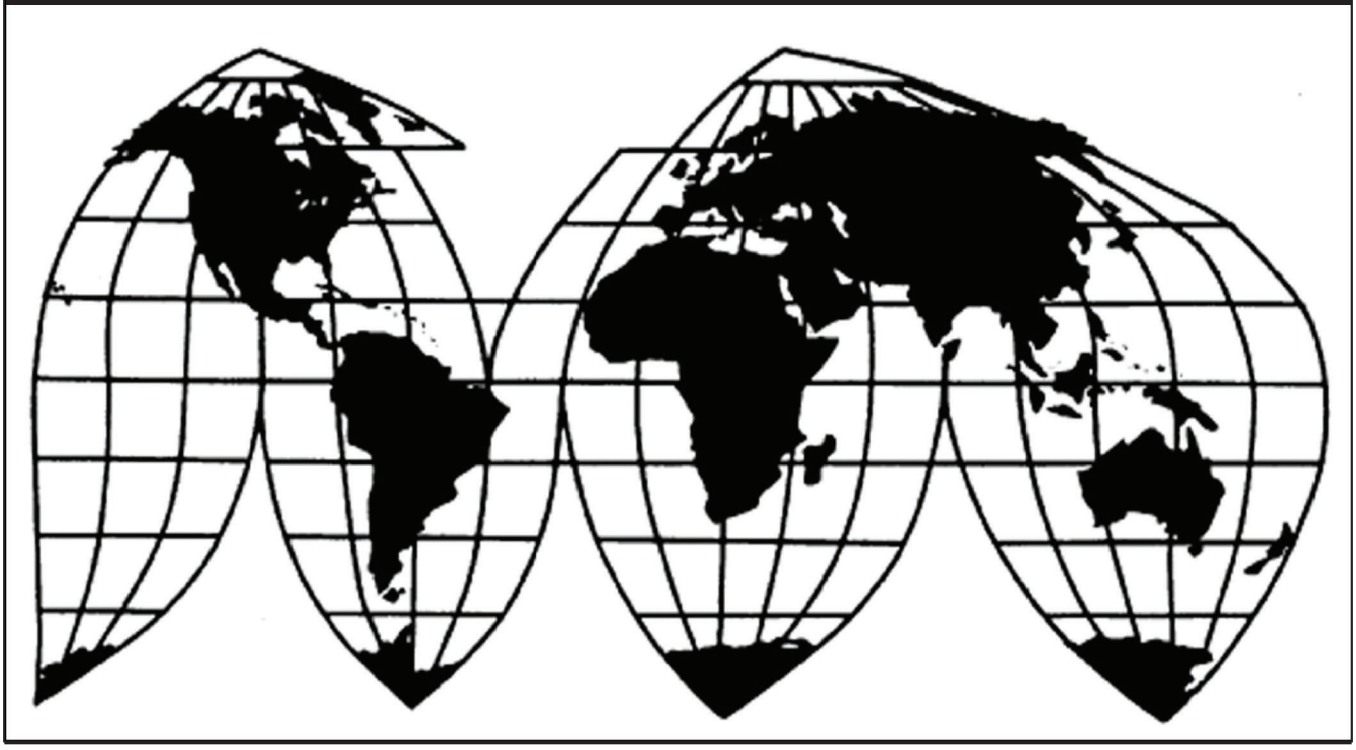
Fresh, Chilled, or Frozen Blueberries

Investigation No. TA-201-77

Publication 5164 **March 2021**

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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Note.—Information that would reveal confidential operations of individual concerns may not be published.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

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. TA-201-77

Fresh, Chilled, or Frozen Blueberries

DETERMINATION

On the basis of the information in the investigation, the United States International Trade Commission ("Commission") determines pursuant to section 202(b) of the Trade Act of 1974 that fresh, chilled, or frozen blueberries[1] are not being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or threat thereof, to the domestic industry producing an article like or directly competitive with the imported article.

BACKGROUND

Following receipt of a request from the United States Trade Representative on September 29, 2020, the Commission instituted this investigation pursuant to section 202 of the Trade Act of 1974 to determine whether fresh, chilled, or frozen blueberries are being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or the threat thereof, to the domestic industry producing an article like or directly competitive with the imported article. Notice of the institution of the Commission's investigation and of the scheduling of public hearings to be held in connection therewith was given by publishing the notice in the *Federal Register* (85 FR 64162 (October 9, 2020), amended at 85 FR 66360 (October 19, 2020)). In light of the restrictions on access to the Commission building due to the COVID–19 pandemic, the Commission conducted its public hearing in connection with the injury phase of the investigation through written testimony and video conference on January 12, 2021.[2] All persons who requested the opportunity were permitted to participate.

[1] For Customs purposes, the products covered by the investigation are provided for under Harmonized Tariff Schedule of the United States ("HTSUS") statistical reporting numbers 0810.40.0024; 0810.40.0026; 0810.40.0029; 0811.90.2024; 0811.90.2030; and 0811.90.2040. These HTSUS numbers are provided for convenience, and the written description of the scope is dispositive.

[2] The Commission changed the starting time of this hearing from 9:30 a.m. as originally scheduled to 9:00 a.m. in a subsequent notice (86 FR 3195 (January 14, 2021)).

Commission's Views on Injury

Based on the facts in this investigation, we determine pursuant to section 202(b) of the Trade Act of 1974 ("Trade Act")[1] that fresh, chilled, and frozen blueberries are not being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or threat thereof, to the domestic industry producing an article like or directly competitive with the imported article.[2]

I. Background

Following receipt of a request from the United States Trade Representative (''USTR'') on September 29, 2020, the Commission instituted this investigation to determine whether fresh, chilled, or frozen blueberries are being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or the threat thereof, to the domestic industry producing an article like or directly competitive with the imported article. Notice of the Commission's investigation was published in the *Federal Register* on October 9, 2020.[3] Pursuant to the scheduling notice, the Commission held a public hearing on injury issues on January 12, 2021[4] and voted with respect to injury issues on February 11, 2021.

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[1] 19 U.S.C. § 2252(b).

[2] The Commission's negative determination is unanimous, reflecting the views of Chair Jason E. Kearns, Vice Chair Randolph J. Stayin, and Commissioners David S. Johanson, Rhonda K. Schmidtlein, and Amy A. Karpel.

[3] *Fresh, Chilled, or Frozen Blueberries; Institution of Investigation, Scheduling of Public Hearings, and Determination That the Investigation Is Extraordinarily Complicated*, 85 Fed. Reg. 64162 (Oct. 9, 2020); *Fresh, Chilled, or Frozen Blueberries; Institution of Investigation, Scheduling of Public Hearings, and Determination That the Investigation Is Extraordinarily Complicated, Amendment*, 85 Fed. Reg. 66360 (Oct. 19, 2020).

[4] *See* Transcript of Commission's January 12, 2021 Hearing on Injury Issues ("Hearing Tr."). In light of the restrictions on access to the Commission building due to the COVID-19 pandemic, the Commission conducted its hearing in this investigation via a videoconference.

Parties to the Investigation. The American Blueberry Growers' Alliance ("Alliance" or "ABGA"), participated in the investigation in support of safeguard measures.[5] Members of the Alliance appeared at the hearing with counsel and submitted both prehearing and posthearing briefs.

Multiple interested parties that oppose safeguard measures also participated in the investigation, appearing at the hearing and submitting both prehearing and posthearing briefs. These parties are: the Blueberry Coalition for Progress and Health ("Coalition");[6] Aneberries, A.C. ("Aneberries");[7] and the Chilean Food Processing Companies Association ("Chilealimentos").[8] Five foreign governments also participated in the investigation. The government of Argentina submitted a prehearing submission and made an oral statement at the hearing. The governments of Canada,[9] Chile,[10] Mexico, and Peru[11] appeared with counsel at the hearing and submitted both prehearing and posthearing briefs.

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[5] The Alliance is a coalition of state blueberry grower organizations, which represent growers in Georgia, Florida, Michigan, California, and other states. ABGA Prehearing Br. at 1.

[6] The Coalition consists of U.S. producers, U.S. distributors, U.S. purchasers, and foreign suppliers. Coalition Prehearing Br. at 1.

[7] Aneberries represents most of the producers and exporters of blueberries from Mexico. Aneberries Prehearing Br. at 1.

[8] Chilealimentos is an association representing producers and exporters of blueberries in Chile. Chilealimentos Prehearing Br. at 1 n.1.

[9] The government of Canada participated along with the British Columbia Blueberry Council, Wild Blueberry Association of North America, government of Quebec, government of British Columbia, and the government of Nova Scotia (collectively "Canadian parties"). Canadian Parties Prehearing Br. at 1.

[10] Participating for Chile was the Subsecretaria de Relaciones Economicas Internacionales de Chile and the Asociación de Exportadores de Frutas de Chile (collectively "Chile"). Chile Prehearing Br. at 1.

[11] The government of Peru participated along with the Asociación de Productores de Arándanos del Perú (collectively "Peruvian parties"). Peruvian Parties Prehearing Br. at 1.

Data Coverage. U.S. industry data are based on USDA data, official export statistics, and questionnaire responses of 134 firms believed to account for 33.8 percent of U.S. bearing acreage of blueberries in 2019. Specifically, data on U.S. bearing acreage, utilized production, U.S. shipments, and cold storage of blueberries are provided by or derived from USDA National Agricultural Statistics Service ("NASS") reports and official export statistics; while information on U.S. producers' net sales, inventories, employment data, freezing capacity, and individual qualitative responses are derived from questionnaire responses.[12] Information on imports is based on official U.S. import statistics for imports for consumption and importer questionnaire responses from forty-one firms that provided usable responses. In aggregate, these forty-one firms' imports represented 70.0 percent of U.S. imports from all import sources in 2019, 36.3 percent of U.S. imports from Argentina, 65.1 percent of U.S. imports from Canada, 64.2 percent of U.S. imports from Chile, 73.5 percent of U.S. imports from Mexico, 86.8 percent of U.S. imports from Peru, and 35.0 percent of U.S. imports from all other sources.[13] The Commission also received usable questionnaire responses from 148 foreign producers/exporters of blueberries.[14]

[12] Confidential Report, Memorandum INV-TT-018 (Feb. 3, 2021), as amended by Memorandum INV-TT-020 (Feb. 10, 2021) ("CR"), Public Report ("PR") at I-4, I-6 – I-8 ("Commission Report").

[13] CR/PR at I-4, II-1.

[14] Foreign producer responses and the estimated coverage for each country are as follows: Argentina (10 firms firm accounting for 46.5 percent of U.S. imports from Argentina in 2019); Canada (57 firms firm accounting for 63.2 percent of U.S. imports from Canada in 2019); Chile (39 firms firm accounting for 67.1 percent of U.S. imports from Chile in 2019); Mexico (29 firms firm accounting for 89.7 percent of U.S. imports from Mexico in 2019); and Peru (13 firms firm accounting for 89.7 percent of U.S. imports from Peru in 2019). CR/PR at IV-20, IV-33, IV-46, IV-57, IV-69.

II. Domestic Industry Producing a Product that is Like or Directly Competitive with the Imported Article

A. Like or Directly Competitive Domestic Product

1. Legal Standards

In making determinations in global safeguard investigations, the Commission examines three statutory criteria. Specifically, to make an affirmative determination, section 202(b)(1)(A) of the Trade Act directs that the Commission must find –

> (1) an article is being imported into the United States in increased quantities;
> (2) the domestic industry producing an article that is like or directly competitive with the imported article is seriously injured or threatened with serious injury; and
> (3) the article is being imported in such increased quantities as to be a substantial cause of serious injury or threat of serious injury to the domestic industry.[15]

Before considering whether the three statutory criteria are satisfied, the Commission first defines the domestic industry. Section 202(c)(6)(A)(i) defines the term "domestic industry" as "the producers as a whole of the like or directly competitive article or those producers whose collective production of the like or directly competitive article constitutes a major proportion of the total domestic production of such article."[16] The Commission defines the domestic industry in terms of each like or directly competitive product and evaluates the impact of the pertinent imports on the industry producing each article.[17]

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[15] *See* 19 U.S.C. § 2252(b)(1)(A).

[16] 19 U.S.C. § 2252(c)(6)(A)(i).

[17] *See, e.g.*, *Steel*, Inv. No. 201-TA-73, USITC Pub. 3479 at 29 n.25 (Dec. 2001); *Extruded Rubber Thread*, Inv. No. 201-TA-72, USITC Pub. 3375 at I-8 (Dec. 2000); *Crabmeat from Swimming Crabs*, Inv. No. 201-TA-71, USITC Pub. 3349 at I-8 to I-9 (Aug. 2000); *Circular Welded Carbon Quality Pipe*, Inv. No. 201-TA-70, USITC Pub. 3261 at I-12 to I-13 (Dec. 1999); *Certain Steel Wire Rod*, Inv. No. 201-TA-69, USITC Pub. 3207 at I-10, I-36 (Jul. 1997).

The legislative history distinguishes between products that are "like" and products that are "directly competitive" with the imported articles, explaining that "like" articles are those which are "substantially identical in inherent or intrinsic characteristics (*i.e.*, materials from which made, appearance, quality, texture, etc.)," whereas "directly competitive" articles are those that "are substantially equivalent for commercial purposes, that is, are adapted to the same uses and are essentially interchangeable therefor."[18]

In determining what constitutes the like or directly competitive domestic product, the Commission has considered a number of factors. The list of factors considered is not fixed, and the weight given to any one factor may vary from case to case depending upon the facts.[19] The list, which derives from Commission practice, has included the physical properties of the article, its customs treatment, its manufacturing process (where and how it is made, and whether in a separate facility), the product's uses, and the marketing channels through which the product is sold.[20] The statute does not prescribe these specific factors nor does it limit the factors that the

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[18] H.R. Rep. No. 571, 93rd Cong., 1st Sess. 45 (1973); Senate Finance Committee, Report on Trade Reform Act of 1974 H.R. 10710, S. Rep. No. 1298, 93rd Cong., 2d Sess. at 121-22 (1974). *See, e.g.*, *Mushrooms*, Inv. No. 201-TA-43, USITC Pub. 1089 at 8, 11-12 (Aug. 1980) ("the intent of the drafting committees was that 'like' has to do with the physical identity of the articles themselves, while 'directly competitive' relates more to the notion of commercial interchangeableness"); *see also United Shoe Workers of Am. v. Bedell*, 506 F.2d 174, 185-86, 190-91 (D.C. Cir. 1974) (discussing meaning of "like" and "directly competitive" in the context of a request for adjustment assistance under the Trade Expansion Act).

[19] *See, e.g.*, *Large Residential Washers ("LRWs"),* Inv. No. TA-201-076, USITC Pub. 4745 (Dec. 2017), at 6-7*; Crystalline Silicon Photovoltaic Cells (Whether or not Partially or Fully Assembled into Other Products) ("CSPV")*, Inv. No. TA-201-75, USITC Pub. 4739 (Nov. 2017).

[20] *See, e.g.*, *LRWs*, USITC Pub. 4745 at 12-17 (finding that domestically produced LRWs and belt drive washers, and covered parts are like the imported LRWs and covered parts within the scope of the investigation); *CSPV,* USITC Pub. 4739 at 10-16 (finding that domestically manufactured CSPV cells and modules are like the imported CSPV cells and modules); *Extruded Rubber Thread*, Inv. No. 201-TA-72, USITC Pub. 3375 at I-5 to I-6 (Dec. 2000); *Circular Welded Carbon Quality Line Pipe*, Inv. No. 201-TA-70, (Continued…)

Commission may consider in making its determination. Thus, in conducting its analysis, the Commission (1) considers the list of factors as well as any other relevant factors, (2) evaluates the factors in terms of the facts in the investigation, and (3) looks for clear dividing lines between products, disregarding minor variations.[21]

The notice of institution described the imported articles under investigation as follows:

> The imported articles covered by this investigation are fresh, chilled, or frozen blueberries (''blueberries''). For Customs purposes, the blueberries covered by the investigation are provided for under Harmonized Tariff Schedule of the United States (''HTSUS'') statistical reporting numbers 0810.40.0024; 0810.40.0026; 0810.40.0029; 0811.90.2024; 0811.90.2030; and 0811.90.2040. These HTSUS numbers are provided for convenience, and the written description of the scope is dispositive.[22]

2. Parties' Arguments in This Investigation

The parties agree that domestically produced fresh and chilled blueberries (collectively referred to as "fresh") blueberries are like imported fresh blueberries and that domestically

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USITC Pub. 3261 at I-10 (Dec. 1999); *Apple Juice*, Inv. No. 201-TA-69, USITC Pub. 1861 at 3-10 (June 1986); *Fresh Winter Tomatoes*, Inv. No. 201-TA-64 (Provisional Relief Phase), USITC Pub. 2881 at I-7 (Apr. 1995) (Views of Watson, Crawford, and Bragg); *Broom Corn Brooms*, Inv. No. 302-NAFTA-1 (Provisional Relief Phase), USITC Pub. 2963 at I-14 (May 1996).

[21] *See, e.g.*, *CSPV,* USITC Pub. 4739 at 13-16 (finding no clear dividing lines between CSPV cells and CSPV modules, noting that: they share the same physical primary physical properties, characteristics and function of enabling the conversion of sunlight into electricity; most domestic production of CSPV cells and modules during the POI was performed by integrated producers; CSPV cells are dedicated for use in the production of CSPV modules; CSPV cells represent a substantial portion of the total cost of finished CSPV modules; and prices of cells generally correlated with module prices during the POI. *See also Stainless Steel Table Flatware*, Inv. No. 201-TA-49, USITC Pub. 1536 at 3-4 (June 1984).

[22] *Fresh, Chilled, or Frozen Blueberries; Institution of Investigation, Scheduling of Public Hearings, and Determination That the Investigation is Extraordinarily Complicated*, 85 Fed. Reg. 66360 (Oct. 19, 2020). The scope is defined in the notice of investigation and is the description of the article(s) that allegedly is being imported in such increased quantities as to be a substantial cause of serious injury or threat of serious injury to the domestic industry producing an article like or directly competitive with the imported article. The defined scope echoes the language of USTR's letter requesting initiation.

produced frozen blueberries are like imported frozen blueberries. They disagree, however, on whether the Commission should find more than one domestic product. ABGA argues that the Commission should define a single domestic product that is like or directly competitive with imported blueberries.[23] ABGA disputes arguments that fresh and frozen blueberries should be defined as separate products, asserting that there is no clear dividing line between the two.[24]

Several parties opposing safeguard measures argue that fresh blueberries constitute separate domestic like or directly competitive products from frozen blueberries. The Coalition asserts that, while there may be few genetic differences between fresh and frozen blueberries, the freezing process creates intrinsic and irreversible differences, and it highlights that most market participants reported that fresh and frozen blueberries never or only somewhat have comparable properties.[25] It claims that there are clear dividing lines between fresh and frozen blueberries in terms of customs treatment,[26] the manufacturing process,[27] uses,[28] and marketing channels.[29] The Canadian, Chilean, and Peruvian parties adopt and incorporate the

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[23] ABGA Prehearing Br. at 14-17, Posthearing Br. at 1-4, Responses to Commission Questions at 18-25.

[24] ABGA Posthearing Br. at 3-4 (citing Tr. at 349-50 (Bjorn), 369-370 (Tentomas), 371 (Phillips), 400 (Lugan)), Responses to Commission Questions at 22-25.

[25] Coalition Prehearing Br. at 28-55; Coalition Posthearing Br. at 3-5.

[26] Coalition Prehearing Br. at 37-38. Fresh blueberries are classifiable in the HTSUS under subheading 0810.40.00 (fresh cranberries, and other fruits of the genus Vaccinium) and reported for statistical purposes under statistical reporting numbers 0810.40.0024 for wild blueberries, 0810.40.0026 for cultivated blueberries (including highbush) certified organic, and 0810.40.0029 for other cultivated blueberries. Frozen blueberries that are uncooked or cooked by steaming or boiling in water, whether or not containing added sugar or other sweetening matter are classifiable in the HTSUS under subheading 0811.90.20 and reported for statistical purposes under statistical reporting numbers 0811.90.2024 for wild, 0811.90.2030 for cultivated (including highbush) certified organic, and 0811.90.2040 for other cultivated.

[27] Coalition Prehearing Br. at 38-50.

[28] Coalition Prehearing Br. at 50-55.

[29] Coalition Prehearing Br. at 55-61.

Coalition's arguments that fresh and frozen blueberries should be separate products.[30] Chilealimentos endorses the Coalition's arguments and adds comments regarding its experience, which it argues confirms that fresh and frozen blueberries are separate products.[31] The government of Mexico also asks the Commission to find fresh and frozen blueberries to be separate products, highlighting market participants' responses that the two are only somewhat or never similar and the fact that that fresh and frozen blueberries fall under different HTSUS categories, as well as arguing that freezing changes the physical properties of a blueberry to extend its shelf life and claiming that the two are harvested differently.[32]

3. Analysis

We begin our analysis by first determining whether the domestic product or products are like the imported article under investigation. We find that domestically produced fresh and frozen blueberries are like imported fresh and frozen blueberries, as outlined below. Although the parties disagree on whether the Commission should find more than one like product, they agree that domestically produced fresh blueberries are like imported fresh blueberries and that domestically produced frozen blueberries are like imported frozen blueberries.[33]

During the January 2015 to September 2020 period of investigation ("POI"), U.S. producers and importers both supplied the U.S. market with fresh and frozen blueberries, although there are times of the year in which few fresh blueberries are available from certain

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[30] Canadian Parties Prehearing Br. at 9; Canadian Parties Posthearing Br. at 2; Chile Prehearing Br. at 4-6; Peruvian Parties Prehearing Br. at 19-20.

[31] Chilealimentos Prehearing Br. at 5-8; Chilealimentos Posthearing Br. at 2 (citing CR at Table I-5, Tr. 252, 371, and the affidavits that were submitted with Coalition's Prehearing Brief).

[32] Mexico Prehearing Br. at 5-7.

[33] *See, e.g.,* Coalition Prehearing Br. at 30.

sources based on different harvesting seasons.[34] While there are many varieties of blueberries, the most common distinction between blueberry types is between "cultivated" and "wild" varieties, both of which are available from domestic and imported sources. Cultivated blueberries typically include but are not limited to highbush (*Vaccinium australe Small and Vaccinium corymbosum L.*) and rabbiteye blueberry plant varieties (*Vaccinium ashei Reade*), and hybrid half-high blueberries, all of which are grown extensively throughout the United States and the world.[35] Wild blueberries, or lowbush (*Vaccinium angustifolium*), are domestically grown primarily in Maine, as well as adjacent regions in Canada.[36] Domestically produced blueberries and imported blueberries are sold in overlapping channels of the market, namely distributors, processors, and retailers,[37] for the same end use for human consumption.[38] Both U.S. and foreign producers utilized similar production processes for harvesting and processing.[39] Additionally, most U.S. producers, importers, and purchasers reported that U.S.-produced blueberries were interchangeable with imported blueberries,[40] and most purchasers reported that domestic and imported blueberries were comparable in terms of all reported purchasing factors.[41] Thus, we find that domestic blueberries are "like" the imports subject to this investigation.

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[34] CR/PR at Tables I-3, II-4, II-6, IV-3 – IV-5.
[35] CR/PR at I-8, I-10.
[36] CR/PR at I-8, I-10.
[37] CR/PR at Table I-4.
[38] CR/PR at I-19.
[39] Both domestic and foreign producers reported harvesting by hand and machine. Similarly, both reported using IQF for freezing.
[40] CR/PR at Table V-12.
[41] CR/PR at Tables V-10, V-11.

We next consider whether domestic fresh and frozen blueberries constitute separate like products. Based on the factors that the Commission typically considers as outlined above, the record indicates that there are not clear dividing lines separating fresh and frozen blueberries and that both are "like" imports subject to this investigation. Therefore, we find a single domestic like product consisting of all blueberries, fresh and frozen.

The physical properties of the article: Market participants' perceptions regarding the similarities of the physical properties of fresh and frozen blueberries were mixed, although most reported that the physical properties were at least somewhat similar.[42] All blueberries are produced from the perennial flowering blueberry shrub, within the genus *Vaccinium*.[43] Blueberries can vary in size, taste, and color, but they all are high in fiber, antioxidants, and the same essential nutrients.[44] It is these latter characteristics that have led blueberries to be regarded as a "superfood," the health benefits of which have been recognized in scientific studies and promoted in various marketing efforts, which has increased demand for fresh and frozen blueberries.[45] No party has argued that these health benefits, which are clearly important to the market, are substantially altered by the freezing process.[46]

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[42] CR/PR at Table I-5.

[43] CR/PR at I-10.

[44] CR/PR at I-10.

[45] Coalition Prehearing Br. at 19-21, Exhibits 27-36; Coalition Posthearing Br., Responses to Commission Questions at A-53; CR at Table V-3 (showing that the vast majority of firms perceived demand increased for fresh and frozen cultivated blueberries and frozen wild blueberries; responses were mixed with respect to fresh wild, but as discussed above, wild blueberries are predominantly sold as frozen).

[46] Although no party has argued that freezing substantially alters the health benefits, and most marketing materials and promotional materials do not distinguish between fresh and frozen, we note that there is record evidence indicating that freezing might lower the potency of antioxidants. Coalition Prehearing Br. at Exhibit 29. That same article, however, specifically mentions the health benefits of frozen blueberries, as do other articles in the record. *Id.* at Exhibits 27-30.

Although wild blueberries are sold predominantly in the frozen market, a small portion are sold in the fresh market.[47] With respect to cultivated blueberries, there is not a clear dividing line distinguishing which blueberries will be sold as fresh or frozen and substantial volumes of cultivated blueberries are sold in both forms.[48] Blueberry growers may not know in advance whether their blueberries will be sold as fresh or frozen.[49] The same blueberry plants can produce blueberries that can be sold as fresh or frozen.[50] Although sometimes it is the quality or variety of the berry that determines whether a berry will be sold fresh or frozen, that is not always the case, as growers also make decisions as to whether their blueberries will be sold fresh or frozen based on market conditions.[51]

Manufacturing processes: As discussed above, blueberry growers may not know whether their blueberries are going to be sold as fresh or frozen.[52] Accordingly, the record indicates that there is usually not a significant difference in how blueberries are grown depending on whether they are ultimately sold as fresh or frozen. While blueberries for the fresh market are primarily handpicked and blueberries for processing are primarily machine-harvested, the harvest methods do overlap. While machine harvesting is common for blueberries that are known at the time of harvest to be destined for processing into frozen blueberries, machine harvesters are used increasingly on blueberries intended for the fresh

[47] CR/PR at Table III-10.
[48] CR/PR at Table III-10.
[49] CR/PR at I-15.
[50] Hearing Tr. at 350 (Bjorn).
[51] Hearing Tr. at 147 (Schreiber), 148-49 (Crosby), 149-50 (Scarborough), 371-72 (Phillips), 373-74 (Shelford), 374-75 (Jackson).
[52] Indeed, some U.S. growers reported frozen blueberries as a by-product of fresh blueberry production that offsets costs. CR/PR at III-32 n.30.

market.[53] Similarly, while handpicking is common for blueberries that are likely to be sold in the fresh market, hand-picked blueberries are also further processed into frozen blueberries given that growers often do not know at the time of harvest the final form and a portion of blueberries picked by hand may be sold into the processing market after sorting.[54] Accordingly, there is no clear dividing line between blueberries sold as fresh or frozen products in the growing and harvesting stages of production.

After harvest, both fresh and frozen blueberries are cooled to extend their shelf life, albeit in different manners.[55] Frozen blueberries undergo additional processing, and can either be individually quick frozen ("IQF") or block frozen.[56] Given that approximately 16,000 farms grow fresh blueberries and a much smaller number of firms engage in freezing, most farms do not also engage in their own freezing operations, with a limited number of growers also having freezing operations.[57]

Market participants' perceptions regarding the similarities in the manufacturing processes for fresh and frozen blueberries were mixed, with a large number of domestic producers and the majority of purchasers reporting that manufacturing processes are never similar.[58]

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[53] CR/PR at I-14, Appendix G; Hearing Tr. at 191-92 (Crosby).
[54] CR/PR at I-13 – I-15.
[55] CR/PR at I-11.
[56] CR/PR at I-11, I-18.
[57] CR/PR at III-1, III-20.
[58] CR/PR at Table I-5.

Uses of the article: All blueberries have the same end use for human food consumption and are eaten by themselves or used as ingredients in other preparations.[59] A majority of responding U.S. producers and purchasers reported that fresh and frozen blueberries had somewhat similar uses.[60]

Marketing channels for products: U.S. producers sell fresh and frozen blueberries to distributors, processors, and retailers.[61] However, as ABGA acknowledges, there appear to be some distinctions in these channels based on whether a product is fresh or frozen.[62] The majority of U.S. producers and purchasers reported that the marketing channels for fresh and frozen blueberries are never similar.[63]

Customs treatment: Fresh blueberries are classifiable in the HTSUS under subheading 0810.40.00 (fresh cranberries, and other fruits of the genus Vaccinium) and reported for statistical purposes under statistical reporting numbers 0810.40.0024 for wild blueberries, 0810.40.0026 for cultivated blueberries (including highbush) certified organic, and 0810.40.0029 for other cultivated blueberries. Frozen blueberries that are uncooked or cooked by steaming or boiling in water, whether or not containing added sugar or other sweetening matter, are classifiable in the HTSUS under subheading 0811.90.20 and reported for statistical purposes under statistical reporting numbers 0811.90.2024 for wild, 0811.90.2030 for cultivated (including highbush) certified organic, and 0811.90.2040 for other cultivated. While

[59] CR/PR at I-10; *see also* Frozen Blueberries Research, EDIS Doc. 733070.
[60] CR/PR at Table I-5.
[61] CR/PR at Table I-4.
[62] ABGA Posthearing Br. at 1-2.
[63] CR/PR at Table I-5.

fresh and frozen blueberries are imported under different HTSUS subheadings, they are treated the same for customs purposes, with both having a duty rate of zero.

Conclusion. All blueberries have the same general end use as food or food ingredients. The record indicates that physical properties and uses are similar. In addition, no party has argued, and the record does not suggest, that freezing substantially alters a blueberry's highly publicized health benefits, which have been a significant driver in increased demand in the U.S. market. Blueberries are grown and harvested in overlapping manners. While wild blueberries are predominantly frozen, there is no clear dividing line distinguishing which cultivated blueberries will ultimately be sold as fresh or frozen. Indeed, the decision to process a blueberry for the frozen market may not come until after it is harvested, and the same plants can be used to produce berries that go to both the fresh and frozen markets. Because they are a perishable product, all blueberries must be treated to extend shelf life, with frozen blueberries undergoing an additional step of freezing. While the record supports some distinctions between fresh and frozen blueberries regarding marketing channels and customs treatment, the overlap in physical characteristics, manufacturing processes, and uses described above do not support clear dividing lines between these products. Accordingly, we define a single domestic product corresponding to the imported products within the scope of the investigation that includes fresh and frozen blueberries.

B. Domestic Industry

The term "domestic industry" is defined in section 202(c)(6)(A)(i) of the Trade Act to mean

> with respect to an article, the domestic producers as whole of the like or directly competitive article or those producers whose collective production of the like or

> directly competitive article constitutes a major proportion of the total domestic production of such article.[64]

This definition was added by the Uruguay Round Agreements Act ("URAA") and codified existing Commission practice.[65]

The Commission has broad discretion to determine what constitutes the domestic industry producing a like or directly competitive article in global safeguard investigations, generally adhering to the principal that "{t}he industry should be defined in a manner which allows for a meaningful analysis of the statutory criteria in light of the legislative history of section 201."[66] [67]

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[64] 19 U.S.C. § 2252(c)(6)(A)(i).

[65] Uruguay Round Agreements Act Statement of Administrative Action ("URAA SAA"), H. Doc. 103-316, vol. I (103rd Cong. 2nd Sess.) at 961.

[66] *Steel*, Inv. No. 201-TA-075, USITC Pub. 3479 at 30 (quoting *Stainless Steel and Alloy Tool Steel*, 201-TA-048, USITC Pub. 1377 at 12 (May 1983)).

[67] The concept of industry employed in section 201 of the Trade Act is not the same as that used in the antidumping and countervailing duty provisions of Title VII. The statutory definitions of "domestic industry" are different. *Compare* 19 U.S.C. § 2252(c)(6)(A)(1) (defining the term for purposes of global safeguard investigations as "domestic producers as a whole of the like or directly competitive article …") *with* 19 U.S.C. §§ 1677(4)(A), 1677(10) (defining "domestic industry" in antidumping and countervailing duty investigations as "the producers as a whole of a domestic like product …," and in turn is defining "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses" with the imports subject to investigation). As the Commission has stated,

> Title VII is narrowly aimed at remedying the specific advantages imports may be receiving from unfair trade practices. The purpose of section 201 either is to prevent or remedy serious injury to domestic productive resources from all imports. In light of the purpose of section 201 and in contrast to Title VII, the sharing of productive processes and facilities is a fundamental concern in defining the scope of the domestic industry under section 201.

Steel, Inv. No. 201-TA-075, USITC Pub. 3479 at 30 (quoting *Stainless Steel and Alloy Tool Steel*, 201-TA-048, USITC Pub. 1377 at 16 n.21 (May 1983)).

Consistent with our definition of a single like or directly competitive domestic product consisting of fresh and frozen blueberries, we define the domestic industry as all U.S. producers of fresh and frozen blueberries, consisting of those firms engaging in growing and freezing operations.[68]

III. Data Sources

A. Employment and Financial Information

In this investigation, the Commission issued U.S. producers' questionnaires to approximately 1,150 firms, including U.S. growers of blueberries, freezers, and firms that may have carried out both growing and freezing operations.[69] In addition, USDA assisted the Commission by distributing a Commission letter to 1,000 individual farm operations (accounting for 85 percent of published blueberry acreage in 2019) informing them of the Commission questionnaire and explaining how it could be downloaded, and also explaining the importance of responses to the Commission's investigation.[70] Additionally, Commission staff participated in two seminars, one hosted by the Wild Blueberry Commission of Maine and another hosted by the American Frozen Food Institute and the North American Blueberry Council, to provide information to firms on the investigation timeline and how to complete and file questionnaire responses, as well as answering general questions.[71]

[68] No party argues that any domestic producers engaged in the production of fresh and frozen blueberries should not be included in the domestic industry.

[69] CR/PR at I-6.

[70] CR/PR at I-6 n.20.

[71] CR/PR at I-6 n.20.

The Commission received 134 responses, believed to account for 33.8 percent of U.S. bearing acreage of blueberries in 2019 reported by USDA.[72] In particular, the Commission received responses from firms based in the following states: Georgia (36 responses), Michigan (29 responses), Oregon (16 responses), Florida (14 responses), Maine (12 responses), California (9 responses), Washington (7 responses), New Jersey (3 responses), New York and North Carolina (2 responses each), and Alabama, Indiana, New Hampshire, and Texas (1 response each).[73] These questionnaire responses are the best available data for analyzing the domestic industry's employment indicia, net sales, and financial performance.

B. U.S. Industry's U.S. Shipments and Imports

For analyzing the domestic blueberry industry's U.S. shipments and the volume of imports, as well as apparent U.S. consumption during the POI, the Commission has relied upon publicly available data from other government sources. In the Commission Report, the domestic industry's U.S. shipments are calculated based on official U.S. agricultural statistics. Annual domestic shipments are calculated taking the utilized production data in the USDA/NASS reports and adjusting that data by deducting domestic export shipments provided in official U.S. export statistics.[74] To calculate monthly U.S. shipments of domestically produced fresh blueberries, domestic data published by USDA/AMS (monthly movement data in annual Fresh Fruit and Vegetable Shipments reports) are adjusted to match the annual totals reported

[72] CR/PR at I-6.
[73] CR/PR at III-1.
[74] CR/PR at III-10 n. 12 & Table III-8.

by USDA/NASS mentioned above, removing domestic exports in the month they were reported in official U.S. export statistics.[75]

In calculating the quantity of imports, the Commission Report relies on official U.S. import statistics to calculate total imports in Part II of the Commission Report.[76] For purposes of calculating apparent U.S. consumption and in the summary data tables in appendix C of the Commission Report, re-exports, *i.e.*, foreign-origin exports identified as such using Census Bureau statistics, were deducted from individual country import totals based on the proportionate share of imports from that country that were reported as re-exports in data compiled from Commission questionnaires.[77] To calculate monthly import totals of fresh blueberries, import data are based on official U.S. import statistics, again adjusted to net out foreign-origin exports in the month they were reported.[78] Total monthly U.S. shipments and market shares by month were then calculated by aggregating the monthly apparent U.S. consumption data for both imports and domestic shipments.

We find these methods of calculating the data to be more reliable for purposes of this investigation than various alternative methodologies proposed by the parties. While parties have largely relied on similar data sources in their arguments, including data from USDA/NASS reports, parties have proposed a number of adjustments to these data, but we find that the manner in which the data are calculated in the Commission Report to be the most reliable and

[75] CR/PR at Appendix E note. If there were no reported domestic shipments in a month in which re-exports took place, the next closest month for which there was production was used.

[76] *See, e.g.,* CR/PR at Table II-1.

[77] *See, e.g.,* CR/PR Table IV-1 note & Table C-1.

[78] CR/PR at Appendix E note.

appropriate in the context of this investigation. ABGA's calculations in its economic study rely upon proprietary data maintained by a third-party source.[79] These data are broken out by weeks, and therefore, to the extent that ABGA aggregates that data on a monthly basis, the placement of the data in a particular month is left to ABGA's discretion.[80] In contrast, the monthly data in the Commission Report is consistent with the monthly data from the respective public source and the Commission did not allocate the weekly data into specific months. In addition, ABGA did not include imports of fresh wild blueberries, which resulted in internal inconsistencies in ABGA's data.

The Coalition's economic analysis adjusts import quantities by offsetting them with domestic exports.[81] We find that the approach in the Commission Report, *i.e.*, calculating import totals net of re-exports and deducting domestic exports from domestic shipments, to better reflect what portion of domestic production and imports are actually being consumed in the U.S. market for purposes of this investigation.

Finally, the Canadian Parties attempted in their economic analysis to adjust the domestic industry data to account for purported errors in the USDA data, due to the alleged failure of a large frozen wild processor in Maine to complete the USDA survey.[82] Commission staff further investigated these allegations, and was unable to substantiate the claim. In addition, 2019 Maine production volumes were consistent with the relatively lower levels of

[79] ABGA Posthearing Br., Economic Appendix.

[80] ABGA appeared to place a week in a given month if the first day of the week appeared in a month and as such its approach included within monthly totals days that are not actually part of that month. ABGA Posthearing Br., Economic Appendix.

[81] Coalition Prehearing Br., Appendix A (Dr. Prusa's report).

[82] Canadian Parties Prehearing Br., Exhibit 6.

production reported during 2017 and 2018.[83] Thus, in the absence of any current revision by USDA to its own data, we find it appropriate in this investigation to continue to rely upon the data as last reported by USDA.

Thus, considering the various methods to calculate data used by the parties, we find that the methodologies relied upon in the Commission Report to be the most appropriate in this investigation.

IV. Increased Imports

After defining the domestic industry that manufactures a product that is like or directly competitive with the imported article, the Commission next examines whether imports are entering in "increased quantities." Under section 202 of the Trade Act, imports have increased when the increase is "either actual or relative to domestic production."[84] Consistent with its usual past practice,[85] the Commission in this safeguard investigation considers import trends over the most recent five-year period as the framework for its analysis.[86]

Based on the data in the record, we find that the statutory criterion of increased imports is met. Imports of blueberries increased by 61.7 percent between 2015 and 2019.[87]

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[83] CR/PR at III-1 n.2.

[84] 19 U.S.C. § 2252(b)(1)(A) (requiring the Commission to determine whether an article is being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or the threat thereof); *see also* 19 U.S.C. § 2252(c)(1)(C) (in turn requiring with respect to substantial cause, that the Commission take into account an increase in imports (either actual or relative to domestic production)).

[85] *See, e.g.*, *Steel*, Inv. No. 201-TA-73, USITC Pub. 3479 at 32-33 (Dec. 2001); *Extruded Rubber Thread*, Inv. No. 201-TA-72, USITC Pub. 3375 at I-8 (Dec. 2000).

[86] The POI in the instant global safeguard investigation covered the full five years for January 2015 through December 2019, as well as the first three quarters (January through September) of 2020.

[87] CR/PR at Table II-1. As explained above, the quantity of U.S. imports in Part II is not net re-exports.

They increased from 423.2 million pounds in 2015 to 495.1 million pounds in 2016 before decreasing to 457.0 million pounds in 2017 and subsequently increasing to 554.9 million pounds in 2018 and to 684.1 million pounds in 2019.[88] Imports as a ratio to domestic production also increased overall, from 48.5 percent in 2015 to 66.2 percent in 2016 and then decreasing to 54.8 percent in 2017 and subsequently increasing to 67.6 percent in 2018 and to 73.2 percent in 2019.[89]

While increases were observed for both fresh and frozen blueberries,[90] imports of fresh blueberries increased more than those for frozen blueberries, and these increases occurred in the context of seasonal growing differences between many foreign growers and U.S. growers.[91] As discussed further below in Section V.B.2., the majority of the increase in imports was of fresh blueberries during the months with little or no domestic production.

We find that imports increased both absolutely and relative to domestic production.

V. Substantial Cause of Serious Injury or Threat of Serious Injury

A. Legal Standards and Statutory Requirements

The second of the three statutory criteria concerns whether the domestic industry is seriously injured or threatened with serious injury. Section 202(c)(6)(C) of the Trade Act defines the term "serious injury" as "a significant overall impairment in the position of a

[88] CR/PR at Table II-1. The volume of imports was 472.0 million pounds in interim 2019 and 462.3 million pounds in interim 2020. *Id.*

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

[90] CR/PR at Tables IV-1 & IV-3.

[91] CR/PR at Table I-3.

domestic industry," and section 202(c)(6)(D) defines the term "threat of serious injury" as "serious injury that is clearly imminent."[92]

In determining whether serious injury or threat of serious injury exists, the Commission considers "all economic factors which it considers relevant, including (but not limited to)" the following enumerated factors –

> (A) with respect to serious injury –
>
> (i) the significant idling of productive facilities in the domestic industry,[93]
> (ii) the inability of a significant number of firms to carry out domestic production operations at a reasonable level of profit, and
> (iii) significant unemployment or underemployment within the domestic industry;[94]
>
> (B) with respect to threat of serious injury –
>
> (i) a decline in sales or market share, a higher and growing inventory (whether maintained by domestic producers, importers, wholesalers, or retailers), and a downward trend in production, profits, wages, productivity, or employment (or increasing underemployment) in the domestic industry,
> (ii) the extent to which firms in the domestic industry are unable to generate adequate capital to finance the modernization of their domestic plants and equipment, or are unable to maintain existing levels of expenditures for research and development, and
> (iii) the extent to which the United States market is the focal point for the diversion of exports of the article concerned by reason of restraints on exports of such article to, or on imports of such article into, third country markets.[95]

The presence or absence of any of these factors is not "necessarily dispositive" of whether increased imports are a substantial cause of serious injury, or threat of serious injury, to the

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[92] 19 U.S.C. §§ 2252(c)(6)(C), 2252(c)(6)(D).

[93] The statute further provides that the term "significant idling of productive facilities" includes the closing of plants or the underutilization of production capacity. 19 U.S.C. § 2252(c)(3).

[94] 19 U.S.C. § 2252(c)(1)(A).

[95] 19 U.S.C. § 2252(c)(1)(B).

industry.[96] As part of its analysis, the Commission must "consider the condition of the domestic industry over the course of the relevant business cycle."[97] [98]

B. Conditions of Competition and the Business Cycle

The following conditions of competition inform our analysis of whether blueberries are being imported into the United States in such increased quantities as to be a substantial cause of serious injury or threat thereof to the domestic industry producing an article like or directly competitive with the imported article.

1. Demand Conditions

Apparent U.S. consumption of blueberries generally increased from 2015 to 2019, with the quantity of apparent U.S. consumption 28.5 percent higher in 2019 as compared to 2015.[99] Total apparent U.S. consumption was 950.7 million pounds in 2015, 1.04 billion pounds in 2016, 886.4 million pounds in 2017, 1.03 billion pounds in 2018, and 1.22 billion pounds in 2019.[100]

Several factors contributed to the increase in apparent U.S. consumption, such as targeted marketing promoting the health benefits of blueberries, packaging innovations and new technologies, and changes in product mix.[101] Additionally, the emergence of new suppliers

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[96] 19 U.S.C. § 2252(c)(3).

[97] 19 U.S.C. § 2252(c)(2)(A).

[98] The third statutory criterion requires a finding that the article is being imported in such increased quantities as to be a "substantial cause" of serious injury or threat of serious injury. Section 202(b)(1)(B) defines "substantial cause" as "a cause which is important and not less than any other cause." 19 U.S.C. § 2252(b)(1)(B). As discussed below, because we have found that the domestic industry is not seriously injured or threatened with serious injury, we do not make any findings as to whether imports are a substantial cause of such injury or threat thereof.

[99] CR/PR at V-1.

[100] CR/PR at Table IV-1. Total apparent U.S. consumption was lower in interim 2019 at 954.5 million pounds compared interim 2020 at 967.8 million pounds. *Id.*

[101] CR/PR at IV-1, V-2. We discuss below in section V.B.2. seasonality considerations for fresh blueberries and the U.S. growing season.

in South America increased the availability of fresh blueberries in the U.S. off-season.[102] The overall increase in apparent U.S. consumption of fresh and frozen blueberries was primarily driven by the considerable increase in apparent U.S. consumption of fresh blueberries. Apparent U.S. consumption of fresh blueberries increased from 500.9 million pounds in 2015 to 557.0 million pounds in 2016 and then decreased to 545.0 million pounds in 2017; it subsequently increased to 629.6 million pounds in 2018 and to 731.3 million pounds in 2019.[103] Apparent U.S. consumption of frozen blueberries increased from 449.8 million pounds in 2015 to 482.5 million pounds in 2016, decreased to 341.4 million pounds in 2017 and increased to 399.0 million pounds in 2018 and to 490.5 million pounds in 2019.[104] Consistent with these data, the majority of firms reported that demand in the United States increased for all blueberries, as well as for fresh cultivated blueberries and frozen cultivated and wild blueberries.[105] Responses to Commission questionnaires on demand trends were mixed with respect to demand perceptions for fresh wild blueberries, which are mostly further processed and sold as frozen blueberries in the U.S. market.[106]

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[102] CR/PR at IV-1, V-2.

[103] CR/PR at Table IV-3. Apparent U.S. consumption of fresh blueberries was higher in interim 2019 at 564.2 million pounds compared to interim 2020 at 553.0 million pounds. *Id.* Per USDA data, per capita consumption of fresh blueberries increased from approximately 1.5 pounds per person in 2015 to almost 2.5 pounds per person in 2019. CR/PR at Figure V-1.

[104] CR/PR at Table IV-5. Apparent U.S. consumption of frozen blueberries was lower in interim 2019 at 390.3 million pounds compared interim 2020 at 414.8 million pounds. *Id.*

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

[106] CR/PR at I-16 & Table V-3. Most U.S. producers reported that demand for fresh wild blueberries in the United States decreased, most U.S. importers reported that demand increased or did not change, and most purchasers reported that demand did not change. *Id.*

2. Supply Conditions

During the POI, the domestic industry supplied both fresh and frozen blueberries to the U.S. market. Domestic supply of fresh blueberries is limited by the seasonal availability in various regions. The U.S. fresh blueberry season is reported to span from March through October; very few U.S. shipments of domestic fresh blueberries were actually reported in October, however, and low levels were reported in March compared to other months in the March through October period.[107] Only very small quantities of domestic fresh blueberries were shipped outside of these months and only in some years.[108] The primary harvesting months are April through July for California, North Carolina, South Carolina, Florida, and Georgia; July and August for Maine; June through October generally for Oregon, Washington, and other East Coast producers; and the Midwest season generally spans July through October.[109] According to ABGA, the season for Florida also includes March[110] though as noted low levels were reported in March relative to other months.[111]

U.S. blueberry acreage generally increased over the POI. Since January 1, 2015, 79 firms reported new acreage planted and 71 reported replacing acreage with new bushes; 51 firms reported taking acreage out of production.[112] Domestic acreage increased overall from 113,620 acres in 2015 to 122,200 in 2019.[113] In addition, fourteen firms reported opening packing

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[107] CR/PR at Appendix E. March and October 2019 shipments respectively represented 2.2 percent and 0.1 percent of domestic U.S. shipments in 2019. *Id.*

[108] CR/PR at Appendix E. Shipments of fresh blueberries between March and September represented 99.7 percent of domestic U.S. shipments in 2019. *Id.*

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

[110] ABGA Prehearing Br. at 22.

[111] *See* EDIS Doc. 732940.

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

[113] CR/PR at Table III-2.

operations, while eight reported closing packing operations.[114] Two firms reported opening freezing operations, while seven reported closing freezing operations.[115] Notwithstanding these closures of freezing operations, domestic freezing capacity increased overall from 2015 to 2019. Overall IQF capacity increased from 320.2 million pounds in 2015 to 355.5 million pounds in 2019.[116] [117]

By quantity, the domestic industry's annual share of the U.S. blueberry market decreased from 57.5 percent in 2015 to 54.4 percent in 2016, 52.9 percent in 2017, 50.3 percent in 2018, and 48.4 percent in 2019.[118] By value, its share decreased from 43.6 percent in 2015 to 34.6 percent in 2016 and increased to 40.3 percent in 2017, then decreased to 34.2 percent in 2018 and was 34.5 percent in 2019.[119]

As discussed above, the domestic fresh blueberry season generally runs from March through September. Domestic market share for fresh blueberries during those months increased from 66.2 percent in 2015 to 67.0 percent in 2016 and 67.8 percent in 2017, before declining to 65.0 percent in 2018, and 63.7 percent in 2019.[120]

During the POI, imports of both fresh and frozen blueberries were also sold in the U.S. market. Considering both types of blueberries together, Canada was the largest source of U.S.

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

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

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

[117] Overall block and other non-IQF (*e.g.,* bulk freezing) capacity also increased from *** pounds in 2015 to *** pounds in 2019. CR/PR at Table III-7.

[118] CR/PR at Table IV-2. By quantity, the domestic industry's market share was 54.2 percent in interim 2019 and 55.4 percent in interim 2020. *Id.*

[119] CR/PR at Table IV-2. By value, the domestic industry's market share was 42.1 percent in interim 2019 and 44.1 percent in interim 2020. *Id.*

[120] *Calculated from* CR/PR at Appendix E.

imports of blueberries from 2015 to 2017, closely followed by Chile, while U.S. imports of blueberries from Mexico, Peru, and Argentina comprised the vast majority of the remaining blueberry imports. In 2018, Chile became the largest supplier of blueberries to the United States, closely followed by Canada. In 2019, U.S. imports of blueberries from Canada once again accounted for the largest share of U.S. imports, followed by Chile then Peru, Mexico, Argentina, and all other sources.[121] By quantity, import's annual share of the U.S. blueberry market increased from 42.5 percent in 2015 to 45.6 percent in 2016, 47.1 percent in 2017, 49.7 percent in 2018, and 51.6 percent in 2019.[122] By value, import market share increased from 56.4 percent in 2015 to 65.4 percent in 2016, decreased to 59.7 percent in 2017, then increased to 65.8 percent in 2018 and was 65.5 percent in 2019.[123]

Similar to that of domestic fresh blueberries, the supply of fresh imported blueberries (the majority of blueberry imports) is affected by seasonal availability in various regions, although imports of fresh blueberries were reported year round.[124] As discussed above, the leading sources of imported blueberries include Canada, Mexico, Argentina, Chile, and Peru. Of these major sources, the fresh blueberry season in Canada overlaps with that in the United States, generally spanning from July to October.[125] Although there is some overlap in the

[121] CR/PR at II-2. While U.S. imports from Argentina, Canada, and Chile were lower in interim 2020 compared to interim 2019, U.S. imports from Mexico, Peru, and all other sources were higher during the same interim period. *Id.*

[122] CR/PR at Table IV-2. By quantity, import market share was 45.8 percent in interim 2019 and 44.6 percent in interim 2020. *Id.*

[123] CR/PR at Table IV-2. By value, import market share was 57.9 percent in interim 2019 and 55.9 percent in interim 2020. *Id.*

[124] CR/PR at Appendix E.

[125] CR/PR at Table I-3.

beginning and end of the U.S. season, the fresh blueberry seasons in other major sources largely run counter-seasonal to the U.S. season, with peak season occurring primarily during United States fall and winter months when domestic fresh blueberries are not readily available.[126] Argentina's fresh blueberry season typically runs August through March; Chile's fresh blueberry season typically runs October through April; Mexico's fresh blueberry season typically runs October through May; and Peru's fresh blueberry season typically runs September through February.[127] Import volumes of fresh blueberries from Argentina peak in October and November; imports from Chile peak in January and February; imports from Mexico peak in March and April; and imports from Peru peak December through February.[128]

Reflecting these seasonality considerations, of the increase in imports in apparent U.S. consumption between 2015 and 2019, the majority (approximately 63 percent) was imports of fresh blueberries between the months of October through February.[129] In other words, the large majority of the increase in U.S. supply of imports was of fresh blueberries during months when there was comparatively little U.S. production of fresh blueberries. In contrast, during the March through September U.S. growing season, import market share of the fresh U.S. blueberry market was relatively stable, initially decreasing from 33.8 percent in 2015 to 33.0 percent in 2016 and 32.2 percent in 2017, before increasing to 35.0 in 2018, and 36.3 percent in

[126] The counter seasonal nature of foreign producer production is further supported by what we see in the pricing data. CR/PR at V-16 – V-19.

[127] CR/PR at Table I-3.

[128] CR/PR at Appendix E.

[129] *Calculated from* CR/PR at Tables IV-1, IV-3, *and* Appendix E. Between 2015 and 2019, imports of all blueberries increased by 225.4 million pounds. CR/PR at Table IV-1. Imports of fresh blueberries accounted for 182.5 million pounds of this increase, and imports of fresh blueberries between October and February accounted for 141.2 million pounds of this increase. CR/PR at Table IV-3 and Appendix E.

2019.[130] Imports of frozen blueberries exhibited less seasonality than those of fresh blueberries but also increased less, accounting for only 19 percent of the increase in apparent U.S. consumption of imports between 2015 and 2019.[131]

3. Substitutability and Other Conditions

Throughout the POI, U.S. producers and importers supplied the market with a variety of blueberries. Both domestic and import sources supplied blueberries in the same forms (fresh and frozen), of the same types (cultivated and wild), and with the same certifications (organic and conventional).[132] As discussed above, most U.S. producers, importers, and purchasers reported that U.S.-produced blueberries were interchangeable with imported blueberries,[133] and most purchasers reported that domestic and imported blueberries were comparable in terms of all reported purchasing factors.[134] Based on available data, we find that there is generally a moderate-to-high degree of substitutability between domestic and imported blueberries when all products are available. However, as discussed above, there are certain times of the year that domestic fresh blueberries are not readily available due to the growing season in the United States.

In the U.S. market, purchasers consider a variety of factors in their purchasing decisions, with quality, availability, and price being the most frequently identified top three purchasing

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[130] *Calculated from* CR/PR at Appendix E. Import market share of the fresh U.S. blueberry market during January, February, October, November and December fluctuated between 99.5 percent and 100 percent during the period of investigation. *Id.*

[131] *Calculated from* Table IV-1 *and* Table IV-5. Imports of frozen blueberries increased by 42.9 million pounds between 2015 and 2019, from 149.4 million pounds in 2015 to 192.3 million pounds in 2019. *Id*.

[132] CR/PR at II-13 – II-56; III-11 – III-13; V-18 – V-19; V-33 – V-48; Appendix D.

[133] CR/PR at Table V-12.

[134] CR/PR at Tables V-10, V-11.

factors.[135] In rating the importance of certain factors in purchasing decisions for fresh blueberries, more than half of responding purchasers identified the following factors as very important: quality meeting or exceeding industry standards, overall availability, freshness, product consistency, lack of bruising/punctures, reliability of supply, firmness, flavor, shelf life, ripeness, color, and texture.[136] In rating the importance of certain factors in purchasing decisions for frozen blueberries, more than half of responding purchasers identified the following factors as very important: quality meeting or exceeding industry standards, product consistency, availability overall, reliability of supply, price, color, flavor, texture, and firmness.[137]

Imported and U.S.-produced blueberries are sold in overlapping channels of distribution, with both domestic and imported fresh and frozen blueberries sold to distributors, processors, and retailers.[138] Ninety-five U.S. producers reported using marketers that act as brokers to sell their fresh and/or frozen blueberries.[139] Some marketers sell exclusively U.S.-origin blueberries but others offer domestic as well as imported blueberries for sale to the U.S. market, due at least in part to the need to rely on imports to satisfy year-round demand for fresh blueberries.[140] Out of ten marketing firms that sell both domestic and imported blueberries, one marketing firm ranked price as the third-most important factor for fresh blueberries, one

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[135] CR/PR at Table V-5 (indicating that, with respect to fresh blueberries, the most-often cited top three factors that firms consider in their purchasing decisions were quality (26 firms), availability/supply (21 firms), and price/cost (13 firms), and that, with respect to frozen blueberries, the most-often cited top three factors that firms consider in their purchasing decisions were quality (22 firms), price/cost (20 firms), and availability/supply (14 firms)).

[136] CR/PR at V-15 & Table V-6.

[137] CR/PR at V-15 & Table V-7.

[138] CR/PR at Table I-4.

[139] CR/PR at V-29; Hearing Tr. 110-12 (Greer).

[140] CR/PR at V-29; Hearing Tr. 52, 145-46 (Crosby), 190-91 (Scarborough), 191 (Hartman).

ranked price as the second-most important factor for frozen blueberries, and one ranked price as the third-most important factor for frozen blueberries.[141] Five out of the ten marketing firms reported that price was "not" an important purchasing factor for fresh blueberries and four reported that price was "somewhat" important (one firm did not respond to the question). For frozen blueberries, two firms reported that price was "very" important (and eight firms did not respond).[142]

Based on purchaser and marketer responses, we find price to be an important purchasing factor along with nonprice factors in purchasing decisions.

As an agricultural product, blueberries are subject to weather, pest, and disease that can affect production.[143] Weather is frequently mentioned by firms as a leading factor affecting the U.S. blueberry market.[144] Local fluctuations in weather influence blueberry yields, harvest timing, size, flavor, and quality.[145] In addition, during the POI, several notable weather events affected blueberry operations in certain regions of the United States. In 2015, north Florida and Georgia experienced freezing temperatures in mid-February.[146] The Michigan crop in 2015 experienced some winter kill damage from two-consecutive years of below normal winter temperatures.[147] Harvest delays in Florida occurred during 2016 due to unseasonably warm

[141] CR/PR at V-29.
[142] CR/PR at V-29.
[143] *See, e.g.,* CR/PR at I-10, V-4, V-6 & Table III-1.
[144] CR/PR at V-63.
[145] CR/PR at I-10, C-4. Among other effects of weather, large harvests may cause prices to fall and losses to mount, while small harvests may benefit firms with blueberries to sell. CR/PR at III-38 n.40.
[146] CR/PR at V-63.
[147] CR/PR at V-63.

winter weather followed by a cold snap in early spring.[148] In 2017, a late-spring freeze in Georgia cut the state's production by more than 50 percent from the previous year.[149] Also in 2017, Hurricane Irma struck Florida, which affected certain growers in that state.[150] In 2017 and 2018, wild blueberry growers in Maine were affected by several weather events, including drought and frost in 2017, and heavy snow in 2017 and 2018.[151] Ninety-six U.S. producers reported changes in operations related to weather events since January 1, 2015.[152] In addition, forty-seven U.S. producers reported changes in operations due to disease or pest-related events since January 1, 2015.[153]

The main raw material inputs for blueberry production are seeds/plants, fertilizer, herbicides, pesticides, and packing materials, with other agricultural inputs including energy and fuel, sawdust, woodchips, peat moss, and irrigation.[154] Most U.S. producers reported that raw material costs have increased overall since January 1, 2015. Raw material costs for the cultivation of fresh blueberries accounted for 25.3 percent of U.S. producers' total operating expenses during 2019, up from 22.3 percent in 2015. Raw material costs for the production of frozen blueberries accounted for 39.1 percent of U.S. producers' total operating expenses in 2019, up from 36.2 percent in 2015. Most U.S. producers reported that raw material supplies

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[148] CR/PR at V-63.

[149] CR/PR at III-3, V-63.

[150] CR/PR at III-3.

[151] CR/PR at III-3 – III-4.

[152] CR/PR at Table III-1. Some blueberry growers reported that they were insured against weather events. *See, e.g.,* Hearing Tr. at 235 (Atwood), 239 (Crosby), 240 (Hartmann). The USDA agriculture statistics reported that the number of acres insured for blueberries were 69,000 in 2015, 64,000 in 2016, 67,000 in 2017, 69,000 in 2018, and 70,000 in 2019 (the most recent year for which data were published). CR/PR at III-39 n.43, as revised by Memorandum INV-TT-020.

[153] CR/PR at Table III-1

[154] CR/PR at V-26.

for organic blueberries have not affected their firm's operations since January 1, 2015; however, there were few responding firms that identified themselves as having a majority organic blueberry harvest in 2019. The U.S. producers that reported an impact on their firm's operations from raw material supplies for organic blueberries described organic fertilizer, compost, and weeding labor costs as the most impactful raw material costs.[155]

Finally, the COVID-19 pandemic was reported by several firms to affect the U.S. blueberry market. Several producers reported a reduction or retraction in orders due to restaurant, school, resort, and cruise line closures, and some producers reported that there were no pick-your-own fruit sales in 2020. Producers also reported delayed receipt of crop inputs and delayed deliveries to processors.[156]

C. The Domestic Industry Is Not Seriously Injured

In determining whether the domestic industry is seriously injured, we have considered the enumerated factors in the statute as well as other relevant economic factors. As discussed in further detail below, although the domestic industry's profitability trended downward in certain years, it remained reasonably profitable throughout the period of investigation and experienced increases in acreage, production, employment (workers and wages), productivity, and shipments, and it continued to make investments, which contributed to this growth. Thus, we determine that the record, on balance, does not demonstrate a significant overall impairment of the domestic industry and does not support a finding of serious injury.

[155] CR/PR at V-26.
[156] CR/PR at V-66.

1. No Significant Idling of Productive Facilities

In assessing whether the domestic industry is seriously injured, we first consider whether there has been a significant idling of U.S. productive facilities in terms of plant closures and/or underutilization of productive capacity to produce blueberries. As discussed above, 79 firms reported new acreage planted since January 1, 2015, compared to 51 firms that reported taking acreage out of production.[157] Fourteen firms reported opening packing operations, while eight reported closing packing operations.[158]

Domestic acreage increased over the five full years of POI, particularly in 2019, the most recent full-year period. Domestic acreage increased from 113,620 acres in 2015 to 115,900 acres in 2016, before decreasing to 100,900 acres in 2017; it subsequently increased to 108,000 acres in 2018 and reached its highest level of 122,200 acres in 2019.[159] Total production and yield per acre also increased irregularly during the full years of the POI, similarly reaching the highest levels in the most recent full year of the POI. Total production of blueberries increased from 667.6 million pounds in 2015 to 695.5 million pounds in 2016 before decreasing to 586.3 million pounds in 2017; it subsequently increased to 612.7 million pounds in 2018 and to 735.1 million pounds in 2019.[160] Yield per acre increased from 5,876 pounds per acre in 2015 to 6,000 pounds per acre in 2016, then decreased to 5,811 pounds per acre in 2017 and to 5,673 pounds per acre in 2018; yield per acre subsequently increased to 6,061 pounds per acre in 2019.[161]

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[157] CR/PR at Table III-1.
[158] CR/PR at Table III-1.
[159] CR/PR at Table III-2.
[160] CR/PR at Table III-2.
[161] CR/PR at Table III-2.

With respect to freezing operations, as discussed above, two firms reported opening freezing operations, while seven reported closing freezing operations.[162] Notwithstanding these reported closures, domestic producers responding to Commission questionnaires reported freezing capacity increased overall from 2015 to 2019. Reported overall IQF capacity initially decreased from 320.2 million pounds in 2015 to 311.6 million pounds 2016 and to 300.2 million pounds in 2017; it subsequently increased to 349.9 million pounds in 2018 and to 355.5 million pounds in 2019.[163] [164] U.S. producers using IQF for freezing primarily used their production capacity for the freezing of blueberries, and reported production of IQF frozen blueberries decreased overall from 2015 to 2019, although it increased from 2018 to 2019.[165] Overall IQF capacity utilization rate initially increased from 63.6 percent in 2015 to 69.7 percent in 2016 before decreasing to 55.9 percent in 2017 and to 45.8 percent in 2018; it subsequently increased to 52.6 percent in 2019.[166] [167] Although production of frozen blueberries reported in

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

[163] CR/PR at Table III-6. Overall IQF capacity was 344.4 million pounds in interim 2019 and 336.0 million pounds in interim 2020. *Id.*

[164] Overall non-IQF capacity, which accounted for less freezing capacity than IQF operations, also increased from *** pounds in 2015 and 2016 to *** pounds in 2017, 2018, and 2019. CR/PR at Table III-7. Overall non-IQF freezing capacity was *** in interim 2019 and interim 2020. *Id.*

[165] CR/PR at III-7 & Table III-6. Production of IQF blueberries was 139.1 million pounds in 2015, 141.1 million pounds in 2016, 91.2 million pounds in 2017, 91.4 million pounds in 2018, and 114.4 million pounds in 2019; it was 113.6 million pounds in interim 2019 and 90.3 million pounds in interim 2020. *Id.* Overall IQF production including blueberries and other products was 203.6 million pounds in 2015, 217.2 million pounds in 2016, 167.7 million pounds in 2017, 160.4 million pounds in 2018, and 186.9 million pounds in 2019; it was 171.3 million pounds in interim 2019 and 126.4 million pounds in interim 2020. *Id.*

[166] CR/PR at Table III-6. Overall IQF capacity utilization was 49.8 percent in interim 2019 and 37.6 percent in interim 2020. *Id.*

[167] U.S. producers using non-IQF freezing methods primarily used their capacity for the freezing of products other than blueberries; reported production of non-IQF frozen blueberries increased overall (Continued…)

response to Commission questionnaires decreased overall, we observe that USDA/NASS data indicate that production of processed blueberries, which are believed to consist primarily of frozen blueberries,[168] fluctuated during the POI but finished higher in 2019 than in 2015; it was 351.7 million pounds in 2015, 375.5 million pounds in 2016, 275.9 million pounds in 2017, 298.9 million pounds in 2018, and 352.7 million pounds in 2019.[169]

Based on this evidence, including the increases in acreage, production, and yield for fresh blueberries along with the increased IQF capacity and USDA data showing fluctuating but relatively stable production of processed blueberries over the full POI, we find that there was no significant idling of domestic productive facilities during the POI.

2. No Significant Unemployment or Underemployment

We next examine whether there has been significant unemployment or underemployment in the domestic industry. Employment indicators generally improved overall from 2015 to 2019. According to questionnaire data, the number of production and related workers ("PRWs") engaged in blueberry growing and freezing operations increased overall from

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from 2015 to 2019. CR/PR at III-7 & Table III-7. Production of non-IQF frozen blueberries was *** pounds in 2015, *** pounds in 2016, *** pounds in 2017, *** pounds in 2018, and *** pounds in 2019; it was *** pounds in interim 2019 and *** pounds in interim 2020. *Id.* Overall non-IQF production of frozen blueberries and other products was *** pounds in 2015, *** pounds in 2016, *** pounds in 2017, *** pounds in 2018, and *** pounds in 2019; it was *** pounds in interim 2019 and *** pounds in interim 2020. *Id.* Overall non-IQF capacity utilization rate initially decreased from *** percent in 2015 to *** percent in 2016, *** percent in 2017, and *** percent in 2018; it subsequently increased to *** percent in 2019. CR/PR at Table III-6. Overall non-IQF freezing capacity utilization was *** percent in interim 2019 and *** percent in interim 2020. *Id.*

[168] Processing can include among other things canning, juicing, and drying in addition to freezing; however, the information in the record suggests that processing other than freezing is limited. CR/PR at III-32 n.30, IV-5 n.3, IV-8 n.4, V-1 n.5.

[169] CR/PR at Table III-3.

2015 to 2019, initially increasing from 15,474 PRWs in 2015 to 16,044 PRWs in 2016 and to 16,383 PRWs in 2017 before decreasing to 15,706 PRWs in 2018; the number of PRWs subsequently increased to 15,993 PRWs in 2019.[170] Total number of hours worked was 8.4 million in 2015, 9.0 million in 2016, 9.8 million in 2017, 8.4 million in 2018, and 8.7 million in 2019.[171] Hours worked per PRW, wages paid, and hourly wages also increased overall from 2015 to 2019.[172] The industry's productivity also improved; it was 29.8 pounds per hour in 2015, 32.2 pounds per hour in 2016, 28.3 pounds per hour in 2017, 33.1 pounds per hour in 2018, and 35.8 pounds per hour in 2019.[173] We observe that labor availability was a frequently cited issue for U.S. growers,[174] which suggests that employment levels likely would have been greater if U.S. producers had been able to obtain additional workers.

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[170] CR/PR at Table III-15. The number of PRWs was 16,546 in interim 2019 and 16,086 in interim 2020. *Id.* The questionnaires asked for family labor to be included in the reported employment figures. CR/PR at III-16. Usable U.S. producer questionnaire responses accounted for 29.6 percent of combined utilized production data, and 26.1 percent of acreage data, in 2019 according to USDA. CR/PR at III-1. For certain incomplete responses, staff estimated data using various methods, including comparative ratios from other questionnaire responses for certain metrics, accompanying labor cost data, and Bureau of Labor Statistics Standard Occupational Classification data for code 45-0000 (Farming, Fishing, and Forestry Occupations). CR/PR at III-16 n.18.

[171] CR/PR at Table III-15. Total number of hours worked 8.1 million in interim 2019 and 7.5 million in interim 2020. *Id.*

[172] Hours worked per PRW were 544 hours in 2015, 560 hours in 2016, 600 hours in 2017, 532 hours in 2018, and 561 hours in 2019; they were 489 hours in interim 2019 and 466 hours in interim 2020. CR/PR at Table III-15. Wages paid were $138.2 million in 2015, $148.4 million in 2016, $156.3 million in 2017, $156.1 million in 2018, and $168.4 million in 2019; they were $154.7 million in interim 2019 and $153.9 million in interim 2020. *Id.* Hourly wages paid were $16.41 in 2015, $16.51 in 2016, $15.89 in 2017, $18.67 in 2018, and $18.78 in 2019; they were $19.11 in interim 2019 and $20.51 in interim 2020. *Id.*

[173] CR/PR at Table III-15. Productivity was 34.3 pounds per hour in interim 2019 and 33.3 pounds per hour in interim 2020. *Id.*

[174] CR/PR at III-16.

Based on this evidence, including increases in PRWs, hours worked, hourly wages, wages paid, and productivity, we do not find significant unemployment and underemployment in the domestic industry during the POI.

3. No Inability of a Significant Number of Firms to Carry Out Domestic Production Operations at a Reasonable Level of Profit

We next examine the domestic industry's profitability. The Commission received usable financial information from eighty-nine firms on their blueberry growing and/or freezing operations in the United States. As a preliminary matter, we note that a large number of firms, forty-six out of the eighty-nine responding U.S. producers, provided their financial data on a cash basis.[175] These firms reported revenue and expenses in the time period they were received or paid, therefore revenues are not necessarily recorded in the same period as the matching expenses, which can make it difficult to analyze the profitability of a company and which creates some challenges when comparing year-over-year financial performance.[176] This

[175] CR/PR at III-20. Of the remaining companies that did not use cash-based accounting, 27 reported their financial results on an accrual basis, 13 reported on a tax basis, and 3 reported that they did not know. Twenty-four of the companies using accrual accounting reported that they provided their financial information on the basis of generally accepted accounting principles ("GAAP"), which requires accrual accounting. Firms that used accrual accounting were generally larger than firms that relied on cash-based accounting, and represented approximately three-quarters of the total reported net sales volumes for fresh and frozen blueberries during the period for which data were requested. CR/PR at III-20 n. 23.

[176] CR/PR at III-20. The use of cash-based accounting by more than half of responding firms impacted the reported financial results in a number of ways. First, the use of cash-based accounting can affect analysis of partial year data. In the January-September interim year periods, some U.S. growers have sold all of their blueberry crop for the year and will therefore report the same amount of revenue in a January-September period as they would for a full calendar year period. However, they have not incurred all of their annual expenses in the interim period results, since they incur certain expenses during the fourth quarter of the year (e.g., prepping fields, purchasing fertilizer, etc.), and would therefore not report all of their annual expenses. This may result in what appears to be improved interim period profitability compared to full-year results. Conversely, some firms reported only a fraction of their revenue relative to their full year sales, as they were paid for a majority of their crop in (Continued…)

disconnect between how expenses and revenue are reported can skew the overall industry profitability, particularly when there are cash-based new entrants and expansions by firms that use cash-based accounting, which can result in some firms reporting large expenses in years with no revenue associated with those expenses.[177] This, in turn, can decrease the overall industry profitability when there are cash-based new entrants or cash-based firms that are increasing their blueberry production or re-planting acreage.[178] Accordingly, in our examination of the domestic industry's profitability, we consider these issues and the implications that the use of cash-based accounting by some firms has on our analysis.

The value of the domestic industry's total net sales increased 16.9 percent overall from 2015 to 2019, increasing from $464.7 million in 2015 to $472.4 million in 2016 and to $504.6 million in 2017 before decreasing to $495.2 million in 2018 and subsequently increasing to

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the fourth quarter, while they have incurred the majority of their full year expenses in the interim year period. This results in the interim period financial results appearing worse relative to these firms' full year results. CR/PR at III-21.

Second, cash-based accounting can affect accurate comparisons of profitability from year to year. For example, a portion of the revenue reported by cash-based firms may be for a previous year's crop. Cash-based firms that are expanding or have an increase in sales quantity year-over-year (with a corresponding increase in costs incurred in prior years) may seem less profitable in a given year than they would with accrual accounting, if a large portion of the firm's revenue is received the year after the associated sales are made. This is because they will be reporting higher costs for the increase in their blueberry crop, but their sales will still reflect (in part) the lower quantity from the previous year. The opposite is true for firms that are decreasing their sales quantities but are still receiving revenue from previous years; they may seem more profitable than they would with accrual accounting. CR/PR at III-21.

[177] Firms that use cash-based accounting can elect out of uniform capitalization ("UNICAP") rules that require the capitalization of preproduction period costs for crops that have a preproduction period of more than two years based on a national average (which includes blueberry plants), and are allowed to expense these costs in the years incurred.

[178] CR/PR at III-21 – III-22 (citing 26 C.F.R. § 1.263).

$543.1 million in 2019.[179] The domestic industry's ratio of operating expenses to net sales increased five percentage points overall from 2015 to 2019, increasing from 86.8 percent in 2015 to 90.0 percent in 2016 before decreasing to 83.9 percent in 2017; it subsequently increased to 88.1 percent in 2018 and to 91.9 percent in 2019.[180] Both operating income and net income fluctuated during the POI, initially decreasing from 2015 to 2016, increasing and peaking in 2017 before subsequently declining in 2018 and 2019.[181] Both were higher in interim 2020 compared to interim 2019.

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[179] CR/PR at Tables III-18, C-1. The value of net sales was $483.2 million in interim 2019 and $471.4 million in interim 2020. *Id.*

[180] CR/PR at Tables III-18, C-1. The ratio of operating expenses to net sales was 88.5 percent in interim 2019 and 85.5 percent in interim 2020. *Id.*

[181] ABGA argues that the profitability of the industry is overstated because of pre-production costs being expensed in the year incurred rather than capitalized over the life of the asset. In its posthearing brief, ABGA provided calculations for its estimate of the impact this had on profitability. *See* ABGA posthearing brief at Exh. 46, p. 3. We decline to make the adjustments proposed by ABGA because of potential distortions in them and concerns that ABGA's assumptions do not result in accurate estimates. First, when calculating how much depreciation the industry would have incurred in each year of the POI had pre-production costs been capitalized, ABGA calculated an average acreage per year and multiplied that by an estimated cost per acre for initial field preparation, planting, irrigation, etc. It divided this by an amortization period of 10 years to estimate the annual depreciation costs the industry would have incurred. This calculation is likely overestimated because 1) it assumed that all responding companies would expense these pre-production costs rather than capitalize them (this is something that is only allowable for cash-based farms, and therefore would represent a minority of the acreage of the responding companies) and 2) it assumed that none of the current acreage was planted more than 10 years ago, and would therefore still be incurring a depreciation expense annually. At the same time, ABGA's calculation of how much of these costs were expensed during the POI did not include acreage that was re-planted, which would lead to underestimation of these expenses.

ABGA also argues that uncompensated owner labor is not included in the industry's financial data. *See* ABGA Posthearing brief at Exh. 46, p. 3. We note, however, that the figure ABGA has provided likely overstates the extent to which this skews the data, as it estimates that 90 percent of the firms did not pay salaries to the owner growers. However, farms with unpaid labor would typically be smaller family farms, while our data set has a substantial share of large firms, which are much less likely to have uncompensated owner labor. In addition, to account for what it considers uncompensated owner labor, ABGA estimated the amount of compensation that should be added to these firms' costs based on two full time professional mid-level farm supervisor positions, however there is a lack of record evidence to support the assumption that the amount of uncompensated owner labor on a small family farm would be equivalent to two full time mid-level supervisors. ABGA Posthearing Br. at Exhibit 46, p.1 & n.1.

Even in years with declines, the domestic industry remained profitable. Operating income initially decreased from $61.2 million in 2015 to $47.3 million in 2016 before increasing to $81.2 million in 2017 and subsequently decreasing to $59.1 million in 2018 and to $44.2 million in 2019.[182] Operating income was $55.7 million in interim 2019 and $68.3 million in interim 2020.[183] [184] The domestic industry's ratio of operating income to net sales was 13.2 percent in 2015, 10.0 percent in 2016, 16.1 percent in 2017, 11.9 percent in 2018, and 8.1 percent in 2019.[185] The domestic industry's operating margin was 11.5 percent in interim 2019 and 14.5 percent in interim 2020.[186] Net income decreased from $30.6 million in 2015 to $17.7 million in 2016 before increasing to $57.7 million in 2017; it subsequently declined to $35.4

[182] CR/PR at Tables III-18, C-1.

[183] CR/PR at Tables III-18, C-1.

[184] ABGA argues that the Commission should consider net income rather than operating income in analyzing the domestic industry's profitability. *See, e.g.,* Posthearing Br., Responses to Commission Questions at 43-44, Exhibit 46. In this regard, ABGA asserts that operating income is overstated in the Commission Report because some expenses that would typically be reported as above operating income (*i.e.*, that would be included in the calculation of operating income) were mis-reported as below operating income (which should include interest expenses, all other expenses, and all other income). *See* CR/PR at III-39, as amended by Memorandum INV-TT-020 (Feb. 10, 2020). Commission staff followed up with selected firms that had included expenses reported for "all other expenses" to ascertain whether these companies had included expenses that would typically be included in the calculation of above operating income. Staff targeted the largest companies with the highest ratios of all other expenses to net sales, which accounted for approximately one-quarter of the firms. All of these companies confirmed that some or all of the expenses reported in their questionnaire responses for "all other expenses" were actually operating expenses (*i.e.*, these expenses should have been used in the calculation of operating and net income, rather than only in the calculation of net income). The companies reported that they had reported these expenses below operating income because there were not appropriate expense line items for those expenses above operating income, or because they could not break out the expenses in the requested format, such as depreciation, insurance, marketing, utilities, and licenses. Thus, Commission staff corrected and reclassified most of the obvious misclassifications. CR/PR at III-36 n.39. While there may be other smaller producers who similarly misclassified some expenses, resulting in operating income still being somewhat overstated, but not to the extent that this would change our analysis.

[185] CR/PR at Table III-18.

[186] CR/PR at Table III-18.

million in 2018, and $6.5 million in 2019.[187] Net income was $26.5 million in interim 2019 and $37.9 million in interim 2020.[188] The number of firms reporting losses during the POI fluctuated but generally increased from 2015 through 2019. Of the over 80 responding firms, the number of firms reporting operating losses was 22 in 2015, 25 in 2016, 27 in 2017, 28 in 2018, and 27 in 2019,[189] and the number of firms reporting net losses was 35 in 2015, 43 in 2016, 32 in 2017, 37 in 2018, and 42 in 2019.[190]

Notwithstanding the increase in the number of firms that reported losses when 2019 is compared to 2015, we do not find that the industry's profitability was such as to represent significant overall impairment in the position of the domestic industry.

First, as indicated above, the domestic industry as a whole continued to operate profitably during the POI. While the fact that a domestic industry is profitable does not preclude an affirmative determination,[191] we find it persuasive in this case that the industry reported substantial operating profits throughout much of the POI.

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[187] CR/PR at Tables III-18, C-1.

[188] CR/PR at Tables III-18, C-1.

[189] CR/PR at Table III-18.

[190] CR/PR at Table III-18.

[191] We disagree with the arguments of parties in opposition to safeguard measures on this issue. In particular, citing to the provision in the 2015 Trade Preferences Extension Act ("TPEA") that prohibits the Commission from making a negative material injury determination in a Title VII investigation just because that industry is profitable or because the performance of that industry has recently improved, the Coalition argues that the absence of a similar amendment to the safeguard statute suggests Congress did not intend to extend that analysis to the serious injury standard for safeguard investigations. Coalition Posthearing Br., Responses to Commission questions at A-27-28. We note, however, that the TPEA did not amend or otherwise reference the safeguards statute and therefore it is unreasonable for the Coalition to read any inferences in the absence of language on profitability. *See* Trade Preferences Extension Act of 2015, P.L. 114-27 § 503, 129 Stat. 362, 384 (2015). Moreover, the legislative history to the 1984 amendments to the safeguard statute indicates that Congress already contemplated this approach towards profitability in safeguard investigations. Specifically, the Senate bill (Continued…)

Contrary to ABGA's focus on simply comparing 2015 with 2019, we consider the POI in its entirety, rather than the beginning and end points of the POI, particularly in light of the implications that cash-based accounting and investment decisions can have for year-to-year comparisons of profitability, and the variability in industry profitability resulting from weather. In this regard, we observe that the largest decline in profitability was in net income in 2019, and this decline was related in substantial part to the ***.[192] This producer alone reported a net loss of $*** in 2019, which was ***.[193] Considering the domestic industry's profitability for the

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suggested amending the safeguard statute to "specify that the fact that the domestic industry is profitable does not preclude an injury finding." While this precise language was not included in the text of the statute, the adopted bill instead used broader language stating that the presence or absence of any factor is not dispositive of injury. The intent of the Senate in suggesting the amendment was explained as follows:

> The Senate approved amendments to section 201 of the Trade Act in response to the decision of the International Trade Commission in the non-rubber footwear case. These amendments reflect Senate dissatisfaction with the ITC's interpretation of section 201 in the non-rubber footwear case. . . . This amendment is intended to make clear that the presence or absence of any one factor shall not necessarily provide decisive guidance to the Commission in its determination of serious injury. It is possible, for example, that surviving firms in an industry will be profitable, even though large numbers of workers have lost their jobs. Accordingly, the Commission should not treat the industry's profitability as dispositive, but should go on to give careful consideration to the plant closings and employment trends in assessing the condition of the industry.

H.R. Rep. No. 98-1156, 98th Cong. 2d Sess. 141 (1984).

[192] *See* Coalition Prehearing Br., App. B.

[193] CR/PR at III-40 n. 45. We also note that this company *** safeguard measures and reported that, ***. Coalition Prehearing Br., App. B.

full POI, both operating and net income initially increased, peaking in 2017 before subsequently declining in 2018 and 2019,[194] and were higher in interim 2020 compared to interim 2019.

Moreover, we consider the industry's profitability, including any declines, in the context of a domestic industry that exhibited growth and expansion during the POI. As discussed above, more firms reported planting new acreage than those reporting taking acreage out of production, and total domestic acreage increased, particularly in 2019. In addition, more firms reported opening packing operations, compared to the number reporting closing packing operations. The industry also added employees and increased wages over the POI. Furthermore, after an initial decline, the domestic industry maintained consistent levels of capital expenditures throughout the POI. Capital expenditures were $64.2 million in 2015, $46.2 million in 2016, $46.8 million in 2017, $42.3 million in 2018, and $42.1 million in 2019.[195] Additionally, research and development ("R&D") increased overall from 2015 to 2019. R&D expenses were $*** in 2015, $*** in 2016, $*** in 2017, $*** in 2018, and $*** in 2019.[196] These factors do not suggest that the industry as a whole was significantly impaired or operating at an unreasonable level of profitability, which may have prevented such growth and investment.

[194] We also note that the profitability levels in 2018, despite the declines from 2017, were near (operating income) or exceeded (net income) the industry's profitability levels in 2015. CR/PR at Tables III-18, C-1.

[195] CR/PR at Table III-26. Capital expenditures were $36.8 million in interim 2019 and $28.0 million in interim 2020. *Id.*

[196] CR/PR at Table III-26. R&D expenses were $*** in interim 2019 and $*** in interim 2020.

We have also considered the number of firms reporting losses in this context of the industry as whole. As indicated above, the number of firms reporting operating losses ranged from approximately a quarter to a third of the total responding firms, while the number reporting net losses ranged from approximately a third to half of the responding firms. However, we view these reported losses in the context of the overall industry, which remained profitable and exhibited growth and expansion during the POI and continued to make substantial capital investments as well as investments in R&D.

We further find that the record does not support ABGA's claims that the domestic industry was unable to obtain a reasonable level of profit because domestic growers are being forced to sell increasing quantities in the less-profitable frozen market.[197] Rather, the record indicates that fresh blueberries accounted for a greater share of production in 2017 through 2019 than in 2015 and 2016, fluctuating within a narrow range during that time.[198] We further find that the record does not support ABGA's assertions that growers have been forced to leave fruit on the bushes when prices have fallen to the point where they cannot afford to harvest the blueberries,[199] or if this is happening, the record does not suggest this was widespread, given the record evidence showing increases in acreage, production, and yield, particularly in 2019.

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[197] ABGA Prehearing Br. at 42-43; ABGA Posthearing Br., Responses to Commission Questions at 29-30.

[198] CR/PR at Table III-3. Production of fresh blueberries accounted for the following percentages of total production: 46.3 percent in 2015, 45.3 percent in 2016, 51.9 percent in 2017, 50.1 percent in 2018, and 50.9 percent in 2019. Production of processed (including frozen) blueberries accounted for the following percentages of total production: 52.7 percent in 2015, 54.0 percent in 2016, 47.1 percent in 2017, 48.8 percent in 2018, and 48.0 percent in 2019. *Id.*

[199] ABGA Posthearing Br. at 9-10.

Thus, based on the overall continued profitability of the industry as a whole, combined with the growth and expansion in acreage, production, and employment, as well as the continued capital investments, we do not find that the record in this investigation indicates that a significant number of firms were unable to carry out domestic production operations at a reasonable level of profit during the POI such that there was significant overall impairment in the position of the domestic industry.[200]

4. Other Economic Factors

We have also considered other economic factors in assessing whether the record in this investigation indicates that there was significant overall impairment in the position of the domestic industry.

[200] We do not find persuasive ABGA's citations to prior investigations in which the Commission has found a profitable domestic industry to be seriously injured or threatened with serious injury. *See* ABGA Posthearing Br., Responses to Commission Questions at 41-42. As an additional matter, as noted above, we agree with ABGA that a profitable industry does not preclude an affirmative determination. The record in this investigation, however, does not support such a determination. In addition, "{g}enerally, {Commission} determinations are *sui generis*, *i.e.*, 'necessarily confined to a specific period of investigation with its attendant, peculiar set of circumstances.'" *Hitachi Metals, Ltd. v. United States*, 350 F. Supp. 3d 1325, 1334 (Ct. Int'l Trade 2018) (citation omitted), *aff'd*, 449 F.3d 710 (Fed. Cir. 2020). While in each of these investigations the industry may have reported profits, there were other indicators that suggested that the industry was seriously injured or threatened with serious injury, such as downward trends in output, employment, or sales indicators. In *Lamb Meat*, the Commission found that USDA data showed substantial declines in production and shipments, that the record indicated declines in employment indicators, and that USDA data showed an industry that experienced a contraction over the period of investigation. *Lamb Meat*, Inv. No. TA-201-68, USITC Pub. 3176 (Apr. 1999) at I-16 – I-19. Similarly, in *Wood Shakes and Shingles*, the Commission found significant declines in production and employment. *Wood Shakes and Shingles*, Inv. No. TA-201-57, USITC Pub. 1826 (Mar. 1986) at 10-12. In *Nonrubber Footwear*, the record showed declines in production, capacity, shipments, and employment. *Nonrubber Footwear*, No. TA-201-55, USITC Pub. 1717 (July 1985) at 14. In *Mushrooms*, the Commission found declines in PRWs as well as a downward trend in domestic sales, which it considered likely to continue due to the real and imminent threat of increased import penetration, citing among other things the fact that foreign sources of supply had been seriously affected by import restrictions in third-country markets. *Mushrooms*, Inv. No. TA-201-43, USITC Pub. 1089 (Aug. 1980) at 15-17.

In this regard, we have considered prices of fresh and frozen blueberries. The Commission gathered pricing data for eight pricing products. Specifically, the Commission gathered monthly USDA shipping point price data for four products representing the two most common containers used to transport fresh blueberries that were traded at prominent points in the United States and at ports of entry for imports.[201] The Commission also requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of four

[201] These pricing products were as follows: **Product 1.**--Fresh conventional flats, 12 6-oz cups with lids; **Product 2**.--Fresh conventional flats, 12 1-pt cups with lids; **Product 3**.--Fresh organic flats, 12 6-oz cups with lids; **Product 4.**--Fresh organic flats, 12 1-pt cups with lids. CR/PR at V-31. Prices for these pricing products represent open (spot) market sales by first handlers on product of generally good quality and condition unless otherwise stated and may include promotional allowances or other incentives. Reported prices generally include, but are not limited to, applicable brokerage fees and commissions, Customs fees and duties, U.S. packaging and U.S. freight costs prior to first sale, paid by the shipper/seller. Delivered Sales, Shipping Point Basis excludes all charges for freight after sale. CR/PR at V-31 n.46. USDA shipping point prices are reported in two sets of ranges: the overall low-high transaction price range per product from a given origin on a given day and the mostly low-high price range. Commission staff calculated a midpoint price based on the reported low and high prices for each product on each day. A simple average monthly calculation was made by using the midpoint price calculation for each product. CR/PR at V-32.

Grade A frozen blueberry products shipped to unrelated U.S. customers during January 2015-September 2020.[202] [203]

In general, prices for the pricing products decreased during 2015 to 2019. Comparing simple average shipping point prices for U.S.-origin fresh blueberries, price decreases ranged from 4.2 to 21.6 percent from 2015 to 2019, while foreign-origin blueberry price decreases ranged from 8.3 to 46.0 percent.[204] However, these comparisons are based on a simple average of monthly prices and do not take into account that the volumes shipped per month vary significantly reflecting the U.S. growing season.

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[202] These pricing products were as follows: **Product 5**.--Individual quick frozen (IQF), Cultivated, Grade A, Organic, 30 lbs box (labeled product 1 in questionnaire); **Product 6**.--Individual quick frozen (IQF), Cultivated, Grade A, Conventional, 30 lbs box (labeled product 2 in questionnaire); **Product 7**.--Individual quick frozen (IQF), Wild, Grade A, Organic, 30 lbs box (labelled product 3 in questionnaire); and **Product 8**.--Individual quick frozen (IQF), Wild, Grade A, Conventional, 30 lbs box (labelled product 4 in questionnaire). CR/PR at V-31. Data were requested net of all discounts, both direct and indirect, as well as U.S.-inland transportations costs. Grade A is defined by the U.S. standards for grades of frozen blueberries to be the quality of frozen blueberries that possess similar varietal characteristics; that are practically free from defects; that possess a good character, normal flavor and odor; and are of such quality with respect to color as to score not less than 90 points when scored in accordance with USDA's U.S. standards. CR/PR at V-31 n.48. Thirty-two U.S. producers and ten importers provided usable pricing data for sales of the requested frozen blueberry products, although not all firms reported pricing for all products for all quarters. Pricing data reported by these firms accounted for approximately 36.4 percent of U.S. producers' net sales of frozen blueberries and 15.2 percent of U.S. shipments of frozen blueberries imports in 2019. CR/PR at V-32.

[203] With respect to fresh blueberry pricing products, prices for imported blueberries were lower than U.S.-origin blueberries in 62 out of 91 instances. CR/PR at V-59. We observe, however, that compared to the 91 instances of available comparisons, there were 152 instances in which pricing data was available for either domestic or imported fresh blueberries but not both. CR/PR at Tables V-16 – V-19. With respect to frozen blueberries, prices for imported products were higher in the majority of instances (87 out of 132 comparisons). CR/PR at V-59.

[204] CR/PR at V-57 & Table V-24.

USDA data indicate that the domestic industry typically ships its highest volumes of fresh blueberries during the months of May, June, and July.[205] With respect to pricing product 1, while the average price in May decreased 5.6 percent from 2015 as compared to 2020, the average price in June increased 23.9 percent from 2015 as compared to 2020 and the average price in July increased 18.4 percent from 2015 as compared to 2020.[206] With respect to pricing product 2, the average May price increased 0.5 percent from 2015 as compared to 2020, while the average June price increased 52.9 percent from 2015 as compared to 2020, and the average July price increased 40.8 percent from 2015 as compared to 2020.[207] In 2019, U.S. domestic shipments in May, June, and July accounted for 23.4 percent, 27.5 percent and 21.5 percent of domestic shipments, respectively, and collectively for the May through June period, they accounted for 72.4 percent of U.S. domestic shipments.[208] Although prices decreased for the remaining months of the U.S. growing season (March-April and August-October), those months represent relatively few total shipments to the U.S. market, particularly with respect to the beginning and end of the U.S. growing season in which relatively small volumes of U.S. produced fresh blueberries are shipped.[209] During these months domestic U.S. shipments totaled 80.3 million pounds, or just 27.3 percent of the 293.7 million pounds shipped by

[205] CR/PR at Appendix E. We recognize that the USDA shipping point pricing data does not have quantities associated with that information; however, we consider the USDA/NASS movement data to be reliable, probative evidence of quantities shipped in this context.

[206] CR/PR at V-57 n.58.

[207] CR/PR at V-57 n.58.

[208] *Calculated from* CR/PR at Appendix E.

[209] CR/PR at Appendix E.

domestic producers in 2019.[210] Thus, the domestic industry saw prices rising on the majority of the volume of their U.S. shipments over the POI.

ABGA asserted that the months at the beginning of the fresh blueberry season (March and April) and at the end of the season (August through October) are of critical importance to the industry, as they claimed that they earn a disproportionate share of their income in these months due to higher prices.[211] ABGA further claimed that the prices at the beginning of the season directly impact prices later in the season.[212] Given the relatively smaller volume of U.S. shipments of domestically produced fresh blueberries in these months, we do not find the price declines noted as indicative of significant overall impairment to the U.S. industry or that they equate to serious injury as contemplated by the statute.[213] In addition, the record shows that the domestic industry experienced price increases in peak months of the U.S. growing season despite declines in earlier lower-volume months. Given these opposite pricing trends in various months of the year during the POI, we are not persuaded by ABGA's argument that prices in the beginning of the season affect prices in later months.

We also observe that looking at total U.S. shipment volumes relative to value over the POI, overall prices for blueberries do not decline. Specifically, the average unit value ("AUV")

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[210] Calculations based on CR/PR at Appendix E.

[211] ABGA Prehearing Br. at 8, 12-13, 29, 37; ABGA Posthearing Br. at 12-13.

[212] ABGA Prehearing Br. at 8, 12-13, 29, 37; ABGA Posthearing Br. at 12-13.

[213] Domestic U.S. shipments in March, September, and October represented 2.2 percent, 6.2 percent and 0.1 percent of annual domestic U.S. shipments in 2019. *Calculated from* CR/PR at Appendix E.

for U.S. shipments of blueberries increased overall during the POI, from $1.26 in 2015 to $1.28 in 2019.[214]

In light of the foregoing, we do not find that U.S. price declines in the beginning and end of the fresh blueberry season led to a significant overall impairment in the position of the domestic industry. This is particularly true when viewed in context of the domestic industry's overall profitability as well as the growth and expansion it exhibited during the POI, as discussed above.

We have also considered other economic factors. In particular, ABGA asserts that we should consider the rate of return on assets ("ROA").[215] The operating income and net income ROAs are calculated as operating income and net income, respectively divided by total assets.[216] Consistent with a growing industry, the industry's assets steadily increased from $392.5 million in 2015, to $408.7 million in 2016, $430.8 million 2017, $439.3 million in 2018, and $488.2 million in 2019.[217] The operating income and net income ROAs generally tracked the trends in operating and net income, initially decreasing from 2015 to 2016, peaking in 2017, and

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[214] CR/PR at Table C-1. We recognize that changes in AUVs may be affected by changes in product mix, although there should be relatively few product mix issues with respect to fresh blueberries. U.S. producers' U.S. shipment AUVs for fresh blueberries increased from $1.95 in 2015 to $2.17 in 2019, while U.S. producers' U.S. shipment AUVs for frozen blueberries decreased from $0.69 in 2015 to $0.39 in 2017. *Id.* at Tables C-2 and C-3. With respect to frozen blueberries for U.S.-origin prices frozen blueberries declines ranged from *** to *** percent from 2015 to 2019, while foreign-origin blueberry price decreases ranged from *** to *** percent. However, the frozen segment of the industry experienced an overall increase in profitability and remained at a reasonable level of profitability during the POI. CR/PR at Table C-3.

[215] ABGA Prehearing Br. at 54-57.

[216] CR/PR at III-41 n. 49. With respect to a firm's overall operations, the total asset value reflects an aggregation of a number of assets which are generally not product specific. Thus, high-level allocations are generally required in order to report a total asset value for blueberries. *Id.*

[217] CR/PR at Table III-26.

although declining from 2017 to 2019, reflecting a positive return throughout that time. The operating income ROA was 15.6 percent in 2015, 11.6 percent in 2016, 18.8 percent in 2017, 13.5 percent in 2018, and 9.0 percent in 2019.[218] Net income ROA was 7.8 percent in 2015, 4.3 percent in 2106, 13.4 percent in 2017, 8.0 percent in 2018, and 1.3 percent in 2019.[219] While the ROA for both net income and operating income were at their lowest in 2019, these indicators are impacted by cash-based accounting, once again making year-to-year comparisons less meaningful, and considered the full POI in the context of other indicators. Given that the domestic industry continued to expand and experience positive returns, we do not find the industry's ROAs to be indicative of serious injury.

D. The Domestic Industry Is Not Threatened with Material Injury

In considering whether the industry is threatened with serious injury, we consider all relevant economic factors, including the statutory threat factors:

> (i) a decline in sales or market share, a higher and growing inventory (whether maintained by domestic producers, importers, wholesalers, or retailers), and a downward trend in production, profits, wages, productivity, or employment (or increasing underemployment) in the domestic industry,
>
> (ii) the extent to which firms in the domestic industry are unable to generate adequate capital to finance the modernization of their domestic plants and equipment, or are unable to maintain existing levels of expenditures for research and development,
>
> (iii) the extent to which the United States market is the focal point for the diversion of exports of the article concerned by reason of restraints on exports of such article to, or on imports of such article into, third country markets.[220]

[218] CR/PR at Table III-26.
[219] CR/PR at Table III-26.
[220] 19 U.S.C. § 2252(c)(1)(B).

1. Decline in Sales or Market Share, Higher and Growing Inventories, Downward Trends in Production, Profits, Wages, Productivity, or Employment in the Domestic Industry

As discussed above, the domestic industry experienced overall increases in production, wages, productivity, and employment from 2015 through 2019.[221] [222]

With respect to profitability, we find that there is no clear trend sufficient to support a finding of threat of serious injury. Rather than demonstrating consistent downward trends, both operating and net income initially decreased from 2015 to 2016, increased and peaked in 2017 before subsequently declining in 2018 and 2019. Further, as we noted in our consideration of present serious injury, the sharper decline in net income in 2019 was related in substantial part to the ***.[223] Moreover, as the trends in profitability fluctuated, and notwithstanding declines, the domestic industry remained profitable and continued to grow, expand, and largely maintained a substantial level of capital expenditures.[224]

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[221] CR/PR at Tables III-2, III-3, III-9, III-15, III-18.

[222] We recognize that, as observed above, each of these indicators were lower in interim 2020 compared to interim 2019. Given that the interim period represents only partial year data, which is likely affected by the COVID-19 pandemic, we give greater weight to the trends exhibited in the full years of the POI.

[223] *See* Coalition Prehearing Br., App. B.

[224] As observed in our evaluation of serious injury, the domestic industry's net income and operating income were higher in interim 2020 compared to interim 2019. Given the issues with comparing year-to-year profitability and the fact that the interim period represents only partial year data, we give greater weight to the overall trends in the full years of the POI. Further, as discussed in the Commission Report, there is uncertainty regarding the meaningfulness of certain interim 2019 financial data due to the large number of companies that reported interim 2019 financial data that matched their full year 2019 financial results. *See* CR/PR at p. III-21 n. 27. Due to the timing of the typical harvest season, it is possible that many firms' profitability in a January-September period would be higher than for an annual-year period. *See* CR/PR at p. III-21. Of the 86 firms that reported 2019 financial data, 34 (*i.e.*, 40 percent) reported matching interim 2019 and full-year 2019 financial results,

(Continued…)

We also examine the level of inventories, both of domestic and foreign-origin blueberries. Because fresh blueberries are a perishable product, end-of-period inventories consist primarily of frozen blueberries.[225] Both U.S. producers' and importers' reported end-of-period inventories declined overall during the POI. U.S. producers' end-of-period inventories decreased from 114.6 million pounds in 2015 to 87.6 million pounds in 2019.[226] U.S. importers' end-of-period inventories were *** pounds in 2015, *** pounds in 2016, *** pounds in 2017, *** pounds in 2018, and *** pounds in 2019.[227] Although reported inventories declined, we observe that USDA data indicate that cold storage of blueberries increased overall during the POI. These data indicate that cold storage of

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which could likely result in overall interim 2019 profitability that is understated. However, because these 34 firms generally had lower sales volumes, they represented a much smaller share of the overall 2019 sales volume (9.1 percent). *Calculated* from U.S. producer questionnaire responses at III-9a and III-9b. As a check on our analysis, we also compared interim period results without these distorting effects by calculating interim period profitability excluding the 34 firms that reported matching interim 2019 and full-year 2019 results. We have found that the trends in profitability are still largely similar to those we see in the Commission Report. With these exclusions, operating profit was $65.4 million in interim 2019 and $76.9 million in interim 2020.

Net income was $23.6 million in interim 2019 and $31.7 million in interim 2020. While the comparatively higher profitability in interim 2020 at both the operating and net levels was not as sharp as reported in the Commission Report, operating profit was still 17.6 percent higher (compared to 22.6 percent in the Commission Report) and net income was 34.4 percent higher (compared to 43.2 percent in the Commission Report) in interim 2020 compared with interim 2019. The operating income to net sales ratio was 2.9 percentage points higher in interim 2020 than in interim 2019 (compared to a change of 3.0 percentage points in the Commission Report). The net income to net sales ratio was 2.0 percentage points higher in interim 2020 than in interim 2019 (compared to a change of 2.6 percentage points in the Commission Report). *Calculated* from U.S. producer questionnaire responses at III-9a and III-9b.

[225] CR/PR at III-14.

[226] CR/PR at Table III-12. These inventories were 121.3 million pounds in 2016, 100.3 million pounds in 2017, and 69.7 million pounds in 2018. U.S. producers' end-of-period inventories were 100.3 million pounds in interim 2019 and slightly lower at 95.7 million pounds in interim 2020. *Id.*

[227] CR/PR at Table III-13. U.S. importers' end-of-period inventories were *** pounds in interim 2019 and *** pounds in interim 2020. *Id.*

blueberries increased from 224.7 million pounds in 2015 to 246.6 million pounds in 2019.[228] Notwithstanding these increases in cold storage, the domestic industry was able to increase its U.S. shipments, particularly in 2019.

We have also considered inventories maintained by foreign producers, which overall do not show significant increases. Producers in Canada, which generally maintained the largest levels of inventories, indicated an overall decrease in the level of inventories during the POI.[229] With respect to the other main source countries, the inventory levels, even though increasing in some of the countries, remained at relatively much lower levels.[230] Accordingly, we do not find that there is a significant buildup of inventories being maintained in exporting countries that clearly threatens the domestic industry with serious injury in the imminent future.

We have also considered the domestic industry's declines in market share, as discussed in Section V.B.2. above. We view these declines, however, in the context of the relevant conditions of competition, particularly the seasonal nature of the fresh blueberry market.

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[228] CR/PR at Table III-14. These levels of cold storage were 268.9 million pounds in 2016, 222.1 million pounds in 2017, and 182.9 million pounds in 2018. USDA data indicate that cold storage of blueberries was 290.0 million pounds in interim 2019 and 318.6 million pounds in interim 2020. *Id.*

[229] Inventories in Canada were *** pounds in 2015; *** pounds in 2016, *** pounds in 2017, *** pounds in 2018, and *** pounds in 2019; they were *** pound in interim 2019 and *** pounds in interim 2020.

[230] Inventories in Argentina were *** pounds in 2015, *** pounds in 2016, *** pounds in 2017, *** pounds in 2018, and *** pounds in 2019; they were *** pounds in interim 2019 and *** pounds in interim 2020. Inventories in Chile were *** in 2015, *** pounds in 2016, *** pounds in 2017, *** pounds in 2018, and *** pounds in 2019; they were *** pounds in interim 2019 and *** pounds in interim 2020. Inventories in Mexico *** pounds in 2015, *** pounds in 2016, *** pounds in 2017, *** pounds in 2018, and *** pounds in 2019; they were *** pounds in interim 2019 and *** pounds in interim 2020. Inventories in Peru were *** pounds in 2015, *** pounds in 2016, *** pounds in 2017, *** pounds in 2018, and *** pounds in 2019; they were *** in interim 2019 and *** in interim 2020.

Monthly movement data indicate that, during the months of March through September,[231] the domestic industry's share of the fresh blueberry market initially increased from 66.2 percent in 2015 to 67.0 percent in 2016 and 67.8 percent in 2017 and subsequently decreased to 65.0 percent in 2018 and 63.7 percent in 2019.[232] In sum, the record shows that the domestic industry's share of the U.S. fresh market fluctuated rather than consistently declined, and the overall decline was only 2.5 percentage points.[233] This is consistent with the fact that foreign-origin blueberries are largely counter-seasonal to the U.S. growing season and most of the increase in imports of fresh blueberries (approximately 77 percent between 2015 and 2019) occurred outside of the U.S. growing season.[234] In light of this, coupled with the fact that the domestic industry as a whole remained at a reasonable level of profit notwithstanding the decline in market share, we do not find that these trends in fresh blueberry market share indicate that the domestic industry is threatened with serious injury in the imminent future.

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[231] Given the very small volume of U.S. shipments of domestic fresh blueberries in the month of October, we have not included the month of October for the purpose of calculating market share during the U.S. growing season. CR/PR at Appendix E.

[232] *Calculated from* CR/PR at Appendix E.

[233] *Calculated from* CR/PR at Appendix E. ABGA also argues that increased imports of fresh blueberries during the beginning and end of the U.S. growing season, March-April and September, took market share from domestic producers and depressed prices for domestic blueberries during this time. As previously noted, domestic industry shipments during these months accounted for a small overall portion of their annual shipments of fresh blueberries. Regardless, the domestic industry's shipments also increased substantially over these months, increasing from 44.8 million pounds in 2015 to 65.6 million pounds in 2019, or by 46.6 percent. Thus, while the domestic industry's market share in March-April and September declined from 46.4 percent in 2015 to 43.7 percent in 2019, this reflects only a portion of the market and the industry nevertheless increased shipments and benefited from the growing market. *Calculated from* CR/PR at Appendix E.

[234] Imports of fresh blueberries increased by 182.5 million pounds between 2015 and 2019, and 141.2 million pounds of this increase was in the months of October through February. *Calculated from* CR/PR at Appendix E. Indeed, as noted above, 63 percent of the increase in all imports of blueberries between 2015 and 2019 was of imports of fresh blueberries from October through February. *Calculated from* CR/PR at Appendix E.

In the frozen blueberry market, we recognize that the domestic industry's market share declined from 66.8 percent in 2015 to 66.2 percent in 2016, 65.5 percent in 2017, 64.4 percent in 2018, and 60.8 percent in 2019.[235] Notwithstanding this decline, however, the domestic frozen blueberry industry went from operating and net losses at the beginning of the POI to operating at a profitable level during the POI. Further, the domestic industry as a whole continued to operate at a reasonable level of profitability throughout the POI and experienced improvements in many of its performance indicators. Accordingly, we do not find that the loss in market share in the frozen blueberry market indicates that the domestic industry is threatened with serious injury in the imminent future.

2. Inability of Domestic Producers to Generate Adequate Capital to Finance the Modernization of Their Domestic Plants and Equipment or Inability to Maintain Existing Levels of Expenditures for Research and Development

As we discussed in our evaluation of present serious injury, although the domestic industry's capital expenditures initially declined from 2015 to 2016, such expenditures remained relatively steady from 2016 through 2019. Additionally, R&D expenditures increased during that time. We recognize that a number of firms reported actual and anticipated negative effects of imports on investment and growth and development.[236] However, in light of other record evidence, including that the industry continued to operate profitably and demonstrated overall growth and expansion as well as relatively steady levels of capital expenditures for most of the POI and increased R&D expenses, we find that the record does not

[235] CR/PR at Table C-3. The domestic industry's share of the frozen blueberry market was 61.4 percent in interim 2019 and 63.0 percent in interim 2020. *Id.*

[236] CR/PR at Tables III-27, III-28; *see also* CR/PR at Appendix G.

indicate that the industry as whole is unable to generate adequate capital to finance the modernization of their domestic facilities and equipment, nor is it unable to maintain existing levels of expenditures for R&D.

3. Extent to Which the U.S. Market Is a Focal Point for Diversion of Exports

While the U.S. market is likely to remain a prominent destination for exports in the imminent future, the record does not indicate that producers in other countries will divert additional exports of blueberries to the U.S. market in the imminent future that might give rise to serious injury, and indeed the record often indicates that exports to the United States will account for a declining share of shipments for foreign producers. This is confirmed by an examination of the exports from each of the main sources of U.S. import supply during the POI.

Argentina. Responding producers in Argentina reported an overall decrease in the share of shipments to the U.S. market, while there was an increase in home market shipments. As a share of total shipments, exports to the United States decreased irregularly from 60.9 percent in 2015 to 49.8 percent in 2019, while shipments to their home market increased irregularly from 5.1 percent in 2015 to 15.7 percent in 2019.[237] Exports of blueberries to the U.S. market are projected to account for 60.0 percent in 2020 (below the 2015 percentage) and then

[237] CR/PR at Table IV-36. Exports to the United States accounted for the following share of total shipments by producers in Argentina: 60.9 percent in 2015, 69.3 percent in 2016, 66.1 percent in 2017, 66.2 percent in 2018, 49.8 percent in 2019, 32.3 percent in interim 2019, and 35.1 in interim 2020. Exports from Argentina to other markets accounted for the following share of total shipments: 34.0 percent in 2015, 26.6 percent in 2016, 27.7 percent in 2017, 26.4 percent in 2018, 34.5 percent in 2019, 19.1 percent in interim 2019, and 19.9 in interim 2020. Home market shipments accounted for the following shares of total shipments: 5.1 percent in 2015, 4.1 percent in 2016, 6.3 percent in 2017, 7.3 percent in 2018, 15.7 percent in 2019, 48.7 percent in interim 2019, and 45.0 percent in interim 2020. *Id.*

decline to 54.7 percent in 2021.[238] Global Trad Atlas ("GTA") data for HTS subheadings that include blueberries as well as other fruits also show that exports to the U.S. market decreased overall from 2015 to 2019 and that that AUVs for exports to the United States were generally lower than those for other export markets.[239]

Canada. Responding producers in Canada reported an overall decrease in the share of shipments to the U.S. market relative to other export markets. As a share of total shipments, exports to the United States decreased overall from 42.7 percent in 2015 to 36.9 percent in 2019, while shipments to other export markets increased from 25.6 percent in 2015 to 32.7 in 2019.[240] Exports of blueberries to the U.S. market are projected to remain within the same range, accounting for 36.8 percent of the Canadian industry's shipments in 2020 and 39.9 percent in 2021, the latter of which, although higher than the projected percentage in 2020 still remains below the 2015 percentage.[241] GTA data for HTS subheadings that include blueberries as well as other fruits also show that exports to the U.S. market decreased overall from 2015 to

[238] CR/PR at Table IV-36.

[239] CR/PR at Table IV-38. Export shipments to the United States were 26.3 million in 2015, 29.2 million in 2016, 26.7 million in 2017, 25.1 million in 2018, and 20.4 million in 2019. *Id.*

[240] CR/PR at Table IV-18. Exports to the United States accounted for the following share of total shipments by Canadian producers: 42.7 percent in 2015, 37.7 percent in 2016, 31.9 percent in 2017, 31.7 percent in 2018, 36.9 percent in 2019, 38.6 percent in interim 2019, and 34.5 in interim 2020. Exports from Canada to other markets accounted for the following share of total shipments: 25.6 percent in 2015, 23.0 percent in 2016, 37.1 percent in 2017, 34.5 percent in 2018, 32.7 percent in 2019, 28.2 percent in interim 2019, and 28.1 in interim 2020. Home market shipments accounted for the following shares of total shipments: 31.8 percent in 2015, 39.3 percent in 2016, 31.0 percent in 2017, 33.8 percent in 2018, 30.4 percent in 2019, 33.3 percent in interim 2019, and 37.4 percent in interim 2020. *Id.*

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

2019.[242] As with exports from Argentina, GTA data show that AUVs for exports to the United States were generally lower than those for other export markets.[243]

Chile. Responding producers in Chile likewise reported an overall decrease in the share of shipments to the U.S. market relative to other export markets. As a share of total shipments, exports to the United States decreased overall from 57.2 percent in 2015 to 45.3 percent in 2019, while shipments to other export markets increased from 34.2 percent in 2015 to 45.9 in 2019.[244] Exports of blueberries to the U.S. market are projected to account for 44.4 percent in 2020 and 46.4 percent in 2021, the latter of which, although higher than the projected percentage in 2020 still remains below the 2015 percentage.[245] GTA data for HTS subheadings that include blueberries as well as other fruits show that exports to the U.S. market increased overall from 2015 to 2019, but were lower in 2019 compared to 2018.[246] As with Argentina and Canada, GTA data show that AUVs for exports to the United States were generally lower than those for other export markets in 2017 through 2019.[247]

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[242] CR/PR at Table IV-20. Export shipments to the United States were 427.4 million in 2015, 399.3 million in 2016, 342.3 million in 2017, 416.9 million in 2018, and 397.7 million in 2019. *Id.*

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

[244] CR/PR at Table IV-45. Exports to the United States accounted for the following share of total shipments by producers in Chile: 57.2 percent in 2015, 56.1 percent in 2016, 48.1 percent in 2017, 46.2 percent in 2018, 45.3 percent in 2019, 46.3 percent in interim 2019, and 43.4 in interim 2020. Exports from Chile to other markets accounted for the following share of total shipments: 34.2 percent in 2015, 36.2 percent in 2016, 41.7 percent in 2017, 44.9 percent in 2018, 45.9 percent in 2019, 45.8 percent in interim 2019, and 46.1 in interim 2020. Home market shipments accounted for the following shares of total shipments: 8.6 percent in 2015, 7.7 percent in 2016, 10.1 percent in 2017, 8.9 percent in 2018, 8.8 percent in 2019, 7.9 percent in interim 2019, and 10.5 percent in interim 2020. *Id.*

[245] CR/PR at Table IV-45.

[246] CR/PR at Table IV-47. Export shipments to the United States were 186.1 million in 2015, 239.2 million in 2016, 195.7 million in 2017, 241.8 million in 2018, and 217.2 million in 2019. *Id.*

[247] CR/PR at Table IV-47.

Mexico. Responding producers in Mexico reported that, as a share of total shipments, exports to the United States remained relatively stable at 84.4 percent in 2015 to 84.9 percent in 2019.[248] Exports of blueberries to the U.S. market are projected to remain stable, accounting for 85.4 percent in 2020 and 83.3 percent in 2021.[249] GTA data for HTS subheadings that include blueberries as well as other fruits also show that exports to the U.S. market increased overall from 2015 to 2019.[250]

Peru. Responding producers in Peru reported that the share of shipments to the U.S. market relative to other markets remained relatively steady. As a share of total shipments, exports to the United States increased overall from 52.9 percent in 2015 to 54.4 percent in 2019, while home market shipments increased from 2.5 percent in 2015 to 9.6 in 2019.[251] Exports of blueberries to the U.S. market are projected to account for a declining share of

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[248] CR/PR at Table IV-27. Exports to the United States accounted for the following share of total shipments by producers in Mexico: 84.4 percent in 2015, 83.4 percent in 2016, 86.4 percent in 2017, 84.5 percent in 2018, 84.9 percent in 2019, 83.5 percent in interim 2019, and 84.7 in interim 2020. Exports from Mexico to other markets accounted for the following share of total shipments: 10.6 percent in 2015, 11.7 percent in 2016, 9.1 percent in 2017, 9.1 percent in 2018, 8.3 percent in 2019, 9.2 percent in interim 2019, and 7.3 in interim 2020. Home market shipments accounted for the following shares of total shipments: 5.0 percent in 2015, 4.9 percent in 2016, 4.5 percent in 2017, 6.5 percent in 2018, 6.9 percent in 2019, 7.3 percent in interim 2019, and 7.9 percent in interim 2020. *Id.*

[249] CR/PR at Table IV-27.

[250] CR/PR at Table IV-29. Export shipments to the United States were 101.9 million in 2015, 92.7 million in 2016, 97.9 million in 2017, 116.6 million in 2018, and 147.5 million in 2019. *Id.* GTA data show that AUVs for exports to the United States were generally higher than those for other export markets. *Id.*

[251] CR/PR at Table IV-54. Exports to the United States accounted for the following share of total shipments by producers in Peru: 52.9 percent in 2015, 58.3 percent in 2016, 47.9 percent in 2017, 53.9 percent in 2018, 54.4 percent in 2019, 54.9 percent in interim 2019, and 51.9 in interim 2020. Exports from Peru to other markets accounted for the following share of total shipments: 44.6 percent in 2015, 40.4 percent in 2016, 49.7 percent in 2017, 39.3 percent in 2018, 36.0 percent in 2019, 34.4 percent in interim 2019, and 39.0 in interim 2020. Home market shipments accounted for the following shares of total shipments: 2.5 percent in 2015, 1.2 percent in 2016, 2.4 percent in 2017, 6.9 percent in 2018, 9.6 percent in 2019, 10.7 percent in interim 2019, and 9.1 percent in interim 2020. *Id.*

Peru's shipments, accounting for 50.6 percent in 2020 and 48.1 percent in 2021.[252] GTA data for HTS subheadings that include blueberries as well as other fruits also show that exports from Peru to the U.S. market increased overall from 2015 to 2019.[253]

Accordingly, while the record indicates that the United States has been and will continue to be an important export market for each of these countries, there is no indication that additional exports from those countries will be diverted to the United States in the imminent future. Even to the extent that the United States is likely to continue to be a focal point for exports from some countries, we note that the level of imports are likely to be consistent with levels seen throughout the POI, which did not result in serious injury to the domestic industry. We further note that for some exporting countries, such as Peru, any focus on the U.S. market will likely continue to be on predominantly fresh blueberries during the off-season for U.S. producers of fresh blueberries. We thus do not find that any continued focus on the U.S. market clearly threatens the domestic industry with serious injury in the imminent future.[254]

In sum, based on the record in this investigation, we do not find that the domestic industry is threatened with serious injury from imports of blueberries.

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[252] CR/PR at Table IV-54.

[253] CR/PR at Table IV-56. Export shipments to the United States were 51.4 million in 2015, 66.7 million in 2016, 75.5 million in 2017, 145.7 million in 2018, and 209.8 million in 2019. *Id.* GTA data show that AUVs for exports from Peru to the United States were generally higher than those for other export markets. *Id.*

[254] For these reasons, we also find unpersuasive ABGA's assertions that any increased exports of live blueberry plants to foreign countries is likely to result in significant increases in exports of blueberries to the United States in the imminent future. ABGA Posthearing Br. 10, ABGA Prehearing Br. at 66-68, Exhibits 24-27. As explained above, foreign blueberry growers are increasing shipments to non-U.S. markets so the record does not support the conclusion that increased production in these foreign industries would primarily be dedicated to the U.S. market.

VI. Conclusion

For the foregoing reasons, we determine that fresh, chilled, and frozen blueberries are not being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or threat thereof, to the domestic industry producing an article like or directly competitive with the imported article.[255] [256]

[255] Because we have found that the domestic industry is not seriously injured or threatened with serious injury, we do not make any findings as to whether imports would be a substantial cause of such injury or threat thereof.

[256] Chair Kearns' finding of no serious injury or threat of serious injury is also related to certain causation issues raised by the parties. As noted above, the majority of imports of fresh blueberries and their increase during the POI were during the months of October through February, when there is minimal domestic production of fresh blueberries. In contrast, both the domestic industry and import market shares of fresh blueberries during the US growing season, from March through September, remained relatively stable during the POI. CR/PR at Appendix E. Purchasers also reported only small quantities of imports that were purchased instead of the domestic product. CR/PR at Tables V-25 & V-26 (reporting *** pounds of lost sales, which amounts to just *** percent of responding purchasers total purchases). The record further indicates that other factors contributed to those declines experienced by the domestic industry during different portions of the POI. While the domestic industry's largest declines in production and shipments occurred in 2017, domestic producers indicated that these declines primarily reflected adverse weather that destroyed blueberry crops in multiple regions of the United States. Hearing Tr. at 173 (Lee) (indicating that blueberry crops in Florida were destroyed by Hurricane Irma in 2017) & 239-240 (Crosby, Hartman) (indicating that freezes destroyed blueberry crops in Georgia, Michigan, and along the "east coast" in 2017). And while domestic producers cite declining fresh blueberry prices in the "shoulder" portions of the US growing season as causing injury to the domestic industry, domestic industry shipments in September (the fall "shoulder" season) from west coast producers increased more than 150 percent in this month between 2015 and 2019, which appears to have contributed to an increasing supply of fresh blueberries and decreasing prices in this period. CR/PR at Appendix E. Finally, with respect to frozen blueberries, the overall import levels, market share, and their increase were generally much less than those of imports of fresh blueberries during the POI. *Compare* CR/PR at Tables IV-3 & 4 *with* Tables IV-5 & 6. Further, the producers of frozen blueberries worst performance were in 2015, when imports' market share of frozen blueberries were at their lowest point of the POI, yet domestic firms' performance improved from 2016-2018 even as imports took market share. CR/PR at Table C-3. Given this record evidence, Chair Kearns believes that imports were not a substantial cause of serious injury to the domestic industry.

Part I: Introduction

Background

On September 29, 2020, at the request of the United States Trade Representative ("USTR") the Commission instituted investigation No. TA-201-77 under section 202(b)(1) of the Trade Act of 1974 ("The Act")[1] to determine whether fresh, chilled, or frozen blueberries (collectively, "blueberries") are being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or the threat thereof, to the domestic industry producing an article like or directly competitive with the imported article. The Commission has determined that this investigation is "extraordinarily complicated" within the meaning of section 202(b)(2)(B) of the Act.[2] The following tabulation presents information relating to the background and schedule of this proceeding:[3]

Effective date	Action
September 29, 2020	Request for investigation received from the USTR; notice of institution and scheduling of investigation (85 FR 64162 (October 9, 2020); subsequently amended (85 FR 66360, October 19, 2020))
January 12, 2021	Commission's hearing on injury
February 11, 2021	Scheduled date for the Commission's vote on injury
February 25, 2021	Scheduled date for the Commission's hearing on remedy (canceled)
March 19, 2021	Scheduled date for the Commission's vote on remedy (canceled)
March 29, 2021	Commission's report transmitted to the President containing the Commission's determination and basis therefor.

Statutory criteria and organization of the report

Under the statute, the Commission considers whether "an article is being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or the threat thereof, to the domestic industry producing an article like or directly competitive

[1] 19 U.S.C. § 2252.

[2] 19 U.S.C. § 2252(b)(2)(B).

[3] The Commission's notice of institution and scheduling are referenced in appendix A and may also be found at the Commission's web site (internet address *www.usitc.gov*). Appendix B presents the witnesses participating in the Commission's hearing.

with the imported article."[4] Under section 202 of the Trade Act, imports have increased when the increase is "either actual or relative to domestic production."[5] This information is addressed in *Part II* of this report.

Section 202(c)(1)(A) of the Act provides that in making its determination with respect to serious injury the Commission shall take into account all economic factors which it considers relevant, including (but not limited to) "(i) the significant idling of productive facilities in the domestic industry, (ii) the inability of a significant number of firms to carry out domestic production operations at a reasonable level of profit, and (iii) significant unemployment or underemployment with the domestic industry."[6] Section 202(c)(1)(B) of the Act provides that in making its determination with respect to threat of serious injury the Commission shall take into account all economic factors which it considers relevant, including (but not limited to) "(i) a decline in sales or market share, a higher and growing inventory (whether maintained by domestic producers, importers, wholesalers, or retailers), and a downward trend in production, profits, wages, productivity, or employment (or increasing underemployment) in the domestic industry, (ii) the extent to which firms in the domestic industry are unable to generate adequate capital to finance the modernization of their domestic plants and equipment, or are unable to maintain existing levels of expenditures for research and development, {and} (iii) the extent to which the United States market is the focal point for the diversion of exports of the article concerned by reason of restraints on exports of such article to, or on imports of such article into, third country markets."[7] These factors are addressed in *Part III* of this report, except for information on market share declines, if any, which are addressed in *Part IV* of the report.

With respect to substantial cause, the Commission shall take into account all economic factors which it considers relevant, including (but not limited to) an increase in imports (either actual or relative to domestic production) and a decline in the proportion of the domestic market supplied by domestic producers.[8] The presence or absence of any factor that the Commission is required to consider is "not necessarily dispositive."[9] The statute also directs the Commission to consider "the condition of the domestic industry over the course of the relevant business cycle … " and to examine "factors other than imports which may be a cause of serious

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[4] Section 202(b)(1)(A) of the Trade Act; 19 U.S.C. § 2252(b)(1)(A).
[5] 19 U.S.C. § 2252(c)(1)(C).
[6] 19 U.S.C. § 2252(c)(1)(A).
[7] 19 U.S.C. § 2252(c)(1)(B).
[8] Section 202(c)(1)(C); 19 U.S.C. § 2252(c)(1)(C).
[9] Section 202(c)(3); 19 U.S.C. § 2252(c)(3).

injury, or threat of serious injury, to the domestic industry."[10] *Part IV* of this report provides information on apparent U.S. consumption and respective market shares and available information on foreign industries and their participation, if any, in the U.S. market since January 1, 2015. Information on other competitive dynamics in the U.S. market, including information on any relevant business cycle, is provided in *Part V* of this report.

Previous and related investigations

The Commission has conducted no previous safeguard investigations,[11] or countervailing duty or antidumping duty investigations, on blueberries.

The Commission has conducted a limited number of import injury investigations on other berry products, including countervailing duty and antidumping duty investigations on red raspberries from Canada (Inv. Nos. 701-TA-254 and 731-TA-196) and countervailing duty and antidumping duty investigations on individually quick frozen red raspberries from Chile (Inv. Nos. 701-TA-416 and 731-TA-948). At this time, however, there are no outstanding countervailing duty or antidumping duty orders on raspberries.[12]

This investigation was requested by the USTR as one of a number of actions which the USTR, the Department of Agriculture ("USDA"), and the Department of Commerce ("Commerce") reported they would undertake to address the effects of increased imports on American producers of seasonal and perishable fruits and vegetables. Following receipt on November 4, 2020 of a request from the USTR, the Commission commenced monitoring investigations of fresh or chilled strawberries (Inv. No. 332-581) and fresh or chilled bell peppers (Inv. No. 332-582) on December 7, 2020.[13] The USTR further requested fact-finding investigations into the importation of cucumbers and squash on U.S. seasonal markets on

[10] Section 202(c)(2); 19 U.S.C. § 2252(c)(2).

[11] The Commission has conducted a number of safeguards on other agricultural products including fresh tomatoes and bell peppers (Inv. No. TA-201-66); fresh winter tomatoes (Inv. No. TA-201-64); mushrooms (Inv. Nos. TA-201-10, TA-201-17, and TA-201-43); and asparagus (Inv. No. TA-201-4).

[12] A section 332 fact-finding investigation, *Raspberries for Processing: Conditions of Competition between U.S. and Foreign Suppliers, with a Focus on Washington State*, was requested by the USTR in a letter received on April 9, 2020. The factfinding investigation focuses on the U.S. raspberry industry in Washington state and the conditions of competition between U.S. and foreign suppliers of raspberries meant for processing. A public hearing was held on September 17, 2020, and the report will be transmitted to the USTR no later than June 9, 2021.

[13] 85 FR 78866, 85 FR 78867.

December 7, 2020. The Commission expects to transmit both of its reports to the USTR in these investigations no later than December 7, 2021.[14]

Summary of data sources

Data on operations in the United States are based on USDA data, official export statistics, and questionnaire responses. Specifically, data on U.S. bearing acreage, utilized production, U.S. shipments, and cold storage of blueberries is provided by or derived from USDA National Agricultural Statistics Service ("NASS") reports[15] and official export statistics; while information on U.S. producers' net sales, inventories, employment data, freezing capacity, and individual qualitative responses are derived from questionnaires. Information on imports is based on official U.S. import statistics for imports for consumption.[16] Information on foreign producers is derived from questionnaire responses and select data from foreign government agencies.

For pricing data, the Commission gathered monthly USDA Agricultural Marketing Service (USDA AMS) shipping point price data for fresh or chilled blueberries from its website and collected quarterly data from questionnaires issued to U.S. producers and importers for the total quantity and f.o.b. value of Grade A frozen blueberries shipped to unrelated U.S. customers during January 2015-September 2020. USDA AMS data on movements of blueberries is also incorporated into certain tables.

Market summary

Apparent U.S. consumption of blueberries totaled approximately 1.2 billion pounds ($2.2 billion) in 2019. U.S. producers' U.S. shipments totaled 591.9 million pounds ($755.4 million) in 2019 and accounted for 48.4 percent of apparent U.S. consumption by quantity and 34.5 percent by value. U.S. imports from USMCA sources Canada and Mexico totaled 335.5 million pounds ($583.2 million) in 2019, while U.S. imports from Argentina, Chile, and Peru totaled 346.8 million pounds ($973.7 million). Imports from these five sources collectively accounted for 99.7 percent of all U.S. imports of blueberries by quantity in 2019. U.S. imports from all other sources totaled 1.7 million pounds ($4.8 million) in 2019. U.S. imports of

[14] 86 FR 2692, 86 FR 2694.

[15] This includes certain data derived from NASS Fruit and Nut Summaries, which are provided annually and provide data for full year periods only.

[16] Statistical reporting numbers used include 0810.40.0024, 0810.40.0026, 0810.40.0029, 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040. For more information, see "U.S. Tariff Treatment" below.

blueberries net of re-exports totaled 629.9 million pounds ($1.4 billion) in 2019, and accounted for 51.6 percent of apparent U.S. consumption by quantity and 65.5 percent by value.

U.S. market participants

U.S. growers and freezers

USDA publishes the Census of Agriculture covering farms[17] across the United States every five years.[18] Over the longer period of time covered by the three most recent censuses, cultivated and wild blueberry operations have exhibited somewhat different trends. Cultivated blueberry operations exhibited net growth of 4,973 farms and 35,969 acres during the ten-year period between 2007 and 2017, as well as a southern and western shift in terms of farms and acreage. Wild blueberry operations exhibited net growth of 202 farms and a net reduction of 5,704 total acres during the same ten-year period, with the preponderance of operations located in Maine.

USDA's 2017 Census of Agriculture identified 15,933 farms with 153,258 acres dedicated to growing blueberries (118,443 bearing age acres and 34,815 nonbearing age acres). This included 14,964 cultivated blueberry farms (113,199 total acres) and 1,109 wild blueberry farms (40,059 total acres). The largest number of cultivated blueberry farms and total acreage was in Georgia while the largest number of wild blueberry farms and total acreage was in Maine.[19]

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[17] The census definition of a farm is any place from which $1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the census year. 2017 Census of Agriculture, USDA / NASS, p. VIII.

[18] While data generally presented in this report cover through September 2020, the most recent USDA census report is for 2017. Additionally, the census report refers to "tame" blueberries as one of two subsets of blueberries, along with wild blueberries. Cultivated blueberries are also referred to as "tame" blueberries in USDA publications.

[19] 2017 Census of Agriculture, USDA / NASS, table 33.

USDA's 2012 Census of Agriculture identified cultivated and wild blueberries separately and did not combine the data. Reported growing operations included 13,432 cultivated blueberry farms (96,169 total acres) and 1,297 wild blueberry farms (41,087 total acres). The largest number of cultivated blueberry farms was in Florida and greatest total acreage was in Michigan while the largest number of wild blueberry farms and total acreage was in Maine. 2012 Census of Agriculture, USDA / NASS, table 33.

USDA's 2007 Census of Agriculture identified cultivated and wild blueberries separately and did not combine the data. Reported growing operations included 9,991 cultivated blueberry farms (77,150 total acres) and 907 wild blueberry farms (45,763 total acres). The largest number of cultivated blueberry farms and total acreage was in Michigan while the largest number of wild blueberry farms and total acreage was in Maine. 2007 Census of Agriculture, USDA / NASS, table 34. In comparison, the 2002

(*continued*...)

In this proceeding, the Commission issued U.S. producers' questionnaires to approximately 1,150 firms, including U.S. growers of blueberries, freezers, and firms which may carry out both operations.[20] The Commission has received 134 responses from these firms.[21] These firms are believed to account for 33.8 percent of U.S. bearing acreage of blueberries in 2019.

Table I-1 presents responses by U.S. producers regarding their position on the application of safeguard measures. Table I-2 presents their rankings of the importance of factors causing injury on a scale of 1 through 5 (with five being an extremely important cause of injury).[22]

census recorded 7,093 farms growing blueberries with 75,853 harvested acres located principally in Michigan and Maine. See Fruit and Tree Nuts Outlook Special Article, June 3, 2015, ERS/USDA, tables 9 and 10.

[20] USDA assisted the Commission by distributing a Commission letter to 1,000 individual farm operations (accounting for 85 percent of published blueberry acreage in 2019) informing them of the questionnaire, where it could be downloaded, and the importance of responses to the Commission's investigation. Additionally, Commission staff participated in two seminars, one hosted by the Wild Blueberry Commission of Maine and another hosted by the American Frozen Food Institute and the North American Blueberry Council to provide information to firms on investigation timelines and how to complete and file questionnaire responses.

[21] Though the responses of all firms ("responding U.S. producers") are included in certain tables (for example, ranking of factors causing injury or comparability of fresh and frozen blueberries), substantive U.S. producer data in this report derived from questionnaire data generally reflect approximately two-thirds of the total 134 responses received ("usable U.S. producers"). This subset of firms accounts for 77.1 percent of the total bearing acreage reported in all received U.S. Producer questionnaire responses. ***.

[22] ***.

After the Commission's hearing, about 88 U.S. producers who had not previously returned questionnaires submitted limited responses to Commission staff to report their position on the imposition of safeguard relief. The vast majority of firms reported that they supported the imposition of safeguard relief, while *** reported taking no position. These responses are not included in the count of "responding" or "usable" responses above.

Table I-1
Blueberries: Responding U.S. producers' position on the application of safeguard measures

Firm	Number of firms (count)
Support	112
Oppose	10
Take no positions	12
All responding firms	134

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

Table I-2
Blueberries: Ranking of the importance of factors causing injury as reported by responding U.S. producers, by factor

Factor	Aggregate weight	Average rating (between 1 and 5)	Rating					Total number of firms reporting
			1	2	3	4	5	
			Number of firms reporting (count)					
Competition from imported blueberries	574	4.59	5	6	3	7	104	125
Labor problems or shortages	395	3.35	12	22	26	29	29	118
Environmental factors	350	2.94	16	32	32	21	18	119
COVID-19 pandemic	330	2.87	16	35	29	18	17	115
Exchange rates	315	3.15	24	11	14	28	23	100
Change in Federal regulations for blueberries	290	2.66	25	22	38	13	11	109
Change in raw material costs	287	2.68	32	19	25	13	18	107
Competition from other U.S. producers	264	2.30	34	36	28	11	6	115
Change in composition in U.S. industry	238	2.33	41	22	17	8	14	102
Production problems	223	2.32	34	23	21	10	8	96
U.S. demand for blueberries	220	2.34	41	15	17	7	14	94
Changes in consumer tastes	184	2.07	39	23	15	6	6	89
Limitations on growing varieties	180	2.17	39	13	16	8	7	83
Insufficient scale	166	1.89	51	13	13	5	6	88
Inability to obtain adequate financing	162	1.78	56	14	11	5	5	91
Inability to secure logistics	116	1.47	56	13	7	2	1	79
Other factors	104	2.89	14	3	4	3	12	36

Note.--The factors are sorted in descending order of importance based on the total weighting of responding producers (rating multiplied by count of firms).

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

U.S. importers

In the current proceedings, the Commission issued U.S. importers' questionnaires to 82 firms believed to be importers of blueberries, as well as to all U.S. producers of blueberries. Usable questionnaire responses were received from 41 firms, representing 36.3 percent of U.S. imports from Argentina, 65.1 percent of U.S. imports from Canada, 64.2 percent of U.S. imports

from Chile, 73.5 percent of U.S. imports from Mexico, 86.8 percent of U.S. imports from Peru, 35.0 percent of U.S. imports from all other sources, and 70.0 percent of U.S. imports from all import sources in 2019.

U.S. purchasers

The Commission received 41 usable questionnaire responses from firms that have purchased blueberries since January 1, 2015. The majority of firms reported that they purchased conventional cultivated fresh or chilled blueberries. Eighteen purchasers reported that they are processors, while 17 reported that they are distributors, 9 are retailers, and 1 is a grower. In general, responding U.S. purchasers were located nationwide. Twelve purchasers were also marketers of blueberries, with 10 of those selling both domestic and imported blueberries.

The imported article and like or directly competitive articles

Description

Fresh, chilled or frozen blueberries include blueberries that are fresh, whether or not chilled, and blueberries that are frozen, whether uncooked or cooked by steaming or boiling in water and whether or not containing added sugar or other sweetening matter. Blueberries are fruits grown on perennial flowering blueberry shrubs, classified within the genus *Vaccinium*.[23] Blueberries consist of both "wild" and "cultivated" varieties. Cultivated blueberries typically include but are not limited to those from highbush (*Vaccinium australe Small* and *Vaccinium corymbosum L.*) and rabbiteye blueberry plant varieties (*Vaccinium ashei Reade*).[24] Wild or lowbush blueberries are from lowbush blueberry plants (*Vaccinium angustifolium*) and are generally smaller than cultivated blueberries.[25] Blueberries covered by the scope of this investigation are those specified in the request letter from the USTR, specifically, those that "fall within the product descriptions under the following statistical reporting categories in the Harmonized Tariff Schedule of the United States: 0810400029 (cultivated blueberries, including highbush, fresh or chilled); 0810400026 (certified organic blueberries, fresh or chilled); 0810400024 (wild blueberries, fresh or chilled); 0811902024 (wild blueberry, uncooked or

[23] The genus *vaccinium* includes the cranberry, blueberry, bilberry, lingonberry, and huckleberry.

[24] USDA, AMS, *Blueberries: Shipping Point and Market Inspection Instructions*, October 2002, 1. https://www.ams.usda.gov/grades-standards/blueberries-grade-and-standards.

[25] USDA, AMS, *Blueberries: Shipping Point and Market Inspection Instructions*, October 2002, 1. https://www.ams.usda.gov/grades-standards/blueberries-grade-and-standards.

cooked by steaming or boiling in water, frozen); 0811902030 (blueberries, certified organic, cultivated (including highbush), uncooked or cooked by steaming or boiling in water, frozen); and 0811902040 (blueberries, cultivated (including highbush), uncooked or cooked by steaming or boiling in water, NESOI, frozen)."[26] Blueberries that fall within the specified statistical reporting numbers include blueberries regardless of the type (e.g., wild or cultivated) or horticulture method through which the blueberries were produced (e.g., organic or not). The specified statistical reporting numbers include all shapes, sizes, colors, and grades of fresh, chilled, or frozen blueberries; they include frozen blueberries, whether individually quick frozen ("IQF") or in other forms (e.g., block frozen). These statistical reporting numbers cover all fresh, chilled, or frozen blueberries regardless of the type of packaging, including size or packaging material. USTR's letter does not include blueberries that do not fall under these specified statistical reporting numbers.[27]

The American Blueberry Growers Alliance ("Alliance", or "ABGA") argues that the domestic industry produces a single like product consisting of fresh, chilled, and frozen blueberries.[28] The Blueberry Coalition for Progress and Health ("Coalition" or "the Coalition") argues that fresh blueberries constitute a separate domestic like or directly competitive product from frozen blueberries.[29]

In determining whether an article is being imported into the United States in such increased quantities as to be a substantial cause of serious injury or the threat thereof to the domestic industry, the Commission first defines "the domestic industry producing an article that is like or directly competitive with the imported article." In assessing what constitutes the

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[26] USTR, Request letter to USITC, September 29, 2020. https://www.usitc.gov/press_room/documents/arl_letter_to_itc_kearns_sec_202_investigation_request_blueberries_9_29_20_002.pdf.

[27] For example, blueberries that have been dried or further processed as jams, purees, or juices or incorporated as an ingredient in finished bakery and confectionary items (muffins, granola bars, cakes, cookies, etc.) are provided for in statistical reporting numbers not included in USTR's letter.

[28] See the Alliance's prehearing brief, pp. 13-19, and posthearing brief, pp. 1-4.

[29] See the Coalition's comments on draft questionnaires, pp. 15-20, prehearing brief, pp. 28-62 and posthearing brief pp. 3-5. This argument is also shared by the Asociación de Productores de Arándanos de Peru (see comments on draft questionnaires pp. 5-9, and prehearing brief (shared with the Government of Peru) pp. 17-20), the collective Canadian respondents (see Canadian respondents' prehearing brief p. 9 and posthearing brief, p. 2), Chilean Food Processing Companies Association (see prehearing brief, pp. 5-7 and posthearing brief, pp. 2-3), Aneberries, A.C. (see prehearing brief, pp. 4-5), Government of Mexico (see prehearing brief, pp. 5-7), and the Subsecretaria de Relaciones Economicas Internacionales de Chile and Asociacion de Exportadores de Frutas de Chile A.G. (see prehearing brief, pp. 4-6).

product(s) that is/are like or directly competitive with the imported article(s), the Commission takes into account such factors as (1) the physical properties of the article, (2) its customs treatment, (3) its manufacturing process (i.e., where and how it is made), (4) its uses, and (5) the marketing channels through which the product is sold. Information relating to these factors is presented in the sections that follow.

Physical properties

Blueberries are the berries produced by perennial flowering blueberry shrubs, classified within the genus *Vaccinium*. Blueberries are round with smooth, sometimes velvety skins. They are high in fiber, antioxidants, and essential nutrients.[30] Blueberries vary in size, taste, and color. Wild or lowbush blueberries (*Vaccinium angustifolium*) are domestically grown primarily in Maine. Wild or lowbush blueberries are also grown in adjacent regions in Canada. They tend to be smaller in size than cultivated blueberries, have a more intense flavor profile, and are more delicate, and so are mostly marketed as frozen berries.[31] Cultivated blueberries, e.g., highbush (*Vaccinium australe Small* and *Vaccinium corymbosum L.*) and rabbiteye blueberry plant varieties (*Vaccinium ashei Reade*), and hybrid half-high blueberries, are grown extensively throughout the United States and the world and are larger in size.[32] Different varieties of cultivated blueberries have been adapted to grow in varying climatic conditions and produce blueberries with varying color, flavor, and size properties, with colors ranging from sky blue or gray to pink to blue or purple, flavors varying from bland to sweet to intense, and sizes ranging from small to large. Additionally, color, flavor and size can be affected by weather fluctuations, the maturity of the fruit, and the timing of harvest. Cultivated blueberries are sold fresh as well as for processing. Wild blueberries however, are sold primarily for processing; only a small portion of the crop is sold for fresh consumption.

Blueberries can be sold fresh for consumption or be processed. Blueberries have a soft flesh and no inner core or peel, which makes them highly perishable and susceptible to insect

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[30] Yan, LIn, "Blueberries and Health," last modified, August 13, 2016. https://www.agmrc.org/commodities-products/fruits/blueberries.

[31] Wild Blueberries, "Overview, Are Your Blueberries Wild?" (accessed December 9, 2020). https://www.wildblueberries.com/why-wild/; University of Maine Cooperative Extension, "Cooperative Extension: Maine Wild Blueberries," revised February 2015, 2. https://extension.umaine.edu/blueberries/factsheets/.

[32] USDA, AMS, *Blueberries: Shipping Point and Market Inspection Instructions*, October 2002, 1. https://www.ams.usda.gov/grades-standards/blueberries-grade-and-standards.

and physical damage.[33] Fresh blueberries have limited shelf life before facing damage from spoilage, shriveling or mold.[34] Accordingly, fresh blueberries are typically chilled.[35] Blueberries can also be further processed in a number of ways that extends the shelf life, including freezing either as IQF fruit or in block frozen form. Frozen blueberries may or may not be cooked by boiling or steaming with water and may or may not have sugar or other sweeteners added before freezing. Frozen blueberries can also be mixed with other types of berries to form berry mixes. Blueberries can also be processed in other ways, e.g., canning, juicing, or drying.

U.S. tariff treatment

Fresh blueberries[36] are classifiable in the Harmonized Tariff Schedule of the United States ("HTS") under subheading 0810.40.00 (fresh cranberries, and other fruits of the genus *Vaccinium)* and reported for statistical purposes under statistical reporting numbers 0810.40.0024 for wild blueberries, 0810.40.0026 for cultivated blueberries (including highbush) certified organic, and 0810.40.0029 for other cultivated blueberries. Before January 1, 2011, both 0810.40.0026 and 0810.40.0029 were described under 0810.40.0028 (blueberries, cultivated).[37]

Frozen blueberries that are uncooked or cooked by steaming or boiling in water, whether or not containing added sugar or other sweetening matter are classifiable in the Harmonized Tariff Schedule of the United States ("HTS") under subheading 0811.90.20 and reported for statistical purposes under statistical reporting numbers 0811.90.2024 for wild, 0811.90.2030 for cultivated (including highbush) certified organic, and 0811.90.2040 for other cultivated. Before July 1, 2018, both 0811.90.2030 and 0811.90.2040 were described under 0811.90.2028 (blueberries, cultivated (including highbush), uncooked or cooked by steaming or boiling in water, frozen).[38]

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[33] JBT Technologies, *Technologies for Processing Value-Added Berry Fruit Products*, no date, 5. https://www.jbtc.com/-/media/files/foodtech/innovation/white-papers/jbt-white-paper-berry-processing.ashx.

[34] Wild blueberries are even more perishable than cultivated blueberries, and as a result, a vast majority of fresh wild blueberries are sold further processed.

[35] Agricultural Marketing Resource Center, "Blueberries," revised February 2019.

[36] Chapter 8, note 2, of the HTS specifies that "Chilled fruit and nuts are to be classified in the same headings as the corresponding fresh fruit and nuts." In this report, "fresh blueberries" includes fresh or chilled blueberries.

[37] USITC, 2011 HTSA Basic Edition, Change Record, 2011, 2. https://www.usitc.gov/sites/default/files/publications/docs/tata/hts/bychapter/1100chgs.pdf.

[38] USITC, Version 2018 HTSA Revision 6, Change Record, June 29, 2018, 1. https://hts.usitc.gov/view/Change%20Record?release=2018HTSARevision6.

The 2021 general rate of duty is free for subheadings 0810.40.00 (including fresh blueberries) and 0811.90.20 (for frozen blueberries).[39]

Growing and freezing

Most blueberry production in the United States is in states in the Pacific Northwest (California, Oregon and Washington), in the Northeast and Upper Midwest (Maine, Michigan, and New Jersey), and the Southeast (Florida, Georgia, and North Carolina). Growing seasons vary by region, with peak production months in central and northern U.S. growing regions extending from June to October, and in the southern U.S. growing regions from April through July (table I-3). Consumers have greater access to fresh U.S. blueberries from April through September, although harvest timing varies from year to year with weather and crop conditions. Other countries, such as Argentina, Chile, Mexico, and Peru, have blueberry harvest seasons during the U.S. winter.

Wild and cultivated blueberry varieties allow growing and production in a wide range of climatic conditions. Four broad types of blueberries are grown across North America: northern highbush, which is used by commercial growers in cooler climates; southern highbush and rabbiteye, which are both used by commercial growers in the southern United States); and lowbush, which is wild fruit harvested commercially in the New England area, primarily Maine.[40]

Lowbush blueberries (*V. angustifolium*) are native to the northeastern United States and in neighboring regions of Canada.[41] Northern highbush blueberries are the most common type of blueberry grown worldwide; they are also native to much of the eastern United States.[42] Rabbiteye blueberries are native to the Southeastern United States, and were developed in regions with long, hot summers, where they thrive.

Cultivated (highbush) blueberries grow on bushes that typically peak at 6 feet tall and are often planted in long rows.[43] Wild (lowbush) blueberries grow on bushes that are 4 inches

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[39] Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

[40] Penn State Extension, "Agricultural Alternatives," 2014, 1. https://extension.psu.edu/downloadable/download/sample/sample_id/332/.

[41] Oregon State University Extension Service. Blueberry Cultivars for the Pacific Northwest. PNW 656. February 2014. https://catalog.extension.oregonstate.edu/pnw656/html.

[42] Oregon State University Extension Service. Blueberry Cultivars for the Pacific Northwest. PNW 656. February 2014. https://catalog.extension.oregonstate.edu/pnw656/html.

[43] U.S. Highbush Blueberry Council, "How Blueberries Grow," no date (accessed December 4, 2020). https://www.blueberrycouncil.org/growing-blueberries/how-blueberries-grow/.

to 15 inches in height, spread by underground stems, and are wild plants, meaning that they are not selected or cultivated, although plants are managed just as intensively as cultivated varieties.[44]

Blueberries require special growing conditions to optimize fruit production because of their shallow, fibrous root system. They require loose, well-drained acidic soils and full sun.[45] Most blueberries require some level of chill hours to produce fruit.

Certain varieties (Northern highbush) require dormancy periods with temperatures between 45 to 0 degrees to break bud and flower normally.[46] However, other varieties (Southern Highbush and Rabbiteye) are adapted to warmer climates.[47] Southern highbush varieties were developed to allow blueberry production in regions with mild winters and low chill zones such as Florida and California. Southern highbush blueberries have a much lower chilling requirement (200 to 300 hours) than Northern highbush blueberries (more than 800 hours).[48] Rabbiteye and Southern highbush blueberry varieties can grow in colder regions (like the Pacific Northwest) but may have lower yields and or be otherwise negatively affected than when grown in warmer climates.[49]

Blueberries can be either hand picked or mechanically harvested. The advantage of handpicking is that the fruit is less likely to be lost in the field or downgraded during inspection. As a result, hand-picked fruit historically is more likely to be sold fresh than machine harvested fruit.[50] Hand-picking is also more expensive than machine harvesting.[51]

The type of blueberry variety reportedly impacts the ability of the grower to machine harvest the crop, which can also influence the volume of blueberries sold as fresh or frozen.[52]

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[44] University of Maine Cooperative Extension, "Cooperative Extension: Maine Wile Blueberries," revised February 2015, 2. https://extension.umaine.edu/blueberries/factsheets/; Agricultural Marketing Resource Center, "Blueberries," revised February 2019.

[45] Daniel, Amy, "Best Practices with Blueberries," June 11, 2013. https://www.producegrower.com/article/pg0613-blueberries-commercial-crops/.

[46] Daniel, Amy, "Best Practices with Blueberries," June 11, 2013. https://www.producegrower.com/article/pg0613-blueberries-commercial-crops/.

[47] Daniel, Amy, "Best Practices with Blueberries," June 11, 2013. https://www.producegrower.com/article/pg0613-blueberries-commercial-crops/.

[48] Oregon State University Extension Service. Blueberry Cultivars for the Pacific Northwest. PNW 656. February 2014. https://catalog.extension.oregonstate.edu/pnw656/html.

[49] Oregon State University Extension Service. Blueberry Cultivars for the Pacific Northwest. PNW 656. February 2014. https://catalog.extension.oregonstate.edu/pnw656/html.

[50] American Blueberry Growers Alliance, Posthearing brief. January 19, 2021. Exh. 1, p. 24.

[51] American Blueberry Growers Alliance, Posthearing brief. January 19, 2021. Exh. 1, p. 24.

[52] Blueberry Coalition for Progress and Health, Posthearing brief, Public Version. January 20, 2021. A-10.

Some blueberries are harvested by large machines that catch ripe berries that fall as the machines move slowly along the rows and softly shake each plant.[53] Most berries that are machine-harvested berries are sold for processing into frozen berries.[54] This is because of the damage to the blueberry caused during harvesting. Machine harvested blueberries are more likely to undergo bruising, although certain varieties have been developed to better withstand mechanical harvesting.[55] This bruised fruit is more likely to be frozen.[56] In addition, mechanical harvesting can reduce the useful life of the blueberry bush.[57]

Most berries that are hand picked are sold fresh. [58] In California, for example, about 80 percent of blueberries are hand picked.[59] These hand picked berries are then sorted at the packing house for softness or defects; the portion of the crop (15 – 20 percent) that is sorted out is then sold for processing.[60] In Florida, blueberries are also primarily grown for the fresh market. In Georgia, however, 40 to 50 percent of the highbush blueberry crop that historically was hand picked is now machine harvested.[61] Some farmers in Georgia have intentionally established their farm for mechanical harvesting, selecting varieties for this purpose and training the bushes to grow upright so the bush would be tall and straight, which is desirable for mechanical harvesting.[62]

How blueberries grow and produce fruit determines in part whether the blueberry bush is suitable for machine harvesting. Mechanical harvesting has been used to pick northern highbush blueberries for decades and these berries were primarily destined for processed products.[63] Mechanically harvested fruit, however, may either be sold as fresh or processed depending on the cultivar and condition of the fruit. Factors such as the blueberry's

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[53] U.S. Highbush Blueberry Council, "How Blueberries Grow," no date (accessed December 4, 2020). https://www.blueberrycouncil.org/growing-blueberries/how-blueberries-grow/.

[54] U.S. Highbush Blueberry Council, "How Blueberries Grow," no date (accessed December 4, 2020). https://www.blueberrycouncil.org/growing-blueberries/how-blueberries-grow/.

[55] American Blueberry Growers Alliance, Posthearing brief. January 19, 2021. Exh. 1, p. 25.

[56] American Blueberry Growers Alliance, Posthearing brief. January 19, 2021. Exh. 1, p. 25.

[57] American Blueberry Growers Alliance, Posthearing brief. January 19, 2021. Exh. 1, p. 25.

[58] U.S. Highbush Blueberry Council, "How Blueberries Grow," no date (accessed December 4, 2020). https://www.blueberrycouncil.org/growing-blueberries/how-blueberries-grow/.

[59] Hearing transcript, p. 191 (Scarborough).

[60] Hearing transcript, p. 175 (Scarborough).

[61] Hearing transcript, pp. 191-192 (Crosby).

[62] Hearing transcript, p. 95 (Atwood).

[63] Sargent. "Harvest of Southern Highbush Blueberry with a Modified, Over the Row Mechanical Harvester: Use of Handheld Shakers and Soft Catch Surfaces." Agriculture. December 2019. https://cdn.blueberriesconsulting.com/2020/01/agriculture-10-00004-2.pdf.

architecture, harvesting timing, ease of detachment of mature fruit from the stem relative to immature fruit, and a concentrated ripening period are preferrable features for machine harvesting.[64] Harvest timing is important for machine harvest efficiency because a much larger volume of fruit must be ripe at the same time.[65] [66] For example, machine harvesting can be cost effective in Oregon, because the Northern highbush blueberries have a shorter harvest window compared to Southern highbush varieties.[67]

Blueberry bushes are harvested several times a year and a blueberry grower may not know in advance if a blueberry will be sold fresh or processed. The same blueberry variety and the same blueberry bush can produce blueberries for both fresh or processed sale.[68] For example, for the first pick of the harvest season in Oregon, hand-picking achieves a higher efficiency due to the concentration of berries on the bush. On the second or third pick, machine harvest would be an option.[69] The first pick of some varieties of the Northern highbush are of high quality and mostly are sold as fresh.[70] However, the second, third, and fourth picks (depending on the variety) of the harvest are increasingly are sold for processing.[71]

The main type of blueberries grown in the Pacific Northwest (and in Michigan) are Northern highbush varieties.[72] The Pacific Northwest growing region is reportedly oriented to processing rather than fresh sales.[73] Michigan and Washington growers reportedly plan at the outset of a season to dedicate a good portion of the crop for sale as frozen production.[74] Some

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[64] Olmstead. "Breeding Highbush Blueberry Cultivars Adapted to Machine Harvest for the Fresh Market," American Society for Horticultural Science. June 2014. https://journals.ashs.org/horttech/view/journals/horttech/24/3/article-p290.xml

[65] Olmstead. "Breeding Highbush Blueberry Cultivars Adapted to Machine Harvest for the Fresh Market," American Society for Horticultural Science. June 2014. https://journals.ashs.org/horttech/view/journals/horttech/24/3/article-p290.xml

[66] Blueberry Coalition for Progress and Health, Posthearing brief. January 20, 2021. A-11.

[67] Hearing transcript, p. 304 (Lujan).

[68] American Blueberry Growers Alliance, Posthearing brief. January 19, 2021. Exh. 1, p. 23.

[69] Hearing transcript, pp. 304-305 (Lujan).

[70] Hearing transcript, p. 403 (Bjorn).

[71] Hearing transcript, p. 403 (Bjorn).

[72] Hearing transcript, p. 403 (Bjorn).

[73] "So, in a place like the Pacific Northwest, the whole processing market is built into the business. So, if you're a Pacific Northwest grower, little bit depending on the varieties you're planting, you definitely have an eye on the processing market." Hearing transcript, 403 (Bjorn).

[74] American Blueberry Growers Alliance, Posthearing brief. January 19, 2021. Exh. 1, p. 23.

growers in the Pacific Northwest grow the (reportedly more tart) Elliot variety, although newer, sweeter varieties have been developed to replace this mid-season variety. [75]

Southern Highbush varieties are typically grown in the warm climates of California, Florida, Mexico, and Peru where these blueberries are primarily hand-picked and grown to be sold fresh.[76] Southern highbush cultivars historically produced softer fruit than Northern highbush blueberry varieties, and Southern highbush varieties tend to be hand-harvested to be sold as fresh.[77] Although producers in California and Georgia are focused on producing blueberries to be sold as fresh, some portion of their harvest is sold frozen.[78] For example, 15 to 20 percent of the California crop is reportedly sold to processing.[79]

The Southern highbush variety is planted in Mexico and Peru as well. One of the most widely planted varieties in Mexico, for example, is the Biloxi Southern Highbush, which was developed by the USDA's Agricultural Research Service.[80] The Biloxi is also the most common variety in Peru.[81] The frequency of hand harvesting can vary and typically increases from once or twice a week early in the season to several times a week as the season peaks.

The variety of a blueberry also reportedly affects the quality of the berry for freezing. For example, wild blueberries, which are small and have an intense flavor profile relative to other blueberries, are almost entirely sold for processing/freezing.[82] Regarding cultivated blueberries, the Southern highbush varieties are reportedly not preferred for freezing, nor are Rabbiteye varieties.[83] One frozen fruit processor, re-bagger, and distributor with facilities in both the United States and Canada stated that "As it relates to frozen fruit, with regards to variety, it's actually a very important parameter and quality. The Southern highbush varieties and the Rabbiteye varieties are not typically acceptable varieties for retail value simply because of the fact of the organoleptic properties, which include flavor and texture of the product."[84]

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[75] Hearing transcript, p. 206 (Scarborough).

[76] Hearing transcript, p. 304 (Lujan), p. 402 (Bjorn).

[77] Sargent. "Harvest of Southern Highbush Blueberry with a Modified, Over the Row Mechanical Harvester: Use of Handheld Shakers and Soft Catch Surfaces." Agriculture. December 2019.

[78] Hearing transcript, p. 153 (Crosby).

[79] Hearing transcript, p. 174 (Scarborough).

[80] Hearing transcript, p. 90 (Crosby).

[81] Hearing transcript, p. 421 (Vegas). However Peru reportedly has "less acreage of Biloxi than we had in 2019. There has been a reduction in Biloxi to switch into newer varieties specifically focused for the Asian market."

[82] Coalition's Posthearing brief, p. A-12.

[83] Hearing transcript, p. 438 (Bjorn).

[84] Hearing transcript, p. 423 (Tentomas).

However, some growers of highbush and Rabbiteye varieties report that they sell both fresh and frozen blueberries.[85]

Table I-3: Blueberry general seasonal availability for select major producers

Source	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
United States												
CA												
NC, SC												
FL, GA												
East Coast												
ME												
Midwest												
OR												
WA												
Import suppliers												
Argentina												
Canada												
Chile												
Mexico												
Peru												

Note: This figure captures the primary blueberry season and may not include months with low levels of production.

Sources: Argentina, Canada, Chile, and Peru: Government of Peru, El Arándano en el Perú y el Mundo, 2016, 12; and USDA, ERS, Fruit and Tree Nuts Outlook, March 31, 2020, 25. https://www.ers.usda.gov/webdocs/outlooks/98171/fts-370.pdf?v=1783.9; Mexico: Florida Blueberry Growers Association, "Mexico: An Emerging Power in the Blueberry Market," July 2007 https://www.floridablueberrygrowers.org/index.php?option=com_dailyplanetblog&view=entry&year=2020&month=07&day=06&id=106:mexico-an-emerging-power-in-the-blueberry-market#:~:text=The%20Mexican%20blueberry%20season%20covers,production%20window%20of%20Florida%20blueberries and USDA, ERS, Fruit and Tree Nuts Outlook, March 31, 2020, 25. https://www.ers.usda.gov/webdocs/outlooks/98171/fts-370.pdf?v=1783.9; United States: PickYourOwn.org, "Crop Harvest Calendars for Each State," accessed December 2, 2020 https://www.pickyourown.org/US_crop_harvest_calendars.php; Florida Blueberry Growers Association, "Mexico: An Emerging Power in the Blueberry Market," July 2007 https://www.floridablueberrygrowers.org/index.php?option=com_dailyplanetblog&view=entry&year=2020&month=07&day=06&id=106:mexico-an-emerging-power-in-the-blueberry-market#:~:text=The%20Mexican%20blueberry%20season%20covers,production%20window%20of%20Florida%20blueberries, USDA, ERS, Fruit and Tree Nuts Outlook, March 31, 2020, 13, 25. https://www.ers.usda.gov/webdocs/outlooks/98171/fts-370.pdf?v=1783.9; and Blue Book Services, "Blueberries," no date. https://www.producebluebook.com/know-your-commodity/Blueberries/.

[85] Hearing transcript, p. 88 (Crosby).

The shelf life of fresh blueberries is typically two to three weeks.[86] However, further processing and freezing extends the shelf life of fresh blueberries, and allows year-round access to blueberries, which are especially suitable for certain food applications.[87] Wild blueberries are particularly delicate and are almost always marketed as frozen blueberries.[88] Frozen blueberries can be frozen in an IQF format or block frozen. IQF is one of the fastest and most efficient ways of freezing blueberries with less product dehydration, efficient heat transfer, and short freezing times.[89] With IQF, blueberries are quickly frozen, each piece separately, using high velocity refrigerated air.[90] Blueberries can also be frozen as purees into block frozen form. Blueberry purees can be processed from fresh blueberries or IQF blueberries that are chopped, heated, and then pureed before being sterilized and frozen into bulk puree or bulk puree concentrate (after evaporation).[91] IQF berries are often destined for retail sales while block frozen berries are frequently sold in bulk.[92]

Production and consumption of certified organic blueberries are expanding.[93] Certified organic blueberries can be consumed fresh or further processed and frozen and may sometimes receive a price premium. Blueberries certified as organic do not differ from conventionally grown blueberries in terms of their physical characteristics or uses; however,

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[86] Shelf life includes time from harvest, including transport, warehousing and retail, under optimal storage temperature and humidity conditions. Mishra, Vijay Kumar, and T.V. Gamage, "Postharvest Handling and Treatment of Fruits and Vegetables," July 16, 2007, 58. https://www.routledgehandbooks.com/pdf/doi/10.1201/9781420017373.ch3.

[87] JBT Technologies, *Technologies for Processing Value-Added Berry Fruit Products*, no date, 7. https://www.jbtc.com/-/media/files/foodtech/innovation/white-papers/jbt-white-paper-berry-processing.ashx.

[88] University of Maine Cooperative Extension, "Cooperative Extension: Maine Wild Blueberries," revised February 2015, 2. https://extension.umaine.edu/blueberries/factsheets/.

[89] JBT Technologies, "Technologies for Processing Value-Added Berry Fruit Products, no date, 8. https://www.jbtc.com/-/media/files/foodtech/innovation/white-papers/jbt-white-paper-berry-processing.ashx.

[90] JBT Technologies, "Technologies for Processing Value-Added Berry Fruit Products, no date, 10. https://www.jbtc.com/-/media/files/foodtech/innovation/white-papers/jbt-white-paper-berry-processing.ashx.

[91] JBT Technologies, "Technologies for Processing Value-Added Berry Fruit Products, no date, 14. https://www.jbtc.com/-/media/files/foodtech/innovation/white-papers/jbt-white-paper-berry-processing.ashx.

[92] JBT Technologies, "Technologies for Processing Value-Added Berry Fruit Products, no date, 9. https://www.jbtc.com/-/media/files/foodtech/innovation/white-papers/jbt-white-paper-berry-processing.ashx.

[93] Organic Produce Network, "Organic Blueberry Popularity Continues to Grow," November 15, 2018. https://www.organicproducenetwork.com/article/640/organic-blueberry-popularity-continues-to-grow.

they must be grown, handled, and labeled in such a way as to comply with federal government standards. To receive organic certification from the U.S. Department of Agriculture, farms must be managed in accordance with the regulations in Title 7, Part 205 of the Code of Federal Regulations.[94] Some blueberry producers grow blueberries without pesticides, but choose not to go through the costly and time consuming process of becoming certified organic, meaning that their berries cannot be labeled as Certified USDA Organic.

Uses

Blueberries are used for human food consumption or as food ingredients. Fresh blueberries can be consumed as a standalone food or added to yogurt, salads, smoothies or baked goods, such as pies and muffins. Blueberries can also be further processed in a number of ways, including freezing either as IQF fruit or in block frozen form. Frozen blueberries can be consumed as a standalone food, used in consumer food preparations, or used as an ingredient by food manufacturers. Blueberries can also be processed into puree, juice, or dried. These may then be used in a variety of consumer goods, such as jellies, jams, baked goods, snack foods, or as an additive to breakfast cereals.

Marketing channels

Wild blueberries grown in the United States are sold primarily for processing (principally freezing). In 2019, 97.4 percent of U.S.-grown wild blueberries were sold for processing and only 2.6 percent were sold for the fresh market. Cultivated blueberries grown in the United States are sold for both the fresh market and processing. In 2019, 55.4 percent of U.S.-grown cultivated blueberries were sold for the fresh market and 44.6 percent were sold for processing.[95]

Table I-4 presents reported marketing channels utilized by U.S. producers and U.S. importers for fresh blueberries and frozen blueberries. Since 2015, a majority of U.S. producers' U.S. shipments of fresh or chilled blueberries, as well as frozen blueberries, were to distributors (including distributors, handlers, marketers, or terminal market actors). A majority of U.S. shipments by importers of fresh or chilled blueberries were to retailers, while shipments by importers of frozen blueberries were primarily to processors, including re-packagers, sorters, graders, and freezers.

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[94] USDA, *Guide for Organic Crop Producers*, November 2012, 1. https://www.ams.usda.gov/sites/default/files/media/GuideForOrganicCropProducers.pdf.

[95] USDA Noncitrus Fruits and Nuts 2019 Summary, May 2020.

Table I-4
Blueberries: Usable U.S. producers' and importers' shipments, by source and channels of distribution, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Share of shipments (percent)						
U.S. producers: Fresh or chilled blueberries:							
to Distributors	73.2	71.6	65.2	64.2	66.9	66.7	67.1
to Processors	10.9	10.3	9.2	10.0	8.2	8.3	8.5
to Retailers	15.9	18.1	25.6	25.8	24.9	25.0	24.5
U.S. producers: Frozen blueberries:							
to Distributors	61.6	64.3	61.5	60.5	56.2	57.9	57.7
to Processors	6.5	7.5	6.8	10.6	13.6	13.2	11.8
to Retailers	32.0	28.2	31.6	28.9	30.2	28.9	30.5
U.S. producers: All blueberries:							
to Distributors	67.5	67.8	63.4	62.3	62.1	63.2	63.1
to Processors	8.7	8.8	8.1	10.3	10.6	10.2	9.9
to Retailers	23.7	23.4	28.5	27.4	27.2	26.6	27.0
U.S. importers: Fresh or chilled blueberries:							
to Distributors	16.2	18.3	17.6	17.2	18.0	16.0	16.8
to Processors	11.9	9.5	5.5	4.6	3.6	5.5	1.8
to Retailers	71.9	72.2	76.8	78.2	78.4	78.6	81.3
U.S. importers: Frozen blueberries:							
to Distributors	28.1	25.8	29.5	24.8	25.6	28.0	17.0
to Processors	43.1	44.3	43.9	42.7	36.0	44.0	32.5
to Retailers	28.8	29.9	26.6	32.5	38.4	28.0	50.6
U.S. importers: All blueberries:							
to Distributors	20.2	20.7	20.6	19.1	20.2	19.3	16.9
to Processors	22.6	20.5	15.1	14.2	13.1	16.1	11.9
to Retailers	57.2	58.8	64.3	66.7	66.7	64.6	71.2

Note.--The "to Distributors" channel includes shipments to distributors, handlers, marketers, or terminal market actors, while the "to Processors" channel includes shipments to re-packagers, sorters, graders, freezers, and processors. U.S. producers' shipments are based on total net sales (including export shipments) and U.S. importers' shipments are based on U.S. shipments. Information originally submitted by *** indicated that the vast majority of reported net sales data ***; accordingly, staff did not include *** sales in this table.

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

Product comparisons

U.S. producers and U.S. purchasers were asked to compare fresh and frozen blueberries on several attributes, including their physical properties, manufacturing process, uses, and marketing channels. These responses are presented in table I-5.

Table I-5
Blueberries: Firms' perceptions regarding similarity between fresh and frozen blueberries by like article factor

Item	Number of firms reporting			
	Fully	Mostly	Somewhat	Never
	Similarity of fresh/chilled vs frozen blueberries			
Physical properties:				
U.S. producers	10	22	48	31
U.S. purchasers	3	6	10	12
Manufacturing processes:				
U.S. producers	7	3	37	45
U.S. purchasers	2	4	6	18
Uses:				
U.S. producers	8	13	55	27
U.S. purchasers	3	4	17	6
Marketing channels:				
U.S. producers	6	4	16	58
U.S. purchasers	4	1	9	17

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

Part II: U.S. Imports

Overview

The United States is the world's largest producer of blueberries as well as a substantial importer of blueberries.[1] In 2019, the largest sources of U.S. imports of blueberries were Canada and Mexico in the northern hemisphere and Argentina, Chile, and Peru in the southern hemisphere. Since 2015, U.S. imports of blueberries have increased in each calendar year with the exception of 2017; however, U.S. imports were lower in the first nine months of 2020 than during the same period in 2019. U.S. imports from Peru have accounted for the largest share of the net growth.

In 2019, the two leading sources of U.S. imports of fresh or chilled blueberries were Peru and Chile, while Canada was the largest source of U.S. imports of frozen blueberries. In that same year, Peru, Chile, and Canada were the largest sources of U.S. imports of cultivated blueberries, and Canada was the largest source of U.S. imports of wild blueberries.

In the current proceedings, the Commission issued U.S. importers' questionnaires to 82 firms believed to be importers of blueberries. Forty-one firms provided usable questionnaire responses that in aggregate represented 36.3 percent of U.S. imports from Argentina, 65.1 percent of U.S. imports from Canada, 64.2 percent of U.S. imports from Chile, 73.5 percent of U.S. imports from Mexico, 86.8 percent of U.S. imports from Peru, 35.0 percent of U.S. imports from all other sources, and 70.0 percent of U.S. imports from all import sources in 2019.[2] Out of 41 responding firms, 36 responded importing mostly cultivated blueberries, 5 firms mostly wild blueberries, 36 firms mostly conventional blueberries, and 5 firms mostly organic blueberries. Twenty-six of the 41 responding firms reported importing fresh blueberries and 17 reported importing frozen blueberries from any import source in 2019.

[1] "Blueberries," USDA's Agricultural Marketing Resources Center, February 2019, https://www.agmrc.org/commodities-products/fruits/blueberries#:~:text=The%20United%20States%20is%20the,and%20utilized%20(NASS%202017), retrieved December 8, 2020.

[2] ***.

U.S. imports by source

Imports of blueberries increased irregularly during the period for which data were collected, and were at their highest level in 2019. During 2015-17, Canada was the largest source of U.S. imports of blueberries, closely followed by Chile, together accounting for more than 70.0 percent of all imports of blueberries into the United States. U.S. imports of blueberries from Mexico, Peru, and Argentina comprised the vast majority of the remaining blueberry imports, with all other sources accounting for less than 1.0 percent during 2015-17. In 2018, Chile became the largest supplier of blueberries to the United States, accounting for 33.9 percent of total blueberry imports, closely followed by Canada, at 32.9 percent. In 2019, U.S. imports of blueberries from Canada once again accounted for the largest share of U.S. imports at 35.3 percent, followed by Chile, accounting for 24.4 percent; Peru, accounting for 23.0 percent, and Mexico, accounting for 13.7 percent. U.S. imports from Argentina and all other sources comprised the remaining shares of U.S. imports of blueberries into the United States. While U.S. imports from Argentina, Canada, and Chile were lower in January-September 2020 compared to January-September 2019, U.S. imports from Mexico, Peru, and all other sources were higher during the same interim period.

U.S. imports of blueberries, annual and interim periods

Table II-1 and figure II-1 present information on U.S. imports of blueberries from Argentina, Canada, Chile, Mexico, and Peru and all other sources. From 2015 to 2019 the quantity of U.S. imports of blueberries increased by 61.7 percent from all import sources but was lower in January-September 2020 than in January-September 2019. By value, U.S. imports of blueberries increased by 65.7 percent but were lower in interim 2020 compared to interim 2019. In 2019, Canada accounted for the largest share of U.S. imports of blueberries by quantity, closely followed by Chile and Peru. In 2019, average unit values ranged from $1.16 to $3.33 per pound. The ratio of U.S. imports from all sources to utilized production was 73.2 percent in 2019.

Table II-1
Blueberries: U.S. imports by source, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
U.S. imports from.--							
Argentina	26,023	28,856	26,144	23,709	22,509	7,186	3,905
Canada	209,213	206,491	171,355	182,717	241,751	199,527	180,013
Chile	148,584	188,907	162,352	188,204	167,108	133,915	120,672
Mexico	25,485	35,232	53,724	72,921	93,788	71,733	92,005
Peru	11,571	32,326	41,725	85,227	157,231	59,214	64,912
All other sources	2,294	3,326	1,688	2,089	1,745	401	780
All import sources	423,171	495,138	456,986	554,868	684,132	471,976	462,287
	Value (1,000 dollars)						
U.S. imports from.--							
Argentina	95,146	117,835	88,660	70,421	50,650	10,303	5,011
Canada	256,951	221,083	212,244	236,154	280,574	239,248	215,578
Chile	383,142	481,603	377,151	456,796	399,179	308,633	265,185
Mexico	140,099	151,390	224,673	297,653	302,588	229,943	270,453
Peru	57,162	144,492	171,903	310,242	523,846	194,106	179,413
All other sources	10,072	12,947	6,159	6,594	4,812	711	1,649
All import sources	942,572	1,129,349	1,080,791	1,377,860	1,561,649	982,945	937,288
	Unit value (dollars per pound)						
U.S. imports from.--							
Argentina	3.66	4.08	3.39	2.97	2.25	1.43	1.28
Canada	1.23	1.07	1.24	1.29	1.16	1.20	1.20
Chile	2.58	2.55	2.32	2.43	2.39	2.30	2.20
Mexico	5.50	4.30	4.18	4.08	3.23	3.21	2.94
Peru	4.94	4.47	4.12	3.64	3.33	3.28	2.76
All other sources	4.39	3.89	3.65	3.16	2.76	1.77	2.11
All import sources	2.23	2.28	2.37	2.48	2.28	2.08	2.03

Table continued.

Table II-1--Continued
Blueberries: U.S. imports by source, 2015-19, January to September 2019, and January to September 2020

Item	Comparison periods					
	2015-19	2015-16	2016-17	2017-18	2018-19	Jan-Sept 2019-20
	Percent change based on quantity (percent)					
U.S. imports from.--						
Argentina	▼(13.5)	▲10.9	▼(9.4)	▼(9.3)	▼(5.1)	▼(45.7)
Canada	▲15.6	▼(1.3)	▼(17.0)	▲6.6	▲32.3	▼(9.8)
Chile	▲12.5	▲27.1	▼(14.1)	▲15.9	▼(11.2)	▼(9.9)
Mexico	▲268.0	▲38.2	▲52.5	▲35.7	▲28.6	▲28.3
Peru	▲1,258.8	▲179.4	▲29.1	▲104.3	▲84.5	▲9.6
All other sources	▼(23.9)	▲45.0	▼(49.3)	▲23.8	▼(16.5)	▲94.8
All import sources	▲61.7	▲17.0	▼(7.7)	▲21.4	▲23.3	▼(2.1)
	Percent change based on value (percent)					
U.S. imports from.--						
Argentina	▼(46.8)	▲23.8	▼(24.8)	▼(20.6)	▼(28.1)	▼(51.4)
Canada	▲9.2	▼(14.0)	▼(4.0)	▲11.3	▲18.8	▼(9.9)
Chile	▲4.2	▲25.7	▼(21.7)	▲21.1	▼(12.6)	▼(14.1)
Mexico	▲116.0	▲8.1	▲48.4	▲32.5	▲1.7	▲17.6
Peru	▲816.4	▲152.8	▲19.0	▲80.5	▲68.9	▼(7.6)
All other sources	▼(52.2)	▲28.6	▼(52.4)	▲7.1	▼(27.0)	▲132.0
All import sources	▲65.7	▲19.8	▼(4.3)	▲27.5	▲13.3	▼(4.6)
	Percent change based on average unit values (percent)					
U.S. imports from.--						
Argentina	▼(38.5)	▲11.7	▼(17.0)	▼(12.4)	▼(24.2)	▼(10.5)
Canada	▼(5.5)	▼(12.8)	▲15.7	▲4.3	▼(10.2)	▼(0.1)
Chile	▼(7.4)	▼(1.1)	▼(8.9)	▲4.5	▼(1.6)	▼(4.6)
Mexico	▼(41.3)	▼(21.8)	▼(2.7)	▼(2.4)	▼(21.0)	▼(8.3)
Peru	▼(32.6)	▼(9.5)	▼(7.8)	▼(11.6)	▼(8.5)	▼(15.7)
All other sources	▼(37.2)	▼(11.3)	▼(6.3)	▼(13.5)	▼(12.6)	▲19.1
All import sources	▲2.5	▲2.4	▲3.7	▲5.0	▼(8.1)	▼(2.6)

Table continued.

Table II-1--Continued
Blueberries: U.S. imports by source, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Share of quantity (percent)						
U.S. imports from.--							
Argentina	6.1	5.8	5.7	4.3	3.3	1.5	0.8
Canada	49.4	41.7	37.5	32.9	35.3	42.3	38.9
Chile	35.1	38.2	35.5	33.9	24.4	28.4	26.1
Mexico	6.0	7.1	11.8	13.1	13.7	15.2	19.9
Peru	2.7	6.5	9.1	15.4	23.0	12.5	14.0
All other sources	0.5	0.7	0.4	0.4	0.3	0.1	0.2
All import sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)						
U.S. imports from.--							
Argentina	10.1	10.4	8.2	5.1	3.2	1.0	0.5
Canada	27.3	19.6	19.6	17.1	18.0	24.3	23.0
Chile	40.6	42.6	34.9	33.2	25.6	31.4	28.3
Mexico	14.9	13.4	20.8	21.6	19.4	23.4	28.9
Peru	6.1	12.8	15.9	22.5	33.5	19.7	19.1
All other sources	1.1	1.1	0.6	0.5	0.3	0.1	0.2
All import sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Ratio to utilized production USDA/NASS (percent)						
U.S. imports from.--							
Argentina	3.0	3.9	3.1	2.9	2.4	NA	NA
Canada	24.0	27.6	20.6	22.3	25.9	NA	NA
Chile	17.0	25.3	19.5	22.9	17.9	NA	NA
Mexico	2.9	4.7	6.4	8.9	10.0	NA	NA
Peru	1.3	4.3	5.0	10.4	16.8	NA	NA
All other sources	0.3	0.4	0.2	0.3	0.2	NA	NA
All import sources	48.5	66.2	54.8	67.6	73.2	NA	NA

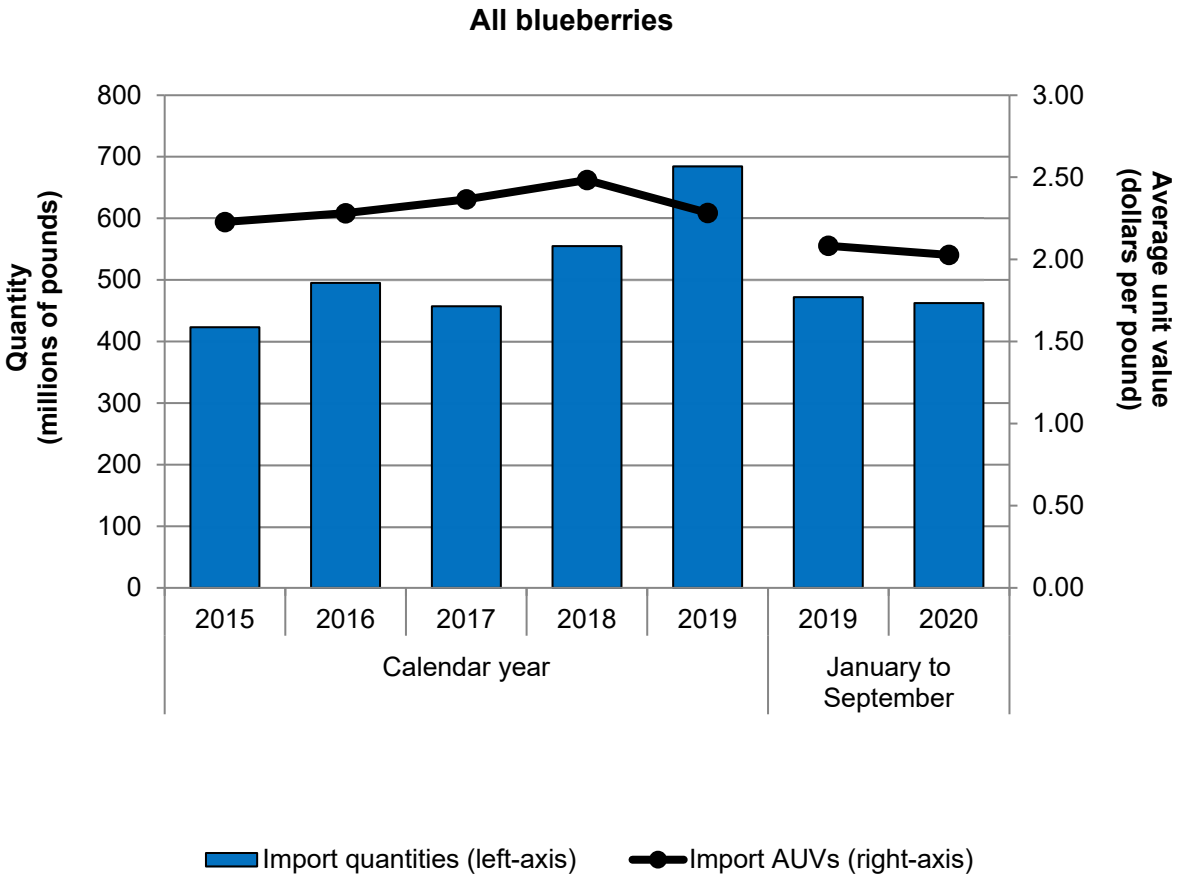
Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Note: The leading ports of entry since January 2015 are as follows:

For Argentina: Miami, FL, Philadelphia, PA, and Los Angeles, CA; for Canada: Seattle, WA, Portland, ME, and Detroit, MI; for Chile: Miami, FL, Philadelphia, PA, and Los Angeles, CA; for Mexico: Laredo, TX and San Diego, CA; and Peru: Philadelphia, PA and Los Angeles, CA.

Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, 0810.40.0029, 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020.

Figure II-1
Blueberries: U.S. import quantities and average unit values, 2015-19, January to September 2019, and January to September 2020



Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, 0810.40.0029, 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020.

U.S. imports of blueberries, monthly

Table II-2 and figure II-2 present information on U.S. imports of blueberries from North America (Canada and Mexico), South America (primarily Argentina, Chile, and Peru), and all other sources by month. In 2015, U.S. imports from all sources during April to September accounted for slightly less than one half of all imports for the calendar year, and were supplied primarily from North America (approximately 90 percent). By comparison, in 2019, U.S. imports from all sources during April to September accounted for less than half of all imports for the calendar year, and while supplied principally from North America (approximately 80 percent of second and third quarter imports), included a growing share of imports from South America.

Table II-2
Blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	North America	South America	Other sources	All import sources
	Quantity (1,000 pounds)			
2015.--				
January	9,000	47,536	92	56,628
February	8,214	38,414	63	46,690
March	13,556	22,768	2	36,326
April	15,710	5,001	16	20,727
May	12,239	2,914	---	15,153
June	15,511	2,578	---	18,089
July	37,425	3,585	1	41,011
August	46,507	1,947	18	48,472
September	41,891	5,193	17	47,101
October	12,318	12,835	34	25,187
November	11,711	17,833	94	29,638
December	10,618	27,491	40	38,150
2016.--				
January	8,707	51,666	70	60,443
February	9,402	56,069	121	65,592
March	12,207	21,568	83	33,858
April	17,861	5,375	295	23,531
May	17,294	4,764	39	22,097
June	19,178	4,525	17	23,720
July	39,239	2,962	48	42,249
August	44,175	3,596	66	47,837
September	32,940	7,915	82	40,937
October	15,182	20,602	199	35,983
November	13,603	23,732	63	37,399
December	11,936	49,376	181	61,494
2017.--				
January	13,406	60,083	12	73,501
February	13,313	44,751	3	58,068
March	20,034	14,781	23	34,839
April	23,064	1,888	88	25,041
May	16,922	2,000	7	18,929
June	11,137	3,336	10	14,483
July	32,681	3,416	34	36,131
August	42,528	3,314	9	45,851
September	17,798	8,203	62	26,062
October	11,295	27,114	99	38,508
November	12,292	30,046	22	42,360
December	10,608	32,571	35	43,214

Table continued.

Table II-2--Continued
Blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	North America	South America	Other sources	All import sources
	Quantity (1,000 pounds)			
2018.--				
January	14,590	58,771	5	73,366
February	13,105	58,536	11	71,653
March	22,149	29,569	48	51,766
April	27,215	6,037	162	33,414
May	21,285	5,585	---	26,871
June	13,192	4,871	7	18,070
July	33,715	3,237	18	36,970
August	43,689	6,436	2	50,127
September	20,145	10,042	---	30,187
October	14,551	32,920	1	47,471
November	15,594	33,161	62	48,817
December	16,409	49,700	47	66,156
2019.--				
January	20,932	66,805	45	87,782
February	20,682	57,746	4	78,433
March	26,783	20,560	47	47,390
April	37,528	4,917	53	42,497
May	25,590	7,121	17	32,729
June	17,561	4,572	30	22,163
July	51,170	5,175	8	56,353
August	44,822	9,341	74	54,238
September	26,192	24,139	62	50,393
October	21,032	39,880	3	60,916
November	21,956	45,844	2	67,802
December	21,291	62,144	2	83,438
2020.--				
January	24,528	58,734	55	83,317
February	26,655	41,432	2	68,089
March	35,391	21,233	75	56,699
April	39,133	3,714	50	42,896
May	28,553	6,398	15	34,966
June	15,617	4,163	10	19,791
July	32,727	6,225	61	39,012
August	45,440	15,439	27	60,906
September	23,973	32,626	12	56,611

Table continued.

Table II-2--Continued
Blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	Argentina	Canada	Chile	Mexico	Peru
	Quantity (1,000 pounds)				
2015.--					
January	1,723	7,505	45,068	1,494	746
February	805	6,205	37,037	2,009	572
March	1,031	9,605	21,498	3,951	238
April	351	8,468	4,454	7,242	196
May	418	9,038	2,496	3,201	---
June	211	14,641	2,367	870	---
July	9	37,165	3,576	260	---
August	99	46,427	1,416	80	407
September	1,179	41,329	1,857	562	1,973
October	7,892	10,657	1,676	1,661	2,453
November	9,782	9,507	5,396	2,204	1,940
December	2,525	8,667	21,742	1,951	3,046
2016.--					
January	1,078	5,934	48,320	2,773	2,269
February	1,217	6,757	52,597	2,645	2,255
March	735	7,501	19,272	4,706	1,562
April	394	9,175	4,342	8,686	640
May	213	12,926	4,543	4,368	---
June	93	17,561	4,432	1,618	---
July	124	39,020	2,838	218	---
August	199	44,060	2,699	115	684
September	1,128	32,450	2,471	490	4,268
October	11,038	13,054	1,834	2,128	6,558
November	9,843	10,222	6,221	3,381	6,901
December	2,796	7,832	39,338	4,104	7,189
2017.--					
January	1,032	8,891	54,868	4,515	4,182
February	366	8,273	43,073	5,041	1,313
March	169	9,820	14,025	10,214	587
April	140	9,934	1,699	13,130	40
May	97	10,230	1,895	6,692	8
June	118	9,483	3,218	1,654	---
July	258	32,368	3,158	313	---
August	100	42,383	3,079	145	135
September	1,823	17,246	3,280	552	2,847
October	10,869	9,266	3,931	2,030	11,583
November	9,103	7,858	6,718	4,434	13,943
December	2,067	5,603	23,407	5,005	7,088

Table continued.

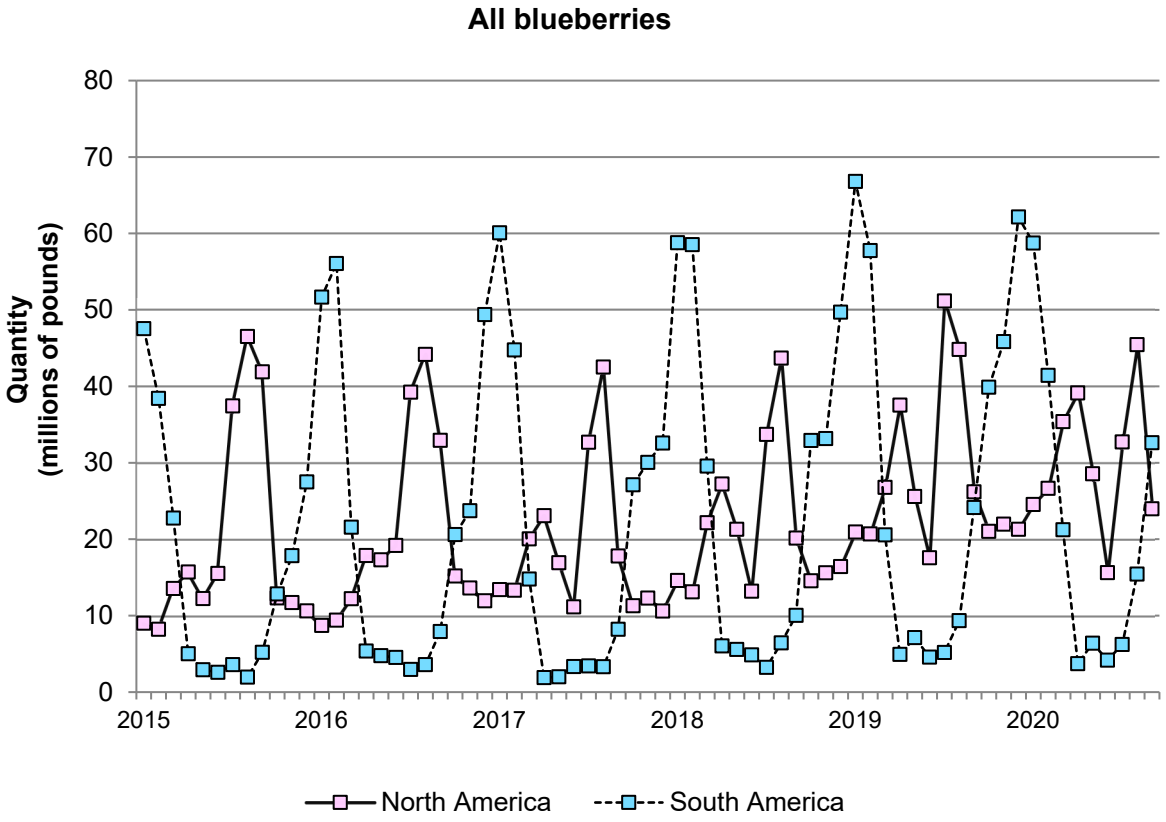
Table II-2--Continued
Blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	Argentina	Canada	Chile	Mexico	Peru
	Quantity (1,000 pounds)				
2018.--					
January	1,006	7,702	51,092	6,888	6,673
February	873	5,753	51,726	7,352	5,937
March	285	9,805	26,397	12,344	2,888
April	694	12,056	5,073	15,158	271
May	292	12,508	5,278	8,778	15
June	144	10,696	4,664	2,496	63
July	42	33,276	3,068	439	127
August	40	43,380	4,127	309	2,270
September	307	18,564	2,472	1,581	7,202
October	6,317	10,621	2,296	3,929	23,487
November	7,447	9,028	2,990	6,566	21,961
December	6,263	9,329	29,020	7,080	14,334
2019.--					
January	2,253	12,731	48,796	8,201	15,756
February	857	10,318	44,948	10,365	11,941
March	480	9,164	16,583	17,620	3,497
April	748	16,416	2,553	21,112	1,616
May	909	16,496	4,699	9,095	1,513
June	461	15,405	3,924	2,156	186
July	151	50,757	4,263	412	761
August	485	44,473	4,230	350	4,625
September	842	23,768	3,919	2,424	19,319
October	4,777	16,011	3,543	5,022	31,295
November	7,261	13,859	3,366	8,097	34,408
December	3,286	12,355	26,283	8,936	32,312
2020.--					
January	1,009	13,644	40,910	10,885	16,688
February	629	14,080	37,525	12,575	3,256
March	359	14,486	18,725	20,905	2,150
April	399	13,173	3,068	25,959	247
May	644	15,991	5,633	12,563	45
June	208	11,662	3,672	3,955	214
July	29	31,724	4,661	1,004	1,481
August	24	44,831	3,777	609	11,611
September	604	20,423	2,701	3,550	29,219

Note: imports from North America consist of imports from Canada and Mexico. Imports from South America consist of imports from all countries in South America, and primarily represent Argentina, Chile, and Peru.

Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, 0810.40.0029, 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020.

Figure II-2
Blueberries: U.S. imports from North and South America, by month, January 2015 through September 2020



Note: Other sources not shown.

Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, 0810.40.0029, 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020.

U.S. imports by form

During 2015-19, quantities of total U.S. imports of both fresh or chilled blueberries and frozen blueberries from all sources increased and reached their highest levels in 2019. While quantities of total U.S. imports of fresh blueberries were lower in January-September 2020 compared to January-September 2019, the quantities of total U.S. imports of frozen blueberries were higher in January-September 2020 compared to January-September 2019. In 2019, the quantities of total U.S. imports of fresh blueberries were slightly more than twice (472.1 million) pounds than those of frozen blueberries (212.0 million) pounds and also grew at much higher rates between 2015 and 2019.

U.S. imports of fresh and chilled blueberries, annual and interim periods

Table II-3 and figure II-3 present information on U.S. imports of fresh or chilled blueberries imported under HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, and 0810.40.0029. The quantity of total U.S. imports of fresh or chilled blueberries increased from 270.2 million pounds in 2015 to 472.1 million pounds in 2019, a net increase of 74.7 percent. In 2019, imports from Peru accounted for the largest share of the quantity of imports. Annual imports were highest in 2019. The quantity of total U.S. imports was 3.6 percent lower in January-September 2020 than in January-September 2019. The value of total U.S. imports increased from $729.9 million in 2015 to $1.3 billion in 2019, a net increase of 82.1 percent. In 2019, imports from Peru accounted for the largest share of the value of imports. Annual import value was highest in 2019. The value of total U.S. imports was 5.4 percent lower in January-September 2020 than in January-September 2019. U.S. imports' average unit value fluctuated within a $0.25 per pound range, but generally increased during 2015-19 by 4.2 percent. The average unit value of U.S. imports of blueberries was highest in 2018 and lowest in 2015. U.S. imports' average unit value was $0.05 per pound (1.9 percent) lower in January-September 2020 than in January-September 2019.

Table II-3
Fresh or chilled blueberries: U.S. imports, by source, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
U.S. imports from.--							
Argentina	20,938	24,335	21,882	19,704	15,345	915	672
Canada	90,715	80,528	69,696	68,846	79,685	79,063	53,081
Chile	119,911	154,192	132,234	150,952	133,358	104,408	91,225
Mexico	25,081	34,791	53,247	71,414	90,907	69,203	90,035
Peru	11,538	32,244	41,725	81,941	151,413	54,448	61,340
All other sources	2,047	2,236	1,347	1,775	1,436	134	582
All import sources	270,231	328,326	320,130	394,633	472,144	308,172	296,934
	Value (1,000 dollars)						
U.S. imports from.--							
Argentina	88,840	109,544	82,477	65,333	42,177	2,805	1,621
Canada	112,286	97,035	115,716	115,512	118,697	117,854	86,412
Chile	322,895	405,022	324,522	394,638	345,719	261,273	221,424
Mexico	139,190	150,587	224,064	296,013	299,282	227,032	268,393
Peru	57,120	144,411	171,903	307,273	518,618	189,850	176,454
All other sources	9,562	10,867	5,557	6,026	4,311	309	1,362
All import sources	729,892	917,467	924,238	1,184,795	1,328,804	799,123	755,665
	Unit value (dollars per pound)						
U.S. imports from.--							
Argentina	4.24	4.50	3.77	3.32	2.75	3.06	2.41
Canada	1.24	1.20	1.66	1.68	1.49	1.49	1.63
Chile	2.69	2.63	2.45	2.61	2.59	2.50	2.43
Mexico	5.55	4.33	4.21	4.15	3.29	3.28	2.98
Peru	4.95	4.48	4.12	3.75	3.43	3.49	2.88
All other sources	4.67	4.86	4.13	3.39	3.00	2.30	2.34
All import sources	2.70	2.79	2.89	3.00	2.81	2.59	2.54
	Ratio to utilized production of fresh blueberries USDA/NASS (percent)						
U.S. imports from.--							
Argentina	6.8	7.7	7.2	6.4	4.1	NA	NA
Canada	29.4	25.6	22.9	22.4	21.3	NA	NA
Chile	38.8	49.0	43.4	49.2	35.6	NA	NA
Mexico	8.1	11.0	17.5	23.3	24.3	NA	NA
Peru	3.7	10.2	13.7	26.7	40.4	NA	NA
All other sources	0.7	0.7	0.4	0.6	0.4	NA	NA
All import sources	87.4	104.2	105.1	128.5	126.1	NA	NA

Table continued.

Table II-3--Continued
Fresh or chilled blueberries: U.S. imports, by source, 2015-19, January to September 2019, and January to September 2020

Item	Comparison periods					
	2015-19	2015-16	2016-17	2017-18	2018-19	Jan-Sept 2019-20
	Percent change based on quantity (percent)					
U.S. imports from.--						
Argentina	▼(26.7)	▲16.2	▼(10.1)	▼(10.0)	▼(22.1)	▼(26.6)
Canada	▼(12.2)	▼(11.2)	▼(13.5)	▼(1.2)	▲15.7	▼(32.9)
Chile	▲11.2	▲28.6	▼(14.2)	▲14.2	▼(11.7)	▼(12.6)
Mexico	▲262.5	▲38.7	▲53.0	▲34.1	▲27.3	▲30.1
Peru	▲1,212.3	▲179.5	▲29.4	▲96.4	▲84.8	▲12.7
All other sources	▼(29.9)	▲9.2	▼(39.7)	▲31.8	▼(19.1)	▲332.6
All import sources	▲74.7	▲21.5	▼(2.5)	▲23.3	▲19.6	▼(3.6)
	Percent change based on value (percent)					
U.S. imports from.--						
Argentina	▼(52.5)	▲23.3	▼(24.7)	▼(20.8)	▼(35.4)	▼(42.2)
Canada	▲5.7	▼(13.6)	▲19.3	▼(0.2)	▲2.8	▼(26.7)
Chile	▲7.1	▲25.4	▼(19.9)	▲21.6	▼(12.4)	▼(15.3)
Mexico	▲115.0	▲8.2	▲48.8	▲32.1	▲1.1	▲18.2
Peru	▲807.9	▲152.8	▲19.0	▲78.7	▲68.8	▼(7.1)
All other sources	▼(54.9)	▲13.7	▼(48.9)	▲8.4	▼(28.5)	▲340.7
All import sources	▲82.1	▲25.7	▲0.7	▲28.2	▲12.2	▼(5.4)
	Percent change based on average unit values (percent)					
U.S. imports from.--						
Argentina	▼(35.2)	▲6.1	▼(16.3)	▼(12.0)	▼(17.1)	▼(21.3)
Canada	▲20.3	▼(2.6)	▲37.8	▲1.1	▼(11.2)	▲9.2
Chile	▼(3.7)	▼(2.5)	▼(6.6)	▲6.5	▼(0.8)	▼(3.0)
Mexico	▼(40.7)	▼(22.0)	▼(2.8)	▼(1.5)	▼(20.6)	▼(9.1)
Peru	▼(30.8)	▼(9.5)	▼(8.0)	▼(9.0)	▼(8.7)	▼(17.5)
All other sources	▼(35.7)	▲4.1	▼(15.1)	▼(17.7)	▼(11.5)	▲1.9
All import sources	▲4.2	▲3.5	▲3.3	▲4.0	▼(6.3)	▼(1.9)

Table continued.

Table II-3--Continued
Fresh or chilled blueberries: U.S. imports, by source, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Share of quantity (percent)						
U.S. imports from.--Argentina	7.7	7.4	6.8	5.0	3.2	0.3	0.2
Canada	33.6	24.5	21.8	17.4	16.9	25.7	17.9
Chile	44.4	47.0	41.3	38.3	28.2	33.9	30.7
Mexico	9.3	10.6	16.6	18.1	19.3	22.5	30.3
Peru	4.3	9.8	13.0	20.8	32.1	17.7	20.7
All other sources	0.8	0.7	0.4	0.4	0.3	0.0	0.2
All import sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Ratio fresh or chilled to total based on quantity of U.S. imports (percent)						
U.S. imports from.--Argentina	80.5	84.3	83.7	83.1	68.2	12.7	17.2
Canada	43.4	39.0	40.7	37.7	33.0	39.6	29.5
Chile	80.7	81.6	81.4	80.2	79.8	78.0	75.6
Mexico	98.4	98.7	99.1	97.9	96.9	96.5	97.9
Peru	99.7	99.7	100.0	96.1	96.3	91.9	94.5
All other sources	89.2	67.2	79.8	85.0	82.3	33.6	74.5
All import sources	63.9	66.3	70.1	71.1	69.0	65.3	64.2
	Share of value (percent)						
U.S. imports from.--Argentina	12.2	11.9	8.9	5.5	3.2	0.4	0.2
Canada	15.4	10.6	12.5	9.7	8.9	14.7	11.4
Chile	44.2	44.1	35.1	33.3	26.0	32.7	29.3
Mexico	19.1	16.4	24.2	25.0	22.5	28.4	35.5
Peru	7.8	15.7	18.6	25.9	39.0	23.8	23.4
All other sources	1.3	1.2	0.6	0.5	0.3	0.0	0.2
All import sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Ratio fresh or chilled to total based on value of U.S. imports (percent)						
U.S. imports from.--Argentina	93.4	93.0	93.0	92.8	83.3	27.2	32.4
Canada	43.7	43.9	54.5	48.9	42.3	49.3	40.1
Chile	84.3	84.1	86.0	86.4	86.6	84.7	83.5
Mexico	99.4	99.5	99.7	99.4	98.9	98.7	99.2
Peru	99.9	99.9	100.0	99.0	99.0	97.8	98.4
All other sources	94.9	83.9	90.2	91.4	89.6	43.5	82.6
All import sources	77.4	81.2	85.5	86.0	85.1	81.3	80.6

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

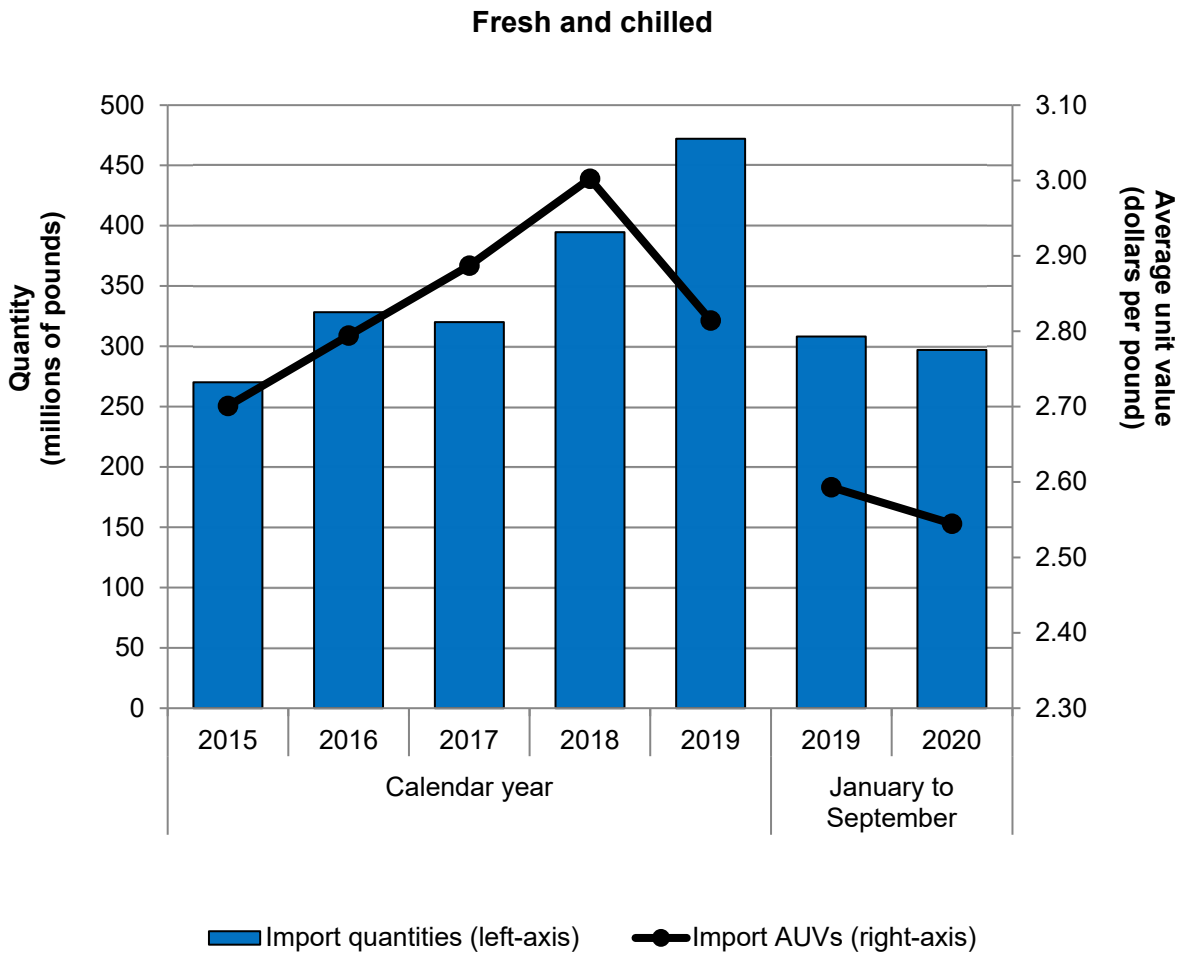
Note: The leading ports of entry since January 2015 are as follows:

For Argentina: Miami, FL, Philadelphia, PA, and Los Angeles, CA; for Canada: Portland, ME, Seattle, WA, and Pembina, ND; for Chile: Philadelphia, PA, Miami, FL, and Los Angeles, CA; for Mexico: Laredo, TX, San Diego, CA, and Nogales, AZ; and Peru: Philadelphia, PA, Miami, FL, and Los Angeles, CA.

Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, and 0810.40.0029, accessed November 6, 2020.

Figure II-3

Fresh or chilled blueberries: U.S. import quantities and average unit values, 2015-19, January to September 2019, and January to September 2020



Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, and 0810.40.0029, accessed November 6, 2020.

U.S. imports of fresh and chilled blueberries, monthly

Table II-4 and figure II-4 present information on U.S. imports of fresh and chilled blueberries from North America (Canada and Mexico), South America (primarily Argentina, Chile, and Peru), and all other sources by month. In 2015, U.S. imports from all sources during April to September accounted for nearly 40 percent of all imports for the calendar year, and were supplied mostly from North America (approximately 95 percent). By comparison, in 2019, U.S. imports from all sources during April to September accounted for approximately 30 percent of all imports for the calendar year, and while supplied principally from North America (approximately 81 percent of second and third quarter imports), included a growing share of imports from South America, especially in the fourth quarter.

Table II-4
Fresh or chilled blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	North America	South America	Other sources	All import sources
	Quantity (1,000 pounds)			
2015.--				
January	1,535	44,313	45	45,893
February	2,009	34,719	15	36,743
March	4,548	16,960	2	21,510
April	7,575	970	---	8,544
May	3,306	---	---	3,306
June	7,832	---	---	7,832
July	29,368	---	---	29,368
August	32,818	514	18	33,350
September	20,622	3,306	16	23,944
October	1,779	11,641	34	13,454
November	2,332	16,426	---	18,758
December	2,072	25,456	---	27,528
2016.--				
January	2,756	48,942	5	51,704
February	2,725	51,270	---	53,995
March	4,772	16,967	25	21,764
April	8,682	1,047	116	9,845
May	4,646	---	37	4,683
June	8,885	---	---	8,885
July	25,694	---	---	25,694
August	30,793	878	2	31,674
September	15,856	5,527	3	21,386
October	2,630	19,677	---	22,308
November	3,739	21,501	---	25,240
December	4,142	47,008	---	51,149
2017.--				
January	4,700	57,000	---	61,700
February	5,058	41,678	---	46,735
March	10,305	12,862	---	23,167
April	13,185	214	15	13,414
May	6,872	80	---	6,952
June	1,870	259	---	2,130
July	23,947	78	---	24,024
August	34,865	182	---	35,047
September	10,026	4,840	---	14,866
October	2,368	23,513	20	25,901
November	4,657	26,640	16	31,313
December	5,089	29,767	24	34,880

Table continued.

Table II-4--Continued
Fresh of chilled blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	North America	South America	Other sources	All import sources
	Quantity (1,000 pounds)			
2018.--				
January	7,035	55,346	4	62,385
February	7,396	53,497	---	60,893
March	12,472	25,426	---	37,898
April	15,234	1,868	---	17,102
May	9,531	15	---	9,546
June	2,435	63	---	2,497
July	22,724	127	---	22,852
August	33,066	2,279	---	35,344
September	12,267	7,518	---	19,785
October	4,620	31,262	---	35,882
November	6,305	31,253	36	37,593
December	7,174	45,673	8	52,855
2019.--				
January	8,176	62,459	---	70,635
February	9,902	54,269	---	64,170
March	17,072	17,137	---	34,210
April	21,172	805	---	21,977
May	9,010	98	---	9,108
June	2,576	85	18	2,680
July	35,836	345	---	36,181
August	30,382	4,531	27	34,939
September	14,140	20,093	39	34,272
October	5,027	37,559	1	42,587
November	8,205	44,626	---	52,831
December	9,094	59,460	---	68,554
2020.--				
January	10,839	55,632	---	66,471
February	12,484	38,888	---	51,372
March	20,705	18,021	56	38,782
April	26,041	171	50	26,262
May	12,458	77	---	12,534
June	3,732	148	---	3,879
July	19,822	1,482	---	21,304
August	26,718	10,272	---	36,990
September	10,317	29,021	---	39,339

Table continued.

Table II-4--Continued
Fresh of chilled blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	Argentina	Canada	Chile	Mexico	Peru
	Quantity (1,000 pounds)				
2015.--					
January	---	41	43,567	1,494	746
February	---	---	34,147	2,009	572
March	---	598	16,722	3,951	238
April	---	337	774	7,238	196
May	---	120	---	3,185	---
June	---	6,962	---	870	---
July	---	29,108	---	260	---
August	82	32,777	---	41	407
September	1,174	20,111	7	511	1,940
October	7,846	263	528	1,516	2,453
November	9,722	277	4,048	2,055	1,940
December	2,114	121	20,118	1,951	3,046
2016.--					
January	---	---	46,722	2,756	2,220
February	---	90	49,015	2,635	2,255
March	---	105	15,406	4,666	1,562
April	---	122	407	8,560	640
May	---	324	---	4,322	---
June	---	7,271	---	1,614	---
July	---	25,510	---	183	---
August	156	30,731	32	63	684
September	1,128	15,421	83	435	4,268
October	10,989	516	958	2,114	6,558
November	9,843	382	3,989	3,357	6,901
December	2,220	57	37,579	4,085	7,156
2017.--					
January	---	207	52,818	4,494	4,182
February	---	39	40,365	5,019	1,313
March	---	93	12,275	10,212	587
April	---	202	174	12,983	40
May	---	272	72	6,600	8
June	---	248	259	1,622	---
July	51	23,663	27	284	---
August	39	34,772	8	93	135
September	1,720	9,483	21	543	2,847
October	10,603	354	599	2,014	11,583
November	8,732	238	3,683	4,419	13,943
December	737	124	21,933	4,966	7,088

Table continued.

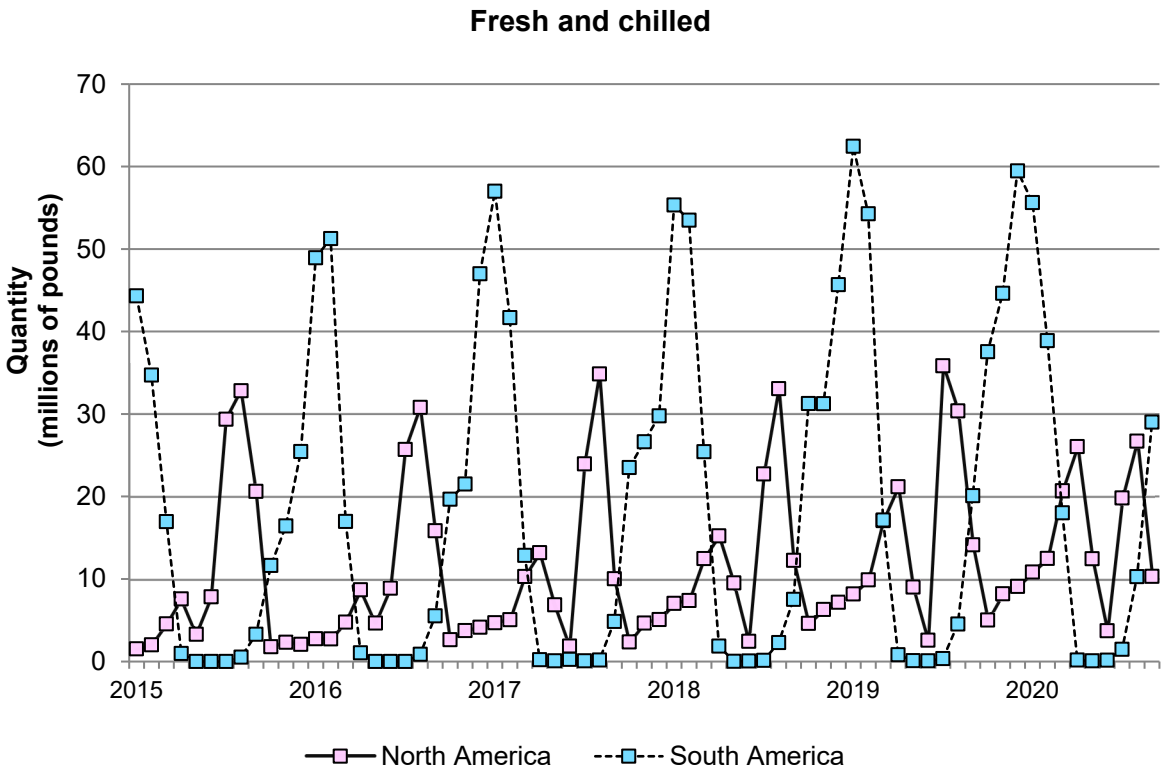
Table II-4--Continued
Fresh of chilled blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	Argentina	Canada	Chile	Mexico	Peru
	Quantity (1,000 pounds)				
2018.--					
January	---	163	48,937	6,872	6,408
February	51	66	47,509	7,329	5,937
March	7	161	22,531	12,311	2,888
April	---	114	1,597	15,120	271
May	---	802	---	8,730	15
June	---	38	---	2,397	63
July	---	22,385	---	339	127
August	---	32,875	9	190	2,270
September	267	10,747	94	1,520	7,096
October	6,317	922	899	3,698	23,227
November	7,447	216	1,787	6,089	21,256
December	5,616	356	27,589	6,818	12,385
2019.--					
January	96	358	47,215	7,818	15,148
February	---	36	42,767	9,866	11,502
March	---	60	14,085	17,013	3,052
April	---	198	158	20,974	647
May	---	84	---	8,926	98
June	---	707	---	1,870	85
July	---	35,545	---	291	345
August	78	30,150	---	232	4,452
September	741	11,926	183	2,214	19,119
October	4,711	273	1,482	4,755	31,137
November	7,212	118	2,461	8,086	34,145
December	2,506	231	25,008	8,863	31,683
2020.--					
January	97	40	39,184	10,799	16,225
February	---	60	35,657	12,424	3,210
March	---	---	16,034	20,705	1,986
April	---	277	85	25,765	86
May	---	119	---	12,339	---
June	---	---	---	3,732	79
July	---	19,127	---	694	1,429
August	---	26,219	16	499	10,229
September	575	7,239	248	3,079	28,096

Note: imports from North America consist of imports from Canada and Mexico. Imports from South America consist of imports from all countries in South America, and primarily represent Argentina, Chile, and Peru.

Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, and 0810.40.0029, accessed November 6, 2020.

Figure II-4
Fresh or chilled blueberries: U.S. imports from North and South America, by month, January 2015 through September 2020



Note: Other sources not shown.

Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, and 0810.40.0029, accessed November 6, 2020.

U.S. imports of frozen blueberries, annual and interim periods

Table II-5 and figure II-5 present information on U.S. imports of frozen blueberries imported under HTS statistical reporting numbers 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040.[3] The quantity of total U.S. imports of frozen blueberries increased from 152.9 million pounds in 2015 to 212.0 million pounds in 2019, a net increase of 38.6 percent. In 2019, imports from Canada accounted for the largest share of the quantity of imports. Annual imports were highest in 2019. The quantity of total U.S. imports was 0.9 percent higher in January-September 2020 than in January-September 2019. The value of total U.S. imports increased from $212.7 million in 2015 to $232.8 million in 2019, a net increase of 9.5 percent. In 2019, imports from Canada accounted for the largest share of the value of imports. Annual import value was highest in 2019. The value of total U.S. imports was 1.2 percent lower in January-September 2020 than in January-September 2019. U.S. imports' average unit value fluctuated, and generally decreased during 2015-19 by 21.0 percent. The average unit value of U.S. imports of frozen blueberries was highest in 2015 and lowest in 2019. U.S. imports' average unit value was $0.02 per pound (2.1 percent) lower in January-September 2020 than in January-September 2019.

[3] Frozen blueberries are currently imported under HTS statistical reporting numbers 0811.90.2024 (wild blueberries, uncooked or cooked by steaming or boiling in water, frozen); 0811.90.2030 (blueberries, certified organic, cultivated (including highbush), uncooked or cooked by steaming or boiling in water, frozen); and 0811.90.2040 (blueberries, cultivated (including highbush), uncooked or cooked by steaming or boiling in water, NESOI, frozen). Before July 1, 2018, frozen blueberries imported under HTS statistical reporting numbers 0811.90.2030 and 0811.90.2040 were imported under a single HTS statistical reporting number, 0811.90.2028 (blueberries, cultivated (including highbush), uncooked or cooked by steaming or boiling in water, frozen). For purposes of this report, frozen blueberries refer to frozen whole blueberries, and do not include frozen further processed blueberries (e.g., frozen puree).

Table II-5
Frozen blueberries: U.S. imports, by source, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
U.S. imports from.--							
Argentina	5,085	4,521	4,262	4,005	7,165	6,270	3,233
Canada	118,498	125,963	101,659	113,871	162,066	120,464	126,932
Chile	28,673	34,715	30,118	37,251	33,749	29,507	29,447
Mexico	404	441	477	1,507	2,881	2,530	1,970
Peru	33	81	---	3,286	5,817	4,767	3,572
All other sources	247	1,091	341	314	310	266	199
All import sources	152,940	166,812	136,856	160,235	211,988	163,804	165,353
	Value (1,000 dollars)						
U.S. imports from.--							
Argentina	6,307	8,291	6,183	5,088	8,473	7,498	3,389
Canada	144,665	124,047	96,529	120,641	161,877	121,394	129,166
Chile	60,247	76,580	52,629	62,158	53,460	47,361	43,761
Mexico	909	803	610	1,640	3,306	2,911	2,060
Peru	42	80	---	2,969	5,228	4,256	2,960
All other sources	510	2,080	602	568	500	402	287
All import sources	212,680	211,883	156,553	193,064	232,845	183,822	181,623
	Unit value (dollars per pound)						
U.S. imports from.--							
Argentina	1.24	1.83	1.45	1.27	1.18	1.20	1.05
Canada	1.22	0.98	0.95	1.06	1.00	1.01	1.02
Chile	2.10	2.21	1.75	1.67	1.58	1.61	1.49
Mexico	2.25	1.82	1.28	1.09	1.15	1.15	1.05
Peru	1.27	0.99	---	0.90	0.90	0.89	0.83
All other sources	2.07	1.91	1.77	1.81	1.62	1.51	1.44
All import sources	1.39	1.27	1.14	1.20	1.10	1.12	1.10
	Ratio to utilized production of processed blueberries from USDA/NASS (percent)						
U.S. imports from.--							
Argentina	1.4	1.2	1.5	1.3	2.0	NA	NA
Canada	33.7	33.5	36.8	38.1	45.9	NA	NA
Chile	8.2	9.2	10.9	12.5	9.6	NA	NA
Mexico	0.1	0.1	0.2	0.5	0.8	NA	NA
Peru	0.0	0.0	---	1.1	1.6	NA	NA
All other sources	0.1	0.3	0.1	0.1	0.1	NA	NA
All import sources	43.5	44.4	49.6	53.6	60.1	NA	NA

Table continued.

Table II-5--Continued
Frozen blueberries: U.S. imports, by source, 2015-19, January to September 2019, and January to September 2020

Item	Comparison periods					
	2015-19	2015-16	2016-17	2017-18	2018-19	Jan-Sept 2019-20
	Percent change based on quantity (percent)					
U.S. imports from.--						
Argentina	▲40.9	▼(11.1)	▼(5.7)	▼(6.0)	▲78.9	▼(48.4)
Canada	▲36.8	▲6.3	▼(19.3)	▲12.0	▲42.3	▲5.4
Chile	▲17.7	▲21.1	▼(13.2)	▲23.7	▼(9.4)	▼(0.2)
Mexico	▲612.9	▲9.1	▲8.1	▲216.3	▲91.1	▼(22.1)
Peru	▲17,530.3	▲146.2	▼(100.0)	▲ ---	▲77.0	▼(25.1)
All other sources	▲25.4	▲341.8	▼(68.8)	▼(7.9)	▼(1.3)	▼(25.3)
All import sources	▲38.6	▲9.1	▼(18.0)	▲17.1	▲32.3	▲0.9
	Percent change based on value (percent)					
U.S. imports from.--						
Argentina	▲34.3	▲31.5	▼(25.4)	▼(17.7)	▲66.5	▼(54.8)
Canada	▲11.9	▼(14.3)	▼(22.2)	▲25.0	▲34.2	▲6.4
Chile	▼(11.3)	▲27.1	▼(31.3)	▲18.1	▼(14.0)	▼(7.6)
Mexico	▲263.6	▼(11.7)	▼(24.1)	▲168.8	▲101.6	▼(29.2)
Peru	▲12,378.1	▲92.0	▼(100.0)	▲ ---	▲76.1	▼(30.5)
All other sources	▼(1.9)	▲307.8	▼(71.0)	▼(5.7)	▼(11.9)	▼(28.6)
All import sources	▲9.5	▼(0.4)	▼(26.1)	▲23.3	▲20.6	▼(1.2)
	Percent change based on average unit values (percent)					
U.S. imports from.--						
Argentina	▼(4.7)	▲47.9	▼(20.9)	▼(12.4)	▼(6.9)	▼(12.3)
Canada	▼(18.2)	▼(19.3)	▼(3.6)	▲11.6	▼(5.7)	▲1.0
Chile	▼(24.6)	▲5.0	▼(20.8)	▼(4.5)	▼(5.1)	▼(7.4)
Mexico	▼(49.0)	▼(19.0)	▼(29.7)	▼(15.0)	▲5.5	▼(9.1)
Peru	▼(29.2)	▼(22.0)	▼(100.0)	▲ ---	▼(0.5)	▼(7.2)
All other sources	▼(21.8)	▼(7.7)	▼(7.3)	▲2.3	▼(10.7)	▼(4.4)
All import sources	▼(21.0)	▼(8.7)	▼(9.9)	▲5.3	▼(8.8)	▼(2.1)

Table continued.

Table II-5--Continued
Frozen blueberries: U.S. imports, by source, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Share of quantity (percent)						
U.S. imports from.--							
Argentina	3.3	2.7	3.1	2.5	3.4	3.8	2.0
Canada	77.5	75.5	74.3	71.1	76.5	73.5	76.8
Chile	18.7	20.8	22.0	23.2	15.9	18.0	17.8
Mexico	0.3	0.3	0.3	0.9	1.4	1.5	1.2
Peru	0.0	0.0	---	2.1	2.7	2.9	2.2
All other sources	0.2	0.7	0.2	0.2	0.1	0.2	0.1
All import sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Ratio frozen to total based on quantity of U.S. imports (percent)						
U.S. imports from.--							
Argentina	19.5	15.7	16.3	16.9	31.8	87.3	82.8
Canada	56.6	61.0	59.3	62.3	67.0	60.4	70.5
Chile	19.3	18.4	18.6	19.8	20.2	22.0	24.4
Mexico	1.6	1.3	0.9	2.1	3.1	3.5	2.1
Peru	0.3	0.3	---	3.9	3.7	8.1	5.5
All other sources	10.8	32.8	20.2	15.0	17.7	66.4	25.5
All import sources	36.1	33.7	29.9	28.9	31.0	34.7	35.8
	Share of value (percent)						
U.S. imports from.--							
Argentina	3.0	3.9	3.9	2.6	3.6	4.1	1.9
Canada	68.0	58.5	61.7	62.5	69.5	66.0	71.1
Chile	28.3	36.1	33.6	32.2	23.0	25.8	24.1
Mexico	0.4	0.4	0.4	0.8	1.4	1.6	1.1
Peru	0.0	0.0	---	1.5	2.2	2.3	1.6
All other sources	0.2	1.0	0.4	0.3	0.2	0.2	0.2
All import sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Ratio frozen to total based on value of U.S. imports (percent)						
U.S. imports from.--							
Argentina	6.6	7.0	7.0	7.2	16.7	72.8	67.6
Canada	56.3	56.1	45.5	51.1	57.7	50.7	59.9
Chile	15.7	15.9	14.0	13.6	13.4	15.3	16.5
Mexico	0.6	0.5	0.3	0.6	1.1	1.3	0.8
Peru	0.1	0.1	---	1.0	1.0	2.2	1.6
All other sources	5.1	16.1	9.8	8.6	10.4	56.5	17.4
All import sources	22.6	18.8	14.5	14.0	14.9	18.7	19.4

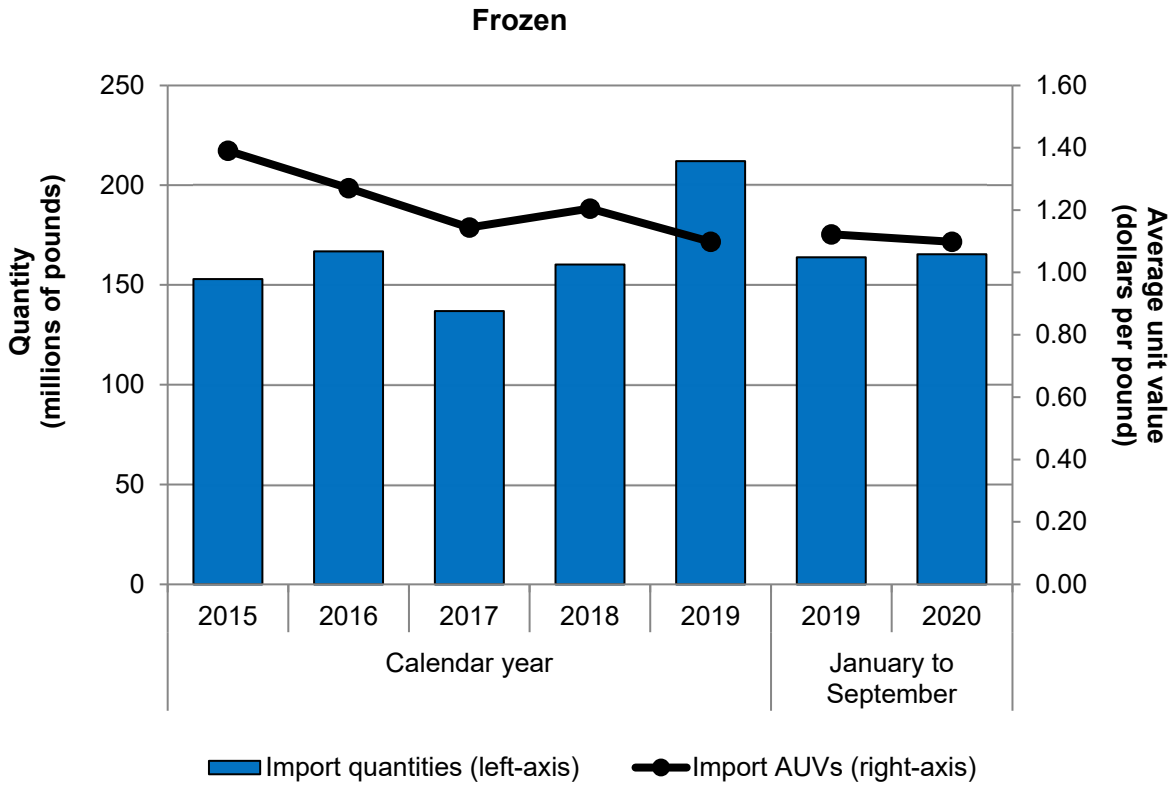
Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Note: The leading ports of entry since January 2015 are as follows:

For Argentina: Seattle, WA, Savannah, GA; for Canada: Detroit, MI, Portland, ME, and Seattle, WA; for Chile: Portland, ME, Seattle, WA, and Los Angeles, CA; for Mexico: Laredo, TX and San Diego, CA; and Peru: Savannah, GA and Seattle, WA.

Source: Official U.S. import statistics using HTS statistical reporting numbers 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020.

Figure II-5
Frozen blueberries: U.S. import quantities and average unit values, 2015-19, January to September 2019, and January to September 2020



Source: Official U.S. import statistics using HTS statistical reporting numbers 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020.

U.S. imports of frozen blueberries, monthly

Table II-6 and figure II-6 present information on U.S. imports of frozen blueberries from North America (Canada and Mexico), South America (primarily Argentina, Chile, and Peru), and all other sources by month. In 2015, U.S. imports from all sources during April to September accounted for slightly more than half of all imports for the calendar year, and were supplied mostly from North America (approximately 80 percent). By comparison, in 2019, U.S. imports from all sources during April to September accounted for approximately 56 percent of all imports for the calendar year, and while supplied principally from North America (accounting for approximately three-quarters of second and third quarter imports), included a growing share of imports from South America, especially in the second and third quarters.

Table II-6
Frozen blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	North America	South America	All other sources	All import sources
	Quantity (1,000 pounds)			
2015.--				
January	7,465	3,223	47	10,735
February	6,205	3,695	47	9,947
March	9,008	5,808	---	14,815
April	8,135	4,031	16	12,183
May	8,933	2,914	---	11,847
June	7,679	2,578	---	10,257
July	8,057	3,585	1	11,643
August	13,688	1,433	1	15,121
September	21,269	1,888	1	23,157
October	10,539	1,194	---	11,733
November	9,379	1,407	94	10,880
December	8,546	2,035	40	10,621
2016.--				
January	5,951	2,723	65	8,739
February	6,677	4,799	121	11,597
March	7,436	4,601	58	12,094
April	9,179	4,328	179	13,686
May	12,648	4,764	2	17,414
June	10,293	4,525	17	14,835
July	13,545	2,962	48	16,555
August	13,382	2,718	64	16,163
September	17,084	2,388	79	19,551
October	12,551	925	199	13,675
November	9,865	2,231	63	12,159
December	7,794	2,369	181	10,344
2017.--				
January	8,706	3,083	12	11,801
February	8,255	3,074	3	11,332
March	9,729	1,919	23	11,671
April	9,879	1,675	73	11,627
May	10,050	1,920	7	11,977
June	9,266	3,077	10	12,353
July	8,734	3,339	34	12,107
August	7,663	3,132	9	10,804
September	7,772	3,362	62	11,196
October	8,927	3,601	79	12,607
November	7,635	3,406	6	11,047
December	5,519	2,804	11	8,334

Table continued.

Table II-6--Continued
Frozen blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	North America	South America	Other sources	All import sources
	Quantity (1,000 pounds)			
2018.--				
January	7,555	3,426	1	10,982
February	5,709	5,040	11	10,760
March	9,676	4,144	48	13,868
April	11,981	4,170	162	16,312
May	11,754	5,570	---	17,324
June	10,757	4,808	7	15,572
July	10,991	3,110	18	14,118
August	10,624	4,157	2	14,783
September	7,877	2,524	---	10,402
October	9,931	1,658	1	11,589
November	9,289	1,909	26	11,224
December	9,235	4,027	39	13,301
2019.--				
January	12,755	4,346	45	17,146
February	10,781	3,477	4	14,262
March	9,711	3,422	47	13,180
April	16,355	4,112	53	20,520
May	16,581	7,023	17	23,621
June	14,984	4,486	12	19,483
July	15,333	4,830	8	20,172
August	14,440	4,811	48	19,299
September	12,053	4,045	23	16,121
October	16,005	2,322	3	18,329
November	13,751	1,218	2	14,971
December	12,197	2,684	2	14,883
2020.--				
January	13,690	3,102	55	16,846
February	14,171	2,544	2	16,717
March	14,686	3,212	18	17,917
April	13,091	3,543	---	16,634
May	16,096	6,321	15	22,431
June	11,886	4,016	10	15,911
July	12,905	4,742	61	17,708
August	18,722	5,167	27	23,916
September	13,656	3,604	12	17,272

Table continued.

Table II-6--Continued
Frozen blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	Argentina	Canada	Chile	Mexico	Peru
	Quantity (1,000 pounds)				
2015.--					
January	1,723	7,465	1,500	---	---
February	805	6,205	2,891	---	---
March	1,031	9,008	4,777	---	---
April	351	8,131	3,680	5	---
May	418	8,917	2,496	16	---
June	211	7,679	2,367	---	---
July	9	8,057	3,576	---	---
August	17	13,650	1,416	39	---
September	5	21,218	1,850	51	33
October	46	10,393	1,149	145	---
November	59	9,230	1,348	149	---
December	411	8,546	1,624	---	---
2016.--					
January	1,078	5,934	1,597	17	49
February	1,217	6,667	3,582	10	---
March	735	7,396	3,866	40	---
April	394	9,053	3,935	126	---
May	213	12,602	4,543	46	---
June	93	10,290	4,432	3	---
July	124	13,510	2,838	35	---
August	43	13,330	2,667	52	---
September	---	17,029	2,388	54	---
October	49	12,537	876	14	---
November	---	9,840	2,231	25	---
December	576	7,775	1,760	19	33
2017.--					
January	1,032	8,685	2,050	21	---
February	366	8,234	2,708	22	---
March	169	9,727	1,750	2	---
April	140	9,732	1,525	147	---
May	97	9,958	1,823	93	---
June	118	9,234	2,959	32	---
July	207	8,705	3,132	29	---
August	61	7,611	3,071	52	---
September	104	7,763	3,259	9	---
October	266	8,912	3,333	16	---
November	370	7,620	3,035	15	---
December	1,330	5,480	1,474	39	---

Table continued.

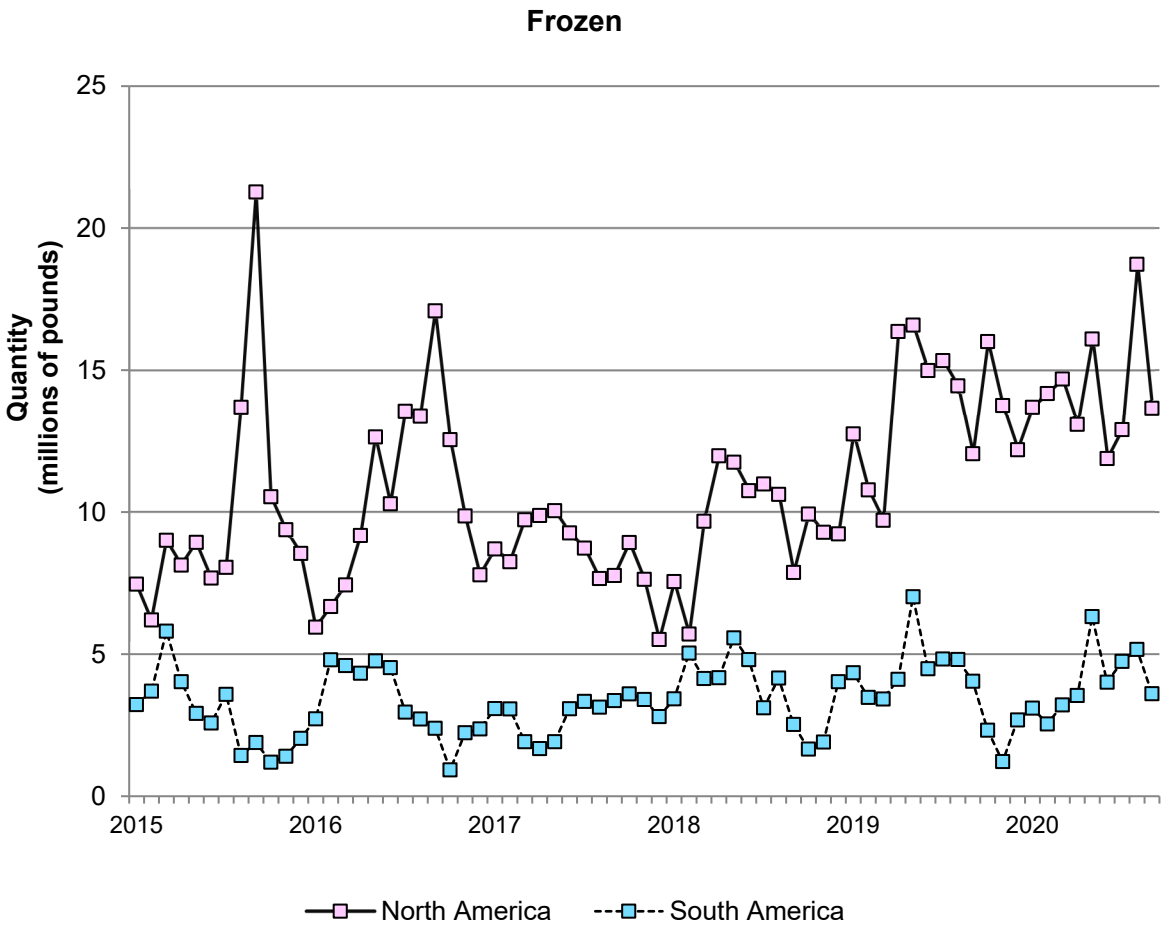
Table II-6--Continued
Frozen blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	Argentina	Canada	Chile	Mexico	Peru
	Quantity (1,000 pounds)				
2018.--					
January	1,006	7,539	2,155	16	265
February	823	5,687	4,217	23	---
March	278	9,643	3,865	33	---
April	694	11,942	3,476	39	---
May	292	11,706	5,278	48	---
June	144	10,658	4,664	99	---
July	42	10,891	3,068	100	---
August	40	10,505	4,118	119	---
September	40	7,817	2,378	60	106
October	---	9,700	1,397	231	261
November	---	8,812	1,203	477	706
December	647	8,972	1,431	262	1,949
2019.--					
January	2,157	12,373	1,581	383	609
February	857	10,282	2,182	499	439
March	480	9,104	2,497	607	445
April	748	16,218	2,395	138	970
May	909	16,412	4,699	169	1,415
June	461	14,698	3,924	286	101
July	151	15,212	4,263	121	416
August	407	14,323	4,230	118	173
September	100	11,843	3,736	210	200
October	66	15,738	2,061	267	158
November	49	13,740	906	11	263
December	779	12,124	1,275	73	629
2020.--					
January	912	13,604	1,726	85	463
February	629	14,019	1,868	151	47
March	359	14,486	2,690	200	164
April	399	12,897	2,983	195	161
May	644	15,871	5,633	224	45
June	208	11,662	3,672	224	136
July	29	12,596	4,661	309	52
August	24	18,612	3,761	110	1,382
September	29	13,184	2,453	472	1,123

Note: imports from North America consist of imports from Canada and Mexico. Imports from South America consist of imports from all countries in South America, and primarily represent Argentina, Chile, and Peru.

Source: Official U.S. import statistics using HTS statistical reporting numbers 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020.

Figure II-6
Frozen blueberries: U.S. imports from North and South America, by month, January 2015 through September 2020



Note: Other sources not shown.

Source: Official U.S. import statistics using HTS statistical reporting numbers 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020.

U.S. imports by type

During 2015-19, the quantity of total U.S. imports of both cultivated and wild blueberries from all sources increased and reached their highest levels in 2019. The quantity of total U.S. imports for both cultivated and wild blueberries were lower in January-September 2020 compared to January-September 2019. In 2019, the quantities of total U.S. imports of cultivated blueberries were more than five times higher (578.6 million) than those of wild blueberries (105.5 million) and also increased at much higher rates between 2015 and 2019.

U.S. imports of cultivated blueberries, annual and interim periods

Table II-7 and figure II-7 present information on U.S. imports of cultivated blueberries imported under HTS statistical reporting numbers 0810.40.0026, 0810.40.0029, 0811.90.2028, 0811.90.2030, and 0811.90.2040. The quantity of total U.S. imports of cultivated blueberries increased from 321.9 million pounds in 2015 to 578.6 million pounds in 2019, a net increase of 79.8 percent. In 2019, imports from Chile accounted for the largest share of the quantity of imports. Annual imports were highest in 2019. The quantity of total U.S. imports was 0.4 percent lower in January-September 2020 than in January-September 2019. The value of total U.S. imports increased from $834.9 million in 2015 to $1.5 billion in 2019, a net increase of 75.2 percent. In 2019, imports from Peru accounted for the largest share of the value of imports. Annual import value was highest in 2019. The value of total U.S. imports was 5.7 percent lower in January-September 2020 than in January-September 2019. U.S. imports' average unit value fluctuated within a $0.20 per pound range, but generally decreased during 2015-19 by 2.5 percent. The average unit value of U.S. imports of cultivated blueberries was highest in 2018 and lowest in January-September 2020. U.S. imports' average unit value was $0.12 per pound (5.4 percent) lower in January-September 2020 than in January-September 2019.

Table II-7
Cultivated blueberries: U.S. imports, by source, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
U.S. imports from.--							
Argentina	25,972	28,856	26,093	23,621	22,311	6,987	3,803
Canada	111,213	106,249	107,576	109,950	140,933	120,604	110,369
Chile	145,401	185,238	161,072	185,488	163,769	131,152	117,295
Mexico	25,485	35,232	53,671	72,902	93,788	71,733	91,624
Peru	11,570	32,326	41,650	84,983	156,195	58,670	64,287
All other sources	2,254	3,078	1,496	1,938	1,625	283	682
All import sources	321,895	390,979	391,557	478,882	578,620	389,430	388,060
	Value (1,000 dollars)						
U.S. imports from.--							
Argentina	95,088	117,835	88,559	70,246	50,373	10,027	4,894
Canada	154,121	136,978	159,638	169,667	186,843	168,117	140,420
Chile	378,378	476,167	375,560	452,999	395,629	305,661	261,482
Mexico	140,099	151,390	224,563	297,633	302,588	229,943	269,320
Peru	57,154	144,492	171,624	310,056	522,807	193,682	178,628
All other sources	10,009	12,549	5,758	6,224	4,563	468	1,522
All import sources	834,850	1,039,410	1,025,703	1,306,826	1,462,804	907,899	856,266
	Unit value (dollars per pound)						
U.S. imports from.--							
Argentina	3.66	4.08	3.39	2.97	2.26	1.43	1.29
Canada	1.39	1.29	1.48	1.54	1.33	1.39	1.27
Chile	2.60	2.57	2.33	2.44	2.42	2.33	2.23
Mexico	5.50	4.30	4.18	4.08	3.23	3.21	2.94
Peru	4.94	4.47	4.12	3.65	3.35	3.30	2.78
All other sources	4.44	4.08	3.85	3.21	2.81	1.65	2.23
All import sources	2.59	2.66	2.62	2.73	2.53	2.33	2.21
	Ratio to utilized production of cultivated blueberries USDA/NASS (percent)						
U.S. imports from.--							
Argentina	4.6	4.9	5.1	4.3	3.3	NA	NA
Canada	19.9	18.0	21.0	19.8	20.9	NA	NA
Chile	26.0	31.5	31.4	33.4	24.3	NA	NA
Mexico	4.6	6.0	10.5	13.1	13.9	NA	NA
Peru	2.1	5.5	8.1	15.3	23.2	NA	NA
All other sources	0.4	0.5	0.3	0.3	0.2	NA	NA
All import sources	57.5	66.4	76.4	86.2	86.0	NA	NA

Table continued.

Table II-7--Continued
Cultivated blueberries: U.S. imports, by source, 2015-19, January to September 2019, and January to September 2020

Item	Comparison periods					
	2015-19	2015-16	2016-17	2017-18	2018-19	Jan-Sept 2019-20
	Percent change based on quantity (percent)					
U.S. imports from.--						
Argentina	▼(14.1)	▲11.1	▼(9.6)	▼(9.5)	▼(5.5)	▼(45.6)
Canada	▲26.7	▼(4.5)	▲1.2	▲2.2	▲28.2	▼(8.5)
Chile	▲12.6	▲27.4	▼(13.0)	▲15.2	▼(11.7)	▼(10.6)
Mexico	▲268.0	▲38.2	▲52.3	▲35.8	▲28.6	▲27.7
Peru	▲1,250.0	▲179.4	▲28.8	▲104.0	▲83.8	▲9.6
All other sources	▼(27.9)	▲36.6	▼(51.4)	▲29.5	▼(16.2)	▲140.9
All import sources	▲79.8	▲21.5	▲0.1	▲22.3	▲20.8	▼(0.4)
	Percent change based on value (percent)					
U.S. imports from.--						
Argentina	▼(47.0)	▲23.9	▼(24.8)	▼(20.7)	▼(28.3)	▼(51.2)
Canada	▲21.2	▼(11.1)	▲16.5	▲6.3	▲10.1	▼(16.5)
Chile	▲4.6	▲25.8	▼(21.1)	▲20.6	▼(12.7)	▼(14.5)
Mexico	▲116.0	▲8.1	▲48.3	▲32.5	▲1.7	▲17.1
Peru	▲814.7	▲152.8	▲18.8	▲80.7	▲68.6	▼(7.8)
All other sources	▼(54.4)	▲25.4	▼(54.1)	▲8.1	▼(26.7)	▲224.9
All import sources	▲75.2	▲24.5	▼(1.3)	▲27.4	▲11.9	▼(5.7)
	Percent change based on average unit values (percent)					
U.S. imports from.--						
Argentina	▼(38.3)	▲11.5	▼(16.9)	▼(12.4)	▼(24.1)	▼(10.3)
Canada	▼(4.3)	▼(7.0)	▲15.1	▲4.0	▼(14.1)	▼(8.7)
Chile	▼(7.2)	▼(1.2)	▼(9.3)	▲4.7	▼(1.1)	▼(4.3)
Mexico	▼(41.3)	▼(21.8)	▼(2.6)	▼(2.4)	▼(21.0)	▼(8.3)
Peru	▼(32.2)	▼(9.5)	▼(7.8)	▼(11.5)	▼(8.3)	▼(15.8)
All other sources	▼(36.8)	▼(8.2)	▼(5.6)	▼(16.6)	▼(12.6)	▲34.9
All import sources	▼(2.5)	▲2.5	▼(1.5)	▲4.2	▼(7.4)	▼(5.4)

Table continued.

Table II-7--Continued
Cultivated blueberries: U.S. imports, by source, 2015-19, January to September 2019, and January to September 2020

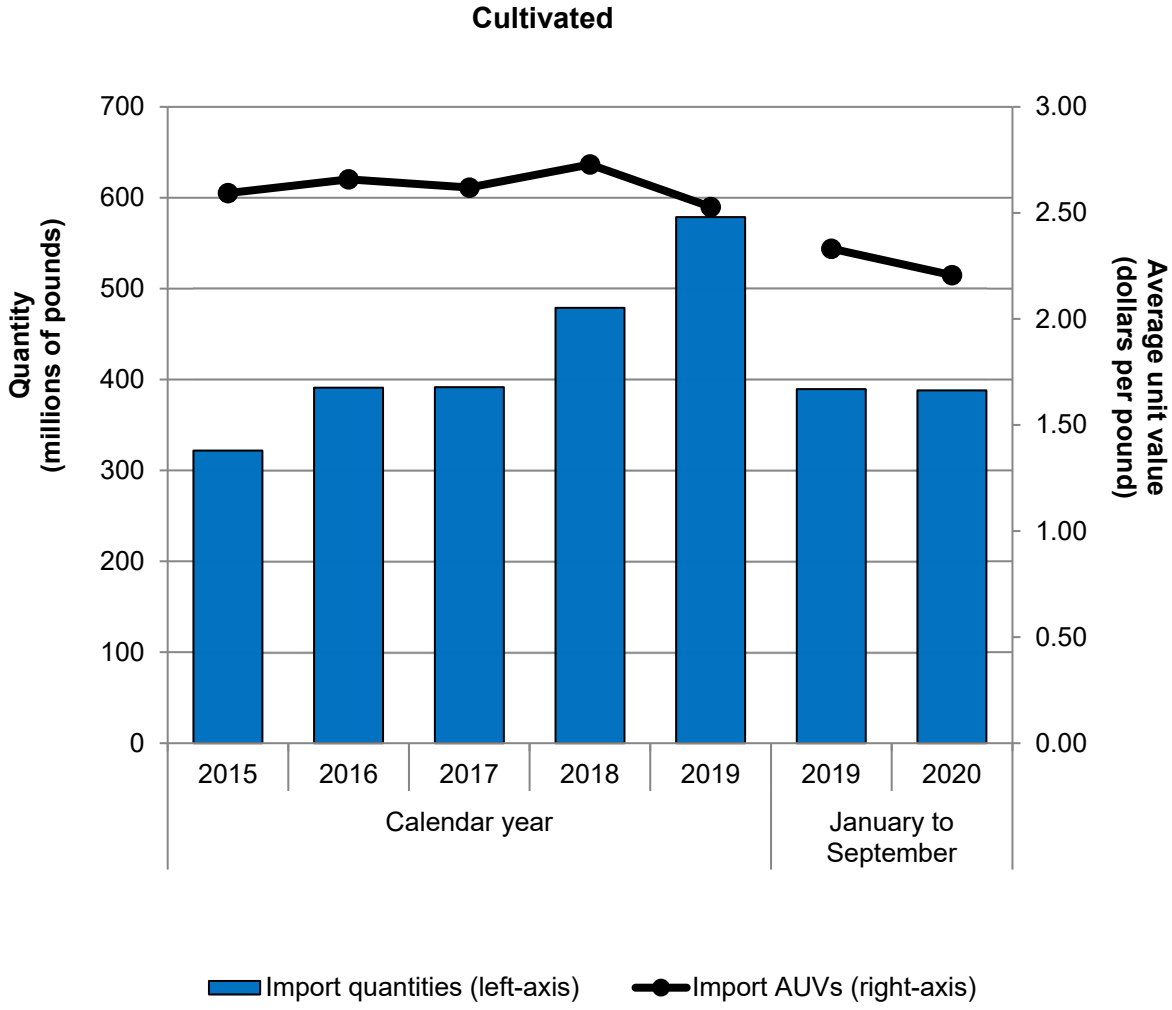
Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Share of quantity (percent)						
U.S. imports from.--							
Argentina	8.1	7.4	6.7	4.9	3.9	1.8	1.0
Canada	34.5	27.2	27.5	23.0	24.4	31.0	28.4
Chile	45.2	47.4	41.1	38.7	28.3	33.7	30.2
Mexico	7.9	9.0	13.7	15.2	16.2	18.4	23.6
Peru	3.6	8.3	10.6	17.7	27.0	15.1	16.6
All other sources	0.7	0.8	0.4	0.4	0.3	0.1	0.2
All import sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Ratio cultivated to total based on quantity of U.S. imports (percent)						
U.S. imports from.--							
Argentina	99.8	100.0	99.8	99.6	99.1	97.2	97.4
Canada	53.2	51.5	62.8	60.2	58.3	60.4	61.3
Chile	97.9	98.1	99.2	98.6	98.0	97.9	97.2
Mexico	100.0	100.0	99.9	100.0	100.0	100.0	99.6
Peru	100.0	100.0	99.8	99.7	99.3	99.1	99.0
All other sources	98.3	92.5	88.6	92.8	93.1	70.7	87.4
All import sources	76.1	79.0	85.7	86.3	84.6	82.5	83.9
	Share of value (percent)						
U.S. imports from.--							
Argentina	11.4	11.3	8.6	5.4	3.4	1.1	0.6
Canada	18.5	13.2	15.6	13.0	12.8	18.5	16.4
Chile	45.3	45.8	36.6	34.7	27.0	33.7	30.5
Mexico	16.8	14.6	21.9	22.8	20.7	25.3	31.5
Peru	6.8	13.9	16.7	23.7	35.7	21.3	20.9
All other sources	1.2	1.2	0.6	0.5	0.3	0.1	0.2
All import sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Ratio cultivated to total based on value of U.S. imports (percent)						
U.S. imports from.--							
Argentina	99.9	100.0	99.9	99.8	99.5	97.3	97.7
Canada	60.0	62.0	75.2	71.8	66.6	70.3	65.1
Chile	98.8	98.9	99.6	99.2	99.1	99.0	98.6
Mexico	100.0	100.0	100.0	100.0	100.0	100.0	99.6
Peru	100.0	100.0	99.8	99.9	99.8	99.8	99.6
All other sources	99.4	96.9	93.5	94.4	94.8	65.9	92.3
All import sources	88.6	92.0	94.9	94.8	93.7	92.4	91.4

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

Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0026, 0810.40.0029, 0811.90.2028, 0811.90.2030 and 0811.90.2040, accessed November 6, 2020.

Figure II-7

Cultivated blueberries: U.S. import quantities and average unit values, 2015-19, January to September 2019, and January to September 2020



Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0026, 0810.40.0029, 0811.90.2028, 0811.90.2030 and 0811.90.2040, accessed November 6, 2020.

U.S. imports of cultivated blueberries, monthly

Table II-8 and figure II-8 present information on U.S. imports of cultivated blueberries from North America (Canada and Mexico), South America (primarily Argentina, Chile, and Peru), and all other sources by month. In 2015, U.S. imports from all sources during April to September accounted for approximately 36 percent of all imports for the calendar year, and were supplied primarily from North America (approximately 84 percent). By comparison, in 2019, U.S. imports from all sources during April to September accounted for about a third of all imports for the calendar year, and while supplied principally from North America (approximately 72 percent of second and third quarter imports), included a growing share of imports from South America, especially in the third and fourth quarters.

Table II-8
Cultivated blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	North America	South America	Other sources	All import sources
	Quantity (1,000 pounds)			
2015.--				
January	5,182	47,452	92	52,727
February	5,879	37,981	63	43,923
March	9,833	22,431	2	32,267
April	12,401	4,827	16	17,245
May	7,298	2,219	---	9,516
June	10,849	1,968	---	12,817
July	34,500	3,138	1	37,639
August	23,465	1,947	18	25,430
September	8,219	4,947	17	13,183
October	5,636	12,732	34	18,402
November	7,162	17,777	94	25,033
December	6,275	27,440	---	33,715
2016.--				
January	5,387	51,666	59	57,111
February	5,722	55,492	95	61,308
March	7,977	21,164	35	29,177
April	12,737	4,713	239	17,690
May	9,901	4,426	39	14,367
June	12,863	3,841	17	16,721
July	36,398	2,326	26	38,749
August	20,207	3,557	46	23,810
September	7,268	7,692	82	15,042
October	7,809	20,524	199	28,531
November	7,427	23,723	54	31,204
December	7,785	49,358	126	57,269
2017.--				
January	8,899	59,994	12	68,905
February	9,270	44,681	1	53,951
March	15,517	14,781	---	30,298
April	18,959	1,802	54	20,815
May	12,977	1,925	7	14,909
June	6,733	2,972	9	9,714
July	29,251	3,211	11	32,474
August	26,678	3,118	---	29,796
September	11,184	8,091	40	19,315
October	6,326	27,048	50	33,425
November	8,096	29,963	18	38,076
December	7,355	32,513	11	39,880

Table continued.

Table II-8--Continued
Cultivated blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	North America	South America	Other sources	All import sources
	Quantity (1,000 pounds)			
2018.--				
January	10,553	58,748	5	69,306
February	9,098	58,135	1	67,234
March	16,186	29,099	3	45,287
April	19,000	5,545	154	24,698
May	13,954	5,305	---	19,259
June	7,557	4,299	6	11,862
July	27,554	2,965	17	30,535
August	30,320	6,292	1	36,613
September	14,030	10,042	---	24,073
October	10,505	32,837	---	43,342
November	11,750	33,026	36	44,811
December	12,346	49,500	17	61,863
2019.--				
January	14,843	66,438	40	81,321
February	16,764	57,547	4	74,315
March	22,963	20,372	24	43,358
April	27,277	4,679	29	31,985
May	14,579	6,770	2	21,350
June	7,984	4,552	30	12,566
July	40,788	4,526	1	45,315
August	33,178	8,346	52	41,575
September	13,962	23,642	41	37,644
October	12,379	39,549	3	51,930
November	15,342	45,548	2	60,892
December	14,663	61,705	---	76,368
2020.--				
January	17,150	58,274	42	75,466
February	19,158	41,223	2	60,383
March	27,587	21,139	73	48,799
April	32,495	3,617	50	36,161
May	19,687	5,786	2	25,475
June	10,946	3,545	10	14,501
July	26,307	5,312	4	31,622
August	31,407	14,709	12	46,128
September	17,256	32,256	12	49,524

Table continued.

Table II-8--Continued
Cultivated blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	Argentina	Canada	Chile	Mexico	Peru
	Quantity (1,000 pounds)				
2015.--					
January	1,723	3,688	44,984	1,494	746
February	805	3,870	36,604	2,009	572
March	1,031	5,883	21,162	3,951	238
April	351	5,159	4,280	7,242	196
May	418	4,097	1,800	3,201	---
June	211	9,979	1,758	870	---
July	9	34,240	3,129	260	---
August	99	23,386	1,416	80	407
September	1,179	7,657	1,611	562	1,973
October	7,892	3,975	1,573	1,661	2,453
November	9,782	4,958	5,342	2,204	1,939
December	2,474	4,323	21,742	1,951	3,046
2016.--					
January	1,078	2,614	48,320	2,773	2,269
February	1,217	3,076	52,020	2,645	2,255
March	735	3,271	18,868	4,706	1,562
April	394	4,052	3,680	8,686	640
May	213	5,533	4,206	4,368	---
June	93	11,246	3,748	1,618	---
July	124	36,180	2,202	218	---
August	199	20,093	2,660	115	684
September	1,128	6,778	2,247	490	4,268
October	11,038	5,681	1,756	2,128	6,558
November	9,843	4,046	6,211	3,381	6,901
December	2,796	3,681	39,320	4,104	7,189
2017.--					
January	982	4,399	54,830	4,500	4,182
February	366	4,265	43,002	5,005	1,313
March	169	5,303	14,025	10,214	587
April	140	5,830	1,612	13,130	40
May	97	6,284	1,820	6,692	8
June	118	5,080	2,853	1,654	---
July	258	28,938	2,953	313	---
August	100	26,533	2,882	145	135
September	1,823	10,633	3,169	552	2,847
October	10,869	4,297	3,911	2,030	11,537
November	9,103	3,662	6,635	4,434	13,943
December	2,067	2,354	23,378	5,002	7,059

Table continued.

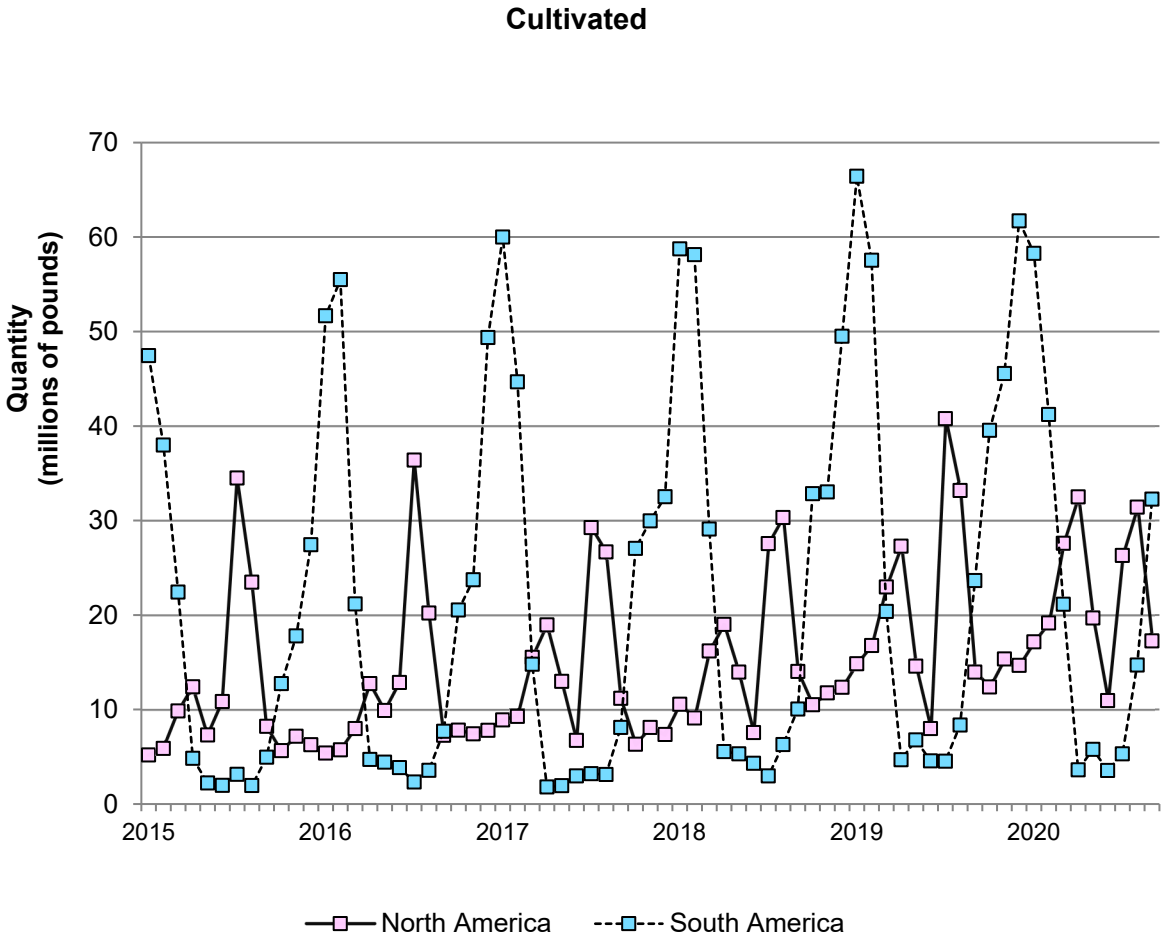
Table II-8--Continued
Cultivated blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	Argentina	Canada	Chile	Mexico	Peru
	Quantity (1,000 pounds)				
2018.--					
January	1,006	3,665	51,068	6,888	6,673
February	873	1,765	51,330	7,333	5,931
March	285	3,841	25,927	12,344	2,888
April	605	3,841	4,669	15,158	271
May	292	5,176	4,997	8,778	15
June	144	5,061	4,092	2,496	63
July	42	27,115	2,796	439	127
August	40	30,011	3,983	309	2,270
September	307	12,450	2,472	1,581	7,202
October	6,317	6,575	2,213	3,929	23,487
November	7,447	5,184	2,933	6,566	21,882
December	6,263	5,266	29,007	7,080	14,175
2019.--					
January	2,106	6,642	48,616	8,201	15,717
February	857	6,399	44,854	10,365	11,836
March	480	5,343	16,503	17,620	3,389
April	697	6,165	2,445	21,112	1,537
May	909	5,484	4,348	9,095	1,513
June	461	5,829	3,905	2,156	186
July	151	40,376	3,825	412	549
August	485	32,828	3,235	350	4,625
September	842	11,538	3,422	2,424	19,319
October	4,777	7,357	3,245	5,022	31,261
November	7,261	7,245	3,206	8,097	34,272
December	3,286	5,727	26,165	8,936	31,991
2020.--					
January	1,009	6,266	40,801	10,885	16,338
February	629	6,583	37,457	12,575	3,116
March	359	6,682	18,630	20,905	2,150
April	399	6,661	2,971	25,834	247
May	593	7,333	5,071	12,354	45
June	157	7,029	3,105	3,916	214
July	29	25,311	3,749	995	1,481
August	24	30,798	3,047	609	11,611
September	604	13,706	2,465	3,550	29,086

Note: imports from North America consist of imports from Canada and Mexico. Imports from South America consist of imports from all countries in South America, and primarily represent Argentina, Chile, and Peru.

Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0026, 0810.40.0029, 0811.90.2028, 0811.90.2030 and 0811.90.2040, accessed November 6, 2020.

Figure II-8
Cultivated blueberries: U.S. imports from North and South America, by month, January 2015 through September 2020



Note: Other sources not shown.

Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0026, 0810.40.0029, 0811.90.2028, 0811.90.2030 and 0811.90.2040, accessed November 6, 2020.

U.S. imports of wild blueberries, annual and interim periods

Table II-9 and figure II-9 present information on U.S. imports of wild blueberries imported under HTS statistical reporting numbers 0810.40.0024 and 0811.90.2024. The quantity of total U.S. imports of wild blueberries increased from 101.3 million pounds in 2015 to 105.5 million pounds in 2019, a net increase of 4.2 percent. In 2019, imports from Canada accounted for the largest share of the quantity of imports. Annual imports were highest in 2019. The quantity of total U.S. imports was 10.1 percent lower in January-September 2020 than in January-September 2019. The value of total U.S. imports decreased from $107.7 million in 2015 to $98.8 million in 2019, a net decrease of 8.2 percent. In 2019, imports from Canada accounted for the largest share of the value of imports. Annual import value was highest in 2015. The value of total U.S. imports was 8.0 percent higher in January-September 2020 than in January-September 2019. U.S. imports' average unit value fluctuated within a $0.22 per pound range, but generally decreased between 2015 and 2019 by 11.9 percent. The average unit value of U.S. imports of wild blueberries was highest in 2015 and lowest in 2017. U.S. imports' average unit value was $0.18 per pound (20.1 percent) higher in January-September 2020 than in January-September 2019.

Table II-9
Wild blueberries: U.S. imports, by source, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
U.S. imports from.--							
Argentina	51	---	51	88	198	198	102
Canada	98,000	100,242	63,778	72,767	100,818	78,923	69,644
Chile	3,183	3,669	1,280	2,716	3,339	2,763	3,377
Mexico	---	---	53	19	---	---	381
Peru	2	---	75	244	1,036	544	624
All other sources	40	248	192	151	120	117	98
All import sources	101,276	104,159	65,429	75,985	105,512	82,546	74,228
	Value (1,000 dollars)						
U.S. imports from.--							
Argentina	58	---	100	176	277	277	117
Canada	102,830	84,105	52,606	66,486	93,731	71,131	75,158
Chile	4,763	5,436	1,591	3,797	3,550	2,973	3,702
Mexico	---	---	110	19	---	---	1,133
Peru	8	---	279	186	1,039	424	785
All other sources	63	399	401	370	249	242	127
All import sources	107,723	89,939	55,088	71,034	98,845	75,046	81,022
	Unit value (dollars per pound)						
U.S. imports from.--							
Argentina	1.14	---	1.97	1.98	1.40	1.40	1.15
Canada	1.05	0.84	0.82	0.91	0.93	0.90	1.08
Chile	1.50	1.48	1.24	1.40	1.06	1.08	1.10
Mexico	---	---	2.08	1.02	---	---	2.97
Peru	5.14	---	3.73	0.76	1.00	0.78	1.26
All other sources	1.57	1.61	2.09	2.44	2.07	2.06	1.29
All import sources	1.06	0.86	0.84	0.93	0.94	0.91	1.09
	Ratio to utilized production of wild blueberries USDA/NASS (percent)						
U.S. imports from.--							
Argentina	0.1	---	0.1	0.2	0.4	NA	NA
Canada	97.0	98.6	94.3	144.7	185.9	NA	NA
Chile	3.2	3.6	1.9	5.4	6.2	NA	NA
Mexico	---	---	0.1	0.0	---	NA	NA
Peru	0.0	---	0.1	0.5	1.9	NA	NA
All other sources	0.0	0.2	0.3	0.3	0.2	NA	NA
All import sources	100.3	102.5	96.7	151.1	194.6	NA	NA

Table continued.

Table II-9--Continued
Wild blueberries: U.S. imports, by source, 2015-19, January to September 2019, and January to September 2020

Item	Comparison periods					
	2015-19	2015-16	2016-17	2017-18	2018-19	Jan-Sept 2019-20
	Percent change based on quantity (percent)					
U.S. imports from.--						
Argentina	▲288.6	▼(100.0)	▲ ---	▲73.6	▲123.9	▼(48.5)
Canada	▲2.9	▲2.3	▼(36.4)	▲14.1	▲38.6	▼(11.8)
Chile	▲4.9	▲15.3	▼(65.1)	▲112.2	▲22.9	▲22.2
Mexico	---	---	▲ ---	▼(64.4)	▼(100.0)	▲ ---
Peru	▲65,160.0	▼(100.0)	▲ ---	▲226.9	▲324.3	▲14.7
All other sources	▲201.1	▲519.3	▼(22.6)	▼(21.1)	▼(20.4)	▼(16.2)
All import sources	▲4.2	▲2.8	▼(37.2)	▲16.1	▲38.9	▼(10.1)
	Percent change based on value (percent)					
U.S. imports from.--						
Argentina	▲374.7	▼(100.0)	▲ ---	▲74.9	▲57.5	▼(57.8)
Canada	▼(8.8)	▼(18.2)	▼(37.5)	▲26.4	▲41.0	▲5.7
Chile	▼(25.5)	▲14.1	▼(70.7)	▲138.6	▼(6.5)	▲24.5
Mexico	---	---	▲ ---	▼(82.5)	▼(100.0)	▲ ---
Peru	▲12,631.1	▼(100.0)	▲ ---	▼(33.4)	▲459.5	▲85.1
All other sources	▲297.0	▲535.0	▲0.6	▼(7.8)	▼(32.6)	▼(47.6)
All import sources	▼(8.2)	▼(16.5)	▼(38.7)	▲28.9	▲39.2	▲8.0
	Percent change based on average unit values (percent)					
U.S. imports from.--						
Argentina	▲22.1	▼(100.0)	▲ ---	▲0.7	▼(29.7)	▼(18.0)
Canada	▼(11.4)	▼(20.0)	▼(1.7)	▲10.8	▲1.8	▲19.7
Chile	▼(29.0)	▼(1.0)	▼(16.1)	▲12.5	▼(24.0)	▲1.9
Mexico	---	---	▲ ---	▼(50.9)	▼(100.0)	▲ ---
Peru	▼(80.5)	▼(100.0)	▲ ---	▼(79.6)	▲31.9	▲61.4
All other sources	▲31.9	▲2.5	▲30.0	▲16.8	▼(15.3)	▼(37.5)
All import sources	▼(11.9)	▼(18.8)	▼(2.5)	▲11.0	▲0.2	▲20.1

Table continued.

Table II-9--Continued
Wild blueberries: U.S. imports, by source, 2015-19, January to September 2019, and January to September 2020

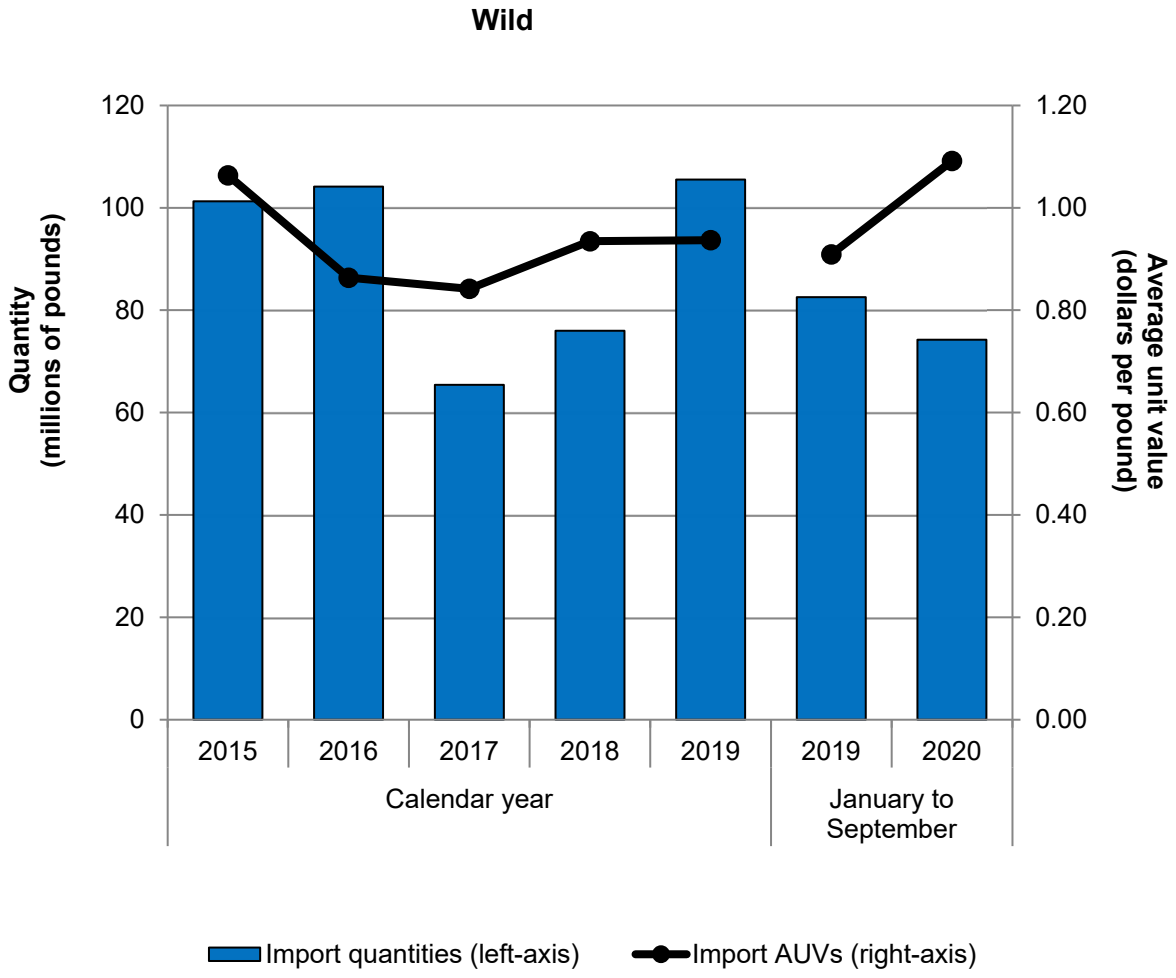
Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Share of quantity (percent)						
U.S. imports from.--							
Argentina	0.1	---	0.1	0.1	0.2	0.2	0.1
Canada	96.8	96.2	97.5	95.8	95.6	95.6	93.8
Chile	3.1	3.5	2.0	3.6	3.2	3.3	4.5
Mexico	---	---	0.1	0.0	---	---	0.5
Peru	0.0	---	0.1	0.3	1.0	0.7	0.8
All other sources	0.0	0.2	0.3	0.2	0.1	0.1	0.1
All import sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Ratio wild to total based on quantity of U.S. imports (percent)						
U.S. imports from.--							
Argentina	0.2	---	0.2	0.4	0.9	2.8	2.6
Canada	46.8	48.5	37.2	39.8	41.7	39.6	38.7
Chile	2.1	1.9	0.8	1.4	2.0	2.1	2.8
Mexico	---	---	0.1	0.0	---	---	0.4
Peru	0.0	---	0.2	0.3	0.7	0.9	1.0
All other sources	1.7	7.5	11.4	7.2	6.9	29.3	12.6
All import sources	23.9	21.0	14.3	13.7	15.4	17.5	16.1
	Share of value (percent)						
U.S. imports from.--							
Argentina	0.1	---	0.2	0.2	0.3	0.4	0.1
Canada	95.5	93.5	95.5	93.6	94.8	94.8	92.8
Chile	4.4	6.0	2.9	5.3	3.6	4.0	4.6
Mexico	---	---	0.2	0.0	---	---	1.4
Peru	0.0	---	0.5	0.3	1.1	0.6	1.0
All other sources	0.1	0.4	0.7	0.5	0.3	0.3	0.2
All import sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Ratio wild to total based on value of U.S. imports (percent)						
U.S. imports from.--							
Argentina	0.1	---	0.1	0.2	0.5	2.7	2.3
Canada	40.0	38.0	24.8	28.2	33.4	29.7	34.9
Chile	1.2	1.1	0.4	0.8	0.9	1.0	1.4
Mexico	---	---	0.0	0.0	---	---	0.4
Peru	0.0	---	0.2	0.1	0.2	0.2	0.4
All other sources	0.6	3.1	6.5	5.6	5.2	34.1	7.7
All import sources	11.4	8.0	5.1	5.2	6.3	7.6	8.6

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

Note: For additional discussion of U.S. production of wild blueberries in 2019, see Part III.

Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024 and 0811.90.2024, accessed November 6, 2020.

Figure II-9
Wild blueberries: U.S. import quantities and average unit values, 2015-19, January to September 2019, and January to September 2020



Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024 and 0811.90.2024, accessed November 6, 2020.

U.S. imports of wild blueberries, monthly

Table II-10 and figure II-10 present information on U.S. imports of wild blueberries from North America (Canada and Mexico), South America (primarily Argentina, Chile, and Peru), and all other sources by month. In 2015, U.S. imports from all sources during April to September accounted for slightly less than three-quarters of all imports for the calendar year, and were supplied primarily from North America (approximately 97 percent). By comparison, in 2019, U.S. imports from all sources during April to September accounted for approximately 64 percent of all imports for the calendar year, and while supplied principally from North America (approximately 96 percent of second and third quarter imports), included a growing share of imports from South America, especially in the third and fourth quarters.

Table II-10
Wild blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	North America	South America	Other sources	All import sources
	Quantity (1,000 pounds)			
2015.--				
January	3,818	84	---	3,901
February	2,334	433	---	2,767
March	3,723	336	---	4,059
April	3,309	174	---	3,483
May	4,941	695	---	5,636
June	4,662	610	---	5,272
July	2,925	447	---	3,372
August	23,041	---	---	23,041
September	33,672	246	---	33,919
October	6,681	104	---	6,785
November	4,550	56	---	4,606
December	4,344	51	40	4,435
2016.--				
January	3,320	---	11	3,331
February	3,681	577	26	4,284
March	4,230	404	48	4,682
April	5,123	662	56	5,841
May	7,393	337	---	7,730
June	6,315	684	---	6,999
July	2,841	637	22	3,499
August	23,968	39	20	24,026
September	25,672	224	---	25,896
October	7,373	78	---	7,451
November	6,176	9	9	6,194
December	4,151	18	56	4,225
2017.--				
January	4,507	89	---	4,596
February	4,043	71	2	4,116
March	4,517	---	23	4,540
April	4,105	87	34	4,225
May	3,946	74	---	4,020
June	4,403	365	1	4,769
July	3,429	206	23	3,658
August	15,850	196	9	16,056
September	6,613	112	22	6,747
October	4,969	66	49	5,083
November	4,196	83	4	4,284
December	3,253	57	24	3,334

Table continued.

Table II-10--Continued
Wild blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	North America	South America	Other sources	All import sources
	Quantity (1,000 pounds)			
2018.--				
January	4,037	24	---	4,060
February	4,007	402	10	4,419
March	5,963	470	45	6,478
April	8,215	492	8	8,715
May	7,332	280	---	7,612
June	5,635	572	1	6,208
July	6,161	273	1	6,435
August	13,369	144	2	13,515
September	6,114	---	---	6,114
October	4,046	83	1	4,130
November	3,844	136	26	4,006
December	4,063	200	30	4,293
2019.--				
January	6,089	367	4	6,460
February	3,918	199	---	4,118
March	3,821	188	23	4,032
April	10,251	238	24	10,512
May	11,012	351	16	11,378
June	9,576	20	---	9,596
July	10,382	650	7	11,038
August	11,645	996	23	12,663
September	12,230	497	21	12,749
October	8,653	332	1	8,986
November	6,613	297	---	6,910
December	6,628	439	2	7,069
2020.--				
January	7,378	460	13	7,851
February	7,497	209	---	7,706
March	7,804	94	1	7,899
April	6,638	97	---	6,735
May	8,866	612	12	9,491
June	4,672	618	---	5,290
July	6,421	913	57	7,391
August	14,032	730	15	14,778
September	6,717	369	---	7,087

Table continued.

Table II-10--Continued
Wild blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	Argentina	Canada	Chile	Mexico	Peru
	Quantity (1,000 pounds)				
2015.--					
January	---	3,818	84	---	---
February	---	2,334	433	---	---
March	---	3,723	336	---	---
April	---	3,309	174	---	---
May	---	4,941	695	---	---
June	---	4,662	610	---	---
July	---	2,925	447	---	---
August	---	23,041	---	---	---
September	---	33,672	246	---	---
October	---	6,681	104	---	---
November	---	4,550	54	---	2
December	51	4,344	---	---	---
2016.--					
January	---	3,320	---	---	---
February	---	3,681	577	---	---
March	---	4,230	404	---	---
April	---	5,123	662	---	---
May	---	7,393	337	---	---
June	---	6,315	684	---	---
July	---	2,841	637	---	---
August	---	23,968	39	---	---
September	---	25,672	224	---	---
October	---	7,373	78	---	---
November	---	6,176	9	---	---
December	---	4,151	18	---	---
2017.--					
January	51	4,492	38	15	---
February	---	4,008	71	35	---
March	---	4,517	---	---	---
April	---	4,105	87	---	---
May	---	3,946	74	---	---
June	---	4,403	365	---	---
July	---	3,429	206	---	---
August	---	15,850	196	---	---
September	---	6,613	112	---	---
October	---	4,969	20	---	46
November	---	4,196	83	---	---
December	---	3,250	29	3	29

Table continued.

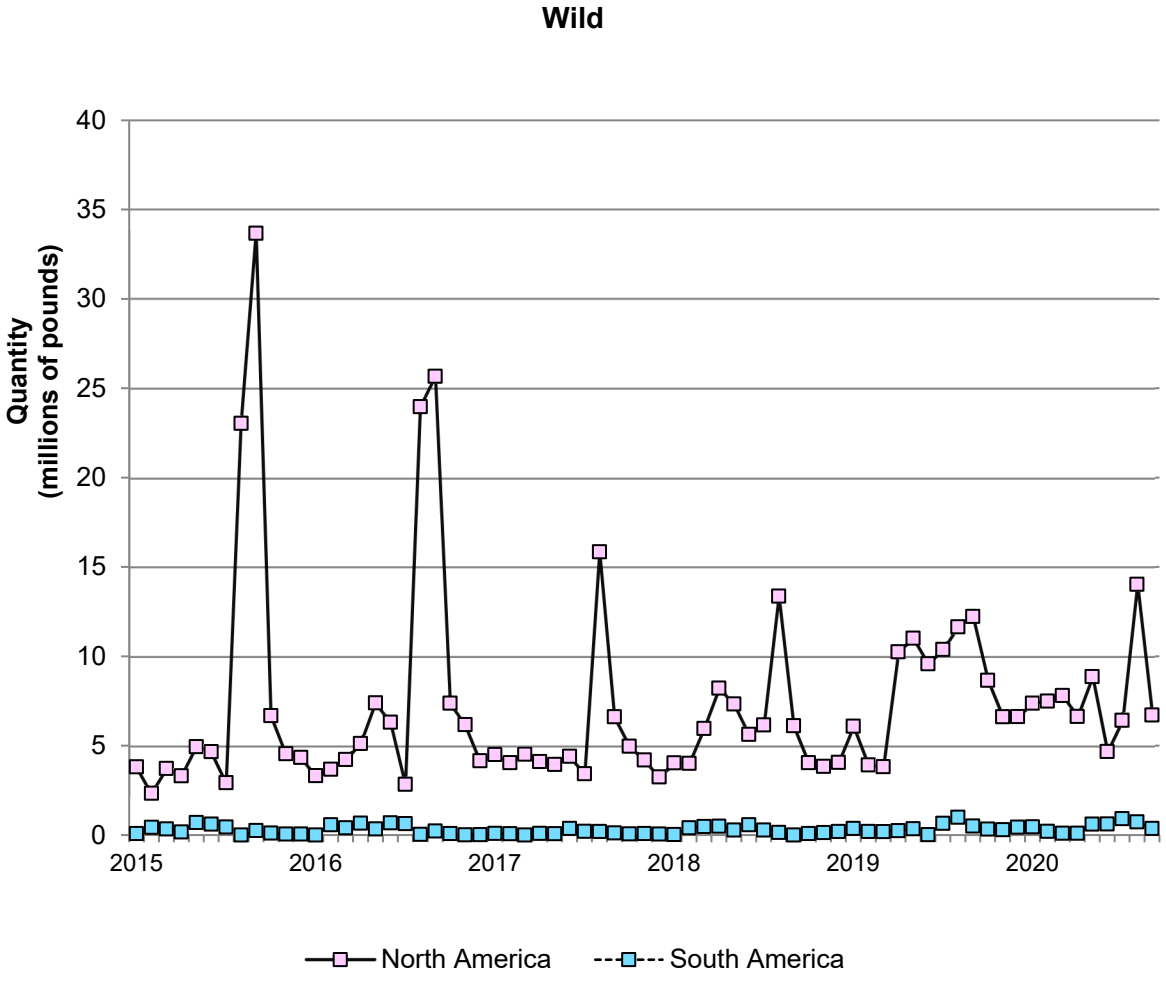
Table II-10--Continued
Wild blueberries: U.S. imports by month, January 2015 through September 2020

U.S. imports	Argentina	Canada	Chile	Mexico	Peru
	Quantity (1,000 pounds)				
2018.--					
January	---	4,037	24	---	---
February	---	3,988	396	19	6
March	---	5,963	470	---	---
April	88	8,215	404	---	---
May	---	7,332	280	---	---
June	---	5,635	572	---	---
July	---	6,161	273	---	---
August	---	13,369	144	---	---
September	---	6,114	---	---	---
October	---	4,046	83	---	---
November	---	3,844	56	---	79
December	---	4,063	13	---	159
2019.--					
January	147	6,089	180	---	40
February	---	3,918	94	---	105
March	---	3,821	80	---	108
April	51	10,251	108	---	79
May	---	11,012	351	---	---
June	---	9,576	20	---	---
July	---	10,382	438	---	212
August	---	11,645	996	---	---
September	---	12,230	497	---	---
October	---	8,653	298	---	34
November	---	6,613	160	---	137
December	---	6,628	118	---	321
2020.--					
January	---	7,378	110	---	351
February	---	7,497	68	---	141
March	---	7,804	94	---	---
April	---	6,513	97	125	---
May	51	8,657	561	209	---
June	51	4,633	567	39	---
July	---	6,412	913	8	---
August	---	14,032	730	---	---
September	---	6,717	236	---	133

Note: imports from North America consist of imports from Canada and Mexico. Imports from South America consist of imports from all countries in South America, and primarily represent Argentina, Chile, and Peru.

Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024 and 0811.90.2024, accessed November 6, 2020.

Figure II-10
Wild blueberries: U.S. imports from North and South America, by month, January 2015 through September 2020



Note: Other sources not shown.

Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024 and 0811.90.2024, accessed November 6, 2020.

U.S. imports by U.S. producers

*** U.S. producers indicated importing blueberries in their U.S. producers' questionnaire, with *** of those firms (***)[4] having provided an Importer's Questionnaire response.[5] These firms reported total imports of *** pounds of blueberries in 2019, with total utilized harvest (i.e., not including discarded or unsold blueberries) in 2019 of *** pounds of blueberries. The ratio of these firms' imports to their utilized harvest in 2019 is *** percent.[6]

[4] ***.

[5] Firms that did not respond include ***. *** is excluded from the U.S. producer questionnaire dataset.

[6] ***.

U.S. imports subsequent to September 30, 2020

The Commission requested importers to indicate whether they had imported or arranged for the importation of blueberries for delivery after September 30, 2020. Table II-11 presents information on arranged U.S. imports from October 2020 through September 2021. While 28 out of the 41 responding firms reported they had arranged imports, no firm indicated arranged imports of blueberries from all other sources in January through March 2021, or Argentina or Peru during April through June 2021. Arranged U.S. imports from South America accounted for the largest share of all arranged imports in October through December 2020; arranged U.S. imports from North America accounted for the majority of arranged imports during the other three quarters. Although U.S. imports of blueberries from Canada were the largest source of imports in all but one annual period (see table II-1), arranged imports from Canada ranked fourth. In total, firms reported 344.5 million pounds of arranged U.S. imports of blueberries from October 2020 through September 2021.

Table II-11
Blueberries: Arranged imports, October 2020 through September 2021

Item	Oct-Dec 2020	Jan-Mar 2021	Apr-Jun 2021	Jul-Sep 2021	Total
	Quantity (1,000 pounds net packed weight)				
Arranged U.S. imports from.--					
Argentina	***	***	***	***	***
Canada	***	***	***	***	***
Chile	***	***	***	***	***
Mexico	***	***	***	***	***
Peru	***	***	***	***	***
All other sources	***	***	***	***	***
All import sources	145,325	125,358	52,287	21,564	344,534

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

Part III: Serious injury or threat of serious injury

Overview

The term "domestic industry" is defined in section 202(c)(6)(A)(i) of the Trade Act as "the domestic producers as a whole of the like or directly competitive article or those producers whose collective production of the like or directly competitive article constitutes a major proportion of the total domestic production of such article."[1] Usable U.S. producer questionnaire responses accounted for 29.6 percent of combined utilized production[2] data, and 26.1 percent of acreage data,[3] in 2019 according to USDA.

As noted in Part I of this report, approximately 16,000 farms grow and ship harvested blueberries, and at least 35 firms engaged in freezing blueberries in the United States.[4] The Commission received responses from firms based in the following states: Georgia (36 responses), Michigan (29 responses), Oregon (16 responses), Florida (14 responses), Maine (12 responses), California (9 responses), Washington (7 responses), New Jersey (3 responses), New York and North Carolina (2 responses each), and Alabama, Indiana, New Hampshire, and Texas (1 response each).

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[1] 19 U.S.C. § 2252(c)(6)(A)(i).

[2] Comparing provided utilized production data from questionnaire responses to USDA data in its Noncitrus Fruits and Nuts Summary 2019. USDA data defines "utilized production" as the amount of a crop sold plus the quantities used at home or held in storage. "Total production" is utilized production plus any quantities harvested but not sold.

On a similar basis, usable U.S. producer questionnaire responses were equivalent to 22.6 percent of cultivated blueberry utilized production data and exceeded wild blueberry utilized production data in 2019. A hearing witness testified, however, that USDA data for wild blueberry production in 2019 is underestimated due to a large frozen wild processor in Maine not completing the necessary survey; the witness estimated that U.S. production of frozen wild blueberries in 2019 was 87 million pounds, and not 54 million pounds as reported in USDA data. Hearing transcript, p. 293 (Yarborough). ***. U.S. producer questionnaire responses reported 63.4 million pounds of harvested wild blueberries, equivalent to 72.8 percent of this estimated wild blueberry production figure.

Usable U.S. producer questionnaire responses were equivalent to 32.6 percent of fresh or chilled blueberry and 26.4 percent of processing blueberry utilized production data in 2019.

[3] Comparing usable U.S. producers' provided bearing acreage data with USDA area harvested data from its Noncitrus Fruits and Nuts Summary 2019.

[4] Based on received U.S. Producer questionnaire responses. Unless otherwise stated, the term "blueberry" used without a modifier includes fresh, chilled, and/or frozen blueberries.

U.S. producers' ownership and related or affiliated firms

The Commission asked U.S. producers to identify their owners and any related or affiliated firms involved in the production or U.S. imports of blueberries. Many farms are independently owned, with more than 100 firms responding that they were not owned by another firm. Thirty-six firms reported being related to importers or exporters, while 20 firms reported having related U.S. producers.[5]

Reported and anticipated changes in operations

U.S. producers were asked to indicate whether their firm had experienced any of a variety of changes in operations, including acreage planting or removal, packing or freezing operation changes, and changes related to weather or disease events, since January 1, 2015. 129 U.S. producers providing responses in this proceeding indicated that they had experienced such changes; their responses are presented in table III-1.

[5] Twenty-four companies reported being members of Michigan Blueberry Growers Association ("MBG"), a producer-owned blueberry marketing cooperative which claims to be the "largest grower-owned marketer of fresh and value-added processed cultivated blueberries in the world", with a production base of more than 300 growers. MBG Website, "About Us--Introduction to MBG Marketing The Blueberry People, A Grower-Owned Cooperative", accessed December 4, 2020.

MBG is one of four grower groups—along with Hortifrut S.A. Chile, Naturipe Berry Growers, Inc., and Munger Farms—which comprises Naturipe Farms, a large and international growers' consortium. ***.

Table III-1
Blueberries: Responding U.S. producers' reported changes in operations, since January 1, 2015

Reported change	Number of firms reporting (count)
New acreage planted	79
Acreage replaced with new bushes	71
Acreage taken out of production	51
Packing operation openings	14
Packing operation closings	8
Freezing operation openings	2
Freezing operation closings	7
Weather related events	96
Disease or pest-related events	47
Changes in labor availability or costs	106
Other	51
Any change	129

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

U.S. acreage, harvest, and capacity

Table III-2 presents USDA data on U.S. producers' acreage, total production, and yield per acre for fresh blueberries, both cultivated and wild varieties.[6] Most bearing acreage in the U.S. consists of acreage for cultivated blueberries, which has grown since 2015. The share of bearing acreage devoted to wild blueberries on the other hand has decreased since 2015.[7] Yield per acre fluctuated between 2015 and 2019, peaking in 2019 after falling to a period low in 2018. While yield per acre for cultivated blueberries increased during this period, yield per acre for wild blueberries was sharply lower.

Several notable weather events have affected blueberry operations in certain regions since 2015. In 2017, a late-spring freeze in Georgia cut the state's production by more than 50 percent from the previous year.[8] Also in 2017, Hurricane Irma struck Florida, which affected certain growers in that state.[9] In 2017 and 2018, wild blueberries in Maine were affected by

[6] Cultivated blueberries are also referred to as "tame" blueberries in USDA publications.

[7] Bearing acreage data provided in questionnaire responses by responding U.S. producers accounts for 33.8 percent of USDA data on bearing acreage in 2019. Bearing acreage data provided in usable questionnaire responses by U.S. producers primarily harvesting cultivated blueberries in 2019 account for 18.8 percent of USDA data on bearing acreage for cultivated blueberries in 2019. Bearing acreage data provided in usable questionnaire responses by U.S. producers primarily harvesting wild blueberries in 2019 account for 64.5 percent of USDA data on bearing acreage for wild blueberries in 2019.

[8] USDA Fruit and Tree Nuts Outlook, FTS-366, March 2, 2018, p. 20. See also hearing transcript, p. 171 (Crosby).

[9] Hearing transcript, p. 173 (Lee) and p. 268 (Fountas).

several weather events, including drought and frost in 2017, and heavy snow in 2017 and 2018.[10]

Table III-2
Blueberries: U.S. producers' acreage, production, and yield per acre by berry type, 2015-19

Item	Calendar year				
	2015	2016	2017	2018	2019
	Acreage (acres)				
U.S. bearing acreage.--					
Cultivated (tame) blueberries	91,220	92,800	83,900	89,200	102,700
Wild blueberries	22,400	23,100	17,000	18,800	19,500
All blueberries, bearing acreage	113,620	115,900	100,900	108,000	122,200
	Share of acreage (percent)				
U.S. bearing acreage.--					
Cultivated (tame) blueberries	80.3	80.1	83.2	82.6	84.0
Wild blueberries	19.7	19.9	16.8	17.4	16.0
All blueberries, bearing acreage	100.0	100.0	100.0	100.0	100.0
	Total production (1,000 pounds)				
U.S. total production.--					
Cultivated (tame) blueberries	566,510	593,610	518,540	562,300	680,700
Wild blueberries	101,110	101,840	67,800	50,400	54,400
All blueberries, total production	667,620	695,450	586,340	612,700	735,100
	Share of total production (percent)				
U.S. total production.--					
Cultivated (tame) blueberries	84.9	85.4	88.4	91.8	92.6
Wild blueberries	15.1	14.6	11.6	8.2	7.4
All blueberries, total production	100.0	100.0	100.0	100.0	100.0
	Yield per acre (pounds per acre)				
Yield per acre.--					
Cultivated (tame) blueberries	6,210	6,397	6,180	6,304	6,628
Wild blueberries	4,514	4,409	3,988	2,681	2,790
All blueberries, yield per acre	5,876	6,000	5,811	5,673	6,016

Note.--Wild blueberry acreage refers only to Maine. Yield per acre is based on total production.

Note.--Data in each period have changed over time as USDA has discontinued estimates for five states since 2015—Alabama, Arkansas, Indiana, Mississippi, and New York.

Source: USDA NASS Fruits and Nuts 2017, 2018, and 2019 summaries.

Tables III-3 and III-4 present details on U.S. producers' total production by berry type and application, and by state, respectively. Total production of cultivated blueberries decreased irregularly from 2015 to 2018, before increasing considerably from 2018 to 2019. Total production of wild blueberries fell by almost half from 2015 to 2019.

[10] Canadian Respondents prehearing brief, pp. 92-95 and fn. 175.

Table III-3
Blueberries: Blueberry production by berry type and application, 2015-19

Item	Calendar year				
	2015	2016	2017	2018	2019
	Total production / harvest (1,000 pounds)				
Cultivated (tame) blueberries.--					
Fresh	308,520	314,600	304,110	305,460	373,010
Processed (including frozen)	251,170	274,190	208,630	250,160	300,040
Utilized production	559,690	588,790	512,740	555,620	673,050
Harvested, not used	6,820	4,820	5,800	6,680	7,650
Total production, cultivated (tame)	566,510	593,610	518,540	562,300	680,700
Wild blueberries.--					
Fresh	500	380	350	1,560	1,410
Processed (including frozen)	100,500	101,260	67,300	48,740	52,820
Utilized production	101,000	101,640	67,650	50,300	54,230
Harvested, not used	110	200	150	100	170
Total production, wild	101,110	101,840	67,800	50,400	54,400
All blueberries.--					
Fresh	309,020	314,980	304,460	307,020	374,420
Processed (including frozen)	351,670	375,450	275,930	298,900	352,860
Utilized production	660,690	690,430	580,390	605,920	727,280
Harvested, not used	6,930	5,020	5,950	6,780	7,820
Total production, all berry types	667,620	695,450	586,340	612,700	735,100
	Share of production / harvest within berry type (percent)				
Cultivated (tame) blueberries.--					
Fresh	54.5	53.0	58.6	54.3	54.8
Processed (including frozen)	44.3	46.2	40.2	44.5	44.1
Utilized production	98.8	99.2	98.9	98.8	98.9
Harvested, not used	1.2	0.8	1.1	1.2	1.1
Total production, cultivated (tame)	100.0	100.0	100.0	100.0	100.0
Wild blueberries.--					
Fresh	0.5	0.4	0.5	3.1	2.6
Processed (including frozen)	99.4	99.4	99.3	96.7	97.1
Utilized production	99.9	99.8	99.8	99.8	99.7
Harvested, not used	0.1	0.2	0.2	0.2	0.3
Total production, wild	100.0	100.0	100.0	100.0	100.0
All blueberries.--					
Fresh	46.3	45.3	51.9	50.1	50.9
Processed (including frozen)	52.7	54.0	47.1	48.8	48.0
Utilized production	99.0	99.3	99.0	98.9	98.9
Harvested, not used	1.0	0.7	1.0	1.1	1.1
Total production, all berry types	100.0	100.0	100.0	100.0	100.0

Source: USDA NASS Fruits and Nuts 2017, 2018, and 2019 summaries.

Table III-4
Blueberries: Blueberry production by state, 2015-19

State	Calendar year				
	2015	2016	2017	2018	2019
	Total production (1,000 pounds)				
Alabama	540	(1)	(1)	(1)	(1)
Arkansas	520	(1)	(1)	(1)	(1)
California	64,100	60,500	63,030	64,900	73,700
Florida	25,300	14,700	20,070	20,500	24,200
Georgia	85,000	70,800	32,910	54,500	95,900
Indiana	1,610	(1)	(1)	(1)	(1)
Maine	101,110	101,840	67,800	50,400	54,400
Michigan	73,200	110,300	102,000	70,100	84,900
Mississippi	6,700	8,200	3,870	(2)	(2)
New Jersey	53,450	44,120	41,180	44,500	47,300
New York	1,790	1,390	1,620	(2)	(2)
North Carolina	49,900	46,600	25,700	33,800	36,200
Oregon	100,000	117,000	110,780	137,500	155,500
Washington	104,400	120,000	117,380	136,500	163,000
Total	667,620	695,450	586,340	612,700	735,100

Note.-- (1) Estimates discontinued in 2016. (2) Estimates discontinued in 2018.

Source: USDA NASS Fruits and Nuts 2017, 2018, and 2019 summaries.

Table III-5 presents U.S. producers' harvest by berry type and application for 2019, and January-September 2019 and 2020. Most harvested blueberries in 2019 were cultivated blueberries sold fresh or chilled (54.4 percent), followed by wild blueberries sold frozen (25.3 percent). The vast majority of harvested wild blueberries were sold frozen, as the constitution of wild blueberries makes them difficult to preserve long enough to be sold fresh or chilled.

Table III-5
Blueberries: Responding U.S. producers' harvest by berry type and application, 2019

Item	Harvest (1,000 pounds)			Share of harvest (percent)		
	Calendar year 2019	January to September 2019	January to September 2020	Calendar year 2019	January to September 2019	January to September 2020
Cultivated for fresh	151,358	141,888	151,230	54.4	54.0	63.0
Wild for fresh	31	31	23	0.0	0.0	0.0
Cultivated for frozen	48,530	43,176	45,398	17.4	16.4	18.9
Wild for frozen	70,457	69,903	35,049	25.3	26.6	14.6
Subtotal, cultivated	199,887	185,064	196,628	71.8	70.5	81.9
Subtotal, wild	70,488	69,934	35,072	25.3	26.6	14.6
Subtotal, for fresh	151,389	141,919	151,253	54.4	54.0	63.0
Subtotal, for frozen	118,987	113,079	80,447	42.7	43.1	33.5
Total utilized harvest	270,376	254,997	231,700	97.1	97.1	96.5
Waste or not sold	8,039	7,623	8,342	2.9	2.9	3.5
Total harvest	278,415	262,620	240,043	100.0	100.0	100.0

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

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

Tables III-6 and III-7 present usable U.S. producers' capacity and production of frozen blueberries using IQF freezing and non-IQF freezing methods, respectively.[11] In 2019, IQF accounted for 98.3 percent of total capacity for freezing blueberries. Likewise, almost all (99.7 percent) of frozen blueberries production utilized IQF freezing.

U.S. producers with freezing operations primarily used their IQF capacity to freeze blueberries (comprising between 54.4 and 71.5 percent in any given period), while IQF freezing of products other than blueberries comprised between 28.5 and 45.6 percent of production. Conversely, a majority of products produced with non-IQF (or bulk) freezing methods reported by U.S. producers in any given periods were products other blueberries, and the share of production of blueberries rose sharply from 2015 to 2016, before steadily decreasing from 2016 to 2019.

[11] IQF freezing is a method where blueberries are quickly frozen, each piece separately, using high velocity refrigerated air.

Table III-6
Blueberries: Usable U.S. producers' overall IQF capacity and production by product type, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
Overall IQF capacity	320,160	311,560	300,160	349,960	355,520	344,400	336,000
Production using.--							
Own blueberry harvest	63,276	58,217	46,552	42,868	49,948	49,123	34,730
Purchased or other domestic blueberries	51,253	60,542	33,258	38,353	52,045	52,045	49,661
U.S.-origin blueberries	114,529	118,759	79,810	81,221	101,992	101,168	84,391
Foreign-origin blueberries	24,571	22,301	11,413	10,135	12,423	12,423	5,927
All blueberries	139,100	141,059	91,223	91,356	114,415	113,591	90,317
Products other than blueberries	64,497	76,187	76,462	69,052	72,496	57,754	36,042
All IQF products	203,597	217,246	167,685	160,408	186,911	171,344	126,359
	Share or ratios (percent)						
Overall IQF capacity utilization	63.6	69.7	55.9	45.8	52.6	49.8	37.6
Share of production using.--							
Own blueberry harvest	31.1	26.8	27.8	26.7	26.7	28.7	27.5
Purchased or other domestic blueberries	25.2	27.9	19.8	23.9	27.8	30.4	39.3
U.S.-origin blueberries	56.3	54.7	47.6	50.6	54.6	59.0	66.8
Foreign-origin blueberries	12.1	10.3	6.8	6.3	6.6	7.3	4.7
All blueberries	68.3	64.9	54.4	57.0	61.2	66.3	71.5
Products other than blueberries	31.7	35.1	45.6	43.0	38.8	33.7	28.5
All IQF products	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Table III-7
Blueberries: Usable U.S. producers' overall block and other non-IQF freezing capacity and production by product type, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
Overall non-IQF freezing capacity	***	***	***	***	***	***	***
Production using.-- Own blueberry harvest	***	***	***	***	***	***	***
Purchased or other domestic blueberries	***	***	***	***	***	***	***
U.S.-origin blueberries	***	***	***	***	***	***	***
Foreign-origin blueberries	***	***	***	***	***	***	***
All blueberries	***	***	***	***	***	***	***
Products other than blueberries	***	***	***	***	***	***	***
All non-IQF freezing products	***	***	***	***	***	***	***
	Share or ratios (percent)						
Overall non-IQF freezing capacity utilization	***	***	***	***	***	***	***
Share of production using.-- Own blueberry harvest	***	***	***	***	***	***	***
Purchased or other domestic blueberries	***	***	***	***	***	***	***
U.S.-origin blueberries	***	***	***	***	***	***	***
Foreign-origin blueberries	***	***	***	***	***	***	***
All blueberries	***	***	***	***	***	***	***
Products other than blueberries	***	***	***	***	***	***	***
All non-IQF freezing products	***	***	***	***	***	***	***

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

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

Table III-8 presents U.S. producers' U.S. shipments, export shipments, and total shipments.[12] Less than one-fifth of total shipments in any given period were of export shipments, with U.S. shipments never being less than four-fifths of total shipments in any given period. U.S. shipments of blueberries increased from 2015 to 2016 before falling to their lowest level in 2017; U.S. shipments subsequently increased to their highest level in 2019. Average unit values of U.S. shipments rose unevenly from 2015 to their highest level in 2017, coinciding with the period in which shipments by quantity were at their lowest. Average unit values steadily decreased from 2017 to 2019.

Table III-8
Blueberries: U.S. producers' U.S. shipments, export shipments, and total shipments, 2015-19

Item	Calendar year				
	2015	2016	2017	2018	2019
	Quantity (1,000 pounds)				
U.S. shipments	546,274	565,337	469,288	517,765	591,921
Export shipments	114,416	125,093	111,102	88,155	135,359
Total shipments (utilized production)	660,690	690,390	580,390	605,920	727,280
	Value (1,000 dollars)				
U.S. shipments	686,430	566,002	674,044	664,104	755,387
Export shipments	186,284	181,837	159,425	157,006	179,318
Total shipments (utilized production)	872,714	747,839	833,469	821,110	934,705
	Unit value (dollars per pound)				
U.S. shipments	1.26	1.00	1.44	1.28	1.28
Export shipments	1.63	1.45	1.43	1.78	1.32
Total shipments (utilized production)	1.32	1.08	1.44	1.36	1.29
	Share of quantity (percent)				
U.S. shipments	82.7	81.9	80.9	85.5	81.4
Export shipments	17.3	18.1	19.1	14.5	18.6
Total shipments (utilized production)	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. shipments	78.7	75.7	80.9	80.9	80.8
Export shipments	21.3	24.3	19.1	19.1	19.2
Total shipments (utilized production)	100.0	100.0	100.0	100.0	100.0

Source: USDA NASS Fruits and Nut Summaries 2017-2019, and official U.S. export statistics using schedule B numbers 0811.90.2024, 0811.90.2028, 0810.40.0024, 0810.40.0029, and 0810.40.0026, accessed November 9, 2020.

[12] This table derives U.S. shipments by deducting domestic export shipments (i.e., not re-exports) provided in official U.S. export statistics from utilized production data provided in USDA reports. As the USDA definition of utilized production includes crop held in storage, the figure may overstate the figure of blueberries actually shipped or internally consumed.

Tables III-9 through III-11 presents usable U.S. producers' net sales of blueberries, including additional detail on net sales of blueberries by application, type, and certification.

Table III-9
Blueberries: Usable U.S. producers' net sales by application, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
Net sales.-- Fresh or chilled blueberries	112,059	110,359	120,337	117,222	133,853	132,976	125,448
Frozen blueberries	138,692	178,664	157,891	159,584	187,320	144,626	124,340
All blueberries	250,751	289,022	278,229	276,806	321,173	277,603	249,788
	Value (1,000 dollars)						
Net sales.-- Fresh or chilled blueberries	278,908	254,374	311,818	296,276	326,856	323,233	313,058
Frozen blueberries	185,808	218,069	192,766	198,890	216,293	159,941	158,385
All blueberries	464,717	472,443	504,584	495,166	543,148	483,174	471,443
	Unit value (dollars per pound)						
Net sales.-- Fresh or chilled blueberries	2.49	2.30	2.59	2.53	2.44	2.43	2.50
Frozen blueberries	1.34	1.22	1.22	1.25	1.15	1.11	1.27
All blueberries	1.85	1.63	1.81	1.79	1.69	1.74	1.89
	Share of quantity (percent)						
Net sales.-- Fresh or chilled blueberries	44.7	38.2	43.3	42.3	41.7	47.9	50.2
Frozen blueberries	55.3	61.8	56.7	57.7	58.3	52.1	49.8
All blueberries	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Ratio (percent)						
Coverage of shipments based on quantity	38.0	41.9	47.9	45.7	44.2	NA	NA
	Share of value (percent)						
Net sales.-- Fresh or chilled blueberries	60.0	53.8	61.8	59.8	60.2	66.9	66.4
Frozen blueberries	40.0	46.2	38.2	40.2	39.8	33.1	33.6
All blueberries	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Ratio (percent)						
Coverage of shipments based on value	53.2	63.2	60.5	60.3	58.1	NA	NA

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Coverage ratios are derived from a comparison between total quantities and values provided in this table with total shipment quantities and values presented in table III-8.

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

Table III-10
Blueberries: Usable U.S. producers' net sales by application and type of berry, between fiscal years and between partial year periods

Item	Calendar year 2019	January to September 2019	January to September 2020
	Quantity (1,000 pounds net packed weight)		
Fresh or chilled blueberries.-- Cultivated	***	***	***
Wild	***	***	***
All varieties	133,853	132,976	125,448
Frozen blueberries.-- Cultivated	***	***	***
Wild	***	***	***
All varieties	187,320	144,626	124,340
All blueberries.-- Cultivated	197,491	186,942	186,601
Wild	123,682	90,661	63,187
All varieties	321,173	277,603	249,788
	Share of quantity within product groups (percent)		
Fresh or chilled blueberries.-- Cultivated	***	***	***
Wild	***	***	***
All varieties	100.0	100.0	100.0
Frozen blueberries.-- Cultivated	***	***	***
Wild	***	***	***
All varieties	100.0	100.0	100.0
All blueberries.-- Cultivated	61.5	67.3	74.7
Wild	38.5	32.7	25.3
All varieties	100.0	100.0	100.0

Note.--***.

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

Table III-11
Blueberries: Usable U.S. producers' net sales by certification, between fiscal years and between partial year periods

Item	Calendar year 2019	January to September 2019	January to September 2020
	Quantity (1,000 pounds net packed weight)		
Fresh or chilled blueberries.--			
Conventional	100,158	99,714	85,200
Organic	33,695	33,262	40,248
All certification types	133,853	132,976	125,448
Frozen blueberries.--			
Conventional	177,497	135,983	115,180
Organic	9,822	8,643	9,160
All certification types	187,320	144,626	124,340
All blueberries.--			
Conventional	277,656	235,698	200,380
Organic	43,517	41,905	49,408
All certification types	321,173	277,603	249,788
	Share of quantity within product groups (percent)		
Fresh or chilled blueberries.--			
Conventional	74.8	75.0	67.9
Organic	25.2	25.0	32.1
All certification types	100.0	100.0	100.0
Frozen blueberries.--			
Conventional	94.8	94.0	92.6
Organic	5.2	6.0	7.4
All certification types	100.0	100.0	100.0
All blueberries.--			
Conventional	86.5	84.9	80.2
Organic	13.5	15.1	19.8
All certification types	100.0	100.0	100.0

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

U.S. inventories

Table III-12 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' net sales**.** The perishable nature of blueberries means that that they must be sold within a short period for fresh consumption,[13] or otherwise frozen for later consumption. Frozen blueberries have a shelf life of at least two years.[14] Accordingly, at the end of each period U.S. producers' inventories of fresh blueberries were much smaller than their inventories of frozen blueberries. Table III-13 presents U.S. importers' end-of-period inventories and the ratio of these inventories to U.S. imports and U.S. shipments of imports**.**

Table III-12
Blueberries: Usable U.S. producers' inventories, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds net packed weight)						
U.S. producers' end-of-period inventories.--							
Fresh or chilled blueberries	1,838	2,193	2,675	1,688	1,419	1,420	1,390
Frozen blueberries	112,798	119,110	97,624	68,036	86,220	98,926	94,343
All blueberries	114,636	121,303	100,299	69,724	87,640	100,346	95,732
	Ratio (percent)						
Ratio of inventories to net sales.--							
Fresh or chilled blueberries	1.6	2.0	2.2	1.4	1.1	0.8	0.8
Frozen blueberries	81.3	66.7	61.8	42.6	46.0	51.3	56.9
All blueberries	45.7	42.0	36.0	25.2	27.3	27.1	28.7

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

[13] Hearing transcript, p. 57 (Ward). There are methods to extend the shelf life of fresh blueberries. One grower testified that the use of a modified atmosphere program during the growing season in Michigan, which starts at the end of June, allows her firm to ship as late as mid-October. Hearing transcript, p. 92 (Hartmann).

[14] Alliance's posthearing brief, exh. 1, p. 1.

Table III-13
Blueberries: U.S. importers' end-of-period inventories of imports, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Inventories (1,000 pounds net packed weight); Ratios (percent)						
U.S. importers' end-of-period inventories	***	***	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***	***	***

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

As presented in table III-14, the quantity of blueberries held in public, private, and semiprivate refrigerated storages[15] at year end fluctuated during the period 2015-19, with an overall increase of nearly 22 million pounds that nonetheless remained below the peak year end level in 2016. During this period, however, year-end cold storage of cultivated blueberries increased by more than 40 million pounds (reflecting a period high in 2019 for December cold storage), while cold storage of wild blueberries decreased by more than 18 million pounds. Overall cold storage of blueberries was higher in September 2020 than in September 2019 by nearly 29 million pounds, with higher levels both for cultivated and wild blueberries.[16] [17]

[15] All commodities reported on the cold storage report are regardless of ownership or origin. NASS does not differentiate between commodities owned by manufacturer, producer, wholesaler, retailer, or government owned, or domestically produced vs. imported. USDA/NASS, Cold Storage 2019 Summary (February 2020), p. 37.

[16] Overall cold storage of blueberries in September 2020, while higher than in September 2019, remained below the record levels for the month, set in 2016. USDA NASS, Cold Storage Summary (October 2020), p. 20 (the record high for the month of September is 332,379,000 pounds in 2016).

[17] The American Blueberry Growers Alliance ("Alliance" or "the Alliance") argues that rising cold storage inventories for cultivated blueberries indicate oversupply in the market, and that cultivated blueberry producers are faced with the trade-off of diverting to freezers more so than wild blueberries, since the nature of wild blueberries results in virtually all frozen sales for that type of blueberry. See Alliance's prehearing brief, p. 97, and posthearing brief, p. 30.

Table III-14
Frozen blueberries: Cold storage of blueberries by berry type, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
End-of-period cold storage.-- Cultivated (tame) blueberries	190,464	214,784	180,558	160,450	230,526	271,993	285,930
Wild blueberries	34,232	54,111	41,502	22,407	16,099	18,027	32,710
All blueberries	224,696	268,895	222,060	182,857	246,625	290,020	318,640
	Share of quantity (percent)						
End-of-period cold storage.-- Cultivated (tame) blueberries	84.8	79.9	81.3	87.7	93.5	93.8	89.7
Wild blueberries	15.2	20.1	18.7	12.3	6.5	6.2	10.3
All blueberries	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note.--Blueberry data in NASS cold storage reports are delineated by geographic region, not blueberry type. Maine is the most prominent blueberry producing state in the New England region (which includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont). Given the concentration of wild blueberries in Maine, blueberries listed in storage in the New England region were designated as "wild blueberries" in this table. The New England region was subsumed into the Middle Atlantic region for this report in 2020; in September 2019 the New England region was about 76 percent of the Middle Atlantic and New England regions combined.

Source: USDA/NASS Cold Storage Summary (Annual, 2015-19); USDA/NASS Cold Storage September 2019 (October 2019), pp. 5, 12; USDA/NASS Cold Storage September 202 (October 2020), pp. 5, 11.

U.S. employment, wages, and productivity

Tables III-15 through III-17 show U.S. producers' employment-related data.[18] The number of reported production and related workers ("PRWs") generally increased from 2015 to 2019, with the highest employment in an annual period occurring in 2019. Hourly wages were between $15 an hour and $21 an hour in any period.

Labor availability was a frequently cited issue for U.S. growers, affected in part by periods of low overall unemployment in the data collection period, rising minimum wages, and other factors. A witness at the Commission's hearing noted that finding interested workers throughout the blueberry season is difficult as different periods yield different harvests (and

[18] Data submitted for certain incomplete responses have been estimated using various methods, including comparative ratios from other questionnaire responses for certain metrics, accompanying labor cost data, and Bureau of Labor Statistics Standard Occupational Classification data for code 45-0000 (Farming, Fishing, and Forestry Occupations). Staff obtained updates for certain usable firms' employment data since issuance of the prehearing report.

thus variable payment amounts for workers paid by the amount of blueberries harvested), and as such machine harvesting is becoming a more viable option.[19] The H-2A Temporary Agricultural Workers program, which allows U.S. employers or U.S. agents who meet certain regulatory requirements to bring foreign nationals to the United States to fill temporary agricultural jobs, was frequently cited as a potential source of labor, but one that came with cost and logistical considerations.

There were several common issues firms noted in computing their employment data, including accounting for employment in family-owned and operated farms; the highly variable nature of working hours per week and payment structures (some firms report payment by pounds of blueberries picked versus hours worked); the use of intermediaries who handle growing operations for farms; and the use of seasonal workers.

The Alliance, citing the considerable length of time it takes for new blueberry plantings to mature into steady production, argues that employment levels are a "lagging indicator," and that rising employment indicators signal growers' prior beliefs of an expanding domestic market for blueberries from a period well before the last year of the data collection period.[20]

[19] Hearing transcript, p. 264 (Lujan).

[20] Alliance's posthearing brief, exh. 1, pp. 38-41. Counsel for the Alliance noted at the hearing that improving employment indicators may also reflect "survivor bias" for farms with the capability to expand, using a panel witness as an example. Hearing transcript, p. 217 (Orava).

Table III-15
Blueberries: Usable U.S. producers' employment related data, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
Reported production and related workers (PRWs) (number).--							
Growing operations	14,185	14,804	15,265	14,643	14,826	15,435	15,106
Freezing operations	1,289	1,240	1,118	1,063	1,167	1,111	980
Total reported PRWs	15,474	16,044	16,383	15,706	15,993	16,546	16,086
Total hours worked (1,000 hours)	8,424	8,987	9,832	8,358	8,967	8,094	7,504
Hours worked per PRW (hours)	544	560	600	532	561	489	466
Wages paid ($1,000)	138,241	148,363	156,283	156,085	168,440	154,652	153,888
Hourly wages (dollars per hour)	$16.41	$16.51	$15.89	$18.67	$18.78	$19.11	$20.51
Productivity (pounds per hour)	29.8	32.2	28.3	33.1	35.8	34.3	33.3
Unit labor costs (dollars per pound)	$0.55	$0.51	$0.56	$0.56	$0.52	$0.56	$0.62

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

Table III-16
Fresh and chilled blueberries: Usable U.S. producers' PRWs by application, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
Production and related workers (PRWs) (number)	11,366	11,606	12,953	11,995	12,215	13,017	12,884
Total hours worked (1,000 hours)	5,490	5,772	7,162	5,632	6,160	5,812	5,529
Hours worked per PRW (hours)	483	497	553	470	504	446	429
Wages paid ($1,000)	92,328	93,674	114,078	104,712	116,896	110,994	111,908
Hourly wages (dollars per hour)	$16.82	$16.23	$15.93	$18.59	$18.98	$19.10	$20.24
Productivity (pounds per hour)	20.4	19.1	16.8	20.8	21.7	22.9	22.7
Unit labor costs (dollars per pound)	$0.82	$0.85	$0.95	$0.89	$0.87	$0.83	$0.89

Note.--Reported employment data in this table is limited to growing operations for the fresh market.

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

Table III-17
Frozen blueberries: Usable U.S. producers' PRWs by application, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
Production and related workers (PRWs) (number)	4,108	4,438	3,430	3,711	3,778	3,529	3,202
Total hours worked (1,000 hours)	2,933	3,215	2,670	2,726	2,807	2,282	1,975
Hours worked per PRW (hours)	714	724	778	735	743	647	617
Wages paid ($1,000)	45,913	54,689	42,205	51,373	51,544	43,658	41,981
Hourly wages (dollars per hour)	$15.65	$17.01	$15.81	$18.85	$18.36	$19.13	$21.26
Productivity (pounds per hour)	47.3	55.6	59.1	58.5	66.7	63.4	63.0
Unit labor costs (dollars per pound)	$0.33	$0.31	$0.27	$0.32	$0.28	$0.30	$0.34

Note.--Reported employment data in this table includes the growing operations for the frozen market, in addition to the employment directly related to freezing operations.

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

Financial experience of U.S. producers

Background

Eighty-nine firms provided usable financial results on their blueberry growing and/or freezing operations in the United States. Of these firms, 79 are growers without active freezing operations ("U.S. growers"), and ten of the firms maintain active freezing operations (*** are growers with freezing operations ("U.S. growers/freezers") and *** are independent freezers ("U.S. freezers").[21] The large majority of responding firms reported their financial data on the requested calendar-year basis.[22] Forty-six of the U.S. producers provided their financial data on a cash-basis.[23] [24] [25]

[21] One U.S. producer ***. U.S. producer questionnaire responses, section II-3a.

[22] A few firms were unable to access their data in this manner and reported on a fiscal year basis.

[23] Of the remaining companies, 27 reported their financial results on an accrual basis, 13 reported on a tax basis, and 3 reported that they did not know. Twenty-four of the companies using accrual accounting reported that they provided their financial information on the basis of generally accepted accounting principles ("GAAP"), which requires accrual accounting. Firms that used accrual accounting were generally larger than firms that relied on cash-based accounting, and represented approximately three-quarters of the total net sales volumes for fresh, chilled, and frozen blueberries during the period for which data were requested.

[24] With cash-based accounting, expenses are recorded when paid and revenues are recorded when received. Therefore, revenues are not necessarily recorded in the same period as the matching expenses, which can make it more difficult to analyze the profitability of a company. U.S. growers reported that it was common for payments to be received the year following harvest. U.S. producer questionnaire responses at III-9c.

[25] *** U.S. producers reported internal consumption of blueberries in 2019. This accounted for a very minor share of total net sales volume (approximately *** percent) and is therefore not shown separately.

Operations on blueberries

Table III-18 presents data on U.S. producers' operations in relation to blueberries (fresh, chilled, or frozen), while table III-19 presents corresponding changes in average unit values ("AUVs"). Tables III-20 and III-22 present U.S. producers' operations in relation to fresh or chilled blueberries and frozen blueberries, respectively, while tables III-21 and III-23 present the corresponding changes in AUVs.[26] [27]

As previously mentioned, a large number of the responding firms reported their financial data on a cash basis. This impacts the reported financial results in a number of ways: (1.) With cash-based accounting, expenses are recorded when they are paid, and do not always appear in the same period in which any corresponding revenues are recorded. In the January-September interim year periods, some U.S. growers have sold all of their blueberry crop for the year, and have therefore reported the same amount of revenue in January-September 2019 as in the full year 2019 period. However, they have not reported all of their expenses in their interim period results, since they incur certain expenses during the fourth quarter of the year (e.g., prepping fields, purchasing fertilizer, etc.). This results in what appears to be improved interim period profitability compared to full-year results. Conversely, some firms reported the majority of their full year expenses in the interim year periods, but only a fraction of their revenue relative to their full year sales, since they were paid for a majority of their crop in the fourth quarter. This results in the interim period financial results appearing worse relative to these firms' full year results. (2.) When comparing profitability from year to year, a portion of the revenue reported by cash-based firms may be for a previous year's crop. Cash-based firms that are expanding or have an increase in sales quantity year-over-year (with a corresponding increase in costs incurred) may seem less profitable than they would with accrual accounting, if a large portion the firm's revenue is received the year after the associated sales are made. This is because they will be reporting higher costs for the increase in their blueberry crop, but their sales will still reflect (in part) the lower quantity from the previous year. The opposite is true for

[26] Most of the responding firms sell the majority of their blueberries fresh or chilled, but may also sell blueberries for processing or in frozen form depending on many factors including supply, demand, weather, and blueberry quality. Eleven of the responding firms sell all or virtually all of their blueberries for processing or in frozen form.

[27] Of the companies that provided financial data in their initial questionnaire responses, nearly one-third did not provide complete interim 2019 financial data. During follow-up requests for the data, a number of companies reported that they did not have access to this data, but their best estimate for interim 2019 data would be to use full year 2019 data. Accordingly, comparisons of partial year period data in tables III-18-23, III-25, and III-26 might be less meaningful than comparisons of full year data.

firms that are decreasing their sales quantities but are still receiving revenue from previous years. They may seem more profitable than they would with accrual accounting. (3.) Cash-based firms can elect out of uniform capitalization ("UNICAP") rules that require the capitalization of preproduction period costs for crops that have a preproduction period of more than two years based on a national average (which includes blueberry plants), and are allowed to expense these costs in the years incurred.[28] [29] This results in some firms reporting large expenses in years with no revenue associated with those expenses. This, in turn, can decrease the overall industry profitability when there are cash-based new entrants or cash-based firms that are increasing their blueberry production.

[28] Capitalization is the process of expensing the costs of attaining an asset over the life of the asset (through depreciation or amortization), rather than the period the expense is incurred.

[29] 26 CFR § 1.263A-4 -- Rules for property produced in a farming business.

Table III-18
Blueberries: Results of operations of U.S. producers, 2015-19, January-September 2019, and January-September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds net packed weight)						
Total net sales	250,751	289,022	278,229	276,806	321,173	277,603	249,788
	Value (1,000 dollars)						
Total net sales	464,717	472,443	504,584	495,166	543,148	483,174	471,443
Operating expenses.-- Raw materials	129,524	125,470	119,148	137,715	167,256	137,021	140,280
Direct labor	132,241	133,084	147,217	148,665	167,063	155,518	140,584
Other cultivation/freezing expenses	104,002	123,999	111,197	104,395	114,228	90,214	77,644
Third party processing expenses	20,487	24,204	22,668	20,758	25,678	25,213	29,158
All other operating expenses	17,309	18,376	23,204	24,489	24,758	19,473	15,468
Operating expenses	403,563	425,134	423,434	436,022	498,982	427,438	403,135
Operating income or (loss)	61,154	47,309	81,150	59,144	44,166	55,736	68,309
Mortgage and other interest expense	7,818	8,291	8,513	10,251	13,307	10,951	8,573
All other expenses	25,875	25,528	22,112	26,530	34,214	25,854	35,167
All other income	3,134	4,162	7,174	13,000	9,870	7,544	13,337
Net income or (loss)	30,594	17,652	57,698	35,364	6,515	26,475	37,905
	Ratio to net sales (percent)						
Operating expenses.-- Raw materials	27.9	26.6	23.6	27.8	30.8	28.4	29.8
Direct labor	28.5	28.2	29.2	30.0	30.8	32.2	29.8
Other cultivation/freezing expenses	22.4	26.2	22.0	21.1	21.0	18.7	16.5
Third party processing expenses	4.4	5.1	4.5	4.2	4.7	5.2	6.2
All other operating expenses	3.7	3.9	4.6	4.9	4.6	4.0	3.3
Operating expenses	86.8	90.0	83.9	88.1	91.9	88.5	85.5
Operating income or (loss)	13.2	10.0	16.1	11.9	8.1	11.5	14.5
Mortgage and other interest expense	1.7	1.8	1.7	2.1	2.5	2.3	1.8
All other expenses	5.6	5.4	4.4	5.4	6.3	5.4	7.5
All other income	0.7	0.9	1.4	2.6	1.8	1.6	2.8
Net income or (loss)	6.6	3.7	11.4	7.1	1.2	5.5	8.0
	Ratio to total operating expenses (percent)						
Operating expenses.-- Raw materials	32.1	29.5	28.1	31.6	33.5	32.1	34.8
Direct labor	32.8	31.3	34.8	34.1	33.5	36.4	34.9
Other cultivation/freezing expenses	25.8	29.2	26.3	23.9	22.9	21.1	19.3
Third party processing expenses	5.1	5.7	5.4	4.8	5.1	5.9	7.2
All other operating expenses	4.3	4.3	5.5	5.6	5.0	4.6	3.8
Operating expenses	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table continued on next page.

Table III-18—Continued
Blueberries: Results of operations of U.S. producers, 2015-19, January-September 2019, and January-September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Unit value (dollars per pound net packed weight)						
Total net sales	1.85	1.63	1.81	1.79	1.69	1.74	1.89
Operating expenses.--							
Raw materials	0.52	0.43	0.43	0.50	0.52	0.49	0.56
Direct labor	0.53	0.46	0.53	0.54	0.52	0.56	0.56
Other cultivation/freezing expenses	0.41	0.43	0.40	0.38	0.36	0.32	0.31
Third party processing expenses	0.08	0.08	0.08	0.07	0.08	0.09	0.12
All other operating expenses	0.07	0.06	0.08	0.09	0.08	0.07	0.06
Operating expenses	1.61	1.47	1.52	1.58	1.55	1.54	1.61
Operating income or (loss)	0.24	0.16	0.29	0.21	0.14	0.20	0.27
Mortgage and other interest expense	0.03	0.03	0.03	0.04	0.04	0.04	0.03
All other expenses	0.10	0.09	0.08	0.10	0.11	0.09	0.14
All other income	0.01	0.01	0.03	0.05	0.03	0.03	0.05
Net income or (loss)	0.12	0.06	0.21	0.13	0.02	0.10	0.15
	Number of firms reporting						
Operating losses	22	25	27	28	27	25	27
Net losses	35	43	32	37	42	37	26
Data	82	84	85	86	86	86	86

Note: Based on follow-up with select large blueberry producers that had unusually high “all other expenses” to net sales ratios, staff confirmed that certain expenses reported below operating income were actually classifiable as operating expenses. These expenses were reported in all other expenses in Commission questionnaires (and therefore not used in the calculation of operating income) because the companies reported that they were not easily classifiable in any of the line items provided above operating income. As such, these expenses that were confirmed by producers to be operating expenses were manually re-classified as operating expenses for the purpose of the staff report tables. While this improves the meaningfulness of operating income, it is still likely that there are certain expenses included in “all other expenses” that could be classifiable as operating expenses, and therefore likely that operating income is somewhat overstated.

The U.S. freezers and certain U.S. grower/freezers purchase domestic origin and/or imported blueberries to freeze, which could lead to double counting of net sales where questionnaires from both the U.S. grower and the U.S. freezer are included. Based on the domestic suppliers listed by the freezers and grower/freezers in the U.S. producer questionnaire responses at II-20 and the customers listed by growers at IV-24, staff estimates this double-counting to be approximately 5 percent of frozen blueberry sales volume in 2019. Additionally, any double-counting would not impact profitability since the additional revenues would be offset by the raw material cost of the purchased blueberries.

Third party processing expenses include fees paid to third parties for packing and freezing.

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

Table III-19
Blueberries: Changes in AUVs between calendar years and partial year periods

Item	Comparison years					Between partial year period
	2015-19	2015-16	2016-17	2017-18	2018-19	2019-20
	Change in AUVs (percent)					
Total net sales	▼(8.7)	▼(11.8)	▲10.9	▼(1.4)	▼(5.5)	▲8.4
Operating expenses.-- Raw materials	▲0.8	▼(16.0)	▼(1.4)	▲16.2	▲4.7	▲13.8
Direct labor	▼(1.4)	▼(12.7)	▲14.9	▲1.5	▼(3.1)	▲0.5
Other cultivation/freezing expenses	▼(14.3)	▲3.4	▼(6.8)	▼(5.6)	▼(5.7)	▼(4.3)
Third party processing expenses	▼(2.1)	▲2.5	▼(2.7)	▼(8.0)	▲6.6	▲28.5
All other operating expenses	▲11.7	▼(7.9)	▲31.2	▲6.1	▼(12.9)	▼(11.7)
Operating expenses	▼(3.5)	▼(8.6)	▲3.5	▲3.5	▼(1.4)	▲4.8
	Change in AUVs (dollars per pound net packed weight)					
Total net sales	▼(0.16)	▼(0.22)	▲0.18	▼(0.02)	▼(0.10)	▲0.15
Operating expenses.-- Raw materials	▲0.00	▼(0.08)	▼(0.01)	▲0.07	▲0.02	▲0.07
Direct labor	▼(0.01)	▼(0.07)	▲0.07	▲0.01	▼(0.02)	▲0.00
Other cultivation/freezing expenses	▼(0.06)	▲0.01	▼(0.03)	▼(0.02)	▼(0.02)	▼(0.01)
Third party processing expenses	▼(0.00)	▲0.00	▼(0.00)	▼(0.01)	▲0.00	▲0.03
All other operating expenses	▲0.01	▼(0.01)	▲0.02	▲0.01	▼(0.01)	▼(0.01)
Operating expenses	▼(0.06)	▼(0.14)	▲0.05	▲0.05	▼(0.02)	▲0.07
Operating income or (loss)	▼(0.11)	▼(0.08)	▲0.13	▼(0.08)	▼(0.08)	▲0.07
Net income or (loss)	▼(0.10)	▼(0.06)	▲0.15	▼(0.08)	▼(0.11)	▲0.06

Note: Unit values shown as “0.00” represent values greater than zero, but less than $0.005. Unit values shown as “(0.00)” represent values less than zero, but greater than $(0.005).

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

Table III-20
Fresh or chilled blueberries: Results of operations of U.S. producers, 2015-19, January-September 2019, and January-September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds net packed weight)						
Total net sales	112,059	110,359	120,337	117,222	133,853	132,976	125,448
	Value (1,000 dollars)						
Total net sales	278,908	254,374	311,818	296,276	326,856	323,233	313,058
Operating expenses.-- Raw materials	62,261	62,056	74,131	78,578	82,647	78,426	74,045
Direct labor	105,233	110,319	124,984	128,346	145,387	139,351	124,578
Other cultivation expenses	18,455	17,901	17,701	17,925	22,971	21,655	17,862
Third party packing expenses	18,353	22,032	20,565	19,293	24,251	24,087	28,336
All other operating expenses	9,068	10,014	15,491	16,463	17,352	14,396	11,863
Operating expenses	213,370	222,322	252,873	260,605	292,608	277,916	256,683
Operating income or (loss)	65,538	32,052	58,945	35,671	34,247	45,318	56,375
Mortgage and other interest expense	3,914	4,007	4,184	5,549	7,969	7,209	4,893
All other expenses	19,985	19,684	16,570	20,446	28,560	21,838	31,033
All other income	2,049	2,672	5,683	11,175	8,150	6,080	10,547
Net income or (loss)	43,689	11,032	43,874	20,851	5,868	22,352	30,997
	Ratio to net sales (percent)						
Operating expenses.-- Raw materials	22.3	24.4	23.8	26.5	25.3	24.3	23.7
Direct labor	37.7	43.4	40.1	43.3	44.5	43.1	39.8
Other cultivation expenses	6.6	7.0	5.7	6.0	7.0	6.7	5.7
Third party packing expenses	6.6	8.7	6.6	6.5	7.4	7.5	9.1
All other operating expenses	3.3	3.9	5.0	5.6	5.3	4.5	3.8
Operating expenses	76.5	87.4	81.1	88.0	89.5	86.0	82.0
Operating income or (loss)	23.5	12.6	18.9	12.0	10.5	14.0	18.0
Mortgage and other interest expense	1.4	1.6	1.3	1.9	2.4	2.2	1.6
All other expenses	7.2	7.7	5.3	6.9	8.7	6.8	9.9
All other income	0.7	1.1	1.8	3.8	2.5	1.9	3.4
Net income or (loss)	15.7	4.3	14.1	7.0	1.8	6.9	9.9
	Ratio to total operating expenses (percent)						
Operating expenses.-- Raw materials	29.2	27.9	29.3	30.2	28.2	28.2	28.8
Direct labor	49.3	49.6	49.4	49.2	49.7	50.1	48.5
Other cultivation expenses	8.6	8.1	7.0	6.9	7.9	7.8	7.0
Third party packing expenses	8.6	9.9	8.1	7.4	8.3	8.7	11.0
All other operating expenses	4.2	4.5	6.1	6.3	5.9	5.2	4.6
Operating expenses	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table continued on next page.

Table III-20—Continued
Fresh or chilled blueberries: Results of operations of U.S. producers, 2015-19, January-September 2019, and January-September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Unit value (dollars per pound net packed weight)						
Total net sales	2.49	2.30	2.59	2.53	2.44	2.43	2.50
Operating expenses.--							
Raw materials	0.56	0.56	0.62	0.67	0.62	0.59	0.59
Direct labor	0.94	1.00	1.04	1.09	1.09	1.05	0.99
Other cultivation expenses	0.16	0.16	0.15	0.15	0.17	0.16	0.14
Third party packing expenses	0.16	0.20	0.17	0.16	0.18	0.18	0.23
All other operating expenses	0.08	0.09	0.13	0.14	0.13	0.11	0.09
Operating expenses	1.90	2.01	2.10	2.22	2.19	2.09	2.05
Operating income or (loss)	0.58	0.29	0.49	0.30	0.26	0.34	0.45
Mortgage and other interest expense	0.03	0.04	0.03	0.05	0.06	0.05	0.04
All other expenses	0.18	0.18	0.14	0.17	0.21	0.16	0.25
All other income	0.02	0.02	0.05	0.10	0.06	0.05	0.08
Net income or (loss)	0.39	0.10	0.36	0.18	0.04	0.17	0.25
	Number of firms reporting						
Operating losses	17	22	25	23	19	17	19
Net losses	27	34	29	30	31	27	18
Data	74	75	77	76	76	76	76

Note: Based on follow-up with select large blueberry producers that had unusually high “all other expenses” to net sales ratios, staff confirmed that certain expenses reported below operating income were actually classifiable as operating expenses. These expenses were reported in all other expenses in Commission questionnaires (and therefore not used in the calculation of operating income) because the companies reported that they were not easily classifiable in any of the line items provided above operating income. As such, these expenses that were confirmed by producers to be operating expenses were manually re-classified as operating expenses for the purpose of the staff report tables. While this improves the meaningfulness of operating income, it is still likely that there are certain expenses included in “all other expenses” that could be classifiable as operating expenses, and therefore likely that operating income is somewhat overstated.

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

Table III-21
Fresh or chilled blueberries: Changes in AUVs between calendar years and partial year periods

Item	Comparison years					Between partial year period
	2015-19	2015-16	2016-17	2017-18	2018-19	2019-20
	Change in AUVs (percent)					
Total net sales	▼(1.9)	▼(7.4)	▲12.4	▼(2.5)	▼(3.4)	▲2.7
Operating expenses.-- Raw materials	▲11.1	▲1.2	▲9.6	▲8.8	▼(7.9)	▲0.1
Direct labor	▲15.7	▲6.4	▲3.9	▲5.4	▼(0.8)	▼(5.2)
Other cultivation expenses	▲4.2	▼(1.5)	▼(9.3)	▲4.0	▲12.2	▼(12.6)
Third party packing expenses	▲10.6	▲21.9	▼(14.4)	▼(3.7)	▲10.1	▲24.7
All other operating expenses	▲60.2	▲12.1	▲41.9	▲9.1	▼(7.7)	▼(12.7)
Operating expenses	▲14.8	▲5.8	▲4.3	▲5.8	▼(1.7)	▼(2.1)
	Change in AUVs (dollars per pound net packed weight)					
Total net sales	▼(0.05)	▼(0.18)	▲0.29	▼(0.06)	▼(0.09)	▲0.06
Operating expenses.-- Raw materials	▲0.06	▲0.01	▲0.05	▲0.05	▼(0.05)	▲0.00
Direct labor	▲0.15	▲0.06	▲0.04	▲0.06	▼(0.01)	▼(0.05)
Other cultivation expenses	▲0.01	▼(0.00)	▼(0.02)	▲0.01	▲0.02	▼(0.02)
Third party packing expenses	▲0.02	▲0.04	▼(0.03)	▼(0.01)	▲0.02	▲0.04
All other operating expenses	▲0.05	▲0.01	▲0.04	▲0.01	▼(0.01)	▼(0.01)
Operating expenses	▲0.28	▲0.11	▲0.09	▲0.12	▼(0.04)	▼(0.04)
Operating income or (loss)	▼(0.33)	▼(0.29)	▲0.20	▼(0.19)	▼(0.05)	▲0.11
Net income or (loss)	▼(0.35)	▼(0.29)	▲0.26	▼(0.19)	▼(0.13)	▲0.08

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

Table III-22
Frozen blueberries: Results of operations of U.S. producers, 2015-19, January-September 2019, and January-September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds net packed weight)						
Total net sales	138,692	178,664	157,891	159,584	187,320	144,626	124,340
	Value (1,000 dollars)						
Total net sales	185,808	218,069	192,766	198,890	216,293	159,941	158,385
Operating expenses.-- Raw materials	67,263	63,414	45,016	59,137	84,609	58,594	66,235
Direct labor	27,008	22,766	22,233	20,319	21,675	16,167	16,006
Other cultivation/freezing expenses	85,547	106,099	93,496	86,470	91,257	68,559	59,783
Third party processing expenses	2,134	2,172	2,102	1,465	1,428	1,126	822
All other operating expenses	8,241	8,362	7,713	8,026	7,405	5,077	3,605
Operating expenses	190,193	202,812	170,561	175,417	206,374	149,522	146,452
Operating income or (loss)	(4,384)	15,257	22,205	23,474	9,919	10,419	11,933
Mortgage and other interest expense	3,905	4,284	4,329	4,702	5,338	3,743	3,680
All other expenses	5,890	5,843	5,543	6,084	5,654	4,017	4,135
All other income	1,085	1,490	1,492	1,825	1,721	1,464	2,790
Net income or (loss)	(13,094)	6,620	13,825	14,513	647	4,124	6,909
	Ratio to net sales (percent)						
Operating expenses.-- Raw materials	36.2	29.1	23.4	29.7	39.1	36.6	41.8
Direct labor	14.5	10.4	11.5	10.2	10.0	10.1	10.1
Other cultivation/freezing expenses	46.0	48.7	48.5	43.5	42.2	42.9	37.7
Third party processing expenses	1.1	1.0	1.1	0.7	0.7	0.7	0.5
All other operating expenses	4.4	3.8	4.0	4.0	3.4	3.2	2.3
Operating expenses	102.4	93.0	88.5	88.2	95.4	93.5	92.5
Operating income or (loss)	(2.4)	7.0	11.5	11.8	4.6	6.5	7.5
Mortgage and other interest expense	2.1	2.0	2.2	2.4	2.5	2.3	2.3
All other expenses	3.2	2.7	2.9	3.1	2.6	2.5	2.6
All other income	0.6	0.7	0.8	0.9	0.8	0.9	1.8
Net income or (loss)	(7.0)	3.0	7.2	7.3	0.3	2.6	4.4
	Ratio to total operating expenses (percent)						
Operating expenses.-- Raw materials	35.4	31.3	26.4	33.7	41.0	39.2	45.2
Direct labor	14.2	11.2	13.0	11.6	10.5	10.8	10.9
Other cultivation/freezing expenses	45.0	52.3	54.8	49.3	44.2	45.9	40.8
Third party processing expenses	1.1	1.1	1.2	0.8	0.7	0.8	0.6
All other operating expenses	4.3	4.1	4.5	4.6	3.6	3.4	2.5
Operating expenses	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table continued on next page.

Table III-22—Continued
Frozen blueberries: Results of operations of U.S. producers, 2015-19, January-September 2019, and January-September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Unit value (dollars per pound net packed weight)						
Total net sales	1.34	1.22	1.22	1.25	1.15	1.11	1.27
Operating expenses.--							
Raw materials	0.48	0.35	0.29	0.37	0.45	0.41	0.53
Direct labor	0.19	0.13	0.14	0.13	0.12	0.11	0.13
Other cultivation/freezing expenses	0.62	0.59	0.59	0.54	0.49	0.47	0.48
Third party processing expenses	0.02	0.01	0.01	0.01	0.01	0.01	0.01
All other operating expenses	0.06	0.05	0.05	0.05	0.04	0.04	0.03
Operating expenses	1.37	1.14	1.08	1.10	1.10	1.03	1.18
Operating income or (loss)	(0.03)	0.09	0.14	0.15	0.05	0.07	0.10
Mortgage and other interest expense	0.03	0.02	0.03	0.03	0.03	0.03	0.03
All other expenses	0.04	0.03	0.04	0.04	0.03	0.03	0.03
All other income	0.01	0.01	0.01	0.01	0.01	0.01	0.02
Net income or (loss)	(0.09)	0.04	0.09	0.09	0.00	0.03	0.06
	Number of firms reporting						
Operating losses	20	17	16	23	24	24	25
Net losses	25	24	19	25	28	29	26
Data	40	41	34	41	42	41	42

Note: Based on follow-up with select large blueberry producers that had unusually high “all other expenses” to net sales ratios, staff confirmed that certain expenses reported below operating income were actually classifiable as operating expenses. These expenses were reported in all other expenses in Commission questionnaires (and therefore not used in the calculation of operating income) because the companies reported that they were not easily classifiable in any of the line items provided above operating income. As such, these expenses that were confirmed by producers to be operating expenses were manually re-classified as operating expenses for the purpose of the staff report tables. While this improves the meaningfulness of operating income, it is still likely that there are certain expenses included in “all other expenses” that could be classifiable as operating expenses, and therefore likely that operating income is somewhat overstated.

The U.S. freezers and certain U.S. grower/freezers purchase domestic origin and/or imported blueberries to freeze, which could lead to double counting of net sales where questionnaires from both the U.S. grower and the U.S. freezer are included. Based on the domestic suppliers listed by the freezers and grower/freezers in the U.S. producer questionnaire responses at II-20 and the customers listed by growers at IV-24, staff estimates this double-counting to be approximately 5 percent of frozen blueberry sales volume in 2019. Additionally, any double-counting would not impact profitability since the additional revenues would be offset by the raw material cost of the purchased blueberries.

Unit values shown as “(0.00)” represent values less than zero, but greater than $(0.005).

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

Table III-23
Frozen blueberries: Changes in AUVs between calendar years and partial year periods

Item	Comparison years					Between partial year periods
	2015-19	2015-16	2016-17	2017-18	2018-19	2019-20
	Change in AUVs (percent)					
Total net sales	▼(13.8)	▼(8.9)	▲0.0	▲2.1	▼(7.4)	▲15.2
Operating expenses.-- Raw materials	▼(6.9)	▼(26.8)	▼(19.7)	▲30.0	▲21.9	▲31.5
Direct labor	▼(40.6)	▼(34.6)	▲10.5	▼(9.6)	▼(9.1)	▲15.2
Other cultivation/freezing expenses	▼(21.0)	▼(3.7)	▼(0.3)	▼(8.5)	▼(10.1)	▲1.4
Third party processing expenses	▼(50.5)	▼(21.0)	▲9.5	▼(31.1)	▼(17.0)	▼(15.1)
All other operating expenses	▼(33.5)	▼(21.2)	▲4.4	▲3.0	▼(21.4)	▼(17.4)
Operating expenses	▼(19.7)	▼(17.2)	▼(4.8)	▲1.8	▲0.2	▲13.9
	Change in AUVs (dollars per pound net packed weight)					
Total net sales	▼(0.19)	▼(0.12)	▲0.00	▲0.03	▼(0.09)	▲0.17
Operating expenses.-- Raw materials	▼(0.03)	▼(0.13)	▼(0.07)	▲0.09	▲0.08	▲0.13
Direct labor	▼(0.08)	▼(0.07)	▲0.01	▼(0.01)	▼(0.01)	▲0.02
Other cultivation/freezing expenses	▼(0.13)	▼(0.02)	▼(0.00)	▼(0.05)	▼(0.05)	▲0.01
Third party processing expenses	▼(0.01)	▼(0.00)	▲0.00	▼(0.00)	▼(0.00)	▼(0.00)
All other operating expenses	▼(0.02)	▼(0.01)	▲0.00	▲0.00	▼(0.01)	▼(0.01)
Operating expenses	▼(0.27)	▼(0.24)	▼(0.05)	▲0.02	▲0.00	▲0.14
Operating income or (loss)	▲0.08	▲0.12	▲0.06	▲0.01	▼(0.09)	▲0.02
Net income or (loss)	▲0.10	▲0.13	▲0.05	▲0.00	▼(0.09)	▲0.03

Note.—Unit values shown as “0.00” represent values greater than zero, but less than $0.005. Unit values shown as “(0.00)” represent values less than zero, but greater than $(0.005).

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

Net sales

Net sales of blueberries (table III-18), by both quantity and value, have fluctuated, but were higher overall in 2019 than in 2015, and were lower in January-September 2020 than during the same period in 2019.[30] [31] Net sales for fresh or chilled blueberries (table III-20) and frozen blueberries (table III-22) were also higher overall in 2019 than in 2015, and were lower in interim 2020 than in interim 2019. The net sales AUVs for blueberries have fluctuated as well, with an annual-period low AUV of $1.63 per pound in 2016 and an annual-period high of $1.85 per pound in 2015. The net sales AUV was $1.89 per pound in interim 2020, compared with $1.74 in interim 2019. Fresh or chilled blueberries tend to have higher net sales AUVs than frozen blueberries. The net sales AUVs of fresh or chilled blueberries were between $2.30 and $2.59 per pound in the full and partial years since 2015, whereas frozen blueberries were between $1.11 and $1.34 per pound.[32]

[30] Many of these growers reported that their goal is to sell all of their harvested blueberries fresh in order to achieve a higher sales value. However, they sometimes sell their harvested blueberries for processing (primarily freezing) depending on many factors including harvesting costs, supply and demand, weather, labor availability, and blueberry quality. Several U.S. growers reported that they consider frozen blueberries a by-product that offsets some of the costs of fresh or chilled blueberries. Email from ***; Email from ***, *** U.S. producer questionnaire responses, section III-18.

[31] ***. In its questionnaire response, the company reported financial results for fresh and chilled blueberries in addition to frozen blueberries. The company indicated that its reported sales of fresh blueberries were ***. ***.

Staff has reclassified these *** as frozen blueberries (table III-22). While this may result in some overstating of net sales and certain cost information for frozen blueberries, the overall profit or loss that is attributed to these *** now reflect the intended application. The reclassification has no effect on the data for all blueberries (table III-18).

[32] The net sales quantities and values for cultivated blueberries and for wild blueberries followed mostly similar directional trends as the combined blueberry data (i.e., they fluctuated year to year, were higher in 2019 than in 2015, and were lower in interim 2020 compared to interim 2019). However, the

(continued…)

U.S. growers that do not have their own packing facilities (for fresh or chilled blueberries) or freezing facilities (for frozen blueberries) will pay other facilities for these services, however title to the blueberries typically remains with the U.S. grower.[33] Many U.S. growers without packing or freezing facilities receive their revenue on a net basis. This means the packing or freezing expenses are deducted from the revenue prior to being paid to the grower.[34] This causes the revenue and net sales AUVs for these growers to be lower than U.S. growers that receive revenue on a gross basis or U.S. growers that have their own facilities.[35]

Approximately half of the firms providing usable data reported at least some net sales of frozen blueberries. However, for the U.S. growers (without freezing facilities) with sales of frozen blueberries, less than one fifth reported any freezing expenses paid to third parties, which indicates they receive their revenue on a net basis. This results in much higher frozen blueberries net sales AUVs for U.S. producers with freezing operation than those without freezing operations. In 2019, producers with freezing operations received an average of $1.22 per pound for frozen blueberries compared to $0.57 per pound for U.S. growers without freezing facilities.

net sales AUVs of cultivated blueberries were higher than the net sales AUVs of wild blueberries, which is consistent with the fact that cultivated blueberries are more commonly sold fresh, chilled, or frozen whereas wild blueberries are more commonly sold frozen or for processing. During the annual year periods, the net sales AUVs for cultivated blueberries were between $1.80 and $2.08 per pound, compared to net sales AUVs between $1.23 and $1.63 per pound for wild blueberries.

[33] The American Blueberry Growers Alliance's comments on draft questionnaires, page 5. (EDIS doc ID: 721641). Packing facilities are typically owned by individual growers or by a co-op of growers. Approximately half of the responding U.S. growers and *** reported belonging to a cooperative. U.S. producer questionnaire responses, section III-7.

[34] Emails from *** and ***.

[35] Whether a U.S. grower receives their revenue on a gross or net basis has no effect on overall profitability. Growers receiving revenue on a net basis have lower revenue, but also do not have the corresponding packing or freezing expense. Based on the number of companies that did and did not report packing and/or freezing expenses, questionnaire responses indicate that a majority of U.S. growers receive revenue on a net basis.

Operating expenses and operating income or loss

For the blueberry industry overall, labor costs (whether for growing/harvesting, packing, or freezing) accounted for the highest share of operating expenses. The per-pound cost of labor increased irregularly between 2015 and 2019, and reached a period high during January-September 2020.[36] Blueberries that are sold fresh or chilled are generally harvested by hand, whereas blueberries that are intended to be sold frozen can be machine harvested.[37] Based on estimates from questionnaire responses and correspondence, harvesting by hand costs on average $0.75-$1.00 per pound, whereas machine harvesting costs $0.15-$0.25 per pound.[38] Consistent with this difference, the per pound cost of labor for fresh or chilled blueberries is noticeably higher than that for frozen blueberries. In addition, firms with freezing operations, which account for a large majority of the total net sales of frozen blueberries, reported slightly more than half of their IQF production in 2019 was of blueberries that were not grown by them. The labor reported for these frozen blueberries would only be the labor required for freezing, with the purchase cost of the blueberries recorded in freezing raw materials.

For the blueberry industry overall, raw materials accounted for the second highest share of operating expenses, and all other cultivation and freezing expenses accounted for the third. On a per-pound basis, raw material costs fluctuated, but were unchanged when comparing 2015 to 2019. On a per-pound basis, the cost of all other cultivation and freezing expenses fluctuated, but decreased overall between 2015 and 2019. The per pound cost of raw materials were higher in interim 2020 than during the same period in 2019, while the per-pound cost of all other cultivation and freezing expenses was slightly lower in interim 2020.

For fresh and chilled blueberries, raw materials include any raw material costs incurred from growing or packaging the blueberries. For frozen blueberries, the raw material costs will include growing raw material costs for the frozen blueberries reported by U.S. growers and U.S.

[36] The per-pound cost of labor for fresh or chilled blueberries increased noticeably in 2018. ***. The company reported that labor costs were increasing *** because of increases in minimum wage. ***. ***.

[37] ***. U.S. producer questionnaire responses, section II-16e.

[38] Email from *** and *** U.S. producer questionnaire response, section II-22.

grower/freezers as well as the purchase cost of the blueberries that are frozen by U.S. freezers and some U.S. grower/freezers. Table III-24 presents raw materials, by application.

Table III-24
Blueberries: Raw materials by application, 2019

Item	Sales and raw material costs		
	Sold as fresh or chilled	Sold frozen or for freezing	Fresh, chilled, and frozen
	Quantity (1,000 pounds net packed weight)		
Net sales	133,853	187,320	321,173
	Value (1,000 dollars)		
Growing materials: Seeds and plants	25,464	17,770	43,234
Chemicals	12,511	3,984	16,495
Fertilizers and lime	12,787	1,530	14,316
All other growing materials	16,973	3,192	20,165
Growing materials	67,735	26,475	94,209
Packing materials	14,912	5,407	20,320
Freezing materials	---	52,727	52,727
All raw materials	82,647	84,609	167,256
	Share of raw materials (percent)		
Growing materials: Seeds and plants	30.8	21.0	25.8
Chemicals	15.1	4.7	9.9
Fertilizers and lime	15.5	1.8	8.6
All other growing materials	20.5	3.8	12.1
Growing materials	82.0	31.3	56.3
Packing materials	18.0	6.4	12.1
Freezing materials	---	62.3	31.5
All raw materials	100.0	100.0	100.0
	Unit raw materials costs (dollars per pound)		
Growing materials: Seeds and plants	0.19	0.09	0.13
Chemicals	0.09	0.02	0.05
Fertilizers and lime	0.10	0.01	0.04
All other growing materials	0.13	0.02	0.06
Growing materials	0.51	0.14	0.29
Packing materials	0.11	0.03	0.06
Freezing materials	---	0.28	0.16
All raw materials	0.62	0.45	0.52

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

The last two categories in operating expenses, third party processing expenses and all other operating expenses, were each the smallest category at times since 2015.[39] In the blueberry industry overall, these expense categories accounted for between 9.4 and 11.1 percent of total operating expenses during the period for which data were collected. Third party expenses are somewhat understated because many U.S. growers receive their revenue on a net basis, and therefore they do not record any third-party processing costs. Table III-25 shows the difference in the relative share of growing, packing, and freezing expenses to total operating expenses for fresh and chilled blueberries, frozen blueberries, and all blueberries.

[39] As discussed previously, staff followed-up with approximately one-quarter of the included firms that had expenses reported for "all other expenses" to ascertain whether these companies had included expenses that would typically be included in the calculation of operating income. Staff targeted the largest companies with the highest ratios of all other expenses to net sales. All of the companies confirmed that some or all of the expenses reported in their questionnaire responses for "all other expenses" were actually operating expenses (i.e., these expenses should be used in the calculation of operating and net income, rather than only in the calculation of net income). The companies reported that they had reported these expenses below operating income because there were not appropriate expense line items for those expenses above operating income, or because they could not break out the expenses in the requested format. Examples of the most common expenses that were reported here and were subsequently reclassified are depreciation, insurance, marketing, utilities, and licenses. While a large majority of the expenses reported for all other expenses by these companies were reclassified, staff does not believe that indicates a similar large majority of the *remaining* "all other expenses" are misclassified since staff contacted the companies with the most obvious misclassifications. However, it is likely that there are other producers that reported in a similar manner, and staff therefore believes operating income is somewhat overstated.

Table III-25
Blueberries: Share of operating expenses of U.S. producers by application and specific activities, 2015-19, January-September 2019, and January-September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Share of value by application (percent)						
Fresh and chilled.— Growing expenses	77.5	77.3	77.4	76.7	76.0	76.1	73.8
Packing expenses	18.2	18.2	16.5	17.0	18.0	18.7	21.6
All other operating expenses	4.2	4.5	6.1	6.3	5.9	5.2	4.6
Operating expenses: Fresh or chilled	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Frozen.-- Growing expenses	34.1	27.9	29.0	25.3	24.3	27.1	29.9
Packing expenses	7.5	5.2	6.9	6.4	5.5	6.1	6.3
Freezing expenses	54.1	62.8	59.7	63.7	66.6	63.4	61.4
All other operating expenses	4.3	4.1	4.5	4.6	3.6	3.4	2.5
Operating expenses: Frozen	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fresh, chilled, and frozen.-- Growing expenses	57.1	53.7	57.9	56.0	54.6	59.0	57.8
Packing expenses	13.2	12.0	12.6	12.8	12.9	14.3	16.0
Freezing expenses	25.5	30.0	24.0	25.6	27.5	22.2	22.3
All other operating expenses	4.3	4.3	5.5	5.6	5.0	4.6	3.8
Operating expenses: Fresh, chilled, or frozen	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

In the blueberry industry overall (table III-18), operating expenses increased irregularly between 2015 and 2019 by a larger amount than the overall increase in total net sales value, which resulted in an overall lower operating profit in 2019 compared with 2015. Conversely, the decrease in operating expenses between the comparable interim periods was more than the decrease in net sales value, which resulted in higher operating income in interim 2020 than during interim 2019. As a ratio to net sales, operating expenses increased irregularly from 2015 to 2020, but were lower in interim 2020 compared to interim 2019. Operating income for fresh and chilled blueberries (table III-20) followed similar directional trends as those for total blueberries. The operating income for frozen blueberries also fluctuated, however, it was higher in 2019 than in 2015.[40]

For total blueberry operations, the number of firms reporting operating losses fluctuated, but increased overall from 22 in 2015 to 27 in 2019. In interim 2019 25 firms reported net losses, while 27 firms reported operating losses in interim 2020.[41]

[40] ***, reported the largest company-specific operating loss during any of the annual or partial year periods examined when it reported an operating loss of $*** in 2015. It also reported a $*** operating loss in 2016. In response to questions from staff, ***.

While these decisions likely decreased the company's costs after 2016, the main reason for the reported losses in 2015 and 2016 is that the company reported its financial results on a cash basis. It produced ***. This resulted in understated profitability (or overstated losses) compared to what would have been reported had the company used accrual accounting. ***. In 2017 and 2018, the company ***, which had the opposite effect, overstating profitability in those periods. ***. ***.

[41] The number of firms with wild blueberry operations that reported operating losses in each period are as follows: 3 of 5 firms in 2015, 3 of 5 firms in 2016, 0 of 5 firms in 2017, 4 of 6 firms in 2018, 2 of 6 firms in 2019, 3 of 6 in interim 2019, and 2 of 6 in interim 2020. The number of firms with cultivated blueberry operations that reported operating losses in each period are as follows: 16 of 77 firms in 2015, 19 of 79 firms in 2016, 23 of 80 firms in 2017, 17 of 80 firms in 2018, and 2019, 18 of 80 firms in interim 2019, and 19 of 80 firms in interim 2020.

All other expenses and net income or loss

Below operating income are interest expense, all other expenses, and all other income. There were a number of nonrecurring items that companies reported were included in all other expenses and all other income. For total blueberry operations (table III-18), interest expense increased from 2015 to 2019, and was lower in interim 2020 than in interim 2019. All other expenses increased irregularly between 2015 and 2019, and were noticeably higher in interim 2020 than during the comparable period in 2019.[42] All other income increased from 2015 to 2018, but decreased in 2019. It was higher in interim 2020 than in interim 2019. These directional trends were mirrored by the fresh and chilled blueberry operations and the frozen blueberry operations. However, all other income reported for fresh and chilled blueberries (table III-20) accounted for a larger share of the total all other income reported in each of the annual and interim year periods.[43] [44] For total blueberry operations (table III-18), other

[42] The noticeably higher all other expenses in interim 2020 ***. The company reported that the higher all other expenses in interim 2020 were the result of ***. ***. ***.

[43] This is consistent with the fact that crop insurance, USDA incentives, and government disaster payments were the most commonly listed items that were included in all other income. The number of firms that specifically identified crop insurance payments or government disaster payments as non-recurring items included in other income peaked in 2017, which is consistent with reports of weather-related issues that year. In addition, a number of companies specifically identified COVID relief payments as nonrecurring items in all other income in interim 2020.

The USDA agriculture statistics reported the number of acres insured for blueberries were 69 thousand in 2015, 64 thousand in 2016, 67 thousand in 2017, 69 thousand in 2018, and 70 thousand in 2019 (the most recent year for which data were published). The associated amount of the premium for these acres was $11.4 million in 2015, $12.9 million in 2016, $13.8 million in 2017, $16.5 million in 2018, and $22.2 million in 2019. The number of indemnities in each of the years were 235 in 2015, 277 in 2016, 619 in 2017, 536 in 2018, and 370 in 2019. The total value of the indemnities in each year was $8.7 million in 2015, $12.7 million in 2016, $40.3 million in 2017, $35.3 million in 2018, and $21.2 million in 2019. National Agricultural Statistics Service, "Agricultural Statistics 2017" p. X-4 and "Agricultural Statistics 2020" p. X-4.

[44] All other income for total blueberries (table III-18) peaked in 2018, which was largely attributable to a $*** nonrecurring item related to *** that was reported

(continued…)

expenses, net of other income, increased overall between 2015 and 2019, and were higher in interim 2020 than in interim 2019.

While the trends in net other expenses and their relative share of overall costs differed for fresh or chilled blueberries (table III-20) and frozen blueberries (table III-22), the directional trends in net income were generally similar to operating income in each table.[45] For total blueberry operations, the number of firms reporting net losses fluctuated, but increased overall from 35 in 2015 to 42 in 2019. In interim 2019, 37 firms reported net losses, while 26 firms reported net losses in interim 2020.[46] [47] [48]

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by *** in their fresh and chilled blueberry results. ***.

[45] *** reported the largest company-specific net loss during any of the annual or partial year periods for which data were collected when it reported a net loss of $*** in 2019. This was at least partially attributable to ***. *** U.S. producer questionnaire, sections III-9a and III-10.

[46] The number of firms with wild blueberry operations that reported net losses in each period are as follows: 4 of 5 firms in 2015, 4 of 5 firms in 2016, 1 of 5 firms in 2017, 4 of 6 firms in 2018, 3 of 6 firms in 2019, 4 of 6 firms in interim 2019, and 2 of 6 firms in interim 2020. The number of firms with cultivated blueberry operations that reported net losses in each period are as follows: 31 of 77 firms in 2015, 39 of 79 firms in 2016, 31 of 80 firms in 2017, 33 of 80 firms in 2018, 39 of 80 firms in 2019, 33 of 80 firms in interim 2019, and 24 of 80 firms in interim 2020.

[47] More firms reported operating losses than net losses in interim 2020 for fresh or chilled blueberries (table III-20) and total blueberries (table III-18). All other income, which is included in the calculation of net income but not operating income, was higher in interim 2020 than in interim 2019 for fresh or chilled blueberries, frozen blueberries, and combined blueberries. A number of firms specifically identified COVID relief payments, such as USDA's Coronavirus Food Assistance Program ("CFAP"), as the reason for their higher all other income in interim 2020. CFAP authorized direct payments, which do not have to be repaid, to U.S. farmers to help offset the financial impacts they incurred as a result of the COVID-19 pandemic. As a result, a number of companies experienced operating losses in interim 2020, but ultimately reported a net income because of their higher interim 2020 all other income. U.S. producer questionnaire responses, section III-10.

[48] A variance analysis is not shown due to the large variety of cost structures and the accounting bases used among the reporting firms.

Capital expenditures, research and development expenses, and assets

Table III-26 presents capital expenditures, research and development ("R&D") expenses, total assets, and the operating return on assets ("ROA").[49] [50] In 2019, 53 of the firms included in this section reported capital expenditures, while 9 reported R&D expenses.

Table III-26
Blueberries: Capital expenditures, R&D expenses, assets, and ROA of U.S. producers, 2015-19, January-September 2019, and January-September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Value (1,000 dollars)						
Capital expenditures.-- Growing	41,268	35,682	31,229	33,046	25,062	20,311	12,599
Packing	6,468	7,514	11,297	6,123	6,728	6,642	8,757
Freezing	16,483	2,985	4,312	3,095	10,332	9,824	6,670
All Cap Ex	64,219	46,181	46,838	42,264	42,122	36,777	28,026
R&D expenses.-- Growing	***	***	***	***	***	***	***
Packing	***	***	***	***	***	***	***
Freezing	***	***	***	***	***	***	***
All R&D expenses	***	***	***	***	***	***	***
Assets.-- Growing	232,389	269,751	279,035	291,338	330,842		
Packing	59,861	55,310	64,123	64,137	67,943		
Freezing	100,234	83,625	87,630	83,861	89,401		
All assets	392,484	408,686	430,788	439,336	488,186		
	Ratio (percent)						
Operating income ROA	15.6	11.6	18.8	13.5	9.0		
Net income ROA	7.8	4.3	13.4	8.0	1.3		

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

[49] The operating income and net income return on assets ("ROA") are calculated as operating income and net income, respectively divided by total assets. With respect to a firm's overall operations, the total asset value reflects an aggregation of a number of assets which are generally not product specific. Thus, high-level allocations are generally required in order to report a total asset value for blueberries.

[50] A number of U.S. growers ***. U.S. producer questionnaires, section III-12b. *** testimony from the hearing that MBG marketing opened IQF facilities in Michigan in 2012 and in Georgia in 2013 for a total investment of approximately $19.5 million. These facilities were both closed in 2019 because of declining fruit prices and increased operational and regulatory costs. Hearing transcript, pp. 76-77 (Crosby).

Capital and investment

The Commission requested U.S. producers of blueberries to describe any actual or potential negative effects of imports of fresh or chilled blueberries and frozen blueberries on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. The number of firms reporting an impact in each category is presented in table III-27 for fresh and chilled blueberries and table III-28 for frozen blueberries.[51]

Table III-27
Fresh and chilled blueberries: Actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2015

Item	No	Yes
	Number of firms (count)	
Negative effects on investment	36	73
Cancellation, postponement, or rejection of expansion projects		54
Denial or rejection of investment proposal		14
Reduction in the size of capital investments		47
Return on specific investments negatively impacted		53
Unable to modernize plants and equipment		44
Unable to maintain investments		26
Other		15
Negative effects on growth and development	48	65
Rejection of bank loans		15
Lowering of credit rating		14
Problem related to the issue of stocks or bonds		2
Ability to service debt		46
Other		25
Anticipated negative effects of imports	20	105

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

[51] While tables III-18 through III-26 include the financial results reported by 89 firms, tables III-27 and III-28 include responses from all firms that provided a U.S. producer questionnaire response, regardless of whether their financial data were deemed usable.

Table III-28
Frozen blueberries: Actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2015

Item	No	Yes
	Number of firms (count)	
Negative effects on investment	46	47
Cancellation, postponement, or rejection of expansion projects		31
Denial or rejection of investment proposal		7
Reduction in the size of capital investments		24
Return on specific investments negatively impacted		32
Unable to modernize plants and equipment		25
Unable to maintain investments		17
Other		13
Negative effects on growth and development	49	39
Rejection of bank loans		11
Lowering of credit rating		8
Problem related to the issue of stocks or bonds		2
Ability to service debt		28
Other		17
Anticipated negative effects of imports	28	66

Note.— Seven firms that reported primarily growing and/or freezing wild blueberries responded to these questions for frozen blueberries. Of these firms, three reported experiencing negative effects on investment, three reported experiencing negative effects on growth and development, and five reported anticipating negative effects as a result of imports of blueberries.

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

Part IV: U.S. market and foreign industries

This section of the report provides information from questionnaire responses and public sources on the U.S. market for blueberries and the foreign industries producing and exporting blueberries.

Apparent U.S. consumption and market shares

As presented in table IV-1, the quantity of apparent U.S. consumption[1] of blueberries (fresh, chilled and frozen) generally increased between 2015 and 2019, with a net increase of 28.5 percent. During 2015-19, apparent U.S. consumption fluctuated, was highest in 2019, and lowest in 2017.[2] During this period, several factors contributed to the increase in apparent U.S. consumption, such as targeted marketing promoting the health benefits of blueberries, packaging innovation and new technologies, changes in product mix, and the emergence of new suppliers in South America (see also Part V). The quantity of apparent U.S. consumption of blueberries in January to September 2020 was 1.4 percent higher than in January to September 2019.

In terms of value, apparent U.S. consumption of blueberries increased between 2015 and 2019, with a net increase of 39.1 percent. During 2015-19, the value of apparent consumption was highest in 2019 and lowest in 2015. The value of apparent U.S. consumption of blueberries in January to September 2020 was 0.8 percent lower than in January to September 2019.

Table IV-2 presents U.S. market share data. The quantity of U.S. imports of blueberries, as a share of apparent U.S. consumption of blueberries, increased each year between 2015 and 2019, with a net increase of 9.0 percentage points. By quantity, U.S. imports as a share of apparent U.S. consumption, were lower in January to September 2020, by 1.3 percentage points (compared to January to September 2019).

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[1] In this report apparent U.S. consumption is calculated as U.S. shipments (USDA utilized production less official export shipments), plus U.S. imports net of re-exports.

[2] As noted in Part III, utilized production of both cultivated and wild blueberries in the United States decreased in 2017. As noted in Part II, 2017 was the only full calendar year in which U.S. imports of blueberries declined relative to the preceding year.

In terms of value, U.S. imports of blueberries, as a share of apparent U.S. consumption, increased irregularly between 2015 and 2019, and was 9.1 percentage points higher in 2019 than in 2015, but declined slightly in 2019 from 2018 by 0.3 percentage points. The value of U.S. imports as a share of apparent U.S. consumption during January to September 2020, was 2.0 percent lower (compared to January to September 2019).

U.S. producers' market share by quantity declined by 9.1 percentage points, from 57.5 percent in 2015 to 48.4 percent in 2019. Similarly, U.S. producers' market share by value decreased by 9.1 percentage points, from 43.6 percent in 2015 to 34.5 percent in 2019. U.S. producers' market share by quantity and value were higher in January to September 2020 compared to January to September 2019.

Table IV-1
Blueberries: Apparent U.S. consumption, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
U.S. producers' U.S. shipments	546,274	565,337	469,288	517,765	591,921	516,952	536,610
U.S. imports net of re-exports from.--							
Argentina	23,885	27,249	25,673	23,366	21,821	6,983	3,847
Canada	206,267	203,379	153,601	166,446	223,516	187,297	168,944
Chile	136,213	176,623	149,992	175,814	156,092	125,297	112,114
Mexico	24,477	33,955	51,544	70,769	90,408	68,369	88,628
Peru	11,351	29,637	34,695	72,375	136,270	49,238	56,834
All other sources	2,241	3,326	1,638	2,065	1,745	401	780
All import sources	404,433	474,169	417,144	510,835	629,851	437,584	431,148
Apparent U.S. consumption	950,708	1,039,506	886,432	1,028,600	1,221,772	954,536	967,758
	Value (1,000 dollars)						
U.S. producers' U.S. shipments	686,430	566,002	674,044	664,104	755,387	659,715	684,802
U.S. imports net of re-exports from.--							
Argentina	85,175	111,239	86,628	68,755	48,395	9,920	4,737
Canada	253,999	218,221	200,948	225,322	264,306	228,506	204,544
Chile	348,794	449,343	345,462	429,557	371,996	287,892	233,502
Mexico	135,248	144,635	215,138	289,101	287,850	215,128	261,588
Peru	56,116	133,665	144,542	260,167	458,435	163,830	162,033
All other sources	9,773	12,947	5,928	6,503	4,812	711	1,649
All import sources	889,104	1,070,051	998,647	1,279,404	1,435,795	905,987	868,053
Apparent U.S. consumption	1,575,535	1,636,053	1,672,691	1,943,508	2,191,181	1,565,702	1,552,855

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Re-exports (foreign-origin exports using Census Bureau statistics) are deducted from each individual country source based submitted questionnaire experience. Note partial year data for U.S. producers uses the experience of usable U.S. producers' questionnaire data and scaled up by the ratio of coverage for usable questionnaires by NASS/USDA.

Source: Compiled from official U.S. agricultural statistics published by NASS/USDA, official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, 0810.40.0029, 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020, and official U.S. export statistics using schedule B numbers 0811.90.2024, 0811.90.2028, 0810.40.0024, 0810.40.0029, and 0810.40.0026, accessed November 9, 2020.

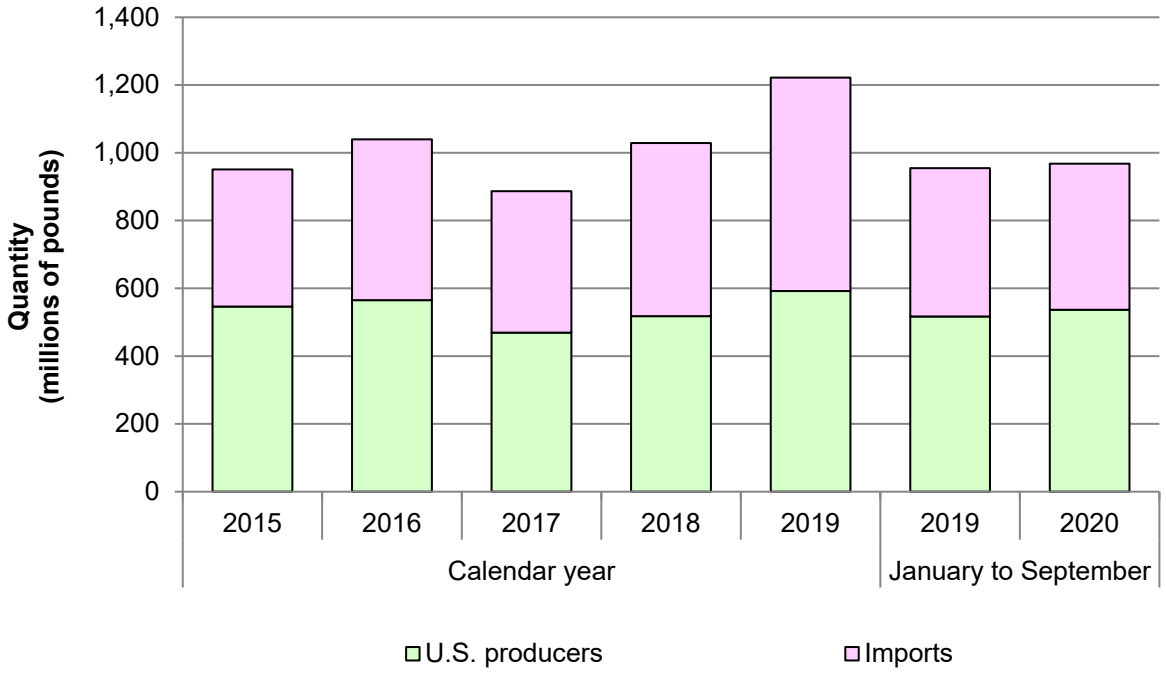
Table IV-2
Blueberries: Market shares, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
Apparent U.S. consumption	950,708	1,039,506	886,432	1,028,600	1,221,772	954,536	967,758
	Share of quantity (percent)						
U.S. producers' U.S. shipments	57.5	54.4	52.9	50.3	48.4	54.2	55.4
U.S. imports net of re-exports from.--							
Argentina	2.5	2.6	2.9	2.3	1.8	0.7	0.4
Canada	21.7	19.6	17.3	16.2	18.3	19.6	17.5
Chile	14.3	17.0	16.9	17.1	12.8	13.1	11.6
Mexico	2.6	3.3	5.8	6.9	7.4	7.2	9.2
Peru	1.2	2.9	3.9	7.0	11.2	5.2	5.9
All other sources	0.2	0.3	0.2	0.2	0.1	0.0	0.1
All import sources	42.5	45.6	47.1	49.7	51.6	45.8	44.6
	Value (1,000 dollars)						
Apparent U.S. consumption	1,575,535	1,636,053	1,672,691	1,943,508	2,191,181	1,565,702	1,552,855
	Share of value (percent)						
U.S. producers' U.S. shipments	43.6	34.6	40.3	34.2	34.5	42.1	44.1
U.S. imports net of re-exports from.--							
Argentina	5.4	6.8	5.2	3.5	2.2	0.6	0.3
Canada	16.1	13.3	12.0	11.6	12.1	14.6	13.2
Chile	22.1	27.5	20.7	22.1	17.0	18.4	15.0
Mexico	8.6	8.8	12.9	14.9	13.1	13.7	16.8
Peru	3.6	8.2	8.6	13.4	20.9	10.5	10.4
All other sources	0.6	0.8	0.4	0.3	0.2	0.0	0.1
All import sources	56.4	65.4	59.7	65.8	65.5	57.9	55.9

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Re-exports (foreign-origin exports using Census Bureau statistics) are deducted from each individual country source based submitted questionnaire experience. Note partial year data for U.S. producers uses the experience of usable U.S. producers' questionnaire data and scaled up by the ratio of coverage for usable questionnaires by NASS/USDA.

Source: Data submitted in response to Commission questionnaires, official U.S. agricultural statistics published by NASS/USDA, official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, 0810.40.0029, 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020, and official U.S. export statistics using schedule B numbers 0811.90.2024, 0811.90.2028, 0810.40.0024, 0810.40.0029, and 0810.40.0026, accessed November 9, 2020.

Figure IV-1
Blueberries: Apparent U.S. consumption, 2015-19, January to September 2019, and January to September 2020



Source: Data submitted in response to Commission questionnaires, official U.S. agricultural statistics published by NASS/USDA, official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, 0810.40.0029, 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020, and official U.S. export statistics using schedule B numbers 0811.90.2024, 0811.90.2028, 0810.40.0024, 0810.40.0029, and 0810.40.0026, accessed November 9, 2020.

Tables IV-3 and IV-4 and figure IV-2 disaggregate the data presented for the quantity, value, and shares of apparent U.S. consumption of fresh or chilled blueberries. To avoid double counting, the data presented for U.S. producers' U.S. shipments of fresh or chilled blueberries are drawn from USDA's fresh production volumes while those for frozen blueberries are drawn from USDA's processed production volumes.[3]

[3] See e.g. USDA NASS, Noncitrus Fruits and Nuts 2019 Summary, May 2020, pp. 26-29 (cultivated and wild blueberries by utilization), p. 95 (definition of processing is "Operations that alter the general state of the commodity, such as canning, cooking, freezing, dehydration, milling, grinding, pasteurization, pickling, juicing, or slicing."). As noted in Part III, processing that does not involve freezing appears to be limited.

Table IV-3
Fresh or chilled blueberries: Apparent U.S. consumption, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
U.S. producers' U.S. shipments	245,838	245,957	245,802	260,623	293,730	277,369	275,287
U.S. imports net of re-exports from.--							
Argentina	18,799	22,728	21,411	19,361	14,657	713	614
Canada	90,607	80,383	69,470	68,525	79,685	79,063	53,081
Chile	108,246	142,662	121,244	140,983	123,789	96,636	83,495
Mexico	24,073	33,514	51,068	69,262	87,526	65,838	86,657
Peru	11,318	29,556	34,695	69,089	130,452	44,471	53,262
All other sources	1,994	2,236	1,297	1,751	1,436	134	582
All import sources	255,037	311,077	299,186	368,970	437,545	286,855	277,692
Apparent U.S. consumption	500,876	557,035	544,988	629,592	731,275	564,224	552,979
	Value (1,000 dollars)						
U.S. producers' U.S. shipments	480,412	451,377	559,452	517,386	638,742	603,164	598,636
U.S. imports net of re-exports from.--							
Argentina	78,868	102,948	80,445	63,666	39,922	2,422	1,347
Canada	112,040	96,757	115,379	114,946	118,697	117,854	86,412
Chile	289,626	373,816	294,847	370,121	320,305	241,608	190,694
Mexico	134,339	143,832	214,528	287,461	284,544	212,217	259,528
Peru	56,074	133,584	144,542	257,198	453,207	159,574	159,073
All other sources	9,263	10,867	5,326	5,936	4,311	309	1,362
All import sources	680,209	861,804	855,069	1,099,328	1,220,987	733,984	698,417
Apparent U.S. consumption	1,160,621	1,313,181	1,414,520	1,616,714	1,859,729	1,337,148	1,297,052

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Re-exports (foreign-origin exports using Census Bureau statistics) are deducted from each individual country source based submitted questionnaire experience. Note partial year data for U.S. producers uses the experience of usable U.S. producers' questionnaire data and scaled up by the ratio of coverage for usable questionnaires by NASS/USDA.

Source: Compiled from official U.S. agricultural statistics published by NASS/USDA, official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, 0810.40.0029, accessed November 6, 2020, and official U.S. export statistics using schedule B numbers 0810.40.0024, 0810.40.0029, and 0810.40.0026, accessed November 9, 2020.

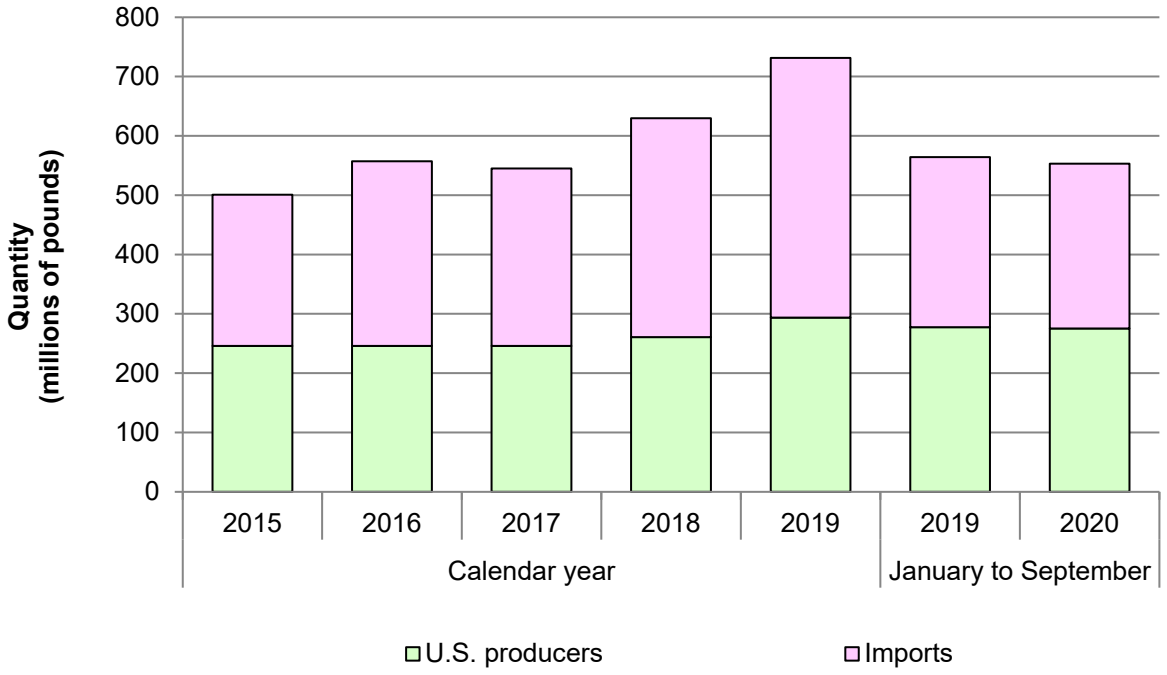
Table IV-4
Fresh or chilled blueberries: Market shares, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
Apparent U.S. consumption	500,876	557,035	544,988	629,592	731,275	564,224	552,979
	Share of quantity (percent)						
U.S. producers' U.S. shipments	49.1	44.2	45.1	41.4	40.2	49.2	49.8
U.S. imports net of re-exports from.--							
Argentina	3.8	4.1	3.9	3.1	2.0	0.1	0.1
Canada	18.1	14.4	12.7	10.9	10.9	14.0	9.6
Chile	21.6	25.6	22.2	22.4	16.9	17.1	15.1
Mexico	4.8	6.0	9.4	11.0	12.0	11.7	15.7
Peru	2.3	5.3	6.4	11.0	17.8	7.9	9.6
All other sources	0.4	0.4	0.2	0.3	0.2	0.0	0.1
All import sources	50.9	55.8	54.9	58.6	59.8	50.8	50.2
	Value (1,000 dollars)						
Apparent U.S. consumption	1,160,621	1,313,181	1,414,520	1,616,714	1,859,729	1,337,148	1,297,052
	Share of value (percent)						
U.S. producers' U.S. shipments	41.4	34.4	39.6	32.0	34.3	45.1	46.2
U.S. imports net of re-exports from.--							
Argentina	6.8	7.8	5.7	3.9	2.1	0.2	0.1
Canada	9.7	7.4	8.2	7.1	6.4	8.8	6.7
Chile	25.0	28.5	20.8	22.9	17.2	18.1	14.7
Mexico	11.6	11.0	15.2	17.8	15.3	15.9	20.0
Peru	4.8	10.2	10.2	15.9	24.4	11.9	12.3
All other sources	0.8	0.8	0.4	0.4	0.2	0.0	0.1
All import sources	58.6	65.6	60.4	68.0	65.7	54.9	53.8

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Re-exports (foreign-origin exports using Census Bureau statistics) are deducted from each individual country source based submitted questionnaire experience. Note partial year data for U.S. producers uses the experience of usable U.S. producers' questionnaire data and scaled up by the ratio of coverage for usable questionnaires by NASS/USDA.

Source: Compiled from official U.S. agricultural statistics published by NASS/USDA, official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, 0810.40.0029, accessed November 6, 2020, and official U.S. export statistics using schedule B numbers 0810.40.0024, 0810.40.0029, and 0810.40.0026, accessed November 9, 2020.

Figure IV-2
Fresh or chilled blueberries: Apparent U.S. consumption, 2015-19, January to September 2019, and January to September 2020



Source: Compiled data submitted in response to Commission questionnaires, from official U.S. agricultural statistics published by NASS/USDA, official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, 0810.40.0029, accessed November 6, 2020, and official U.S. export statistics using schedule B numbers 0810.40.0024, 0810.40.0029, and 0810.40.0026, accessed November 9, 2020.

Tables IV-5 and IV-6 and figure IV-3 disaggregate the data presented for the quantity, value, and shares of apparent U.S. consumption of frozen blueberries. To avoid double counting, the data presented for U.S. producers' U.S. shipments of fresh or chilled blueberries are drawn from USDA's fresh production volumes while those for frozen blueberries are drawn from USDA's processed production volumes.[4]

[4] See e.g. USDA NASS, Noncitrus Fruits and Nuts 2019 Summary, May 2020, pp. 26-29 (cultivated and wild blueberries by utilization), p. 95 (definition of processing is "Operations that alter the general state of the commodity, such as canning, cooking, freezing, dehydration, milling, grinding, pasteurization, pickling, juicing, or slicing."). As noted in Part III, processing that does not involve freezing appears to be limited.

Table IV-5
Frozen blueberries: Apparent U.S. consumption, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
U.S. producers' U.S. shipments	300,436	319,380	223,486	257,142	298,190	239,583	261,323
U.S. imports net of re-exports from.--Argentina	5,085	4,521	4,262	4,005	7,165	6,270	3,233
Canada	115,660	122,997	84,130	97,921	143,831	108,234	115,863
Chile	27,967	33,961	28,749	34,831	32,303	28,661	28,619
Mexico	404	441	477	1,507	2,881	2,530	1,970
Peru	33	81	---	3,286	5,817	4,767	3,572
All other sources	247	1,091	341	314	310	266	199
All import sources	149,396	163,092	117,958	141,865	192,306	150,729	153,456
Apparent U.S. consumption	449,832	482,472	341,444	399,008	490,497	390,312	414,779
	Value (1,000 dollars)						
U.S. producers' U.S. shipments	206,018	114,625	114,592	146,718	116,645	93,719	102,223
U.S. imports net of re-exports from.--Argentina	6,307	8,291	6,183	5,088	8,473	7,498	3,389
Canada	141,959	121,464	85,569	110,375	145,609	110,652	118,133
Chile	59,168	75,528	50,615	59,435	51,691	46,283	42,808
Mexico	909	803	610	1,640	3,306	2,911	2,060
Peru	42	80	---	2,969	5,228	4,256	2,960
All other sources	510	2,080	602	568	500	402	287
All import sources	208,895	208,246	143,578	180,076	214,807	172,002	169,637
Apparent U.S. consumption	414,913	322,871	258,171	326,794	331,452	265,721	271,860

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Re-exports (foreign-origin exports using Census Bureau statistics) are deducted from each individual country source based submitted questionnaire experience. Note partial year data for U.S. producers uses the experience of usable U.S. producers' questionnaire data and scaled up by the ratio of coverage for usable questionnaires by NASS/USDA. NASS data for frozen is based on their "blueberries for processing" the vast majority of which relates to frozen blueberries, however that category also includes some volume of blueberries destined for use in processing into out-of-scope products such as jams, jellies, et cetera.

Source: Compiled from official U.S. agricultural statistics published by NASS/USDA, official U.S. import statistics using HTS statistical reporting numbers 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020, and official U.S. export statistics using schedule B numbers 0811.90.2024, and 0811.90.2028 accessed November 9, 2020.

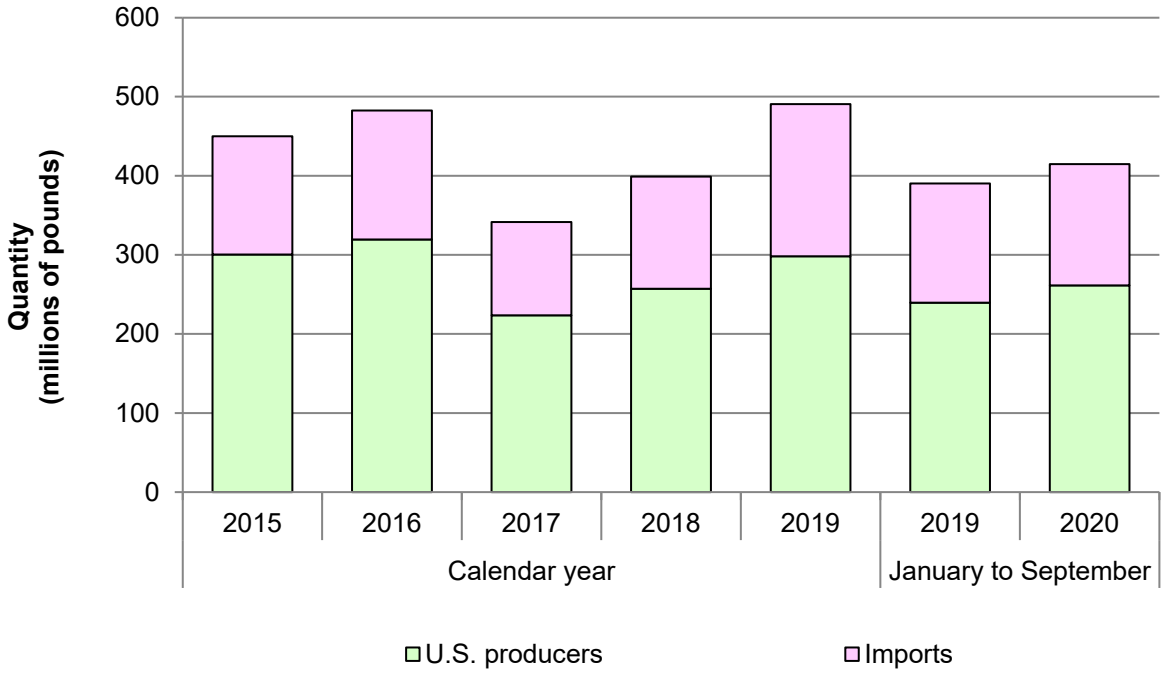
Table IV-6
Frozen blueberries: Market shares, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
Apparent U.S. consumption	449,832	482,472	341,444	399,008	490,497	390,312	414,779
	Share of quantity (percent)						
U.S. producers' U.S. shipments	66.8	66.2	65.5	64.4	60.8	61.4	63.0
U.S. imports net of re-exports from.--							
Argentina	1.1	0.9	1.2	1.0	1.5	1.6	0.8
Canada	25.7	25.5	24.6	24.5	29.3	27.7	27.9
Chile	6.2	7.0	8.4	8.7	6.6	7.3	6.9
Mexico	0.1	0.1	0.1	0.4	0.6	0.6	0.5
Peru	0.0	0.0	---	0.8	1.2	1.2	0.9
All other sources	0.1	0.2	0.1	0.1	0.1	0.1	0.0
All import sources	33.2	33.8	34.5	35.6	39.2	38.6	37.0
	Value (1,000 dollars)						
Apparent U.S. consumption	414,913	322,871	258,171	326,794	331,452	265,721	271,860
	Share of value (percent)						
U.S. producers' U.S. shipments	49.7	35.5	44.4	44.9	35.2	35.3	37.6
U.S. imports net of re-exports from.--							
Argentina	1.5	2.6	2.4	1.6	2.6	2.8	1.2
Canada	34.2	37.6	33.1	33.8	43.9	41.6	43.5
Chile	14.3	23.4	19.6	18.2	15.6	17.4	15.7
Mexico	0.2	0.2	0.2	0.5	1.0	1.1	0.8
Peru	0.0	0.0	---	0.9	1.6	1.6	1.1
All other sources	0.1	0.6	0.2	0.2	0.2	0.2	0.1
All import sources	50.3	64.5	55.6	55.1	64.8	64.7	62.4

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Re-exports (foreign-origin exports using Census Bureau statistics) are deducted from each individual country source based submitted questionnaire experience. Note partial year data for U.S. producers uses the experience of usable U.S. producers' questionnaire data and scaled up by the ratio of coverage for usable questionnaires by NASS/USDA. NASS data for frozen is based on their "blueberries for processing" the vast majority of which relates to frozen blueberries, however that category also includes some volume of blueberries destined for use in processing into out-of-scope products such as jams, jellies, et cetera.

Source: Compiled from official U.S. agricultural statistics published by NASS/USDA, official U.S. import statistics using HTS statistical reporting numbers 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020, and official U.S. export statistics using schedule B numbers 0811.90.2024, and 0811.90.2028 accessed November 9, 2020.

Figure IV-3
Frozen blueberries: Apparent U.S. consumption, 2015-19, January to September 2019, and January to September 2020



Source: Compiled data submitted in response to Commission questionnaires, from official U.S. agricultural statistics published by NASS/USDA, official U.S. import statistics using HTS statistical reporting numbers 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020, and official U.S. export statistics using schedule B numbers 0811.90.2024, and 0811.90.2028 accessed November 9, 2020.

Tables IV-7 and IV-8 provide data regarding monthly U.S. shipments of imports of fresh or chilled blueberries by quantity and share of quantity. The data are compiled from official U.S. import statistics and questionnaire data scaled to match overall U.S. shipments. For additional details regarding data on prior years and specific countries, please see Appendix E in this report.

Table IV-7
Fresh or chilled blueberries: Monthly sources of supply, January 2019 through September 2020

Item	Source of supply					
	U.S. producers	North America	South America	Other	Import sources	Combined
	Quantity (1,000 pounds)					
2019.-- January	***	8,176	62,459	---	70,635	***
February	***	9,902	54,269	---	64,170	***
March	***	17,072	17,137	---	34,210	***
April	***	21,172	805	---	21,977	***
May	***	9,010	98	---	9,108	***
June	***	2,576	85	18	2,680	***
July	***	35,836	345	---	36,181	***
August	***	30,382	4,531	27	34,939	***
September	***	14,140	20,093	39	34,272	***
October	***	5,027	37,559	1	42,587	***
November	***	8,205	44,626	---	52,831	***
December	***	9,094	59,460	---	68,554	***
2020.-- January	***	10,839	55,632	---	66,471	***
February	***	12,484	38,888	---	51,372	***
March	***	20,705	18,021	56	38,782	***
April	***	26,041	171	50	26,262	***
May	***	12,458	77	---	12,534	***
June	***	3,732	148	---	3,879	***
July	***	19,822	1,482	---	21,304	***
August	***	26,718	10,272	---	36,990	***
September	***	10,317	29,021	---	39,339	***

Note: Other imports sources are not shown separately, and U.S. imports are not adjusted for re-exports.

Note: Information originally submitted by *** indicated that the vast majority of reported net sales data ***, accordingly, staff did not include *** sales in this table.

Source: Compiled data submitted in response to Commission questionnaires, official U.S. agricultural statistics published by NASS/USDA, official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, 0810.40.0029, accessed November 6, 2020.

Table IV-8
Fresh or chilled blueberries: Monthly sources of supply, January 2019 through September 2020

Item	Source of supply					
	U.S. producers	North America	South America	Other	Import sources	Combined
	Share of quantity (percent)					
2019.-- January	***	***	***	***	***	100.0
February	***	***	***	***	***	100.0
March	***	***	***	***	***	100.0
April	***	***	***	***	***	100.0
May	***	***	***	***	***	100.0
June	***	***	***	***	***	100.0
July	***	***	***	***	***	100.0
August	***	***	***	***	***	100.0
September	***	***	***	***	***	100.0
October	***	***	***	***	***	100.0
November	***	***	***	***	***	100.0
December	***	***	***	***	***	100.0
2020.-- January	***	***	***	***	***	100.0
February	***	***	***	***	***	100.0
March	***	***	***	***	***	100.0
April	***	***	***	***	***	100.0
May	***	***	***	***	***	100.0
June	***	***	***	***	***	100.0
July	***	***	***	***	***	100.0
August	***	***	***	***	***	100.0
September	***	***	***	***	***	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Other imports sources are not shown separately, and U.S. imports are not adjusted for re-exports.

Source: Compiled data submitted in response to Commission questionnaires, official U.S. agricultural statistics published by NASS/USDA, official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, 0810.40.0029, accessed November 6, 2020.

Figure IV-4
Fresh or chilled blueberries: Monthly sources of supply by quantity, January 2019 through September 2020

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Figure IV-5
Fresh or chilled blueberries: Monthly sources of supply by share of quantity, January 2019 through September 2020

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Tables IV-9 and IV-10 provide data regarding monthly U.S. shipments of imports of frozen blueberries by quantity and share of quantity. The data are compiled from official U.S. import statistics and questionnaire data scaled to match overall U.S. shipments.

Table IV-9
Frozen blueberries: Monthly sources of supply, January 2019 through September 2020

Item	Source of supply					
	U.S. producers	North America	South America	Other	Import sources	Combined
	Quantity (1,000 pounds)					
2019.--						
January	***	12,755	4,346	45	17,146	***
February	***	10,781	3,477	4	14,262	***
March	***	9,711	3,422	47	13,180	***
April	***	16,355	4,112	53	20,520	***
May	***	16,581	7,023	17	23,621	***
June	***	14,984	4,486	12	19,483	***
July	***	15,333	4,830	8	20,172	***
August	***	14,440	4,811	48	19,299	***
September	***	12,053	4,045	23	16,121	***
October	***	16,005	2,322	3	18,329	***
November	***	13,751	1,218	2	14,971	***
December	***	12,197	2,684	2	14,883	***
2020.--						
January	***	13,690	3,102	55	16,846	***
February	***	14,171	2,544	2	16,717	***
March	***	14,686	3,212	18	17,917	***
April	***	13,091	3,543	---	16,634	***
May	***	16,096	6,321	15	22,431	***
June	***	11,886	4,016	10	15,911	***
July	***	12,905	4,742	61	17,708	***
August	***	18,722	5,167	27	23,916	***
September	***	13,656	3,604	12	17,272	***

Note: Other imports sources are not shown separately, and U.S. imports are not adjusted for re-exports.

Source: Compiled data submitted in response to Commission questionnaires and from official U.S. agricultural statistics published by NASS/USDA, official U.S. import statistics using HTS statistical reporting numbers 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020.

Table IV-10
Frozen blueberries: Monthly sources of supply, January 2019 through September 2020

Item	Source of supply					
	U.S. producers	North America	South America	Other	Import sources	Combined
	Share of quantity (percent)					
2019.-- January	***	***	***	***	***	100.0
February	***	***	***	***	***	100.0
March	***	***	***	***	***	100.0
April	***	***	***	***	***	100.0
May	***	***	***	***	***	100.0
June	***	***	***	***	***	100.0
July	***	***	***	***	***	100.0
August	***	***	***	***	***	100.0
September	***	***	***	***	***	100.0
October	***	***	***	***	***	100.0
November	***	***	***	***	***	100.0
December	***	***	***	***	***	100.0
2020.-- January	***	***	***	***	***	100.0
February	***	***	***	***	***	100.0
March	***	***	***	***	***	100.0
April	***	***	***	***	***	100.0
May	***	***	***	***	***	100.0
June	***	***	***	***	***	100.0
July	***	***	***	***	***	100.0
August	***	***	***	***	***	100.0
September	***	***	***	***	***	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Other imports sources are not shown separately, and U.S. imports are not adjusted for re-exports.

Source: Compiled data submitted in response to Commission questionnaires and from official U.S. agricultural statistics published by NASS/USDA, official U.S. import statistics using HTS statistical reporting numbers 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020.

Figure IV-6
Frozen blueberries: Monthly sources of supply by quantity, January 2019 through September 2020

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Figure IV-7
Frozen blueberries: Monthly sources of supply by share of quantity, January 2019 through September 2020

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North American blueberry industries (excluding the United States)

Canada

The Commission issued foreign producers' or exporters' questionnaires to 19 firms believed to produce and/or export blueberries from Canada.[5] Usable responses to the Commission's questionnaire were received from 57 firms.[6] These firms' exports to the United States accounted for approximately 63.2 percent of U.S. imports of blueberries from Canada in 2019. These firms' responses also represent 37.2 percent based on acreage and 27.3 percent of utilized harvest in Canada in 2019 (see also tables IV-14 and IV-15).

According to the Government of Canada, in 2019 blueberries continued to be Canada's top fruit export by volume and value, accounting for 53.4 percent and 65.5 percent of fruit exports, respectively.[7] Canada is the world's second largest producer and third largest exporter of highbush (cultivated) blueberries and lead producer of lowbush (wild) blueberries.[8] Overall, there are an estimated 800 blueberry growers in British Columbia, Western Canada, which produce about 96 percent of Canada's cultivated commercial crop,[9] with additional growers in Ontario, Quebec, and Nova Scotia.

Table IV-11 presents data from Canada's Department of Agriculture and Agri-Food on acreage and utilized production. Canada's Department of Agriculture and Agri-Food states that in 2019, utilized production volumes were 388.3 million pounds.

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[5] These firms were identified through a review of information in published and submitted sources and contained in *** records. The Commission received a number of late foreign producer questionnaire responses well past the due date of November 16, 2020. The usable questionnaire responses were incorporated into the posthearing report.

[6] The Commission contacted firms believed to be foreign producers or exporters of blueberries from Canada, but also received foreign producer questionnaire responses from non-exporting growers in Canada.

[7] "Statistical Overview of the Canadian Fruit Industry," Department of Agriculture and Agri-Food Canada, https://www.agr.gc.ca/eng/horticulture/horticulture-sector-reports/statistical-overview-of-the-canadian-fruit-industry-2019/?id=1564485377504#a1.1, retrieved December 6, 2020.

[8] Ibid.

[9] "Canada: High Bush Blueberry Production in Canada," FAS/USDA GAIN Report CA17048, https://www.fas.usda.gov/data/canada-high-bush-blueberry-production-canada, retrieved February 2, 2021 and "Canada: BC blueberry growers set for one of earliest starts," https://www.freshfruitportal.com/news/2015/05/15/canada-bc-blueberry-growers-set-for-one-of-earliest-starts/, retrieved February 2, 2021.

Table IV-11
Blueberries: Acreage and utilized harvest data in Canada, 2015-19

Item	Calendar year				
	2015	2016	2017	2018	2019
Acreage (acres)	191,876	196,022	191,797	189,474	189,481
Utilized production (1,000 pounds)	386,977	465,596	347,281	339,004	388,342
Yield using utilized production (pounds per acre)	2,017	2,375	1,811	1,789	2,049
Utilized production (1,000 dollars)	213,227	196,104	165,524	195,820	200,787
Utilized production (dollars per pound)	0.55	0.42	0.48	0.58	0.52

Source: Agriculture and Agri-Food Canada (AAFC), Government of Canada, accessed November 18, 2020.

Growing, harvesting, and availability

Table IV-12 presents information on the blueberry operations of the responding producers and exporters in Canada. Producers reported growing blueberries from March through September, and 44 out of 57 producers reported growing in the month of June. Producers reported harvesting blueberries from June through October and 49 out of 57 reported harvesting in August. Fresh or chilled blueberries are available from June to October, but not grown or harvested in November through February. In contrast, producers responded that frozen blueberries are available throughout the year.

Table IV-12
Blueberries: Producers' reported growing, harvest, and availability in the U.S. market, Canada

Reported change	Growing	Harvesting	Availability of fresh or chilled blueberries	Availability of frozen blueberries	Availability of any blueberries
	Number of firms reporting (count)				
January	---	---	---	17	17
February	---	---	---	17	17
March	5	---	---	17	17
April	19	---	---	16	16
May	29	---	---	16	16
June	44	4	4	13	15
July	27	26	16	16	23
August	19	49	19	16	24
September	14	39	17	18	24
October	---	3	5	20	21
November	---	---	---	20	20
December	---	---	---	20	20

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

Changes in operations

As presented in table IV-13 producers in Canada reported several operational and organizational changes since January 1, 2015. Twenty-one out of the 57 responding foreign producers reported new acreage planted, 15 reported weather related events, and a few others reported closings. Ten producers reported acreage replaced with new bushes and 8 reported freezing operation openings.

Table IV-13
Blueberries: Reported changes in operations by producers in Canada, since January 1, 2015

Reported change	Number of firms reporting (count)
New acreage planted	21
Acreage replaced with new bushes	10
Acreage taken out of production	8
Packing operation openings	1
Packing operation closings	4
Freezing operation openings	8
Freezing operation closings	3
Weather related events	15
Disease or pest-related events	2
Other	9
Any change	37

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

Operations on blueberries

Tables IV-14 and IV-15 present information on acreage and harvest from 2015-19, and projections for 2020 and 2021 of the responding producers and exporters in Canada. In 2019, reported overall acreage was 70,541 acres, an increase of 4,940 acres from 65,601 acres in 2015. Year-on-year, overall acreage of blueberries is projected to increase by 4.8 percent in 2020 and then to decrease by 4.2 in 2021.

Table IV-14
Blueberries: Responding producers' acreage in Canada, 2015-19, and projected 2020 and 2021

Item	Actual experience					Projections	
	Calendar year						
	2015	2016	2017	2018	2019	2020	2021
	Acreage (acres)						
Blueberry acreage.-- Bearing	56,125	57,351	58,522	60,063	60,383	62,658	57,456
Non-bearing	9,476	7,300	8,992	8,469	10,158	11,240	13,351
Overall acreage, all blueberries	65,601	64,651	67,514	68,532	70,541	73,898	70,807
	Ratio (percent)						
Coverage, based on acres	34.2	33.0	35.2	36.2	37.2	NA	NA
	Acreage (acres)						
Share of blueberry acreage.-- Bearing	85.6	88.7	86.7	87.6	85.6	84.8	81.1
Non-bearing	14.4	11.3	13.3	12.4	14.4	15.2	18.9
Overall acreage, all blueberries	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: See also table IV-11 for additional acreage information.

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

Responding producers in Canada reported fluctuating volumes for total harvest during 2015-19, with lower projections in 2020 and higher in 2021.

The harvest of cultivated blueberries increased between 2015 and 2019, by 31.1 percent, with highest volumes in 2019. The harvest of cultivated blueberries is projected to decrease by 17.8 percent in 2020 and to increase by 5.0 percent in 2021. The harvest of wild blueberries fluctuated and increased between 2015 and 2019 by 8.8 percent, with highest volumes in 2016.The harvest of wild blueberries is projected to slightly increase in 2020 and grow by 17.8 percent in 2021.

In 2019, fresh or chilled blueberries accounted for 19.7 percent of the total utilized harvest, while the harvest for frozen accounted for 80.3 percent.

According to Canadian wild blueberry producers, wild blueberries bloom every other year; thus, a comparison of wild blueberry acreage and production in 2021 to acreage and production in 2019, would match bloom year to bloom year. With respect to projections, according to ***, most major wild blueberry producers typically calculate the actual average yield for the five previous harvests and then apply it to the number of acres that will bloom the following year; thus estimates for number of acres expected in 2021 were based on the calculated average yield for 2011, 2013, 2015, 2017, and 2019.[10]

[10] Email from ***, January 27, 2021.

Table IV-15
Blueberries: Responding producers' production or harvest in Canada, 2015-19, and projected 2020 and 2021

Item	Actual experience					Projections	
	Calendar year						
	2015	2016	2017	2018	2019	2020	2021
	Harvest (1,000 pounds)						
Cultivated for fresh	15,106	15,621	15,774	16,869	18,406	13,858	15,474
Wild for fresh	1,394	3,541	1,639	2,349	2,463	2,844	2,862
Cultivated for frozen	5,370	6,806	5,527	6,321	8,445	8,200	7,696
Wild for frozen	71,414	113,935	81,145	77,432	76,738	77,067	91,271
Cultivated	20,475	22,427	21,301	23,190	26,850	22,058	23,170
Wild	72,808	117,476	82,784	79,781	79,201	79,911	94,133
For Fresh	16,499	19,162	17,413	19,217	20,869	16,702	18,335
For frozen	76,784	120,742	86,672	83,753	85,183	85,267	98,967
Total utilized harvest	93,283	139,903	104,085	102,971	106,051	101,969	117,303
Waste or not sold	9	21	53	6	2	22	10
Total harvest	93,292	139,924	104,139	102,977	106,053	101,991	117,313
	Ratio (percent)						
Coverage, based on utilized harvest	24.1	30.0	30.0	30.4	27.3	NA	NA
	Share of harvest (percent)						
Cultivated for fresh	16.2	11.2	15.1	16.4	17.4	13.6	13.2
Wild for fresh	1.5	2.5	1.6	2.3	2.3	2.8	2.4
Cultivated for frozen	5.8	4.9	5.3	6.1	8.0	8.0	6.6
Wild for frozen	76.5	81.4	77.9	75.2	72.4	75.6	77.8
Cultivated	21.9	16.0	20.5	22.5	25.3	21.6	19.8
Wild	78.0	84.0	79.5	77.5	74.7	78.4	80.2
For fresh	17.7	13.7	16.7	18.7	19.7	16.4	15.6
For frozen	82.3	86.3	83.2	81.3	80.3	83.6	84.4
Total utilized harvest	100.0	100.0	99.9	100.0	100.0	100.0	100.0
Waste or not sold	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Total harvest	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

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

Table IV-16 presents information on responding producers in Canada’s overall individual quick frozen (IQF) capacity, production, and capacity utilization by product type from 2015-19 and projections for 2020 and 2021.

During 2015-19 overall IQF capacity has grown by 18.7 percent and is projected to grow further in 2020 and 2021. Overall IQF capacity utilization was 77.7 percent in 2015 and increased to 80.2 percent in 2019. Overall IQF capacity utilization is projected to decrease substantially in 2020 and then increase in 2021. In 2019, blueberries made up 98.0 percent of IQF products. However, the share of products other than blueberries for IQF is projected to grow marginally in 2020 and 2021.

Table IV-16
Blueberries: Responding producers' overall IQF capacity and production by product type in Canada, 2015-19, and projected 2020 and 2021

Item	Calendar year					Projections	
	2015	2016	2017	2018	2019	2020	2021
	Quantity (1,000 pounds)						
Overall IQF capacity	272,579	300,488	287,770	301,406	323,503	337,305	338,260
Production using.--							
Own blueberry harvest	30,622	36,849	27,987	23,258	27,429	19,445	38,220
Purchased or other home market blueberries	161,062	214,398	169,568	160,212	195,795	189,313	225,342
Home market blueberries	191,684	251,248	197,555	183,470	223,224	208,758	263,562
Foreign-origin blueberries	17,504	27,666	16,133	4,097	31,042	12,022	19,052
All blueberries	209,188	278,914	213,688	187,567	254,266	220,780	282,614
Products other than blueberries	2,529	3,311	2,112	5,715	5,181	7,293	9,700
All IQF products	211,717	282,225	215,800	193,282	259,447	228,073	292,314
	Share or ratios (percent)						
Overall IQF capacity utilization	77.7	93.9	75.0	64.1	80.2	67.6	86.4
Share of production using.--							
Own blueberry harvest	14.5	13.1	13.0	12.0	10.6	8.5	13.1
Purchased or other home market blueberries	76.1	76.0	78.6	82.9	75.5	83.0	77.1
Home market blueberries	90.5	89.0	91.5	94.9	86.0	91.5	90.2
Foreign-origin blueberries	8.3	9.8	7.5	2.1	12.0	5.3	6.5
All blueberries	98.8	98.8	99.0	97.0	98.0	96.8	96.7
Products other than blueberries	1.2	1.2	1.0	3.0	2.0	3.2	3.3
All IQF products	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

During 2015-19 overall block and other non-IQF freezing capacity has decreased by 8.8 percent and is projected to decrease further in 2020 and 2021. Overall other freezing capacity utilization was 64.2 percent in 2015 and decreased to 58.6 in 2019. Overall block and other non-IQF freezing capacity utilization is projected to slightly increase in 2020 and then decrease in 2021. In 2019, blueberries made up 77.1 percent of block and other non-IQF freezing products. Products other than blueberries for block and other non-IQF freezing capacity have nearly doubled in 2019 compared to 2018 and are projected to grow in 2020 and 2021.

Table IV-17
Blueberries: Responding producers' overall block and other non-IQF freezing capacity and production by product type in Canada, 2015-19, and projected 2020 and 2021

Item	Calendar year					Projections	
	2015	2016	2017	2018	2019	2020	2021
	Quantity (1,000 pounds)						
Overall block and other, non-IQF freezing capacity	41,000	43,150	38,500	39,944	37,377	33,240	33,000
Production using.--							
Own blueberry harvest	425	620	691	820	757	707	650
Purchased or other home market blueberries	21,017	28,838	19,089	20,544	14,555	13,522	11,800
Home market blueberries	21,442	29,459	19,781	21,364	15,312	14,228	12,450
Foreign-origin blueberries	469	436	433	772	1,591	800	1,000
All blueberries	21,910	29,894	20,214	22,136	16,903	15,028	13,450
Products other than blueberries	4,421	4,715	4,925	3,361	5,017	5,062	5,000
All other, non-IQF products	26,332	34,609	25,139	25,497	21,920	20,091	18,450
	Share or ratios (percent)						
Overall other, non-IQF freezing capacity utilization	64.2	80.2	65.3	63.8	58.6	60.4	55.9
Share of production using.--							
Own blueberry harvest	1.6	1.8	2.8	3.2	3.5	3.5	3.5
Purchased or other home market blueberries	79.8	83.3	75.9	80.6	66.4	67.3	64.0
Home market blueberries	81.4	85.1	78.7	83.8	69.9	70.8	67.5
Foreign-origin blueberries	1.8	1.3	1.7	3.0	7.3	4.0	5.4
All blueberries	83.2	86.4	80.4	86.8	77.1	74.8	72.9
Products other than blueberries	16.8	13.6	19.6	13.2	22.9	25.2	27.1
All other, non-IQF products	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

In 2019, 40.0 percent Canada's fresh or chilled blueberries, and 35.8 percent of its frozen blueberries were destined to the United States. Overall, in the same year, the United States accounted for 36.9 percent of Canada's total shipments of blueberries. Shipments to the United States of fresh or chilled blueberries, combined with frozen blueberries were lower in January to September 2020 compared to January to September 2019.

Table IV-18
Blueberries: Producers' and resellers' shipments from Canada, 2015-19, January to September 2019, and January to September 2020 and projection calendar years 2020 and 2021

Item	Actual experience						
	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
Fresh or chilled blueberries.--							
Home market shipments	49,053	73,691	59,972	68,403	64,297	57,879	61,341
Exports to the United States	50,636	44,279	40,092	37,031	43,029	43,016	24,561
Exports to other markets	111	122	204	152	229	213	221
All export shipments	50,746	44,402	40,296	37,183	43,259	43,228	24,782
Total shipments	99,799	118,092	100,268	105,586	107,555	101,107	86,124
Frozen blueberries.--							
Home market shipments	44,139	55,367	49,610	59,835	61,728	41,732	53,100
Exports to the United States	74,634	79,692	72,580	83,318	109,676	72,361	80,960
Exports to other markets	74,942	75,526	130,706	130,656	135,085	84,074	85,631
All export shipments	149,577	155,218	203,287	213,975	244,761	156,434	166,591
Total shipments	193,716	210,585	252,897	273,809	306,489	198,166	219,691
Fresh, chilled, or frozen blueberries.--							
Home market shipments	93,192	129,058	109,582	128,237	126,025	99,611	114,442
Exports to the United States	125,270	123,972	112,672	120,349	152,705	115,376	105,521
Exports to other markets	75,053	75,648	130,911	130,808	135,315	84,286	85,852
All export shipments	200,323	199,620	243,583	251,158	288,020	199,662	191,373
Total shipments	293,515	328,677	353,165	379,395	414,044	299,273	305,815
	Ratios and shares (percent)						
Fresh or chilled blueberries.--							
Home market shipments	49.2	62.4	59.8	64.8	59.8	57.2	71.2
Exports to the United States	50.7	37.5	40.0	35.1	40.0	42.5	28.5
Exports to other markets	0.1	0.1	0.2	0.1	0.2	0.2	0.3
All export shipments	50.8	37.6	40.2	35.2	40.2	42.8	28.8
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Frozen blueberries.--							
Home market shipments	22.8	26.3	19.6	21.9	20.1	21.1	24.2
Exports to the United States	38.5	37.8	28.7	30.4	35.8	36.5	36.9
Exports to other markets	38.7	35.9	51.7	47.7	44.1	42.4	39.0
All export shipments	77.2	73.7	80.4	78.1	79.9	78.9	75.8
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fresh, chilled, or frozen blueberries.--							
Home market shipments	31.8	39.3	31.0	33.8	30.4	33.3	37.4
Exports to the United States	42.7	37.7	31.9	31.7	36.9	38.6	34.5
Exports to other markets	25.6	23.0	37.1	34.5	32.7	28.2	28.1
All export shipments	68.2	60.7	69.0	66.2	69.6	66.7	62.6
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table continued.

Table IV-18--Continued
Blueberries: Producers' and resellers' shipments from Canada, 2015-19, January to September 2019, and January to September 2020 and projection calendar years 2020 and 2021

Item	Projections	
	Calendar year	
	2020	2021
	Quantity (1,000 pounds)	
Fresh or chilled blueberries.--		
Home market shipments	62,516	66,673
Exports to the United States	24,584	37,540
Exports to other markets	221	400
All export shipments	24,806	37,940
Total shipments	87,322	104,613
Frozen blueberries.--		
Home market shipments	59,390	51,955
Exports to the United States	107,971	90,691
Exports to other markets	105,970	74,421
All export shipments	213,941	165,112
Total shipments	273,332	217,067
Fresh, chilled, or frozen blueberries.--		
Home market shipments	121,906	118,627
Exports to the United States	132,555	128,231
Exports to other markets	106,192	74,821
All export shipments	238,747	203,052
Total shipments	360,653	321,679
	Ratios and shares (percent)	
Fresh or chilled blueberries.--		
Home market shipments	71.6	63.7
Exports to the United States	28.2	35.9
Exports to other markets	0.3	0.4
All export shipments	28.4	36.3
Total shipments	100.0	100.0
Frozen blueberries.--		
Home market shipments	21.7	23.9
Exports to the United States	39.5	41.8
Exports to other markets	38.8	34.3
All export shipments	78.3	76.1
Total shipments	100.0	100.0
Fresh, chilled, or frozen blueberries.--		
Home market shipments	33.8	36.9
Exports to the United States	36.8	39.9
Exports to other markets	29.4	23.3
All export shipments	66.2	63.1
Total shipments	100.0	100.0

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

Table IV-19 presents data on reported inventories from producers and exporters in Canada from 2015-19, January to September 2019 and January to September 2020. Canadian producers did not report end-of-period inventories of fresh or chilled blueberries. End-of-period inventories of frozen blueberries by quantity decreased between 2015 and 2019 by *** pounds, or *** percent, and volumes were lower in January-September 2020 than in January-September 2019. The ratio of inventories of frozen blueberries to total shipments was *** percent in 2019 and the ratio of inventories of all blueberries to total shipments was *** percent in the same year.

Table IV-19
Blueberries: Inventories in Canada, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds net packed weight)						
End-of-period inventories.-- Fresh or chilled blueberries	***	***	***	***	***	***	***
Frozen blueberries	***	***	***	***	***	***	***
All blueberries	***	***	***	***	***	***	***
	Ratio (percent)						
Ratio of inventories to total shipments.-- Fresh or chilled blueberries	***	***	***	***	***	***	***
Frozen blueberries	***	***	***	***	***	***	***
All blueberries	***	***	***	***	***	***	***

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

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

Exports

According to GTA, the leading export markets for blueberries from Canada in 2019 are the United States and Germany (table IV-20). During 2019, the United States was the top export market for fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits excluding strawberries and raspberries from Canada, accounting for 68.9 percent, followed by Germany, accounting for 6.9 percent.

Table IV-20
Fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits excluding strawberries and raspberries: Exports from Canada by destination market, 2015-19

Destination market	Calendar year				
	2015	2016	2017	2018	2019
	Quantity (1,000 pounds)				
United States	427,400	399,341	342,271	416,890	397,677
Germany	23,379	23,840	35,758	36,561	39,800
Japan	17,063	19,848	22,939	24,889	24,229
Poland	3,113	4,409	13,539	20,749	19,691
Netherlands	9,262	7,001	12,780	20,361	19,012
China	7,548	7,823	11,815	14,684	16,816
France	6,523	6,482	8,005	6,045	10,871
Belgium	7,288	8,256	10,884	11,052	9,637
United Kingdom	5,096	4,618	5,672	7,291	7,139
All other destination markets	23,821	26,250	30,047	33,944	32,564
All destination markets	530,493	507,867	493,710	592,467	577,435
	Value (1,000 dollars)				
United States	357,591	314,579	288,028	333,888	352,875
Germany	25,534	23,807	25,637	30,092	35,809
Japan	26,723	27,714	26,704	30,020	30,317
Poland	2,376	3,588	8,948	16,976	15,494
Netherlands	7,596	5,569	8,660	14,873	15,317
China	9,768	7,992	10,898	12,844	14,581
France	8,146	7,009	7,388	6,172	10,459
Belgium	9,116	8,774	8,871	10,414	9,822
United Kingdom	4,486	3,884	3,659	5,856	6,259
All other destination markets	28,943	29,727	30,745	35,168	33,669
All destination markets	480,279	432,645	419,536	496,303	524,603

Table continued.

Table IV-20--Continued
Fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits excluding strawberries and raspberries: Exports from Canada by destination market, 2015-19

Destination market	Calendar year				
	2015	2016	2017	2018	2019
	Unit value (dollars per pound)				
United States	0.84	0.79	0.84	0.80	0.89
Germany	1.09	1.00	0.72	0.82	0.90
Japan	1.57	1.40	1.16	1.21	1.25
Poland	0.76	0.81	0.66	0.82	0.79
Netherlands	0.82	0.80	0.68	0.73	0.81
China	1.29	1.02	0.92	0.87	0.87
France	1.25	1.08	0.92	1.02	0.96
Belgium	1.25	1.06	0.81	0.94	1.02
United Kingdom	0.88	0.84	0.65	0.80	0.88
All other destination markets	1.22	1.13	1.02	1.04	1.03
All destination markets	0.91	0.85	0.85	0.84	0.91
	Share of quantity (percent)				
United States	80.6	78.6	69.3	70.4	68.9
Germany	4.4	4.7	7.2	6.2	6.9
Japan	3.2	3.9	4.6	4.2	4.2
Poland	0.6	0.9	2.7	3.5	3.4
Netherlands	1.7	1.4	2.6	3.4	3.3
China	1.4	1.5	2.4	2.5	2.9
France	1.2	1.3	1.6	1.0	1.9
Belgium	1.4	1.6	2.2	1.9	1.7
United Kingdom	1.0	0.9	1.1	1.2	1.2
All other destination markets	4.5	5.2	6.1	5.7	5.6
All destination markets	100.0	100.0	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2019 data. Note both the fresh (0810.40) and frozen (0811.90) subheadings are broader than just blueberries and include fruits such as cranberries among other fruits, the frozen subheading is slightly broader in terms of the miscellaneous additional fruits covered than the fresh subheading, both subheadings expressly exclude strawberries and raspberries.

Note: A comparison of exports to the United States and U.S. imports suggests that blueberries account for approximately 60 percent of the data presented in this table.

Source: Official exports statistics of Canada using HS subheadings 0810.40 and 0811.90 as reported by Statistics Canada in the Global Trade Atlas database, accessed November 17, 2020.

Mexico

The Commission issued foreign producers' or exporters' questionnaires to six firms believed to produce and/or export blueberries from Mexico.[11] Usable responses to the Commission's questionnaire were received from 29 firms. These firms' exports to the United States accounted for approximately 89.7 percent of U.S. imports of blueberries from Mexico in 2019. These firms' responses also represent 90.6 percent based on acreage and 72.2 percent of utilized harvest in Mexico in 2019 (see also tables IV-24 and IV-25).

In Mexico, blueberries are grown in ten states, although most of the production is in Central Mexico, including Jalisco, Michoacán, and Sinaloa, with Jalisco accounting for well over half of the total production.[12] The vast majority of blueberries from Mexico (97 percent) are exported to North America, with the United States accounting for approximately 90 percent of these shipments, and Canada 7 percent.[13] [14]

Table IV-21 presents data from Mexico's Ministry of Agriculture on acreage and utilized production. Between 2015 and 2019, acreage for blueberries increased 117.6 percent from 5,019 acres to 10,920 acres and utilized production also increased more than three-fold from 34.1 million pounds to 108.0 million pounds, respectively.

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[11] These firms were identified through a review of information in published and submitted sources and contained in *** records.

The Commission contacted firms believed to be foreign producers or exporters of blueberries in Mexico, but also received foreign producer questionnaire responses from non-exporting growers in Mexico.

[12] SIAP, Government of Mexico https://nube.siap.gob.mx/cierreagricola/, retrieved December 4, 2020.

[13] "Mexican blueberry exports to rise during 2019-20 season," Fresh Fruit Portal, https://www.freshfruitportal.com/news/2019/11/25/mexican-blueberry-exports-to-rise-during-2019-20-season/, retrieved December 4, 2020.

[14] "Berries: Mexico must urgently diversify its markets," https://blueberriesconsulting.com/en/berries-mexico-debera-diversificar-con-urgencia-sus-mercados/, Blueberries Consulting, retrieved December 4, 2020.

Table IV-21
Blueberries: Acreage and utilized harvest data in Mexico, 2015-19

Item	Calendar year				
	2015	2016	2017	2018	2019
Acreage (acres)	5,019	7,280	8,239	8,923	10,920
Utilized production (1,000 pounds)	34,146	64,081	80,909	88,739	108,023
Yield using utilized production (pounds per acre)	6,804	8,802	9,821	9,945	9,892
Utilized production (1,000 dollars)	55,087	88,476	113,694	109,576	141,005
Utilized production (dollars per pound)	1.61	1.38	1.41	1.23	1.31

Source: SIAP, Government of Mexico, accessed November 18, 2020.

Growing, harvesting, and availability

Table IV-22 presents information on the blueberry operations of the responding producers and exporters in Mexico. Producers reported growing blueberries from January through December, with most of the growth occurring during September through May (11 to 20 out of 29 producers) and low season from June through August. Producers reported harvesting blueberries from January through December, while only 4 reported harvesting in July and August and 19 to 21 reported harvesting from January through April. Fresh or chilled blueberries are available all year, while 3 out 29 reported availability in July and August, in contrast with 20 to 24 out of 29, which reported availability January through May. No frozen blueberries were reported available in any of the months.

Table IV-22
Blueberries: Producers' reported growing, harvest, and availability in the U.S. market, Mexico, 2015-19

Reported change	Growing	Harvesting	Availability of fresh or chilled blueberries	Availability of frozen blueberries	Availability of any blueberries
	Number of firms reporting (count)				
January	19	19	22	---	22
February	18	20	23	---	23
March	16	21	24	---	24
April	14	21	24	---	24
May	11	17	20	---	20
June	4	9	9	---	9
July	5	4	3	---	3
August	8	4	3	---	3
September	12	10	8	---	8
October	18	13	15	---	15
November	20	13	15	---	15
December	20	14	16	---	16

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

Changes in operations

As presented in table IV-23, producers in Mexico reported several operational and organizational changes since January 1, 2015. No producer in Mexico reported packing operation openings or freezing operation openings or closings. Out of the 29 responding producers, 17 reported new acreage planted, 3 reported acreage replaced with new bushes, while 5 producers reported acreage taken out of production and 8 reported packing operations closings.

Table IV-23
Blueberries: Reported changes in operations by producers in Mexico, since January 1, 2015

Reported change	Number of firms reporting (count)
New acreage planted	17
Acreage replaced with new bushes	3
Acreage taken out of production	5
Packing operation openings	---
Packing operation closings	8
Freezing operation openings	---
Freezing operation closings	---
Weather related events	6
Disease or pest-related events	1
Other	2
Any change	23

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

Operations on blueberries

Tables IV-24 and IV-25 present information on acreage, harvest from 2015-19, and projections for 2020 and 2021 of the responding producers and exporters in Mexico. From 2015 to 2019, reported overall acreage of blueberries increased by 4,883 acres from 5,010 acres to 9,893 acres. Year-on-year, overall acreage for blueberries are projected to increase by 37.6 percent in 2020 and by 13.6 percent in 2021.

The American Blueberry Growers Alliance (ABGA) estimates that Biloxi southern high bush is the most widely planted variety in Mexico.[15] ABGA also estimates that there were approximately 22 million imports of live blueberry plants from the United States into Mexico from 2015 to September 2020.[16] In response to ABGA's comments, Mexico's association of berry exporters (Aneberries), affirmed that, per the testimony of Miguel Angel Curiel Mendoza, Vice President and General Manager of Driscoll, only about 15 to 17 million were planted (roughly 3000-3500 hectares).[17] In addition, Aneberries stated that 50 percent of this quantity went to substitute the Biloxi variety, as Mexican growers have been substituting Biloxi bushes in response to market demand for better flavored varieties. The actual net increase, according to Aneberries, is approximately 1500-2000 of planted hectares, or 7.5 to 8.5 million newly cultivated plants during 2018-20.[18]

[15] Hearing transcript, p. 75 (Crosby).
[16] ABGA prehearing brief, Exhibit 27.
[17] Aneberries posthearing brief, p. 8.
[18] Ibid., p. 9.

Table IV-24
Blueberries: Responding producers' acreage in Mexico 2015-19 and projection calendar years 2020 and 2021

Item	Calendar year					Projections	
	2015	2016	2017	2018	2019	2020	2021
	Acreage (acres)						
Blueberry acreage.--							
Bearing	4,106	4,715	6,532	7,737	7,730	12,334	13,830
Non-bearing	904	1,240	710	815	2,163	1,279	1,632
Overall acreage, all blueberries	5,010	5,955	7,242	8,552	9,893	13,613	15,462
	Ratio (percent)						
Coverage, based on acres	99.8	81.8	87.9	95.8	90.6	NA	NA
	Acreage (acres)						
Share of blueberry acreage.--							
Bearing	82.0	79.2	90.2	90.5	78.1	90.6	89.4
Non-bearing	18.0	20.8	9.8	9.5	21.9	9.4	10.6
Overall acreage, all blueberries	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: See also table IV-21 for additional acreage information.

Source: Compiled from data submitted in response to Commission questionnaires and from SIAP, Government of Mexico, accessed November 18, 2020.

Responding producers in Mexico did not report any harvest of wild blueberries during 2015-19. The harvest of cultivated blueberries increased year-on-year during 2015-19, and grew by 179.6 percent between 2015 and 2019, with highest volumes in 2019. The harvest of cultivated blueberries is projected to increase in 2020 and by approximately 47.1 million pounds from 2020 to 2021.

In 2019, fresh or chilled blueberries accounted for 93.5 percent of cultivated blueberries, while the harvest of cultivated blueberries for frozen accounted for 6.3 percent, with 0.2 percent non-utilized.

Table IV-25
Blueberries: Responding producers' production or harvest in Mexico, 2015-19, and projected 2020 and 2021

Item	Calendar year					Projections	
	2015	2016	2017	2018	2019	2020	2021
	Harvest (1,000 pounds)						
Cultivated for fresh	25,281	36,379	50,151	62,606	73,094	81,849	130,002
Wild for fresh	---	---	---	---	---	---	---
Cultivated for frozen	2,626	1,208	2,337	3,204	4,925	4,735	3,651
Wild for frozen	---	---	---	---	---	---	---
Cultivated	27,906	37,587	52,488	65,810	78,019	86,584	133,653
Wild	---	---	---	---	---	---	---
For Fresh	25,281	36,379	50,151	62,606	73,094	81,849	130,002
For frozen	2,626	1,208	2,337	3,204	4,925	4,735	3,651
Total utilized harvest	27,906	37,587	52,488	65,810	78,019	86,584	133,653
Waste or not sold	52	63	86	132	144	181	382
Total harvest	27,958	37,650	52,574	65,942	78,163	86,765	134,035
	Ratio (percent)						
Coverage, based on utilized harvest	81.7	58.7	64.9	74.2	72.2	NA	NA
	Share of harvest (percent)						
Cultivated for fresh	90.4	96.6	95.4	94.9	93.5	94.3	97.0
Wild for fresh	---	---	---	---	---	---	---
Cultivated for frozen	9.4	3.2	4.4	4.9	6.3	5.5	2.7
Wild for frozen	---	---	---	---	---	---	---
Cultivated	99.8	99.8	99.8	99.8	99.8	99.8	99.7
Wild	---	---	---	---	---	---	---
For Fresh	90.4	96.6	95.4	94.9	93.5	94.3	97.0
For frozen	9.4	3.2	4.4	4.9	6.3	5.5	2.7
Total utilized harvest	99.8	99.8	99.8	99.8	99.8	99.8	99.7
Waste or not sold	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Total harvest	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

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

Table IV-26 presents information on responding producers in Mexico's overall individual quick frozen (IQF) capacity, production, and capacity utilization by product type from 2015-19 and projections for 2020 and 2021.

Producers in Mexico did not report IQF capacity in 2015 or 2016. During 2017-19, overall IQF capacity remained constant and is projected to remain unchanged through 2021. Overall IQF capacity utilization was *** percent in 2017 and increased to *** percent in 2019. Overall IQF capacity utilization is projected to increase substantially in 2020 by nearly *** percentage points and again in 2021 by *** percentage points. In 2019, blueberries made up *** percent of IQF products, while other products comprised *** percent and are projected to remain constant in 2020. In 2021, other products are projected to increase their share to *** percent, as products that share production and equipment with blueberries.

Table IV-26
Blueberries: Responding producers' overall IQF capacity and production by product type in Mexico, 2015-19, and projected 2020 and 2021

Item	Calendar year					Projections	
	2015	2016	2017	2018	2019	2020	2021
	Quantity (1,000 pounds)						
Overall IQF capacity	***	***	***	***	***	***	***
Production using.-- Own blueberry harvest	***	***	***	***	***	***	***
Purchased or other home market blueberries	***	***	***	***	***	***	***
Home market blueberries	***	***	***	***	***	***	***
Foreign-origin blueberries	***	***	***	***	***	***	***
All blueberries	***	***	***	***	***	***	***
Products other than blueberries	***	***	***	***	***	***	***
All IQF products	***	***	***	***	***	***	***
	Share or ratios (percent)						
Overall IQF capacity utilization	***	***	***	***	***	***	***
Share of production using.-- Own blueberry harvest	***	***	***	***	***	***	***
Purchased or other home market blueberries	***	***	***	***	***	***	***
Home market blueberries	***	***	***	***	***	***	***
Foreign-origin blueberries	***	***	***	***	***	***	***
All blueberries	***	***	***	***	***	***	***
Products other than blueberries	***	***	***	***	***	***	***
All IQF products	***	***	***	***	***	***	***

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

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

Responding firms from Mexico did not report any capacity or production for block and other non-IQF freezing for blueberries during the period for which data were collected.

Table IV-27 presents producers' and resellers' shipments from Mexico, 2015-19, January to September 2019, and January to September 2020 and projection calendar years 2020 and 2021. In 2019, the United States accounted for *** percent of Mexico's fresh or chilled blueberries total shipments. Overall, in the same year, the United States accounted for 84.9 percent of Mexico's total shipments of blueberries. Shipments of fresh or chilled and frozen blueberries to the United States were higher in January to September 2020 compared to January to September 2019 but are projected to increase by about a third from 2020 to 2021.

Table IV-27
Blueberries: Producers' and resellers' shipments from Mexico, 2015-19, January to September 2019, and January to September 2020 and projection calendar years 2020 and 2021

Item	Actual experience						
	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
Fresh or chilled blueberries.--							
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to other markets	***	***	***	***	***	***	***
All export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
Frozen blueberries.--							
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to other markets	***	***	***	***	***	***	***
All export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
Fresh, chilled, or frozen blueberries.--							
Home market shipments	1,473	1,929	2,564	4,958	6,801	5,731	7,652
Exports to the United States	24,653	33,088	49,276	64,720	84,159	65,714	81,565
Exports to other markets	3,083	4,635	5,209	6,941	8,190	7,277	7,037
All export shipments	27,736	37,724	54,485	71,661	92,349	72,991	88,603
Total shipments	29,209	39,653	57,048	76,619	99,149	78,722	96,255
	Ratios and shares (percent)						
Fresh or chilled blueberries.--							
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to other markets	***	***	***	***	***	***	***
All export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
Frozen blueberries.--							
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to other markets	***	***	***	***	***	***	***
All export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
Fresh, chilled, or frozen blueberries.--							
Home market shipments	5.0	4.9	4.5	6.5	6.9	7.3	7.9
Exports to the United States	84.4	83.4	86.4	84.5	84.9	83.5	84.7
Exports to other markets	10.6	11.7	9.1	9.1	8.3	9.2	7.3
All export shipments	95.0	95.1	95.5	93.5	93.1	92.7	92.1
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table continued.

Table IV-27--Continued
Blueberries: Producers' and resellers' shipments from Mexico, 2015-19, January to September 2019, and January to September 2020 and projection calendar years 2020 and 2021

Item	Projections	
	Calendar year	
	2020	2021
	Quantity (1,000 pounds)	
Fresh or chilled blueberries.--		
Home market shipments	***	***
Exports to the United States	***	***
Exports to other markets	***	***
All export shipments	***	***
Total shipments	***	***
Frozen blueberries.--		
Home market shipments	***	***
Exports to the United States	***	***
Exports to other markets	***	***
All export shipments	***	***
Total shipments	***	***
Fresh, chilled, or frozen blueberries.--		
Home market shipments	9,175	11,740
Exports to the United States	101,788	136,750
Exports to other markets	8,205	15,633
All export shipments	109,993	152,383
Total shipments	119,168	164,124
	Ratios and shares (percent)	
Fresh or chilled blueberries.--		
Home market shipments	***	***
Exports to the United States	***	***
Exports to other markets	***	***
All export shipments	***	***
Total shipments	***	***
Frozen blueberries.--		
Home market shipments	***	***
Exports to the United States	***	***
Exports to other markets	***	***
All export shipments	***	***
Total shipments	***	***
Fresh, chilled, or frozen blueberries.--		
Home market shipments	7.7	7.2
Exports to the United States	85.4	83.3
Exports to other markets	6.9	9.5
All export shipments	92.3	92.8
Total shipments	100.0	100.0

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

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

Table IV-28 presents data on reported inventories from producers and exporters in Mexico from 2015-19, January to September 2019 and January to September 2020. Mexican producers' end-of-period inventories of fresh or chilled blueberries by quantity were higher in 2019 than in 2015 by *** pounds and were lower in January to September 2020 by *** pounds compared to January to September 2019. There were no end-of-period inventories reported of frozen blueberries in 2015 or 2016. End-of-period inventories for frozen blueberries were higher in 2019 than in 2017 by *** pounds. End-of-period inventories of frozen blueberries in January to September 2020 were higher than in January to September 2019 by *** pounds.

The ratio of inventories of fresh or chilled blueberries to total shipments of fresh or chilled blueberries was *** percent in 2019 and the ratio of inventories of frozen blueberries to total shipments was *** percent in the same year.

Table IV-28
Blueberries: Inventories in Mexico, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds net packed weight)						
End-of-period inventories.-- Fresh or chilled blueberries	***	***	***	***	***	***	***
Frozen blueberries	***	***	***	***	***	***	***
All blueberries	***	***	***	***	***	***	***
	Ratio (percent)						
Ratio of inventories to total shipments.-- Fresh or chilled blueberries	***	***	***	***	***	***	***
Frozen blueberries	***	***	***	***	***	***	***
All blueberries	***	***	***	***	***	***	***

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

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

Exports

According to GTA, the leading export markets for fresh, chilled, frozen, or other processed cranberries, blueberries, and other miscellaneous fruits (not including strawberries and raspberries) from Mexico in 2019 are the United States, Canada, and Japan (table IV-29). During 2019, the United States was the top export market for blueberries from Mexico, accounting for 86.5 percent, followed by Canada, accounting for 10.5 percent.

Table IV-29
Fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits excluding strawberries and raspberries: Exports from Mexico by destination market, 2015-19

Destination market	Calendar year				
	2015	2016	2017	2018	2019
	Quantity (1,000 pounds)				
United States	101,898	92,738	97,940	116,582	147,527
Canada	15,816	72,807	11,804	15,014	17,906
Japan	4,051	3,247	3,602	3,820	2,470
Belgium	3,580	4,067	4,216	4,183	2,079
Netherlands	1,534	2,463	1,606	1,818	397
Chile	1,420	1,629	1,234	964	145
France	502	216	711	580	61
United Arab Emirates	1	5	92	139	31
Costa Rica	3	---	33	72	9
All other destination markets	7,835	7,496	7,255	8,761	6
All destination markets	136,639	184,668	128,493	151,932	170,630
	Value (1,000 dollars)				
United States	121,022	116,764	126,073	149,171	215,673
Canada	16,070	14,831	9,434	13,478	15,600
Japan	10,344	10,940	11,826	10,682	8,720
Belgium	3,903	4,145	4,204	4,933	2,031
Netherlands	1,865	2,832	1,456	2,346	294
Chile	1,349	1,334	1,211	951	101
France	602	402	836	908	57
United Arab Emirates	2	14	378	758	134
Costa Rica	1	---	80	185	52
All other destination markets	8,886	9,992	9,348	11,071	28
All destination markets	164,043	161,253	164,847	194,483	242,690

Table continued.

Table IV-29--Continued
Fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits excluding strawberries and raspberries: Exports from Mexico by destination market, 2015-19

Destination market	Calendar year				
	2015	2016	2017	2018	2019
	Unit value (dollars per pound)				
United States	1.19	1.26	1.29	1.28	1.46
Canada	1.02	0.20	0.80	0.90	0.87
Japan	2.55	3.37	3.28	2.80	3.53
Belgium	1.09	1.02	1.00	1.18	0.98
Netherlands	1.22	1.15	0.91	1.29	0.74
Chile	0.95	0.82	0.98	0.99	0.70
France	1.20	1.86	1.18	1.57	0.93
United Arab Emirates	2.15	2.73	4.13	5.46	4.36
Costa Rica	0.39	---	2.45	2.57	5.44
All other destination markets	1.13	1.33	1.29	1.26	4.94
All destination markets	1.20	0.87	1.28	1.28	1.42
	Share of quantity (percent)				
United States	74.6	50.2	76.2	76.7	86.5
Canada	11.6	39.4	9.2	9.9	10.5
Japan	3.0	1.8	2.8	2.5	1.4
Belgium	2.6	2.2	3.3	2.8	1.2
Netherlands	1.1	1.3	1.3	1.2	0.2
Chile	1.0	0.9	1.0	0.6	0.1
France	0.4	0.1	0.6	0.4	0.0
United Arab Emirates	0.0	0.0	0.1	0.1	0.0
Costa Rica	0.0	---	0.0	0.0	0.0
All other destination markets	5.7	4.1	5.6	5.8	0.0
All destination markets	100.0	100.0	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2019 data. Note both the fresh (0810.40) and frozen (0811.90) subheadings are broader than just blueberries and include fruits such as cranberries among other fruits, the frozen subheading is slightly broader in terms of the miscellaneous additional fruits covered than the fresh subheading, both subheadings expressly exclude strawberries and raspberries.

Note: Although official exports statistics from Mexico report exports of 72.8 million pounds to Canada in 2016, Canadian import data from Mexico of fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits, excluding strawberries and raspberries, report importing only 13.4 million pounds.

Note: A comparison of exports to the United States and U.S. imports suggests that blueberries account for approximately 64 percent of the data presented in this table.

Source: Official exports statistics of Mexico using HS subheadings 0810.40 and 0811.90 as reported by Instituto Nacional de Estadística y Geografía (INEGI) (or the National Institute of Statistics and Geography) in the Global Trade Atlas database, accessed November 17, 2020.

South American blueberry industries

Argentina

The Commission issued foreign producers' or exporters' questionnaires to 24 firms believed to produce and/or export blueberries from Argentina.[19] Usable responses to the Commission's questionnaire were received from ten firms. These firms' exports to the United States accounted for approximately 46.5 percent of U.S. imports of blueberries from Argentina in 2019. These firms' responses also represent 57.4 percent based acreage and 49.6 percent of utilized harvest in Argentina in 2019 (see also tables IV-33 and IV-34).

Overall, according to the Argentinean Blueberry Committee, there are approximately 146 growers in Argentina, 54 in the Northwest region in the provinces of Salta, Tucumán, and Catamarca, accounting for approximately 40 percent of production; 54 in the Northeast region in the provinces of Corrientes and Entre Ríos, accounting for more than half of the country's production; and 38 in the Central region in Buenos Aires, accounting for approximately less than 10 percent of production.[20]

Table IV-30 presents data from Argentina's Ministry of Agriculture on acreage, utilized harvest and exports to the world. Argentina's Ministry of Agriculture states that in 2019, Argentina exported 89.5 percent of its blueberry production, compared to 92.3 percent in 2015.

Table IV-30
Blueberries: Acreage, utilized harvest, and total exports to the world data in Argentina, 2015-19

Item	Calendar year				
	2015	2016	2017	2018	2019
Acreage (acres)	6,830	6,830	6,795	6,654	6,350
Utilized production (1,000 pounds)	43,560	45,298	44,480	44,616	39,600
Yield using utilized production (pounds per acre)	6,378	6,632	6,546	6,705	6,236
Utilized production (1,000 dollars)	121,707	139,288	116,962	99,820	76,547
Utilized production (dollars per pound)	2.79	3.07	2.63	2.24	1.93
Exports to the World	40,205	42,313	41,229	39,686	35,457
Share of production exported	92.3	93.4	92.7	89.0	89.5

Source: Data certified by Ministerio de Agricultura, Ganadería y Pesca, Secretaria de Alimentos, Bioeconomía y Desarrollo Regional, Government of Argentina.

[19] These firms were identified through a review of information in published and submitted sources and contained in *** records.

[20] Argentinean Blueberry Committee, "ABC," Season Summary 2018 Report, https://www.argblueberry.com/home/en/estadisticas/, retrieved December 4, 2020.

Growing, harvesting, and availability

Table IV-31 presents information on the blueberry operations of the responding producers and exporters in Argentina. Producers reported growing blueberries from May through December, and 9 out of 10 producers reported growing in the month of August. Producers reported harvesting blueberries from August through December and 9 out of 10 reported harvesting in September, October, and November. Fresh or chilled blueberries are available from September to December, in contrast with availability of frozen, which are available from January through April and then from October through December. No blueberries were reported available during the months of May through August.

Table IV-31
Blueberries: Producers' reported growing, harvest, and availability in the U.S. market, Argentina

Reported change	Growing	Harvesting	Availability of fresh or chilled blueberries	Availability of frozen blueberries	Availability of any blueberries
	Number of firms reporting (count)				
January	---	---	---	3	3
February	---	---	---	3	3
March	---	---	---	1	1
April	---	---	---	1	1
May	2	---	---	---	---
June	5	---	---	---	---
July	7	---	---	---	---
August	9	3	---	---	---
September	6	9	7	---	7
October	3	9	9	1	9
November	3	9	9	2	9
December	2	5	6	3	6

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

Changes in operations

As presented in table IV-32 producers in Argentina reported several operational and organizational changes since January 1, 2015. No producer in Argentina reported freezing operation closings or disease/pest-related events. Out of the 10 responding producers, 6 reported new acreage planted and 7 reported acreage replaced with new bushes, while 3 producers reported acreage taken out of production and packing operations closings.

Table IV-32
Blueberries: Reported changes in operations by producers in Argentina, since January 1, 2015

Reported change	Number of firms reporting (count)
New acreage planted	6
Acreage replaced with new bushes	7
Acreage taken out of production	3
Packing operation openings	1
Packing operation closings	3
Freezing operation openings	1
Freezing operation closings	---
Weather related events	5
Disease or pest-related events	---
Other	2
Any change	10

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

Operations on blueberries

Tables IV-33 and IV-34 present information on acreage, harvest from 2015-19, and projections for 2020 and 2021 of the responding producers and exporters in Argentina. In 2019, reported overall acreage was 3,644 acres, an increase of 604 acres from 3,040 acres in 2015. Similarly, based acres coverage was 57.4 percent, an increase of 12.9 percentage points from 2015. Projections for overall acreage for blueberries for 2020 and 2021 are both lower than in 2019 and are expected to decrease by 3.9 percent and 2.6 percent, respectively.

Table IV-33
Blueberries: Responding producers' acreage in Argentina, 2015-19, and projected 2020 and 2021

Item	Actual experience					Projections	
	Calendar year						
	2015	2016	2017	2018	2019	2020	2021
	Acreage (acres)						
Blueberry acreage.-- Bearing	3,017	3,303	3,476	3,612	3,615	3,500	3,550
Non-bearing	23	84	73	45	29	2	---
Overall acreage, all blueberries	3,040	3,387	3,549	3,657	3,644	3,502	3,550
	Ratio (percent)						
Coverage, based on acres	44.5	49.6	52.2	55.0	57.4	NA	NA
	Acreage (acres)						
Share of blueberry acreage.-- Bearing	99.2	97.5	97.9	98.8	99.2	99.9	100.0
Non-bearing	0.8	2.5	2.1	1.2	0.8	0.1	---
Overall acreage, all blueberries	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: See also table IV-30 for additional acreage information.

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

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

Responding producers in Argentina did not report any harvest of wild blueberries during 2015-19. The harvest of cultivated blueberries fluctuated from 2015 through 2019, peaking in 2018. Projections for harvest of cultivated blueberries in 2020 are lower than in 2019, but are expected to increase from 2020 to 2021 by approximately 2 million pounds. Fresh or chilled blueberries accounted for 72.1 percent of cultivated blueberries in 2019. The harvest of blueberries cultivated for frozen increased steadily from 2015 to 2018, then decreased in 2019. Projections for harvest of cultivated blueberries for frozen in 2020 and 2021 are higher than in 2019, and are expected to increase by approximately 1.4 million pounds. Frozen blueberries accounted for 23.9 percent of total harvested blueberries in 2019.

Table IV-34
Blueberries: Responding producers' production or harvest in Argentina, 2015-19, and projected 2020 and 2021

Item	Actual experience					Projections	
	Calendar year						
	2015	2016	2017	2018	2019	2020	2021
	Harvest (1,000 pounds)						
Cultivated for fresh	15,253	18,466	17,327	17,921	14,756	12,901	14,859
Wild for fresh	---	---	---	---	---	---	---
Cultivated for frozen	2,268	2,318	3,284	5,630	4,892	6,311	6,376
Wild for frozen	---	---	---	---	---	---	---
Cultivated	17,521	20,783	20,611	23,550	19,649	19,211	21,235
Wild	---	---	---	---	---	---	---
For Fresh	15,253	18,466	17,327	17,921	14,756	12,901	14,859
For frozen	2,268	2,318	3,284	5,630	4,892	6,311	6,376
Total utilized harvest	17,521	20,783	20,611	23,550	19,649	19,211	21,235
Waste or not sold	676	745	552	1,081	826	821	806
Total harvest	18,197	21,528	21,163	24,631	20,474	20,032	22,042
	Ratio (percent)						
Coverage, based on utilized harvest	40.2	45.9	46.3	52.8	49.6	NA	NA
	Share of harvest (percent)						
Cultivated for fresh	83.8	85.8	81.9	72.8	72.1	64.4	67.4
Wild for fresh	---	---	---	---	---	---	---
Cultivated for frozen	12.5	10.8	15.5	22.9	23.9	31.5	28.9
Wild for frozen	---	---	---	---	---	---	---
Cultivated	96.3	96.5	97.4	95.6	96.0	95.9	96.3
Wild	---	---	---	---	---	---	---
For Fresh	83.8	85.8	81.9	72.8	72.1	64.4	67.4
For frozen	12.5	10.8	15.5	22.9	23.9	31.5	28.9
Total utilized harvest	96.3	96.5	97.4	95.6	96.0	95.9	96.3
Waste or not sold	3.7	3.5	2.6	4.4	4.0	4.1	3.7
Total harvest	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

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

Table IV-35 presents information on responding producers in Argentina's individual quick frozen (IQF) capacity, production and capacity utilization by product type from 2015-19 and projections for 2020 and 2021.

Between 2015 and 2019, overall IQF capacity grew by *** percent and is projected to grow another *** percent in 2020 and another *** percent in 2021. Overall IQF capacity utilization increased from *** percent to *** percent between 2015 and 2019 and is expected to further increase by *** percentage points in 2020 and *** percentage points in 2021. In 2019, the share of products other than blueberries for IQF has fluctuated and was *** percent of production, while blueberries comprised the remaining *** percent.

Table IV-35
Blueberries: Responding producers' overall IQF capacity and production by product type in Argentina, 2015-19, and projected 2020 and 2021

Item	Calendar year					Projections	
	2015	2016	2017	2018	2019	2020	2021
	Quantity (1,000 pounds)						
Overall IQF capacity	***	***	***	***	***	***	***
Production using.-- Own blueberry harvest	***	***	***	***	***	***	***
Purchased or other home market blueberries	***	***	***	***	***	***	***
Home market blueberries	***	***	***	***	***	***	***
Foreign-origin blueberries	***	***	***	***	***	***	***
All blueberries	***	***	***	***	***	***	***
Products other than blueberries	***	***	***	***	***	***	***
All IQF products	***	***	***	***	***	***	***
	Share or ratios (percent)						
Overall IQF capacity utilization	***	***	***	***	***	***	***
Share of production using.-- Own blueberry harvest	***	***	***	***	***	***	***
Purchased or other home market blueberries	***	***	***	***	***	***	***
Home market blueberries	***	***	***	***	***	***	***
Foreign-origin blueberries	***	***	***	***	***	***	***
All blueberries	***	***	***	***	***	***	***
Products other than blueberries	***	***	***	***	***	***	***
All IQF products	***	***	***	***	***	***	***

Note: ***.

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

Responding firms from Argentina did not report any capacity or production for block and other non-IQF freezing for blueberries during the period for which data were collected.

Table IV-36 presents data on producers' and resellers' shipments from Argentina, 2015-19, January to September 2019, and January to September 2020 and projection calendar years 2020 and 2021. In 2019, the United States accounted for nearly half of Argentina's fresh or chilled as well as its frozen blueberry exports. Shipments of fresh or chilled and frozen blueberries to the United States were lower in January to September 2020 compared to January to September 2019 but are projected to decrease from 2020 to 2021.

Table IV-36
Blueberries: Producers' and resellers' shipments from Argentina, 2015-19, January to September 2019, and January to September 2020 and projection calendar years 2020 and 2021

Item	Actual experience						
	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
Fresh or chilled blueberries.--							
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to other markets	***	***	***	***	***	***	***
All export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
Frozen blueberries.--							
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to other markets	***	***	***	***	***	***	***
All export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
Fresh, chilled, or frozen blueberries.--							
Home market shipments	1,000	933	1,349	1,774	3,293	1,590	1,338
Exports to the United States	11,840	15,874	14,200	15,994	10,456	1,054	1,043
Exports to other markets	6,602	6,100	5,945	6,379	7,239	623	592
All export shipments	18,442	21,973	20,145	22,373	17,695	1,676	1,635
Total shipments	19,442	22,906	21,494	24,147	20,989	3,266	2,973
	Ratios and shares (percent)						
Fresh or chilled blueberries.--							
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to other markets	***	***	***	***	***	***	***
All export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
Frozen blueberries.--							
Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to other markets	***	***	***	***	***	***	***
All export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
Fresh, chilled, or frozen blueberries.--							
Home market shipments	5.1	4.1	6.3	7.3	15.7	48.7	45.0
Exports to the United States	60.9	69.3	66.1	66.2	49.8	32.3	35.1
Exports to other markets	34.0	26.6	27.7	26.4	34.5	19.1	19.9
All export shipments	94.9	95.9	93.7	92.7	84.3	51.3	55.0
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table continued.

Table IV-36--Continued
Blueberries: Producers' and resellers' shipments from Argentina, 2015-19, January to September 2019, and January to September 2020 and projection calendar years 2020 and 2021

Item	Projections	
	Calendar year	
	2020	2021
	Quantity (1,000 pounds)	
Fresh or chilled blueberries.--		
Home market shipments	***	***
Exports to the United States	***	***
Exports to other markets	***	***
All export shipments	***	***
Total shipments	***	***
Frozen blueberries.--		
Home market shipments	***	***
Exports to the United States	***	***
Exports to other markets	***	***
All export shipments	***	***
Total shipments	***	***
Fresh, chilled, or frozen blueberries.--		
Home market shipments	2,177	2,451
Exports to the United States	11,709	11,551
Exports to other markets	5,631	7,103
All export shipments	17,340	18,654
Total shipments	19,517	21,106
	Ratios and shares (percent)	
Fresh or chilled blueberries.--		
Home market shipments	***	***
Exports to the United States	***	***
Exports to other markets	***	***
All export shipments	***	***
Total shipments	***	***
Frozen blueberries.--		
Home market shipments	***	***
Exports to the United States	***	***
Exports to other markets	***	***
All export shipments	***	***
Total shipments	***	***
Fresh, chilled, or frozen blueberries.--		
Home market shipments	11.2	11.6
Exports to the United States	60.0	54.7
Exports to other markets	28.9	33.7
All export shipments	88.8	88.4
Total shipments	100.0	100.0

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

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

Table IV-37 presents data on reported inventories from producers and exporters in Argentina from 2015-19, January to September 2019 and January to September 2020. Argentine producers' end-of-period inventories of fresh or chilled blueberries by quantity were relatively stable and peaked in 2019 at *** pounds, an increase of *** percent from 2015 to 2019, and volumes were higher in January-September 2020 than in January-September 2019. Foreign producers' in Argentina end-of-period inventories of frozen blueberries by quantity increased during in 2015-19, with the highest level at *** pounds in 2018. Inventories of frozen blueberries increased by *** percent from 2015 to 2019, and volumes were higher in January-September 2020 than in January-September 2019. The ratio of inventories of fresh or chilled blueberries to total shipments was *** percent in 2019 and the ratio of inventories of frozen blueberries to total shipments was *** percent in the same year.

Table IV-37
Blueberries: Inventories in Argentina, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds net packed weight)						
End-of-period inventories.-- Fresh or chilled blueberries	***	***	***	***	***	***	***
Frozen blueberries	***	***	***	***	***	***	***
All blueberries	***	***	***	***	***	***	***
	Ratio (percent)						
Ratio of inventories to total shipments.-- Fresh or chilled blueberries	***	***	***	***	***	***	***
Frozen blueberries	***	***	***	***	***	***	***
All blueberries	***	***	***	***	***	***	***

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

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

Exports

According to GTA, the leading export markets for fresh, chilled, frozen, or other processed cranberries, blueberries, and other miscellaneous fruits (not including strawberries and raspberries) from Argentina in 2019 were the United States, Netherlands, and Germany (table IV-38). During 2019, the United States was the top export market for fresh, chilled, frozen, or other processed cranberries, blueberries, and other miscellaneous fruits from Argentina, accounting for 63.5 percent, followed by the Netherlands, accounting for 15.4 percent.

Table IV-38
Fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits excluding strawberries and raspberries: Exports from Argentina by destination market, 2015-19

Destination market	Calendar year				
	2015	2016	2017	2018	2019
	Quantity (1,000 pounds)				
United States	26,325	29,184	26,699	25,081	20,367
Netherlands	1,477	1,819	2,680	2,769	4,955
Germany	2,421	3,043	1,873	2,190	2,167
Spain	106	207	722	990	1,583
Canada	1,873	1,419	1,965	1,273	1,304
United Kingdom	5,364	5,548	4,399	3,403	624
Singapore	164	100	253	300	313
Ireland	469	520	557	278	185
United Arab Emirates	107	183	249	111	156
All other destination markets	1,323	1,550	1,939	891	434
All destination markets	39,627	43,574	41,335	37,286	32,089
	Value (1,000 dollars)				
United States	70,169	82,635	65,860	52,988	36,027
Netherlands	4,180	5,331	7,749	7,768	10,803
Germany	7,089	9,833	5,533	6,015	6,146
Spain	341	721	2,194	2,710	3,650
Canada	4,645	3,843	4,188	3,212	2,946
United Kingdom	15,828	18,619	13,185	9,332	1,352
Singapore	533	262	694	768	642
Ireland	1,674	1,937	1,612	759	339
United Arab Emirates	317	502	695	266	293
All other destination markets	3,193	3,781	4,850	2,561	1,226
All destination markets	107,969	127,464	106,559	86,379	63,425

Table continued.

Table IV-38--Continued
Fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits excluding strawberries and raspberries: Exports from Argentina by destination market, 2015-19

Destination market	Calendar year				
	2015	2016	2017	2018	2019
	Unit value (dollars per pound)				
United States	2.67	2.83	2.47	2.11	1.77
Netherlands	2.83	2.93	2.89	2.81	2.18
Germany	2.93	3.23	2.95	2.75	2.84
Spain	3.23	3.48	3.04	2.74	2.31
Canada	2.48	2.71	2.13	2.52	2.26
United Kingdom	2.95	3.36	3.00	2.74	2.17
Singapore	3.26	2.63	2.74	2.56	2.05
Ireland	3.57	3.72	2.89	2.73	1.83
United Arab Emirates	2.96	2.75	2.79	2.39	1.88
All other destination markets	2.41	2.44	2.50	2.88	2.83
All destination markets	2.72	2.93	2.58	2.32	1.98
	Share of quantity (percent)				
United States	66.4	67.0	64.6	67.3	63.5
Netherlands	3.7	4.2	6.5	7.4	15.4
Germany	6.1	7.0	4.5	5.9	6.8
Spain	0.3	0.5	1.7	2.7	4.9
Canada	4.7	3.3	4.8	3.4	4.1
United Kingdom	13.5	12.7	10.6	9.1	1.9
Singapore	0.4	0.2	0.6	0.8	1.0
Ireland	1.2	1.2	1.3	0.7	0.6
United Arab Emirates	0.3	0.4	0.6	0.3	0.5
All other destination markets	3.3	3.6	4.7	2.4	1.4
All destination markets	100.0	100.0	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2019 data. Note both the fresh (0810.40) and frozen (0811.90) subheadings are broader than just blueberries and include fruits such as cranberries among other fruits, the frozen subheading is slightly broader in terms of the miscellaneous additional fruits covered than the fresh subheading, both subheadings expressly exclude strawberries and raspberries.

Note: A comparison of exports to the United States and U.S. imports suggests that blueberries account for the vast majority of the data presented in this table.

Source: Official exports statistics of Argentina using HS subheadings 0810.40 and 0811.90 as reported by INDEC (National Institute of Statistics & Census, acronym in Spanish) in the Global Trade Atlas database, accessed November 17, 2020.

Chile

The Commission issued foreign producers' or exporters' questionnaires to 51 firms believed to produce and/or export blueberries from Chile.[21] Usable responses to the Commission's questionnaire were received from 39 firms. These firms' exports to the United States accounted for approximately 67.1 percent of U.S. imports of blueberries from Chile in 2019. These firms' responses also represent 37.9 percent based on acreage and 30.1 percent of utilized harvest in Chile in 2019 (see also tables IV-42 and IV-43).

According to the Chilean Fruit Exporters Association (ASOEX), Chile has approximately 1,300 blueberry growers and about 100 exporters, mainly located in central and southern Chile (regions of O'Higgins, Maule, Biobío, Araucanía, Los Ríos, and Los Lagos).[22]

Table IV-39 presents data from Chile's Ministry of Agriculture (Oficina de Estudios y Políticas Agrarias--ODEPA) on acreage, production, exports to the world and share of production exported. According to ODEPA, Chile exported more than 93 percent of its blueberry production during 2015-19.

Table IV-39
Blueberries: Acreage, production and total exports data for Chile, 2015-19

Item	Calendar year				
	2015	2016	2017	2018	2019
Acreage (acres)	36,010	39,042	38,812	39,081	45,400
Production (1,000 pounds)	271,861	330,415	299,508	350,477	353,355
Yield (pounds per acre)	7,550	8,463	7,717	8,968	7,783
Exports to the World	265,295	325,398	279,957	348,639	343,119
Share of production exported	97.6	98.5	93.5	99.5	97.1

Source: Fruit Cadastre ODEPA-CIREN, Government of Chile, provided by party.

[21] These firms were identified through a review of information in published and submitted sources and contained in *** records.

[22] "Chilean Blueberry Volume Expected to Dip in 2018-19," Fruits from Chile, ASOEX website https://fruitsfromchile.com/2018/10/23/chilean-blueberry-volume-expected-to-dip-in-2018-19/, retrieved December 6, 2020 and ASOEX Blueberries Overview , https://fruitsfromchile.com/fruit/blueberries/, retrieved December 6, 2020.

Growing, harvesting, and availability

Table IV-40 presents information on the blueberry operations of the responding producers and exporters in Chile. Producers reported growing blueberries from August through March, and 23 to 25 out of 39 producers responded that most of growing season occurs in November through February. No firm reported growing or harvesting in May through July. Producers reported availability of fresh or chilled from January through May and then from October through December, with 29 out of 39 reporting availability in January. Frozen blueberries are available year-round with only 2 out of 39 companies reporting availability.

Table IV-40
Blueberries: Producers' reported growing, harvest, and availability in the U.S. market, Chile

Reported change	Growing	Harvesting	Availability of fresh or chilled blueberries	Availability of frozen blueberries	Availability of any blueberries
	Number of firms reporting (count)				
January	23	28	29	2	30
February	23	27	28	2	29
March	9	11	22	2	24
April	---	1	3	2	5
May	---	---	1	2	3
June	---	---	---	2	2
July	---	---	---	2	2
August	3	---	---	2	2
September	6	1	---	2	2
October	9	7	3	2	5
November	23	23	14	2	16
December	25	27	26	2	27

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

Changes in operations

As presented in table IV-41 producers in Chile reported several operational and organizational changes since January 1, 2015. 24 out of 39 reported new acreage planted and 17 reported new acreage replaced with new bushes. Out of the 39 responding producers, 15 reported acreage taken out of production and 12 reported plant operation closings. One out of the 39 responding producers reported freezing operations closings.

Table IV-41
Blueberries: Reported changes in operations by producers in Chile, since January 1, 2015

Reported change	Number of firms reporting (count)
New acreage planted	24
Acreage replaced with new bushes	17
Acreage taken out of production	15
Packing operation openings	7
Packing operation closings	12
Freezing operation openings	5
Freezing operation closings	1
Weather related events	9
Disease or pest-related events	7
Other	13
Any change	37

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

Operations on blueberries

Tables IV-42 and IV-43 present information on acreage, harvest from 2015-19, and projections for 2020 and 2021 of the responding producers and exporters in Chile. In 2019, reported overall acreage was 17,204 acres, an increase of 5,414 acres from 11,790 acres in 2015. Similarly, based acres coverage was 37.9 percent in 2019, an increase of 5.2 percentage points from 2015. Projections for overall acreage of blueberries for 2020 and 2021 are both higher than in 2019 and are expected to increase by 0.1 percent and 0.8 percent from 2019, respectively.

Juan Allende, CEO of Hortifrut, S.A., issued a statement that the firm is actively developing and licensing new, proprietary blueberry varieties that are specifically designed to be more attractive for export to the Asian and European markets. According to Allende, these varieties have better taste (sweetness), firmness and size than public varieties (such as Biloxi), and also have a better shelf life (which facilitates long-distance transport).[23]

Table IV-42
Blueberries: Responding producers' acreage in Chile, 2015-19 and projection calendar years 2020 and 2021

Item	Calendar year					Projections	
	2015	2016	2017	2018	2019	2020	2021
	Acreage (acres)						
Blueberry acreage.-- Bearing	9,858	10,472	12,273	13,818	15,945	16,000	16,749
Non-bearing	1,932	2,042	2,235	1,859	1,260	1,220	591
Overall acreage, all blueberries	11,790	12,514	14,508	15,677	17,204	17,221	17,340
	Ratio (percent)						
Coverage, based on acres	32.7	32.1	37.4	40.1	37.9	NA	NA
	Acreage (acres)						
Share of blueberry acreage.-- Bearing	83.6	83.7	84.6	88.1	92.7	92.9	96.6
Non-bearing	16.4	16.3	15.4	11.9	7.3	7.1	3.4
Overall acreage, all blueberries	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: See also table IV-39 for additional acreage information.

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

[23] Coalition respondents' posthearing brief, Attachment 1.

Responding producers in Chile did not report any harvest of wild blueberries during 2015-19. The total quantity of cultivated blueberries increased year-on-year during 2015-19, and grew by 57.2 percent between 2015 and 2019, with highest volumes in 2019. Projections for total utilized harvest of cultivated blueberries in 2020 and 2021 are higher than in 2019, and are expected to increase by approximately 11.9 million pounds in 2020 and by 12.8 million pounds in 2021.

In 2019, fresh or chilled blueberries accounted for 75.3 percent of total harvested blueberries, while the harvest of cultivated blueberries for frozen accounted for 22.6 percent, with a 2.1 percent of non-utilized blueberries.

Table IV-43
Blueberries: Responding producers' production or harvest in Chile, 2015-19, and projected 2020 and 2021

Item	Calendar year					Projections	
	2015	2016	2017	2018	2019	2020	2021
	Harvest (1,000 pounds)						
Cultivated for fresh	51,287	67,123	69,051	76,757	81,961	93,863	104,026
Wild for fresh	---	---	---	---	---	---	---
Cultivated for frozen	16,457	18,149	20,590	21,755	24,554	24,550	27,142
Wild for frozen	---	---	---	---	---	---	---
Cultivated	67,744	85,271	89,641	98,512	106,514	118,413	131,168
Wild	---	---	---	---	---	---	---
For Fresh	51,287	67,123	69,051	76,757	81,961	93,863	104,026
For frozen	16,457	18,149	20,590	21,755	24,554	24,550	27,142
Total utilized harvest	67,744	85,271	89,641	98,512	106,514	118,413	131,168
Waste or not sold	1,036	1,530	2,294	2,924	2,275	1,515	1,646
Total harvest	68,780	86,802	91,935	101,436	108,789	119,928	132,814
	Ratio (percent)						
Coverage, based on utilized harvest	24.9	25.8	29.9	28.1	30.1	NA	NA
	Share of harvest (percent)						
Cultivated for fresh	74.6	77.3	75.1	75.7	75.3	78.3	78.3
Wild for fresh	---	---	---	---	---	---	---
Cultivated for frozen	23.9	20.9	22.4	21.4	22.6	20.5	20.4
Wild for frozen	---	---	---	---	---	---	---
Cultivated	98.5	98.2	97.5	97.1	97.9	98.7	98.8
Wild	---	---	---	---	---	---	---
For Fresh	74.6	77.3	75.1	75.7	75.3	78.3	78.3
For frozen	23.9	20.9	22.4	21.4	22.6	20.5	20.4
Total utilized harvest	98.5	98.2	97.5	97.1	97.9	98.7	98.8
Waste or not sold	1.5	1.8	2.5	2.9	2.1	1.3	1.2
Total harvest	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

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

Table IV-44 presents information on responding producers in Chile's overall individual quick frozen (IQF) capacity, production, and capacity utilization by product type from 2015-19 and projections for 2020 and 2021. During 2015-19 overall IQF capacity has grown by 24.5 percent and is projected to decline in 2020 and 2021. Overall IQF capacity utilization was 78.7 percent in 2015 and decreased to 72.4 percent in 2019. Overall IQF capacity utilization is projected to increase noticeably, especially in 2021. In 2019, blueberries made up 27.4 percent of IQF production. Although the share of production for products for other than blueberries for IQF is projected to increase marginally in 2020, it is projected to decrease to 67.3 percent in 2021.

Table IV-44
Blueberries: Responding producers' overall IQF capacity and production by product type in Chile, 2015-19, and projected 2020 and 2021

Item	Calendar year					Projections	
	2015	2016	2017	2018	2019	2020	2021
	Quantity (1,000 pounds)						
Overall IQF capacity	301,720	317,782	356,537	371,055	375,538	334,105	258,129
Production using.--							
Own blueberry harvest	1,628	2,619	2,924	3,312	3,240	3,992	4,250
Purchased or other home market blueberries	45,336	63,314	63,574	65,154	71,372	64,434	74,606
Home market blueberries	46,964	65,933	66,498	68,466	74,612	68,426	78,856
Foreign-origin blueberries	3,600	340	286	---	---	---	---
All blueberries	50,564	66,273	66,784	68,466	74,612	68,426	78,856
Products other than blueberries	186,976	195,883	202,232	209,067	197,380	184,632	162,602
All IQF products	237,540	262,157	269,016	277,534	271,992	253,057	241,457
	Share or ratios (percent)						
Overall IQF capacity utilization	78.7	82.5	75.5	74.8	72.4	75.7	93.5
Share of production using.--							
Own blueberry harvest	0.7	1.0	1.1	1.2	1.2	1.6	1.8
Purchased or other home market blueberries	19.1	24.2	23.6	23.5	26.2	25.5	30.9
Home market blueberries	19.8	25.2	24.7	24.7	27.4	27.0	32.7
Foreign-origin blueberries	1.5	0.1	0.1	---	---	---	---
All blueberries	21.3	25.3	24.8	24.7	27.4	27.0	32.7
Products other than blueberries	78.7	74.7	75.2	75.3	72.6	73.0	67.3
All IQF products	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Note: Overall IQF capacity reduction in 2021 is largely due to *** merger in 2020, forming a new export company called ***. As a result of the merger, a large portion of non-blueberry freezing capacity did not transfer to *** and stayed with the old owner of ***. Therefore, the projected overall 2021 IQF capacity for ***. According to ***, the IQF facilities that were not transferred to *** are specific for vegetables and cannot be used for blueberries. *** and *** foreign producer questionnaire responses, II-3a and II-11 and email from ***, January 27, 2021.

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

Responding firms from Chile did not report any capacity or production for block and other non-IQF freezing for blueberries during the period for which data were collected.

Table IV-45 presents information on responding producers and resellers' shipments from Chile during 2015-19, January to September 2019, January to September 2020, and projections for 2020 and 2021. In 2019, the United States accounted for 49.9 percent of Chile's fresh or chilled and 33.8 percent of frozen blueberries total shipments. Overall, in the same year, the United States accounted for 45.3 percent of Chile's total shipments of blueberries. Shipments of fresh or chilled and frozen blueberries to the United States were lower in January to September 2020 compared to January to September 2019 but are projected to increase from 2020 to 2021

Table IV-45
Blueberries: Producers' and resellers' shipments from Chile, 2015-19, January to September 2019, and January to September 2020 and projection calendar years 2020 and 2021

Item	Actual experience						
	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
Fresh or chilled blueberries.--							
Home market shipments	10,070	9,544	12,035	14,527	15,901	8,728	10,489
Exports to the United States	80,402	100,645	86,187	88,818	88,351	55,226	49,715
Exports to other markets	37,117	54,338	56,814	67,746	72,793	42,129	43,001
All export shipments	117,519	154,983	143,001	156,564	161,144	97,355	92,715
Total shipments	127,589	164,528	155,036	171,091	177,045	106,083	103,204
Frozen blueberries.--							
Home market shipments	5,013	7,344	9,843	6,378	5,885	4,305	6,697
Exports to the United States	19,810	23,051	17,777	19,654	23,770	21,051	21,435
Exports to other markets	22,792	25,514	33,315	37,564	40,692	33,475	32,674
All export shipments	42,602	48,565	51,092	57,218	64,462	54,527	54,109
Total shipments	47,615	55,909	60,935	63,595	70,346	58,831	60,806
Fresh, chilled, or frozen blueberries.--							
Home market shipments	15,083	16,888	21,878	20,905	21,786	13,033	17,186
Exports to the United States	100,213	123,696	103,964	108,472	112,121	76,277	71,150
Exports to other markets	59,908	79,853	90,130	105,309	113,485	75,604	75,675
All export shipments	160,121	203,549	194,093	213,782	225,606	151,881	146,825
Total shipments	175,204	220,437	215,971	234,687	247,392	164,914	164,010
	Ratios and shares (percent)						
Fresh or chilled blueberries.--							
Home market shipments	7.9	5.8	7.8	8.5	9.0	8.2	10.2
Exports to the United States	63.0	61.2	55.6	51.9	49.9	52.1	48.2
Exports to other markets	29.1	33.0	36.6	39.6	41.1	39.7	41.7
All export shipments	92.1	94.2	92.2	91.5	91.0	91.8	89.8
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Frozen blueberries.--							
Home market shipments	10.5	13.1	16.2	10.0	8.4	7.3	11.0
Exports to the United States	41.6	41.2	29.2	30.9	33.8	35.8	35.3
Exports to other markets	47.9	45.6	54.7	59.1	57.8	56.9	53.7
All export shipments	89.5	86.9	83.8	90.0	91.6	92.7	89.0
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fresh, chilled, or frozen blueberries.--							
Home market shipments	8.6	7.7	10.1	8.9	8.8	7.9	10.5
Exports to the United States	57.2	56.1	48.1	46.2	45.3	46.3	43.4
Exports to other markets	34.2	36.2	41.7	44.9	45.9	45.8	46.1
All export shipments	91.4	92.3	89.9	91.1	91.2	92.1	89.5
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table continued.

Table IV-45--Continued
Blueberries: Producers' and resellers' shipments from Chile, 2015-19, January to September 2019, and January to September 2020 and projection calendar years 2020 and 2021

Item	Projections	
	Calendar year	
	2020	2021
	Quantity (1,000 pounds)	
Fresh or chilled blueberries.--		
Home market shipments	21,009	23,955
Exports to the United States	95,644	109,845
Exports to other markets	83,988	97,167
All export shipments	179,632	207,012
Total shipments	200,641	230,967
Frozen blueberries.--		
Home market shipments	7,834	2,554
Exports to the United States	23,646	33,443
Exports to other markets	36,427	41,711
All export shipments	60,074	75,154
Total shipments	67,908	77,708
Fresh, chilled, or frozen blueberries.--		
Home market shipments	28,843	26,509
Exports to the United States	119,290	143,288
Exports to other markets	120,416	138,878
All export shipments	239,706	282,166
Total shipments	268,549	308,675
	Ratios and shares (percent)	
Fresh or chilled blueberries.--		
Home market shipments	10.5	10.4
Exports to the United States	47.7	47.6
Exports to other markets	41.9	42.1
All export shipments	89.5	89.6
Total shipments	100.0	100.0
Frozen blueberries.--		
Home market shipments	11.5	3.3
Exports to the United States	34.8	43.0
Exports to other markets	53.6	53.7
All export shipments	88.5	96.7
Total shipments	100.0	100.0
Fresh, chilled, or frozen blueberries.--		
Home market shipments	10.7	8.6
Exports to the United States	44.4	46.4
Exports to other markets	44.8	45.0
All export shipments	89.3	91.4
Total shipments	100.0	100.0

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

Table IV-46 presents data on reported inventories from producers and exporters in Chile from 2015-19, January to September 2019 and January to September 2020. Chilean producers' end-of-period inventories of fresh or chilled blueberries by quantity were higher in 2019 than in 2015 by *** pounds and *** were reported in in January to September 2019 or January to September 2020. End-of-period inventories of frozen blueberries were higher in 2019 than in 2015 by *** pounds. End-of-period inventories of frozen blueberries in January to September 2020 were lower than in January to September 2019 by *** pounds. The ratio of inventories of fresh or chilled blueberries to total shipments was *** percent in 2019 and the ratio of inventories of frozen blueberries to total shipments was *** percent in the same year.

Table IV-46
Blueberries: Inventories in Chile, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds net packed weight)						
End-of-period inventories.-- Fresh or chilled blueberries	***	***	***	***	***	***	***
Frozen blueberries	***	***	***	***	***	***	***
All blueberries	***	***	***	***	***	***	***
	Ratio (percent)						
Ratio of inventories to total shipments.-- Fresh or chilled blueberries	***	***	***	***	***	***	***
Frozen blueberries	***	***	***	***	***	***	***
All blueberries	***	***	***	***	***	***	***

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

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

Exports

According to GTA, the leading export markets for fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits, excluding strawberries and raspberries from Chile in 2019 are the United States and the Netherlands (table IV-47). During 2019, the United States was the top export market for fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits, excluding strawberries and raspberries from Chile, accounting for 46.7 percent, followed by the Netherlands, accounting for 11.0 percent.

Table IV-47
Fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits excluding strawberries and raspberries: Exports from Chile by destination market, 2015-19

Destination market	Calendar year				
	2015	2016	2017	2018	2019
	Quantity (1,000 pounds)				
United States	186,055	239,207	195,661	241,805	217,166
Netherlands	32,587	35,732	32,232	39,920	51,091
Germany	4,744	3,614	6,401	9,137	12,557
Spain	197	191	1,091	7,151	1,740
Canada	18,969	23,207	16,456	19,574	19,879
United Kingdom	27,728	35,283	31,880	31,698	35,256
Singapore	836	1,020	796	1,172	1,309
Ireland	510	723	660	231	220
United Arab Emirates	339	210	200	125	82
All other destination markets	86,938	98,363	98,746	121,251	125,326
All destination markets	358,901	437,551	384,122	472,064	464,625
	Value (1,000 dollars)				
United States	313,717	415,321	287,564	393,884	359,965
Netherlands	47,370	58,443	49,135	72,745	92,471
Germany	5,602	4,858	7,760	13,737	20,838
Spain	217	277	1,633	11,911	3,607
Canada	33,579	40,348	24,837	28,421	27,540
United Kingdom	52,145	66,712	56,400	63,430	66,307
Singapore	2,063	2,502	1,867	2,651	2,742
Ireland	999	1,351	1,094	518	489
United Arab Emirates	1,105	516	553	295	173
All other destination markets	141,888	170,864	143,121	179,804	185,059
All destination markets	598,685	761,193	573,962	767,396	759,191

Table continued.

Table IV-47--Continued
Fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits excluding strawberries and raspberries: Exports from Chile by destination market, 2015-19

Destination market	Calendar year				
	2015	2016	2017	2018	2019
	Unit value (dollars per pound)				
United States	1.69	1.74	1.47	1.63	1.66
Netherlands	1.45	1.64	1.52	1.82	1.81
Germany	1.18	1.34	1.21	1.50	1.66
Spain	1.10	1.45	1.50	1.67	2.07
Canada	1.77	1.74	1.51	1.45	1.39
United Kingdom	1.88	1.89	1.77	2.00	1.88
Singapore	2.47	2.45	2.35	2.26	2.10
Ireland	1.96	1.87	1.66	2.24	2.23
United Arab Emirates	3.26	2.46	2.76	2.36	2.10
All other destination markets	1.63	1.74	1.45	1.48	1.48
All destination markets	1.67	1.74	1.49	1.63	1.63
	Share of quantity (percent)				
United States	51.8	54.7	50.9	51.2	46.7
Netherlands	9.1	8.2	8.4	8.5	11.0
Germany	1.3	0.8	1.7	1.9	2.7
Spain	0.1	0.0	0.3	1.5	0.4
Canada	5.3	5.3	4.3	4.1	4.3
United Kingdom	7.7	8.1	8.3	6.7	7.6
Singapore	0.2	0.2	0.2	0.2	0.3
Ireland	0.1	0.2	0.2	0.0	0.0
United Arab Emirates	0.1	0.0	0.1	0.0	0.0
All other destination markets	24.2	22.5	25.7	25.7	27.0
All destination markets	100.0	100.0	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2019 data. Note both the fresh (0810.40) and frozen (0811.90) subheadings are broader than just blueberries and include fruits such as cranberries among other fruits, the frozen subheading is slightly broader in terms of the miscellaneous additional fruits covered than the fresh subheading, both subheadings expressly exclude strawberries and raspberries.

Note: A comparison of exports to the United States and U.S. imports suggests that blueberries account for approximately three-quarters of the data presented in this table.

Source: Official exports statistics of Chile using HS subheadings 0810.40 and 0811.90 as reported by Servicio Nacional de Aduana (National Customs Service in Spanish) in the Global Trade Atlas database, accessed November 17, 2020.

Peru

The Commission issued foreign producers' or exporters' questionnaires to 13 firms believed to produce and/or export blueberries from Peru.[24] Usable responses to the Commission's questionnaire were received from 13 firms. These firms' exports to the United States accounted for approximately 89.7 percent of U.S. imports of blueberries from Peru in 2019. These firms' responses also represent 74.5 percent based on acreage and 78.6 percent of utilized harvest in Peru in 2019 (see also tables IV-51 and IV-52).

Blueberries are produced in the regions of La Libertad, Lambayeque, Ica, Lima, Ancash, and Arequipa. In 2018, the regions of La Libertad and Lambayeque accounted for 96 percent of the national production.[25] The Association of blueberry growers in Peru (ProArándanos) estimates that there are approximately *** growers in Peru, and while there are 85 firms in Peru that export blueberries, 65 firms currently export blueberries from Peru to the United States.[26]

Table IV-48 presents data from Peru's Ministry of Agriculture on acreage, production and exports to the world. Peru's Ministry of Agriculture states that in 2019, Peru exported 85.8 percent of its blueberry production, compared to 95.4 percent in 2015.

Table IV-48
Blueberries: Acreage, production and total exports data for Peru, 2015-19

Item	Calendar year				
	2015	2016	2017	2018	2019
Acreage (acres)	2,861	5,724	11,952	19,618	27,092
Production (1,000 pounds)	23,589	67,608	115,302	186,952	320,993
Yield (pounds per acre)	8,244	11,811	9,647	9,530	11,848
Exports to the World	22,509	60,054	94,816	162,928	275,304
Share of production exported	95.4	88.8	82.2	87.1	85.8

Source: Ministerio de Agricultura y Riego, Government of Peru, accessed November 19, 2020.

[24] These firms were identified through a review of information in published and submitted sources and contained in *** records.

[25] "Blueberry Production in Peru Increased by 796% in Four Years," Fresh Plaza, https://www.freshplaza.com/article/9166874/blueberry-production-in-peru-increased-by-796-in-four-years/#:~:text=According%20to%20the%20latest%20report,average%20price%20at%20origin%20decreased, retrieved December 6, 2020.

[26] Data provided by counsel on behalf of ProArándanos. Email from ***, December 15, 2020.

Growing, harvesting, and availability

Table IV-49 presents information on the blueberry operations of the responding producers and exporters in Peru. Producers reported growing blueberries from January through December, while most producers reported growing from June to September. Producers reported harvesting blueberries from June through February, and no harvest was reported from March through May. Fresh or chilled blueberries are available July through February and all producers from Peru reported availability of fresh or chilled blueberries from August through December. In contrast 1 to 3 producers out of 13 reported availability of frozen blueberries in all months, except May. No blueberries were reported available during the month of May.

Table IV-49
Blueberries: Producers' reported growing, harvest, and availability in the U.S. market, Peru

Reported change	Growing	Harvesting	Availability of fresh or chilled blueberries	Availability of frozen blueberries	Availability of any blueberries
	Number of firms reporting (count)				
January	2	10	12	3	12
February	1	2	7	2	8
March	3	---	---	2	2
April	7	---	---	2	2
May	8	---	---	---	---
June	10	6	---	1	1
July	12	11	2	1	2
August	10	12	13	2	13
September	11	12	13	3	13
October	9	12	13	3	13
November	8	12	13	3	13
December	7	12	13	3	13

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

Changes in operations

As presented in table IV-50 producers in Peru reported several operational and organizational changes since January 1, 2015. No producer in Peru reported packing operation openings or freezing operation closings. 6 out of the 13 responding producers reported packing operation closings, and all 13 responding producers reported new acreage planted.

Table IV-50
Blueberries: Reported changes in operations by producers in Peru, since January 1, 2015

Reported change	Number of firms reporting (count)
New acreage planted	13
Acreage replaced with new bushes	4
Acreage taken out of production	1
Packing operation openings	---
Packing operation closings	6
Freezing operation openings	1
Freezing operation closings	---
Weather related events	4
Disease or pest-related events	4
Other	2
Any change	13

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

Operations on blueberries

Tables IV-51 and IV-52 present information on acreage, harvest from 2015-19, and projections for 2020 and 2021 of the responding producers and exporters in Peru. In 2019, responding producers from Peru reported an overall acreage of 20,182 acres, an increase of 17,570 acres from 2,612 acres in 2015. Based acres coverage was 74.5 percent in 2019, a decrease of 16.8 percentage points from 2015. Projections for overall acreage of blueberries for 2020 and 2021 are both higher than in 2019 and are expected to increase by approximately 1.0 percent from 2020 to 2021.

Peru's blueberry industry's growth is due in part to increases in hectares planted to blueberries (see tables IV-51 and IV-52). Many of the plants were brought into Peru from Chilean nurseries, although the origin of the plant genetics was the United States[27] and improved productivity has also increased the quality and yields in recent years. Some of the varieties used include: O'Neil, Duke, Brigitta, Legacy, Misty, and Biloxi. Biloxi, Misty, and Legacy are considered among the best suited to Peru. Biloxi and Misty are well suited for the coastal zone and Legacy is well suited to higher elevations.[28] While in 2013 Biloxi accounted for the majority of Peruvian blueberries (up to 90 percent), in 2018 Biloxi was just 30 percent of the

[27] "Arándanos en Perú: Situación actual y perspectivas," Redagrícola, September 2017, https://www.redagricola.com/cl/arandanos-en-peru-situacion-actual-y-perspectivas/, retrieved January 19, 2021.
[28] Ibid.

Peruvian production and is estimated to fall to 15 percent in 2021.[29] Growers are planting more the Ventura variety given its higher yields, stability, and bigger size (18mm).[30]

In response to assertions from the American Blueberry Growers' Alliance (ABGA) that Peru has imported approximately 37 million blueberry bushes from the United States to increase production which will be destined to the United States,[31] respondent members of the Blueberry Coalition for Progress and Health ("Coalition"), stated that many of the plants imported are for replants rather than extending existing acreage.[32] The Coalition added that growers in Peru are replacing the Biloxi variety, which is popular in the United States to switch to newer varieties that are focused on demand of the higher-priced Asian markets. In addition, the Coalition stated that because of the growth in non-U.S. markets, particularly in Asia, producers in Peru are investing in varieties that can withstand the ocean freight journey and that have a sweeter flavor profile, which are particularly popular in these markets.[33]

Table IV-51
Blueberries: Responding producers' acreage in Peru, 2015-19 and projection calendar years 2020 and 2021

Item	Calendar year					Projections	
	2015	2016	2017	2018	2019	2020	2021
	Acreage (acres)						
Blueberry acreage.-- Bearing	1,496	2,963	6,183	13,078	15,794	20,638	23,441
Non-bearing	1,116	1,963	2,720	2,259	4,388	2,817	245
Overall acreage, all blueberries	2,612	4,926	8,903	15,337	20,182	23,455	23,686
	Ratio (percent)						
Coverage, based on acres	91.3	102.5	87.2	103.3	74.5	NA	NA
	Acreage (acres)						
Share of blueberry acreage.-- Bearing	57.3	60.2	69.4	85.3	78.3	88.0	99.0
Non-bearing	42.7	39.8	30.6	14.7	21.7	12.0	1.0
Overall acreage, all blueberries	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: See also table IV-48 for additional acreage information.

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

[29] "La major variedad para Perú es una Ventura," Redagrícola, September 2018, https://www.redagricola.com/pe/la-mejor-variedad-para-peru-es-una-ventura-pero-con-mejor-sabor/, retrieved January 19, 2021.

[30] Ibid.

[31] ABGA prehearing brief, Exhibits 26 and 27.

[32] Coalition respondents posthearing brief, p. A-149.

[33] Ibid.

Responding producers in Peru reported increasing volumes for total harvest during 2015-19, and projected continued growth in 2020 and 2021.

The harvest of cultivated blueberries increased between 2015 and 2019, by 1536.4 percent, with highest volumes in 2019. The harvest of cultivated blueberries is projected to maintain an upward trend and achieve a growth of 19.4 percent between 2020 and 2021. Responding producers in Peru did not report any harvest of wild blueberries.

Cultivated blueberries for frozen accounted for between 0.4 to 2.1 percent of all of the total utilized harvest during 2015-19.

Table IV-52
Blueberries: Responding producers' production or harvest in Peru, 2015-19, and projected 2020 and 2021

Item	Calendar year					Projections	
	2015	2016	2017	2018	2019	2020	2021
	Harvest (1,000 pounds)						
Cultivated for fresh	15,418	43,531	65,810	155,080	248,903	312,373	373,257
Wild for fresh	---	---	---	---	---	---	---
Cultivated for frozen	---	370	1,428	596	3,403	7,775	8,944
Wild for frozen	---	---	---	---	---	---	---
Cultivated	15,418	43,902	67,238	155,676	252,306	320,147	382,201
Wild	---	---	---	---	---	---	---
For Fresh	15,418	43,531	65,810	155,080	248,903	312,373	373,257
For frozen	---	370	1,428	596	3,403	7,775	8,944
Total utilized harvest	15,418	43,902	67,238	155,676	252,306	320,147	382,201
Waste or not sold	---	---	39	118	220	399	529
Total harvest	15,418	43,902	67,277	155,794	252,525	320,546	382,730
	Ratio (percent)						
Coverage, based on utilized harvest	65.4	64.9	58.3	83.3	78.6	NA	NA
	Share of harvest (percent)						
Cultivated for fresh	100.0	99.2	97.8	99.5	98.6	97.5	97.5
Wild for fresh	---	---	---	---	---	---	---
Cultivated for frozen	---	0.8	2.1	0.4	1.3	2.4	2.3
Wild for frozen	---	---	---	---	---	---	---
Cultivated	100.0	100.0	99.9	99.9	99.9	99.9	99.9
Wild	---	---	---	---	---	---	---
For Fresh	100.0	99.2	97.8	99.5	98.6	97.5	97.5
For frozen	---	0.8	2.1	0.4	1.3	2.4	2.3
Total utilized harvest	100.0	100.0	99.9	99.9	99.9	99.9	99.9
Waste or not sold	---	---	0.1	0.1	0.1	0.1	0.1
Total harvest	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

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

Table IV-53 presents information on responding producers in Peru's overall individual quick frozen (IQF) capacity, production, and capacity utilization by product type from 2015-19 and projections for 2020 and 2021.

In 2015-19, overall IQF capacity grew by *** percent and is projected to remain constant through 2021. Overall IQF capacity utilization was *** percent in 2015 and increased to *** percent in 2019. Overall IQF capacity utilization is projected to increase by *** percentage points in 2020 and then decrease in 2021. In 2019, blueberries made up an increasing share of the IQF production at *** percent, while the share of products other than blueberries continued to comprise the overwhelming majority of IQF production. However, the share of production for products other than blueberries for IQF are projected to decline to *** percent in 2020 from *** percent in 2019 and further in 2021.

Table IV-53
Blueberries: Responding producers' overall IQF capacity and production by product type in Peru, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					Projections	
	2015	2016	2017	2018	2019	2020	2021
	Quantity (1,000 pounds)						
Overall IQF capacity	***	***	***	***	***	***	***
Production using.-- Own blueberry harvest	***	***	***	***	***	***	***
Purchased or other home market blueberries	***	***	***	***	***	***	***
Home market blueberries	***	***	***	***	***	***	***
Foreign-origin blueberries	***	***	***	***	***	***	***
All blueberries	***	***	***	***	***	***	***
Products other than blueberries	***	***	***	***	***	***	***
All IQF products	***	***	***	***	***	***	***
	Share or ratios (percent)						
Overall IQF capacity utilization	***	***	***	***	***	***	***
Share of production using.-- Own blueberry harvest	***	***	***	***	***	***	***
Purchased or other home market blueberries	***	***	***	***	***	***	***
Home market blueberries	***	***	***	***	***	***	***
Foreign-origin blueberries	***	***	***	***	***	***	***
All blueberries	***	***	***	***	***	***	***
Products other than blueberries	***	***	***	***	***	***	***
All IQF products	***	***	***	***	***	***	***

Note: ***.

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

Responding firms from Peru did not report any capacity or production for block and other non-IQF freezing for blueberries during the period for which data were collected.

Table IV-54 presents data on producers' and resellers' shipments from Peru, 2015-19, January to September 2019, and January to September 2020 and projection calendar years 2020 and 2021. In 2019, the United States accounted for *** percent of Peru's fresh or chilled blueberries total shipments and *** percent of Peru's shipments of frozen blueberries. Overall, in the same year, the United States accounted for 54.4 percent of Peru's total shipments of blueberries. Shipments of fresh or chilled and frozen blueberries to the United States were higher in January to September 2020 compared to January to September 2019 and are projected to increase from 2020 to 2021.

Table IV-54
Blueberries: Producers' and resellers' shipments from Peru, 2015-19, January to September 2019, and January to September 2020 and projection calendar years 2020 and 2021

Item	Actual experience						
	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
Fresh or chilled blueberries.-- Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to other markets	***	***	***	***	***	***	***
All export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
Frozen blueberries.-- Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to other markets	***	***	***	***	***	***	***
All export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
Fresh, chilled, or frozen blueberries.-- Home market shipments	349	539	1,499	9,764	24,281	10,673	9,614
Exports to the United States	7,403	25,157	29,832	76,576	137,618	54,585	54,711
Exports to other markets	6,240	17,447	30,954	55,833	91,028	34,240	41,082
All export shipments	13,643	42,604	60,786	132,409	228,646	88,824	95,793
Total shipments	13,992	43,143	62,285	142,173	252,927	99,497	105,407
	Ratios and shares (percent)						
Fresh or chilled blueberries.-- Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to other markets	***	***	***	***	***	***	***
All export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
Frozen blueberries.-- Home market shipments	***	***	***	***	***	***	***
Exports to the United States	***	***	***	***	***	***	***
Exports to other markets	***	***	***	***	***	***	***
All export shipments	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
Fresh, chilled, or frozen blueberries.-- Home market shipments	2.5	1.2	2.4	6.9	9.6	10.7	9.1
Exports to the United States	52.9	58.3	47.9	53.9	54.4	54.9	51.9
Exports to other markets	44.6	40.4	49.7	39.3	36.0	34.4	39.0
All export shipments	97.5	98.8	97.6	93.1	90.4	89.3	90.9
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table continued.

Table IV-54--Continued
Blueberries: Producers' and resellers' shipments from Peru, 2015-19, January to September 2019, and January to September 2020 and projection calendar years 2020 and 2021

Item	Projections	
	Calendar year	
	2020	2021
	Quantity (1,000 pounds)	
Fresh or chilled blueberries.--		
Home market shipments	***	***
Exports to the United States	***	***
Exports to other markets	***	***
All export shipments	***	***
Total shipments	***	***
Frozen blueberries.--		
Home market shipments	***	***
Exports to the United States	***	***
Exports to other markets	***	***
All export shipments	***	***
Total shipments	***	***
Fresh, chilled, or frozen blueberries.--		
Home market shipments	20,212	21,824
Exports to the United States	155,558	183,334
Exports to other markets	131,616	175,759
All export shipments	287,174	359,093
Total shipments	307,386	380,917
	Ratios and shares (percent)	
Fresh or chilled blueberries.--		
Home market shipments	***	***
Exports to the United States	***	***
Exports to other markets	***	***
All export shipments	***	***
Total shipments	***	***
Frozen blueberries.--		
Home market shipments	***	***
Exports to the United States	***	***
Exports to other markets	***	***
All export shipments	***	***
Total shipments	***	***
Fresh, chilled, or frozen blueberries.--		
Home market shipments	6.6	5.7
Exports to the United States	50.6	48.1
Exports to other markets	42.8	46.1
All export shipments	93.4	94.3
Total shipments	100.0	100.0

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

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

Table IV-55 presents data on reported inventories from producers and exporters in Peru from 2015-19, January to September 2019 and January to September 2020. Peruvian producers' end-of-period inventories of fresh or chilled blueberries by quantity were at their highest levels in 2018 at *** pounds, an increase of *** percent from 2015 by *** pounds and were higher in January to September 2020 by *** pounds compared to January to September 2019. End-of-period inventories reported for frozen blueberries were also at their highest levels in 2018 and were higher in January to September 2020 than in January to September 2019 by approximately *** pounds.

The ratio of inventories of fresh or chilled blueberries to total shipments was *** percent in 2019 and the ratio of inventories of frozen blueberries to total shipments was *** percent in the same year.

Table IV-55
Blueberries: Inventories in Peru, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds net packed weight)						
End-of-period inventories.-- Fresh or chilled blueberries	***	***	***	***	***	***	***
Frozen blueberries	***	***	***	***	***	***	***
All blueberries	***	***	***	***	***	***	***
	Ratio (percent)						
Ratio of inventories to total shipments.-- Fresh or chilled blueberries	***	***	***	***	***	***	***
Frozen blueberries	***	***	***	***	***	***	***
All blueberries	***	***	***	***	***	***	***

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

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

Exports

According to GTA, the leading export markets for fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits, excluding strawberries and raspberries from Peru in 2019 are the United States and the Netherlands (table IV-56). During 2019, the United States was the top export market for fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits, excluding strawberries and raspberries from Peru, accounting for 47.3 percent, followed by the Netherlands, accounting for 17.6 percent.

Table IV-56
Fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits excluding strawberries and raspberries: Exports from Peru by destination market, 2015-19

Destination market	Calendar year				
	2015	2016	2017	2018	2019
	Quantity (1,000 pounds)				
United States	51,440	66,686	75,535	145,708	209,834
Netherlands	13,704	23,780	36,504	48,417	77,975
United Kingdom	4,221	10,878	13,847	23,491	29,525
China	---	493	9,023	10,400	22,776
Canada	7,516	8,769	13,615	17,433	17,287
Belgium	4,088	4,983	7,450	9,610	12,810
Germany	710	4,743	7,129	11,472	10,268
Japan	9,527	8,717	9,569	8,036	10,074
Poland	518	2,433	3,767	6,693	9,398
All other destination markets	29,187	33,259	37,570	47,537	44,076
All destination markets	120,911	164,741	214,009	328,796	444,023
	Value (1,000 dollars)				
United States	97,927	161,910	235,234	334,656	510,336
Netherlands	35,127	65,799	110,321	136,423	199,748
United Kingdom	13,622	38,625	43,371	65,667	73,520
China	---	767	33,306	33,669	70,515
Canada	8,192	12,430	17,677	25,800	20,762
Belgium	4,594	4,793	6,784	9,000	12,887
Germany	828	5,040	5,091	10,557	8,325
Japan	13,812	11,675	12,462	11,169	14,697
Poland	556	2,272	2,870	4,950	6,740
All other destination markets	37,407	45,645	55,031	78,099	71,717
All destination markets	212,066	348,957	522,147	709,989	989,248

Table continued.

Table IV-56--Continued
Fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits excluding strawberries and raspberries: Exports from Peru by destination market, 2015-19

Destination market	Calendar year				
	2015	2016	2017	2018	2019
	Unit value (dollars per pound)				
United States	1.90	2.43	3.11	2.30	2.43
Netherlands	2.56	2.77	3.02	2.82	2.56
United Kingdom	3.23	3.55	3.13	2.80	2.49
China	---	1.55	3.69	3.24	3.10
Canada	1.09	1.42	1.30	1.48	1.20
Belgium	1.12	0.96	0.91	0.94	1.01
Germany	1.17	1.06	0.71	0.92	0.81
Japan	1.45	1.34	1.30	1.39	1.46
Poland	1.07	0.93	0.76	0.74	0.72
All other destination markets	1.28	1.37	1.46	1.64	1.63
All destination markets	1.75	2.12	2.44	2.16	2.23
	Share of quantity (percent)				
United States	42.5	40.5	35.3	44.3	47.3
Netherlands	11.3	14.4	17.1	14.7	17.6
United Kingdom	3.5	6.6	6.5	7.1	6.6
China	---	0.3	4.2	3.2	5.1
Canada	6.2	5.3	6.4	5.3	3.9
Belgium	3.4	3.0	3.5	2.9	2.9
Germany	0.6	2.9	3.3	3.5	2.3
Japan	7.9	5.3	4.5	2.4	2.3
Poland	0.4	1.5	1.8	2.0	2.1
All other destination markets	24.1	20.2	17.6	14.5	9.9
All destination markets	100.0	100.0	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2019 data. Note both the fresh (0810.40) and frozen (0811.90) subheadings are broader than just blueberries and include fruits such as cranberries among other fruits, the frozen subheading is slightly broader in terms of the miscellaneous additional fruits covered than the fresh subheading, both subheadings expressly exclude strawberries and raspberries.
Source: GTIS/GTA database.

Note: A comparison of exports to the United States and U.S. imports suggests that blueberries account for approximately three-quarters of the data presented in this table.

Source: Official exports statistics of Peru using HS subheadings 0810.40 and 0811.90 as reported by Superintendencia Nacional de Aduanas (SUNAT) (or the National Customs Overseer) in the Global Trade Atlas database, accessed November 17, 2020.

Combined operations of principal North and South American blueberry industries in countries other than the United States

Tables IV-57 through 62 present summary data on product operations of the reporting North and South American blueberry industries producing countries other than the United States.

Table IV-57
Blueberries: Responding producers' acreage in all major U.S. supplier countries, 2015-19 and projection calendar years 2020 and 2021

Item	Calendar year					Projections	
	2015	2016	2017	2018	2019	2020	2021
	Acreage (acres)						
Blueberry acreage.-- Bearing	74,602	78,804	86,986	98,308	103,467	115,130	115,026
Non-bearing	13,451	12,629	14,730	13,447	17,998	16,558	15,819
Overall acreage, all blueberries	88,053	91,433	101,716	111,755	121,464	131,689	130,845
	Ratio (percent)						
Coverage, based on acres	---	---	---	---	---	NA	NA
	Acreage (acres)						
Share of blueberry acreage.-- Bearing	84.7	86.2	85.5	88.0	85.2	87.4	87.9
Non-bearing	15.3	13.8	14.5	12.0	14.8	12.6	12.1
Overall acreage, all blueberries	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

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

Table IV-58
Blueberries: Responding producers' production or harvest in all major U.S. supplier countries, 2015-19, and projected 2020 and 2021

Item	Calendar year					Projections	
	2015	2016	2017	2018	2019	2020	2021
	Harvest (1,000 pounds)						
Cultivated for fresh	122,345	181,120	218,111	329,233	437,120	514,843	637,617
Wild for fresh	1,394	3,541	1,639	2,349	2,463	2,844	2,862
Cultivated for frozen	26,720	28,851	33,167	37,505	46,218	51,570	53,810
Wild for frozen	71,414	113,935	81,145	77,432	76,738	77,067	91,271
Cultivated	149,065	209,971	251,278	366,738	483,338	566,413	691,427
Wild	72,808	117,476	82,784	79,781	79,201	79,911	94,133
For Fresh	123,738	184,660	219,750	331,582	439,582	517,687	640,479
For frozen	98,134	142,786	114,312	114,938	122,957	128,637	145,081
Total utilized harvest	221,872	327,447	334,062	446,519	562,539	646,324	785,560
Waste or not sold	1,774	2,360	3,025	4,261	3,465	2,939	3,374
Total harvest	223,646	329,806	337,087	450,780	566,004	649,263	788,934
	Share of harvest (percent)						
Cultivated for fresh	54.7	54.9	64.7	73.0	77.2	79.3	80.8
Wild for fresh	0.6	1.1	0.5	0.5	0.4	0.4	0.4
Cultivated for frozen	11.9	8.7	9.8	8.3	8.2	7.9	6.8
Wild for frozen	31.9	34.5	24.1	17.2	13.6	11.9	11.6
Cultivated	66.7	63.7	74.5	81.4	85.4	87.2	87.6
Wild	32.6	35.6	24.6	17.7	14.0	12.3	11.9
For Fresh	55.3	56.0	65.2	73.6	77.7	79.7	81.2
For frozen	43.9	43.3	33.9	25.5	21.7	19.8	18.4
Total utilized harvest	99.2	99.3	99.1	99.1	99.4	99.5	99.6
Waste or not sold	0.8	0.7	0.9	0.9	0.6	0.5	0.4
Total harvest	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Table IV-59
Blueberries: Responding producers' overall IQF capacity and production by product type in all major U.S. supplier countries, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					Projections	
	2015	2016	2017	2018	2019	2020	2021
	Quantity (1,000 pounds)						
Overall IQF capacity	634,265	680,636	756,674	785,328	815,923	791,576	717,656
Production using.--							
Own blueberry harvest	33,258	40,712	33,235	32,429	36,580	34,171	53,115
Purchased or other home market blueberries	206,961	278,284	234,219	227,471	270,347	258,667	301,745
Home market blueberries	240,219	318,995	267,454	259,900	306,927	292,838	354,860
Foreign-origin blueberries	21,104	28,006	16,419	4,097	31,042	12,022	19,052
All blueberries	261,323	347,002	283,873	263,997	337,969	304,860	373,913
Products other than blueberries	202,329	214,708	239,145	261,096	250,780	254,041	244,013
All IQF products	463,652	561,710	523,018	525,093	588,749	558,901	617,926
	Share or ratios (percent)						
Overall IQF capacity utilization	73.1	82.5	69.1	66.9	72.2	70.6	86.1
Share of production using.--							
Own blueberry harvest	7.2	7.2	6.4	6.2	6.2	6.1	8.6
Purchased or other home market blueberries	44.6	49.5	44.8	43.3	45.9	46.3	48.8
Home market blueberries	51.8	56.8	51.1	49.5	52.1	52.4	57.4
Foreign-origin blueberries	4.6	5.0	3.1	0.8	5.3	2.2	3.1
All blueberries	56.4	61.8	54.3	50.3	57.4	54.5	60.5
Products other than blueberries	43.6	38.2	45.7	49.7	42.6	45.5	39.5
All IQF products	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Table IV-60
Blueberries: Responding producers' overall block and other non-IQF freezing capacity and production by product type in all major U.S. supplier countries, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
Overall other, non-IQF freezing capacity	68,101	75,726	80,931	82,216	84,883	78,250	78,644
Production using.--							
Own blueberry harvest	425	620	691	820	757	707	650
Purchased or other home market blueberries	21,017	28,838	19,089	20,544	14,555	13,522	11,800
Home market blueberries	21,442	29,459	19,781	21,364	15,312	14,228	12,450
Foreign-origin blueberries	469	436	433	772	1,591	800	1,000
All blueberries	21,910	29,894	20,214	22,136	16,903	15,028	13,450
Products other than blueberries	18,313	27,069	35,055	34,662	41,163	35,876	37,104
All other, non-IQF products	40,223	56,963	55,269	56,798	58,065	50,905	50,554
	Share or ratios (percent)						
Overall other, non-IQF freezing capacity utilization	59.1	75.2	68.3	69.1	68.4	65.1	64.3
Share of production using.--							
Own blueberry harvest	1.1	1.1	1.3	1.4	1.3	1.4	1.3
Purchased or other home market blueberries	52.3	50.6	34.5	36.2	25.1	26.6	23.3
Home market blueberries	53.3	51.7	35.8	37.6	26.4	28.0	24.6
Foreign-origin blueberries	1.2	0.8	0.8	1.4	2.7	1.6	2.0
All blueberries	54.5	52.5	36.6	39.0	29.1	29.5	26.6
Products other than blueberries	45.5	47.5	63.4	61.0	70.9	70.5	73.4
All other, non-IQF products	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: The data in this table include block and other non-IQF freezing capacity and production reported by growers/freezers in ***. However, only growers/freezers in Canada reported using non-IQF freezing for blueberries (see table IV-17).

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

Table IV-61
Blueberries: Producers' and resellers' shipments from all major U.S. supplier countries, 2015-19, January to September 2019, and January to September 2020 and projection calendar years 2020 and 2021

Item	Actual experience						
	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
Fresh or chilled blueberries.--							
Home market shipments	61,339	86,085	76,764	98,073	112,037	83,217	89,299
Exports to the United States	173,937	218,002	217,331	278,583	358,752	216,817	208,128
Exports to other markets	53,029	81,924	98,869	136,545	177,562	83,150	91,142
All export shipments	226,966	299,927	316,200	415,128	536,315	299,968	299,270
Total shipments	288,305	386,012	392,964	513,201	648,351	383,185	388,569
Frozen blueberries.--							
Home market shipments	49,758	63,262	60,108	67,564	70,149	47,421	60,933
Exports to the United States	95,442	103,785	92,613	107,529	138,307	96,188	105,861
Exports to other markets	97,857	101,758	164,279	168,727	177,694	118,880	119,096
All export shipments	193,300	205,543	256,892	276,255	316,000	215,068	224,958
Total shipments	243,057	268,804	317,000	343,820	386,150	262,488	285,890
Fresh, chilled, or frozen blueberries.--							
Home market shipments	111,097	149,347	136,872	165,638	182,186	130,638	150,232
Exports to the United States	269,379	321,787	309,944	386,112	497,059	313,005	313,990
Exports to other markets	150,886	183,682	263,148	305,272	355,256	202,030	210,238
All export shipments	420,265	505,469	573,092	691,383	852,315	515,035	524,228
Total shipments	531,362	654,817	709,964	857,021	1,034,501	645,673	674,460
	Ratios and shares (percent)						
Fresh or chilled blueberries.--							
Home market shipments	21.3	22.3	19.5	19.1	17.3	21.7	23.0
Exports to the United States	60.3	56.5	55.3	54.3	55.3	56.6	53.6
Exports to other markets	18.4	21.2	25.2	26.6	27.4	21.7	23.5
All export shipments	78.7	77.7	80.5	80.9	82.7	78.3	77.0
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Frozen blueberries.--							
Home market shipments	20.5	23.5	19.0	19.7	18.2	18.1	21.3
Exports to the United States	39.3	38.6	29.2	31.3	35.8	36.6	37.0
Exports to other markets	40.3	37.9	51.8	49.1	46.0	45.3	41.7
All export shipments	79.5	76.5	81.0	80.3	81.8	81.9	78.7
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fresh, chilled, or frozen blueberries.--							
Home market shipments	20.9	22.8	19.3	19.3	17.6	20.2	22.3
Exports to the United States	50.7	49.1	43.7	45.1	48.0	48.5	46.6
Exports to other markets	28.4	28.1	37.1	35.6	34.3	31.3	31.2
All export shipments	79.1	77.2	80.7	80.7	82.4	79.8	77.7
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table continued.

Table IV-61--Continued
Blueberries: Producers' and resellers' shipments from all major U.S. supplier countries, 2015-19, January to September 2019, and January to September 2020 and projection calendar years 2020 and 2021

Item	Projections	
	Calendar year	
	2020	2021
	Quantity (1,000 pounds)	
Fresh or chilled blueberries.--		
Home market shipments	113,448	124,802
Exports to the United States	380,539	469,132
Exports to other markets	223,865	291,353
All export shipments	604,404	760,485
Total shipments	717,852	885,288
Frozen blueberries.--		
Home market shipments	68,865	56,350
Exports to the United States	140,362	134,023
Exports to other markets	148,194	120,841
All export shipments	288,556	254,864
Total shipments	357,421	311,214
Fresh, chilled, or frozen blueberries.--		
Home market shipments	182,314	181,152
Exports to the United States	520,901	603,155
Exports to other markets	372,059	412,194
All export shipments	892,960	1,015,349
Total shipments	1,075,273	1,196,501
	Ratios and shares (percent)	
Fresh or chilled blueberries.--		
Home market shipments	15.8	14.1
Exports to the United States	53.0	53.0
Exports to other markets	31.2	32.9
All export shipments	84.2	85.9
Total shipments	100.0	100.0
Frozen blueberries.--		
Home market shipments	19.3	18.1
Exports to the United States	39.3	43.1
Exports to other markets	41.5	38.8
All export shipments	80.7	81.9
Total shipments	100.0	100.0
Fresh, chilled, or frozen blueberries.--		
Home market shipments	17.0	15.1
Exports to the United States	48.4	50.4
Exports to other markets	34.6	34.4
All export shipments	83.0	84.9
Total shipments	100.0	100.0

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

Table IV-62
Blueberries: Inventories in all major U.S. supplier countries, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds net packed weight)						
End-of-period inventories.-- Fresh or chilled blueberries	2,015	3,397	1,964	7,702	2,798	1,689	3,494
Frozen blueberries	198,419	291,402	265,431	204,017	183,401	268,166	190,984
All blueberries	200,434	294,798	267,395	211,719	186,199	269,854	194,478
	Ratio (percent)						
Ratio of inventories to total shipments.-- Fresh or chilled blueberries	0.7	0.9	0.5	1.5	0.4	0.3	0.7
Frozen blueberries	81.6	108.4	83.7	59.3	47.5	76.6	50.1
All blueberries	37.7	45.0	37.7	24.7	18.0	31.3	21.6

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

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

Other blueberry-producing regions[34]

The industry in Poland

Poland is the fourth largest source of global exports of blueberries based on quantity and including intra-EU trade (table IV-63).[35] Poland is the EU's second largest blueberry producer.[36] In 2018, Poland produced 25,301 metric tons (mt) (55,779 thousand pounds) of blueberries on 8,089 hectares of land with an average yield of 3.2 mt (6.9 thousand pounds) per hectare.[37] Poland produces both wild blueberries and cultivated blueberries.[38]

The industry in the Netherlands

The Netherlands is the fifth leading source of global exports of blueberries based on quantity and including intra-EU trade (table IV-63), although a significant portion are likely re-exports to other EU members of blueberries that were produced in other countries, e.g., in 2017 around 40 percent of the 9.8 thousand mt (21,605 thousand pounds) of fresh blueberries imported into the Netherlands were destined for re-exports.[39] In 2018, the Netherlands

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[34] Although these countries are significant global exporters, they are not major suppliers to the United States. The share of the U.S. apparent consumption of blueberries originating from all non-subject countries combined fell from 0.3 percent in 2016 to 0.1 percent in 2019 (table IV-2).

[35] Trade data may include non-blueberry exports. Exports include those under HS 0810.40 (cranberries, blueberries, and other fruits of the genus *Vacciniun*, fresh) and 0811.90 (Fruit, Nesoi, and nuts, uncooked or cooked by steaming or boiling in water, whether or not containing added sweetening, frozen.

[36] *Fresh Plaza*, "Blueberry Cultivation Increasingly Popular in Poland," August 9, 2019. https://www.freshplaza.com/article/9132113/blueberry-cultivation-increasingly-popular-in-poland/#:~:text=According%20to%20Eurostat%2C%20in%202018,4%2C000%20to%20over%2025%2C000%20tons.

[37] Yield is averaged from 2015 to 2018. FAOS, FAOSTAT Production database (Crops) (accessed December 7, 2020. http://www.fao.org/faostat/en/#data/QC.

[38] Berrymark indicates that Poland is a source for wild European blueberries and for cultivated blueberries. Berrymark, Product Range, Berries (accessed December 8, 2020). https://www.berrymark.be/productrange/berries/.

[39] Trade data may include non-blueberry exports. Exports include those under HS 0810.40 (cranberries, blueberries, and other fruits of the genus *Vacciniun*, fresh) and 0811.90 (Fruit, Nesoi, and nuts, uncooked or cooked by steaming or boiling in water, whether or not containing added sweetening, frozen; International Blueberry Organization, "Netherlands: Blueberry Sales in Supermarkets Continue to Grow," August 1, 2018. https://www.internationalblueberry.org/2018/08/01/netherlands-blueberry-sales-in-supermarkets-continue-to-grow/.

produced 10,257 mt (22,613 thousand pounds) of blueberries on 934 hectares of land.[40] Farm sizes average 7.5 hectares and yields average 11.0 mt (24.2 thousand pounds) per hectare.[41] Dutch blueberry production is primarily cultivated blueberries (highbush) and growers use different blueberry varieties such as the Aurora, Draper, Duke, and Liberty to extend the harvest season.[42]

The industry in Spain

Spain is the seventh largest source of global exports of blueberries based on quantity and including intra-EU trade (table IV-63).[43] Spain is the EU's leading blueberry producer and is developing production to meet spring demand.[44] In 2018, Spain produced 43,516 mt (95,936 thousand pounds) of blueberries on 3,722 hectares of land with an average yield of 11.3 mt (25.8 thousand pounds) per hectare.[45] Spanish blueberry production consists primarily of cultivated blueberries (highbush), with 95 percent of production located in the Southeast province of Huelva.

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[40] FAOS, FAOSTAT Production database (Crops) (accessed December 7, 2020). http://www.fao.org/faostat/en/#data/QC.

[41] Yield is averaged from 2015 to 2018. FAOS, FAOSTAT Production database (Crops) (accessed December 7, 2020. http://www.fao.org/faostat/en/#data/QC; International Blueberry Organization, "Netherlands: Blueberry Sales in Supermarkets Continue to Grow," August 1, 2018 https://www.internationalblueberry.org/2018/08/01/netherlands-blueberry-sales-in-supermarkets-continue-to-grow/.

[42] Rabobank, *Global Farmers*, "A Crush on the Dutch Blueberry," January 11, 2018. https://www.globalfarmers.com/publiccontent/a-crush-on-the-dutch-blueberry.

[43] Trade data may include non-blueberry exports. Exports include those under HS 0810.40 (cranberries, blueberries, and other fruits of the genus *Vaccinium*, fresh) and 0811.90 (Fruit, Nesoi, and nuts, uncooked or cooked by steaming or boiling in water, whether or not containing added sweetening, frozen.

[44] Park, Kristen and Roberta Cook, "Blueberries: Is Supply Developing More Rapidly than Demand?" April 2018, 2. https://dyson.cornell.edu/wp-content/uploads/sites/5/2019/02/smart-marketing-2018-04.pdf.

[45] Yield is averaged from 2015 to 2018. FAOS, FAOSTAT Production database (Crops) (accessed December 7, 2020. http://www.fao.org/faostat/en/#data/QC.

The industry in China

China is the tenth largest source of global exports of blueberries based on quantity (table IV-63).[46] In 2018, China produced 180,000 mt (396,832 thousand pounds) of blueberries, which is up from 114,905 mt (253,322 thousand pounds) on 46,891 hectares in 2017.[47] More than 70 percent of domestic blueberry production is consumed fresh.[48] Chinese production is primarily cultivated (highbush) blueberries.

The industry in Belgium

Belgium is the eleventh largest source of global exports of blueberries based on quantity and including intra-EU trade (table IV-63), although these are likely mostly re-exports of blueberries produced in other countries.[49] Belgium's domestic production appears to be relatively small (reportedly around 50 hectares in 2016).[50] Belgium is a significant blueberry importer, with imports of 64,578 mt (142,370 thousand pounds) valued at $162.0 million.[51]

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[46] Trade data may include non-blueberry exports. Exports include those under HS 0810.40 (cranberries, blueberries, and other fruits of the genus *Vaccinium*, fresh) and 0811.90 (Fruit, Nesoi, and nuts, uncooked or cooked by steaming or boiling in water, whether or not containing added sweetening, frozen.

[47] USDA, FAS, *New to Market Product Report – Fresh Blueberries*, June 15, 2020, 3; Produce Report, "2017 China Blueberry Annual Report," December 27, 2017. https://www.producereport.com/article/2017-china-blueberry-annual-report-released-i.

[48] USDA, FAS, *New to Market Product Report – Fresh Blueberries*, June 15, 2020, 2.

[49] Trade data may include non-blueberry exports. Exports include those under HS 0810.40 (cranberries, blueberries, and other fruits of the genus *Vaccinium*, fresh) and 0811.90 (Fruit, Nesoi, and nuts, uncooked or cooked by steaming or boiling in water, whether or not containing added sweetening, frozen.

[50] *Fresh Plaza*, "Belgium Can't Keep Up with Growing Blueberry Consumption," June 24, 2016. https://www.freshplaza.com/article/2159799/belgium-can-t-keep-up-with-growing-blueberry-consumption/.

[51] Imports include HS 0810.40 (cranberries, blueberries, and other fruits of the genus *Vaccinium*, fresh) and 0811.90 (Fruit, Nesoi, and nuts, uncooked or cooked by steaming or boiling in water, whether or not containing added sweetening, frozen). IHS Markit, GTA database, HTS 0810.40 and 0811.90 (accessed December 8, 2020).

The industry in South Africa

South Africa is the twenty-second largest source of global exports of blueberries based on quantity.[52] In the 2019/20 marketing year, South Africa produced 18,000 mt (39,683 thousand pounds) of blueberries on 2,400 hectares of land with an average yield of around 7.5 mt (1.7 thousand pounds) per hectare.[53] South African blueberry production consists primarily of three varieties: Southern Highbush, Northern Highbush, and Rabbiteye.[54]

Table IV-63 presents summary data global exports by reporting countries on fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits, excluding strawberries and raspberries from 2015 to 2019.

[52] South Africa accounted for 1.8 percent of global exports of HS 0810.40 (cranberries, blueberries, and other fruits of the genus *Vaccinium*, fresh) and 0811.90 (Fruit, Nesoi, and nuts, uncooked or cooked by steaming or boiling in water, whether or not containing added sweetening, frozen) in 2019. IHS Markit, GTA database, HTS 0810.40 and 0811.90 (accessed December 7, 2020).

[53] USDA, FAS, *South African Blueberry Industry Continues Strong Growth*, June 30, 2020, 2-3. https://www.fas.usda.gov/data/south-africa-south-african-blueberry-industry-continues-strong-growth.

[54] USDA, FAS, *The Budding Blueberry Industry in South Africa*, October 5, 2017, 2. https://gain.fas.usda.gov/Recent%20GAIN%20Publications/The%20Budding%20Blueberry%20Industry%20in%20South%20Africa_Pretoria_South%20Africa%20-%20Republic%20of_10-5-2017.pdf.

Table IV-63
Fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits excluding strawberries and raspberries: Global exports by reporting country, 2015-19

Reporting exporter	Calendar year					Rank
	2015	2016	2017	2018	2019	
	Quantity (1,000 pounds)					Based on quantity (Number)
United States	251,272	273,677	258,299	237,405	292,405	6
Leading suppliers to the United States.--						
Argentina	39,627	43,574	41,335	37,286	32,089	25
Canada	530,493	507,867	493,710	592,467	577,435	1
Chile	305,028	369,949	327,904	401,253	395,345	3
Mexico	136,639	184,668	128,493	151,932	170,630	8
Peru	120,911	164,731	214,005	328,796	444,023	2
Subtotal, leading suppliers to the United States	1,132,697	1,270,788	1,205,447	1,511,735	1,619,523	NA
Additional global exporters.--						
Poland	328,985	336,241	336,167	328,228	369,965	4
Netherlands	151,601	201,957	234,914	248,779	327,433	5
Spain	92,407	107,411	133,341	152,237	177,021	7
Costa Rica	108,421	94,701	129,128	134,760	149,693	9
China	144,200	143,295	140,395	136,367	149,073	10
Belgium	100,164	96,334	93,401	99,232	107,562	11
Belarus	80,659	105,914	79,816	98,759	103,961	12
All other exporters	974,529	1,034,694	1,130,960	1,142,421	1,130,481	NA
Subtotal, additional global exporters	1,980,966	2,120,547	2,278,123	2,340,783	2,515,190	NA
All reporting countries	3,364,935	3,665,013	3,741,869	4,089,922	4,427,118	NA

Table continued.

Table IV-63--Continued
Fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits excluding strawberries and raspberries: Global exports by reporting country, 2015-19

Reporting exporter	Calendar year					Rank
	2015	2016	2017	2018	2019	
	Value (1,000 dollars)					Based on value (Number)
United States	342,903	355,616	348,363	364,235	420,104	5
Leading suppliers to the United States.--						
Argentina	107,969	127,464	106,559	86,379	63,425	21
Canada	480,279	432,645	419,536	496,303	524,603	4
Chile	598,685	761,193	573,962	767,396	759,191	2
Mexico	164,043	161,253	164,847	194,483	242,690	8
Peru	212,066	348,957	522,147	709,989	989,248	1
Subtotal, leading suppliers to the United States	1,563,043	1,831,511	1,787,052	2,254,551	2,579,157	NA
Additional global exporters.--						
Poland	239,872	236,284	281,072	309,252	316,599	7
Netherlands	258,290	376,682	437,968	523,173	647,055	3
Spain	243,088	318,881	329,030	421,513	402,532	6
Costa Rica	69,262	63,258	79,719	78,903	80,854	17
China	101,735	92,285	89,161	96,855	113,983	13
Belgium	107,798	108,908	115,625	139,899	143,934	11
Belarus	33,325	35,656	27,198	57,049	59,432	22
All other exporters	1,015,492	1,115,079	1,319,588	1,577,691	1,673,500	NA
Subtotal, additional global exporters	2,068,863	2,347,035	2,679,361	3,204,334	3,437,889	NA
All reporting countries	3,974,810	4,534,163	4,814,775	5,823,120	6,437,150	NA

Table continued.

Table IV-63--Continued
Fresh, chilled, frozen, or other processed cranberries, blueberries and other miscellaneous fruits excluding strawberries and raspberries: Global exports by reporting country, 2015-19

Reporting exporter	Calendar year				
	2015	2016	2017	2018	2019
	Unit value (dollars per pound)				
United States	1.36	1.30	1.35	1.53	1.44
Leading suppliers to the United States.--					
Argentina	2.72	2.93	2.58	2.32	1.98
Canada	0.91	0.85	0.85	0.84	0.91
Chile	1.96	2.06	1.75	1.91	1.92
Mexico	1.20	0.87	1.28	1.28	1.42
Peru	1.75	2.12	2.44	2.16	2.23
Subtotal, leading suppliers to the United States	1.38	1.44	1.48	1.49	1.59
Additional global exporters.--					
Poland	0.73	0.70	0.84	0.94	0.86
Netherlands	1.70	1.87	1.86	2.10	1.98
Spain	2.63	2.97	2.47	2.77	2.27
Costa Rica	0.64	0.67	0.62	0.59	0.54
China	0.71	0.64	0.64	0.71	0.76
Belgium	1.08	1.13	1.24	1.41	1.34
Belarus	0.41	0.34	0.34	0.58	0.57
All other exporters	1.04	1.08	1.17	1.38	1.48
Subtotal, additional global exporters	1.04	1.11	1.18	1.37	1.37
All reporting countries	1.18	1.24	1.29	1.42	1.45
	Share of quantity (percent)				
United States	7.5	7.5	6.9	5.8	6.6
Leading suppliers to the United States.--					
Argentina	1.2	1.2	1.1	0.9	0.7
Canada	15.8	13.9	13.2	14.5	13.0
Chile	9.1	10.1	8.8	9.8	8.9
Mexico	4.1	5.0	3.4	3.7	3.9
Peru	3.6	4.5	5.7	8.0	10.0
Subtotal, leading suppliers to the United States	33.7	34.7	32.2	37.0	36.6
Additional global exporters.--					
Poland	9.8	9.2	9.0	8.0	8.4
Netherlands	4.5	5.5	6.3	6.1	7.4
Spain	2.7	2.9	3.6	3.7	4.0
Costa Rica	3.2	2.6	3.5	3.3	3.4
China	4.3	3.9	3.8	3.3	3.4
Belgium	3.0	2.6	2.5	2.4	2.4
Belarus	2.4	2.9	2.1	2.4	2.3
All other exporters	29.0	28.2	30.2	27.9	25.5
Subtotal, additional global exporters	58.9	57.9	60.9	57.2	56.8
All reporting countries	100.0	100.0	100.0	100.0	100.0

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

Note both the fresh (0810.40) and frozen (0811.90) subheadings are broader than just blueberries and include fruits such as cranberries among other fruits, the frozen subheading is slightly broader in terms of the miscellaneous additional fruits covered than the fresh subheading, both subheadings expressly exclude strawberries and raspberries.

Source: Official exports statistics using HS subheadings 0810.40 and 0811.90 as reported by various national statistical authorities in the Global Trade Atlas database, accessed December 8, 2020.

Part V: Other competitive dynamics of the U.S. market

U.S. market characteristics

The U.S. market for blueberries includes both fresh or chilled and frozen blueberries. The blueberries may be cultivated or wild, and they may be conventional or certified as organic. U.S.-origin cultivated blueberries are primarily grown in 8 states with seasonal availability primarily between April and October in a given year.[1] U.S.-origin wild blueberries are principally grown in Maine and are typically harvested in August.[2] Foreign-origin blueberries are available year-round in the United States and are imported primarily from Argentina, Canada, Chile, Mexico, and Peru.[3] The vast majority of responding U.S. blueberry growers reported that cultivated conventional blueberries accounted for the majority of their harvest in 2019; similarly, cultivated conventional blueberries accounted for the majority of U.S. imports and U.S. purchases in 2019.[4]

Apparent U.S. consumption of blueberries by quantity increased almost every year during 2015-19; the exception was 2017 where it decreased 14.7 percent from 2016. Overall, apparent U.S. consumption in 2019 was 28.5 percent higher than in 2015. In 2019, U.S. producers' U.S. shipments of fresh or chilled blueberries were 293.7 million pounds ($638.7 million) and U.S. producers' U.S. shipments of processed blueberries were 298.2 million pounds ($116.6 million).[5]

[1] These states are California, Florida, Georgia, Michigan, New Jersey, North Carolina, Oregon, and Washington. Florida-origin blueberries are typically the first available in the calendar year while blueberries from Michigan, Oregon, and Washington are predominantly the last available. See Part I "Growing and freezing" for more information.

[2] The vast majority of wild blueberries grown in Maine are ultimately frozen. *See, e.g.,* University of Maine Cooperative Extension: Maine Wild Blueberries, available at https://extension.umaine.edu/blueberries/about-2/.

[3] For more information, please see table I-3.

[4] In the questionnaires, firms were asked to indicate which type of blueberry (cultivated or wild) and the classification (conventional or organic) accounted for the majority of its harvest (U.S. Producers' Questionnaire); which type and classification accounted for the majority of its imports (U.S. Importers' Questionnaire), and which type and classification accounted for the majority of its purchases (U.S. Purchasers' Questionnaire).

[5] For more information on the quantity and value of U.S. producers' U.S. shipments of fresh or chilled blueberries, please see Table IV-3; for frozen blueberries, see Table IV-5. As noted in Part IV, the definition of processing is "Operations that alter the general state of the commodity, such as canning, cooking, freezing, dehydration, milling, grinding, pasteurization, pickling, juicing, or slicing."). As noted in Part III, processing that does not involve freezing appears to be limited.

The majority of U.S. producers and importers indicated that there have been significant changes in product mix of blueberries since January 1, 2015. Several U.S. producers and importers reported that the number of varieties of blueberries increased in the U.S. market along with larger pack sizes. U.S. producers and importers also reported an increase in the marketing of blueberries in the U.S. market where industry participants promote the health benefits of blueberries. The vast majority of U.S. producers, importers, and purchasers reported that there was an increase in customer awareness of organic blueberries since 2015.

U.S. producers and importers reported selling blueberries to all regions in the contiguous United States and all other U.S. markets (table V-1). For U.S. producers, 63.6 percent of sales were between 101 and 1,000 miles of their packing facility, 26.5 percent were over 1,000 miles, and 9.9 percent were within 100 miles.[6] Importers sold 54.9 percent between 101 and 1,000 miles of their U.S. point of shipment, 32.2 percent over 1,000 miles, and 12.9 percent within 100 miles. U.S. producers mainly sold fresh or chilled and frozen blueberries to distributors. U.S. importers mainly sold fresh or chilled and frozen blueberries to retailers.[7]

Table V-1
Blueberries: Geographic market areas in the United States served by U.S. producers and U.S. importers

Region	U.S.-origin blueberries			Foreign-origin blueberries		
	Fresh or chilled	Frozen	All blueberries	Fresh or chilled	Frozen	All blueberries
Northeast	72	19	78	24	14	36
Midwest	66	24	74	19	13	30
Southeast	68	16	74	22	11	32
Central Southwest	54	11	59	17	12	28
Mountains	51	10	56	15	9	23
Pacific Coast	63	18	71	23	16	35
Other	7	1	8	11	2	13
Reporting firms	98	35	106	28	17	40

Note: All other U.S. markets, including AK, HI, PR, and VI.

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

[6] More information on distance shipped and geographic market areas by state can be found in "Factors other than imports affecting the U.S. blueberry market" later in this chapter.

[7] For more information on channels of distribution, please refer to "Marketing channels" in Part I.

A small number of firms reported importing or purchasing U.S.-origin fresh or chilled blueberries that were processed into frozen blueberries outside of the United States before being exported back to the United States.[8]

Supply and demand considerations

U.S. supply

Table V-2 provides a summary of the supply factors regarding U.S.-origin blueberries and foreign-origin blueberries. U.S. producers reported increasing utilized production during 2015-19. Additionally, global utilized production increased rapidly during 2015-19, with Peru having the largest increase.

[8] Purchaser *** reported that fresh wild blueberries are exported to Canada for processing when the firm does not have the capacity to freeze in the United States, and that a portion are re-imported into the United States to meet customer demands. Another purchaser (***) reported it purchased approximately *** pounds of frozen blueberries that were re-imported from British Columbia in the past five years.

Table V-2
Blueberries: U.S. and foreign industry factors that affect ability to increase shipments to the United States, January 2015-December 2019

Item	2015	2019	2015-19	2015	2019	Shipments by market in 2019 (percent)		Able to shift to alternate products
	Utilized production (1,000 pounds)		Change in utilized production (percent)	Inventories as a ratio to total shipments (percent)		Home market shipments	Exports to non-U.S. markets	No. of firms reporting "yes"
United States	660,690	727,280	10.1	45.7	27.3	81.4	18.6	7 of 129
Argentina	17,521	19,649	12.1	***	***	15.7	34.5	1 of 10
Canada	93,283	106,051	13.7	***	***	30.4	32.7	2 of 49
Chile	67,744	106,514	57.2	***	***	8.8	45.9	13 of 30
Mexico	27,906	78,019	179.6	***	***	6.9	8.3	3 of 20
Peru	15,418	252,306	1,536.4	***	***	9.6	36.0	1 of 13
All reporting foreign sources	221,872	562,539	153.5	37.7	18.0	17.6	34.3	20 of 122

Note: Utilized production stems from growing operations. Inventories consist primarily of frozen blueberries.

Note: Responding U.S. producers accounted for 33.8 percent of U.S. bearing acreage of blueberries in 2019. Responding foreign producer/exporter firms from Argentina accounted for 46.5 percent of U.S. imports of blueberries from that country in 2019, responding firms from Canada accounted for 63.2 percent of Canadian imports, those from Chile accounted for 67.1 percent of imports from Chile, those from Mexico accounted for 89.7 percent of imports from Mexico, and those from Peru accounted for 87.5 percent of imports from Peru. For additional data on the number of responding firms and their share of U.S. production and of U.S. imports, please refer to Part I and Part IV.

Sources: NASS, Agricultural statistics, 2017, 2018, 2019, https://www.nass.usda.gov/Publications/Ag_Statistics/index.php, and NASS Fruits and Nuts 2019 summary; Compiled from data submitted in response to Commission questionnaires.

U.S. producers

Based on available information, blueberry growers and freezers in the United States have the ability to respond to changes in demand with small-to-moderate changes in the quantity of shipments of U.S.-produced blueberries to the U.S. market.[9] The response would depend on whether the firm is a grower, grower/freezer, or freezer. Firms with freezing operations may have a moderate ability to respond due to the availability of inventories of frozen blueberries and some ability to shift shipments from alternate markets. Growers would have a lesser ability to respond due to low inventories for fresh blueberries and a very limited ability to shift production to or from alternate products. Weather and other factors impact the exact yield and timing of fresh blueberries production. These factors are outside the control of U.S. growers and freezers and limit the responsiveness of supply.

[9] "Growers and freezers" include growers (growers without freezing operations), growers/freezers (growers with freezing operations), and freezers (independent freezers).

Domestic utilized production of blueberries increased during 2015-19. U.S. producers' inventories decreased during 2015-19 primarily due to a decrease in frozen blueberry inventories.[10] Export shipments of blueberries represented a relatively small share of U.S. producers' total shipments in 2019. Most of the 129 responding U.S. producers did not report growing other products on the same land used to grow blueberries, but seven[11] reported growing peaches, strawberries, blackberries, raspberries, avocados, citrus, flowers, hay, various vegetables, and/or livestock. U.S. producers reported that the factors affecting their ability to shift production between blueberries and other products included the cost and time to production. According to these firms, it would be very expensive to remove the blueberry plants and replace them with another crop. Any permanent replacement crop would take several years to establish without income being generated during that time period.

Foreign producers

Based on available information, foreign producers of blueberries have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of foreign-origin blueberries to the U.S. market. The main contributing factor to this degree of responsiveness is an ability to shift shipments from alternative markets. Additionally, firms with freezing operations have a moderate ability to respond due to the availability of inventories of frozen blueberries. Factors mitigating responsiveness of supply for growers are low inventories for fresh blueberries and a limited ability to shift production to or from alternate products. Additionally, weather and other factors outside the control of growers can impact the yield and timing of fresh blueberries production.

Foreign utilized production of blueberries increased significantly during 2015-19, primarily due to large increases in utilized production in Peru, Mexico, and Chile. Foreign producers' inventories decreased during 2015-19 due to a decrease in frozen blueberry inventories. The vast majority of U.S. imports of blueberries entered the United States as fresh or chilled blueberries. Foreign producers ship approximately one third of their blueberry production to non-U.S. markets. The vast majority of responding foreign producers reported that they could not grow other products on the same land used to grow blueberries.[12] For frozen blueberries, 22 of 62 responding foreign producers reported that they can switch

[10] U.S.-produced fresh/chilled blueberries are primarily shipped immediately from harvest or packing facility; frozen blueberries are primarily sold from inventory (see "Lead times" later in this chapter).

[11] Four of these firms reported having freezing operations.

[12] Other produce commonly reported were raspberries, blackberries, strawberries, and cherries.

production between blueberries and other products using the same freezing equipment and/or labor.

Changes in availability of U.S. supply

Most U.S. producers (81 of 94 responding) reported that there were changes in the availability of U.S. supply for fresh or chilled cultivated blueberries. Between 2015 and 2019, the utilized production increased in California, Georgia, Michigan, Oregon, and Washington; utilized production decreased in Florida, Maine, New Jersey, and North Carolina.[13] Seventy-four of 90 responding U.S. producers reported anticipated changes in the future as yield changes from year to year. These anticipated changes varied by state.

The majority of U.S. producers (99 of 128 responding), U.S. importers (21 of 38 responding), and purchasers (29 of 41 responding) reported that weather-related freezes had impacts on operations or market conditions since 2015; while the majority of firms reported no impacts from storms (64 U.S. producers, 32 importers, and 29 purchasers) and droughts (79 U.S. producers, 30 importers, and 26 purchasers).[14] [15] Additionally, most U.S. producers (62 of 68 responding) reported that there were changes in the availability of U.S. supply for frozen cultivated blueberries, and 61 of 68 responding U.S. producers anticipated continued increases in the future.

[13] Source: USDA Fruit and Tree Nut Yearbook, 2020.

[14] Freeze/frost impacts were reported throughout the country. Firms reporting impacts from storms, reported hurricanes in 2016, 2017, and 2018 were reported as having caused damage in the Southeast United States; other storms throughout the country were reported causing hail damage, flooding, and wind damage. Firms reporting impacts from drought conditions reported droughts in California in 2015 and 2016; Georgia in 2017, 2018, and 2019; Maine in 2017, 2018, 2019, and 2020; Michigan in 2019 and 2020.

[15] For Georgia, in 2017, a freezing event occurred where federal crop insurance wrote off 100 percent of the rabbiteye crop. Hearing transcript, p. 276 (Crosby). Crop insurance covering hail damage is reportedly not available for a new farmer. Hearing transcript, p. 271 (Atwood).

Supply constraints

The vast majority of U.S. producers (89 of 105 responding) reported that they did not experience any supply constraints in the form of refusing, declining, or being unable to supply fresh or chilled cultivated blueberries since January 1, 2015. Similarly, 68 of 72 responding U.S. producers reported no supply constraints for frozen cultivated blueberries. However, 14 out of 26 responding importers reported that they did experience supply constraints in the sale of fresh or chilled cultivated blueberries. Additionally, 17 of 27 responding purchasers reported experiencing supply constraints from their suppliers for fresh or chilled cultivated blueberries, and 14 of 21 responding purchasers reported such constraints for frozen wild blueberries.

U.S. demand

Based on available information, the overall demand for blueberries is likely to experience small-to-moderate changes in response to changes in price. The main contributing factors are the small share of blueberries used in downstream products and consumers' inability to substitute other foods for blueberries. However, blueberries are generally not a necessity in the typical consumer's diet, making demand more responsive to price.

End uses and cost share

Most blueberries are not used in downstream products; consumers mostly use retail ready to eat fresh and frozen blueberries. Downstream products reported by purchasers that use fresh and/or frozen blueberries along with other inputs include prepared food items such as blueberry muffins, blueberry pie filling, blueberries in syrup, dried blueberries, and fresh mixed berry blends.

Blueberries account for varying shares of the cost of the end-use products in which they are used. Reported cost shares for some end uses were 5 to 8 percent for blueberry muffins, 40 to 75 percent for blueberry pie filling, 11 to 80 percent for blueberries in syrup, 60 percent for dried blueberries, and 11 to 21 percent for fresh mixed berry blends.[16] Purchasers reporting

[16] Four purchasers that process fresh or chilled blueberries into frozen blueberries reported frozen blueberries as an end-use product, with cost shares ranging from 45 percent to 100 percent, and multiple purchasers reported blueberries in different types of packaging (e.g., polybag, retail bag, tote, box).

practical end uses had varying responses regarding how demand for end uses had changed since 2015.[17]

Business cycles

Most firms (108 of 112 U.S. producers, 30 of 37 importers, and 35 of 41 purchasers) indicated that the market was subject to business cycles or distinct conditions of competition. Specifically, the majority of producers, importers, and purchasers reported that the blueberry market was subject to seasonality as a distinct condition of competition. U.S. producers' responses were mixed regarding whether the market was subject to other business cycles,[18] while most importers and purchasers reported that the market was not subject to other business cycles. Most U.S. producers, importers, and purchasers indicated that there was not a distinct preference for organic blueberries (despite an increase in customer awareness),[19] and most firms also reported that there had been changes to the blueberry market's business cycle and conditions of competition since 2015. U.S. producers and importers reported year-round availability of blueberries as a change to the blueberry market since 2015.[20] Purchasers reported increased availability of blueberries from foreign producers, with many purchasers naming Peru, and some purchasers also naming Canada, Chile, and Mexico.

Demand trends

Most firms reported an increase in U.S. demand for fresh or chilled cultivated blueberries and frozen blueberries, both cultivated and wild, since January 1, 2015 (table V-3). Firms had mixed responses regarding demand for fresh wild blueberries.

[17] ***, which indicated blueberry pie filling as an end use, and ***, which reported mixed fresh berries, reported that demand had increased. ***, which reported blueberry muffins as an end use, and *** which reported mixed fresh berries, reported no change in demand since 2015. ***, reporting preserves and fruit in syrup as end uses, and ***, which reported dried blueberries, indicated that demand had decreased. ***, reported fluctuating demand for blueberries to be used in blueberry pie filling.

[18] Half of U.S. producers (56 of 112 firms) reported that the domestic blueberry market was subject to business cycles, with most of those producers reporting that demand for blueberries decreased during economic downturns.

[19] Some importers reported that demand for organic blueberries is outpacing conventional blueberries.

[20] Producers reported that foreign produced blueberries are available year-round, and importers reported that the growing season in foreign markets occurred during the non-growing season in the domestic market.

Table V-3
Blueberries: Firms' perceptions regarding demand in the United States and outside of the United States

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
	Fresh or chilled cultivated demand			
Demand inside the United States: U.S. producers	86	4	1	4
Importers	24	1	1	1
Purchasers	28	---	1	---
Demand outside the United States: U.S. producers	48	6	---	4
Importers	18	1	1	2
Purchasers	17	1	---	---
	Fresh or chilled wild demand			
Demand inside the United States: U.S. producers	9	12	28	4
Importers	2	2	1	1
Purchasers	2	5	---	2
Demand outside the United States: U.S. producers	7	35	---	4
Importers	2	2	---	1
Purchasers	2	4	1	---
	Frozen cultivated demand			
Demand inside the United States: U.S. producers	29	6	6	3
Importers	13	---	---	2
Purchasers	20	---	2	1
Demand outside the United States: U.S. producers	16	6	---	---
Importers	10	---	---	2
Purchasers	10	3	---	1
	Frozen wild demand			
Demand inside the United States: U.S. producers	11	9	---	4
Importers	7	---	1	1
Purchasers	16	1	1	3
Demand outside the United States: U.S. producers	10	5	---	4
Importers	4	2	---	1
Purchasers	11	2	1	---

Table continued on next page.

Table V-3--Continued
Blueberries: Firms' perceptions regarding demand in the United States and outside of the United States

Item	Number of firms (count)			
	Increase	No change	Decrease	Fluctuate
	All blueberries			
Demand inside the United States: U.S. producers	68	3	3	4
Importers	20	1	---	1
Purchasers	21	---	---	1
Demand outside the United States: U.S. producers	52	3	---	---
Importers	12	2	---	1
Purchasers	13	1	---	1
Demand for end use product(s): Purchasers	14	2	2	4

Note: Not all firms responded to overall blueberry demand that responded to individual product break outs.

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

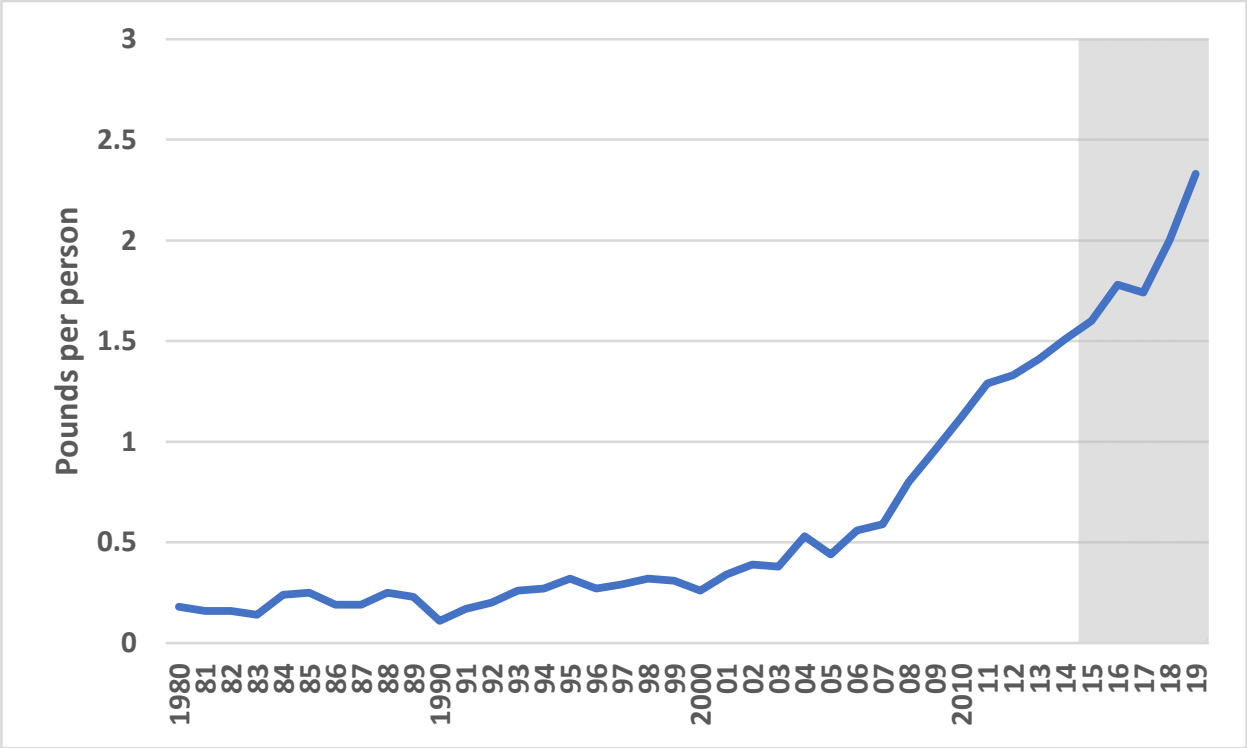
Substitute products

Substitutes for blueberries are limited. Most U.S. producers (95 of 105), importers (35 of 40), and purchasers (34 of 41) reported that there were no substitutes for blueberries. Firms reporting substitutes reported other fruit, such as strawberries and raspberries, as substitutes for blueberries.

U.S. per capita consumption

As both supply and demand have generally expanded in the United States since 2015, per capita consumption increased (figure V-1). Per capita consumption remained below half a pound per person from 1980 to 2003 and increased rapidly to over 2 pounds per person in 2019, quadrupling prior consumption levels.

Figure V-1
Blueberries: U.S. fresh blueberry per capita use



Source: USDA, Economic Research Service Fruit and Tree Nut data.

Substitutability issues

The degree of substitution between domestic and imported blueberries depends upon such factors as relative prices, quality (e.g., firmness, flavor, freshness, etc.), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, reliability of supply, product services, etc.). Based on available data, when all products are available, there is generally a moderate-to-high degree of substitutability between domestic and imported blueberries. However, there are certain times of the year that domestic fresh blueberries are not available due to the growing season in the United States.

Lead times

U.S.-produced fresh or chilled blueberries are primarily shipped immediately from harvest or packing facilities, while frozen blueberries are primarily sold from inventory.[21] In contrast, imported fresh or chilled blueberries are primarily sold from U.S. inventories, and imported frozen blueberries are sold from foreign inventories. U.S. producers of fresh or chilled blueberries reported that 88.9 percent of their commercial shipments were shipped immediately from harvest or packing facilities in 2019, with lead times averaging three days; U.S. importers reported that 59.7 percent of their commercial shipments of fresh or chilled blueberries were sold from U.S. inventories, with lead times averaging six days.[22] The vast majority (93.4 percent) of U.S.-produced frozen blueberries were sold from inventories with lead times averaging 24 days; most commercial shipments (38.0 percent) of imported frozen blueberries were sold from foreign inventories, with lead times averaging 17 days.[23]

Knowledge of country sources

Thirty-nine purchasers reported purchases from the United States, 28 from Canada, 25 from Chile, 22 from Peru, 18 from Mexico, and 17 from Argentina. Nine purchasers reported purchases from other sources. Table V-4 describes the extent to which purchasers and their customers make purchasing decisions based on the producer or country of origin.

[21] Several U.S. producers reported that frozen blueberries can be stored in cold storage facilities and have a shelf life over one year.

[22] The remaining 11.1 percent of U.S. producers' commercial shipments of fresh or chilled blueberries were from inventories, with lead times averaging four days. U.S. importers' remaining commercial shipments were from foreign inventories (27.1 percent of total commercial shipments, with lead times averaging 5 days) and produced-to-order (13.1 percent, with lead times averaging 2 days).

[23] The remaining 6.6 percent of U.S. producers' commercial shipments of frozen blueberries were produced-to-order, with lead times averaging 4 days. U.S. importers' remaining commercial shipments were produced-to-order (28.3 percent of total commercial shipments, with lead times averaging 17 days) or from U.S. inventories (33.7 percent, with lead times averaging 1 day).

Table V-4
Blueberries: Purchasing decisions based on producer and country of origin

Decision	Number of firms (count)			
	Always	Usually	Sometimes	Never
	Fresh or chilled blueberries			
Purchases based on producer: Purchaser's decision	9	7	10	7
Purchaser's customer's decision	---	4	16	6
Purchases based on country of origin: Purchaser's decision	8	4	12	7
Purchaser's customer's decision	---	3	16	5
	Frozen blueberries			
Purchases based on producer: Purchaser's decision	10	4	4	7
Purchaser's customer's decision	1	3	12	9
Purchases based on country of origin: Purchaser's decision	9	2	2	11
Purchaser's customer's decision	3	2	10	11

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

Purchasers reporting that they always make decisions based the producer for fresh or chilled or frozen blueberries cited available volume and varieties as reasons for doing so. Two of these purchasers reported that they only purchase from related or “known” suppliers, while two cited food safety as the reason, and one cited quality. Purchaser *** reported that its sourcing decisions are based strictly on the growing region that currently produces the best quality of fresh fruit during that particular season, and that it takes varieties, weather impact, and freshness into account. Of the purchasers reporting that they or their customers always base their purchasing decisions on country of origin, two purchasers indicated they prefer domestically produced blueberries, while *** reported that there are some countries that it will not buy from and that its customers have approved countries of origin. Purchaser *** reported that it sources blueberries only from the United States or other approved countries, but that country of origin is not the basis for its purchasing decisions.

Factors affecting purchasing decisions

The most often cited top three factors firms consider in their purchasing decisions for fresh or chilled blueberries were quality, availability, and price, as shown in table V-5.[24] For frozen blueberries, the most often cited top three factors were quality, price, and availability. Regarding fresh or chilled blueberries, quality was the most frequently cited first-most important factor, followed by availability/supply. Availability/supply was the most frequently reported second-most important factor, and other factors were the most frequently reported third-most important factor.[25] Purchasers most frequently cited quality as the first-most and second-most important factor for frozen blueberries, and they most frequently cited price/cost as the third-most important factor.

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

Item	Number of firms (count)			
	1st	2nd	3rd	Total
	Fresh or chilled blueberries			
Quality	14	9	4	26
Availability / Supply	8	11	3	21
Price / Cost	5	1	7	13
All other factors	5	7	14	NA
	Frozen blueberries			
Quality	10	11	1	22
Price / Cost	5	3	13	20
Availability / Supply	7	4	3	14
All other factors	4	6	5	NA

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

A majority of purchasers (23 of 42) reported that they sometimes purchase the lowest-priced product, and some purchasers (11 of 42) reported that they never purchase the lowest-priced product.[26]

[24] When asked what characteristics purchasers consider when determining the quality of fresh or chilled blueberries, multiple firms reported size, variety, USDA grade, firmness, flavor, color, and texture; for frozen blueberries, one firm reported looking for a supplier that has quality documents to ensure proper handling and processing.

[25] Other factors included the varietal composition, pesticide application process and "proper" farming practices, the timing of the crop, and whether the blueberries are organic or conventional.

[26] Fewer purchasers reported usually (7 firms) or always (1 firm) purchasing the lowest-priced product.

Purchasers were asked to rate the importance of 27 factors in their purchasing decisions for fresh and frozen blueberries (tables V-6 and V-7). The factors rated as very important for fresh and chilled blueberries by more than half of responding purchasers were quality meeting industry standards, availability overall, freshness, product consistency, lack of bruising/punctures, reliability of supply, firmness, flavor, quality exceeding industry standards, shelf life, ripeness, color, and texture. The factors rated as very important for frozen blueberries by more than half of responding purchasers were quality meeting industry standards, product consistency, availability overall, reliability of supply, price, quality exceeding industry standards, color, flavor, texture, and firmness. [27]

[27] The six purchasers indicating that price was "not" an important purchase factor for fresh or chilled blueberries are ***. *** indicated that price was "not" an important purchase factor for frozen blueberries.

Table V-6
Fresh or chilled blueberries: Importance of purchase factors, as reported by U.S. purchasers, by factor

Factor	Number of firms (count)		
	Very	Somewhat	Not
	Fresh or chilled blueberries		
Availability overall	26	5	1
Availability of varieties	16	7	9
Color	18	10	4
Delivery terms	7	16	9
Delivery time	14	14	4
Discounts offered	3	6	22
Firmness	24	7	1
Flavor	22	7	3
Freshness	26	5	1
Lack of bruising/punctures	25	6	1
Extension of credit	5	8	18
Minimum quantity requirements	6	15	10
Organic or non-organic	10	12	9
Packaging	9	12	10
Payment terms	6	13	12
Price	10	15	6
Product consistency	25	5	1
Product range	9	11	9
Quality meets industry standards	29	2	1
Quality exceeds industry standards	21	9	2
Reliability of supply	25	7	---
Ripeness	18	11	3
Shape	13	12	7
Shelf life	20	6	6
Texture	16	8	7
Technical support/service	6	7	18
U.S. transportation costs	4	16	11

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

Table V-7
Frozen blueberries: Importance of purchase factors, as reported by U.S. purchasers, by factor

Factor	Number of firms (count)		
	Very	Somewhat	Not
	Frozen blueberries		
Availability overall	21	4	---
Availability of varieties	11	8	6
Color	15	9	1
Delivery terms	11	8	6
Delivery time	13	6	5
Discounts offered	7	3	15
Firmness	13	7	5
Flavor	15	8	2
Freshness	10	6	7
Lack of bruising/punctures	11	10	4
Extension of credit	4	6	15
Minimum quantity requirements	7	7	11
Organic or non-organic	11	8	6
Packaging	9	8	7
Payment terms	5	11	9
Price	17	7	1
Product consistency	24	1	---
Product range	6	10	7
Quality meets industry standards	25	---	---
Quality exceeds industry standards	16	5	4
Reliability of supply	22	3	---
Ripeness	12	10	2
Shape	10	10	4
Shelf life	8	13	4
Texture	14	8	3
Technical support/service	8	6	11
U.S. transportation costs	7	11	7

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

Supplier certification

Almost all (38 of 42) responding purchasers require their suppliers to become certified or qualified to sell blueberries to their firm. Most purchasers reported that the time to qualify a new supplier ranged from 4 to 90 days.[28] Most purchasers (33 of 41) reported that no suppliers failed in their attempt to qualify blueberries or had lost their approved status since 2015.[29]

Thirty-two U.S. producers reported having certified organic growing production in 2019, accounting for 55.2 million pounds (19.8 percent of total production).[30] U.S. importers reported importing 6.5 million pounds of individual quick frozen (IQF), cultivated, Grade A, certified organic blueberries and 2.6 million pounds of IQF, wild, Grade A, certified organic blueberries in 2019.[31]

Table V-8 presents U.S. imports of blueberries by certification, including additional detail on imports of blueberries by form and type.

[28] One firm reported a supplier certification of 180 days. A plurality of reporting purchasers reported 30 days for supplier certification.

[29] Most reporting purchasers did not identify suppliers by name or country source, while one purchaser named U.S. firms, generally, and another named "multiple countries" including the United States, Canada, Peru, and Chile.

[30] Reported years of certification for the growing of organic blueberries are 2001 (1 firm), 2004 (1 firm), 2006 (1 firm), 2008 (1 firm), 2009 (3 firms), 2010 (2 firms), 2011 (2 firms), 2012 (2 firms), 2013 (1 firm), 2014 (1 firm), 2015 (3 firms), 2017 (5 firms), 2018 (4 firms), and 2019 (5 firms).

[31] For more information, see "Price data" later in this chapter.

Table V-8
Blueberries: U.S. imports of fresh or chilled and frozen blueberries, by form, type, and certification, 2019, January to September 2019, and January to September 2020

Item	Calendar year 2019	January to September 2019	January to September 2020
	Quantity (1,000 pounds net packed weight)		
Fresh or chilled blueberries.--			
Cultivated conventional	400,898	260,182	242,752
Cultivated organic	57,629	34,581	44,731
All fresh cultivated	458,527	294,763	287,483
All fresh wild	13,617	13,409	9,451
All fresh or chilled blueberries	472,144	308,172	296,934
Frozen blueberries.--			
Cultivated conventional	96,980	74,531	87,898
Cultivated organic	23,114	20,135	12,678
All frozen cultivated	120,094	94,667	100,576
All frozen wild	91,894	69,138	64,777
All frozen blueberries	211,988	163,804	165,353
Fresh, chilled, or frozen blueberries.--			
Cultivated conventional	497,878	334,713	330,650
Cultivated organic	80,743	54,717	57,409
All cultivated	578,620	389,430	388,060
All wild	105,512	82,546	74,228
All blueberries	684,132	471,976	462,287
	Share of quantity within product groups (percent)		
Fresh or chilled blueberries.--			
Cultivated conventional	84.9	84.4	81.8
Cultivated organic	12.2	11.2	15.1
All fresh cultivated	97.1	95.6	96.8
All fresh wild	2.9	4.4	3.2
All fresh or chilled blueberries	100.0	100.0	100.0
Frozen blueberries.--			
Cultivated conventional	45.7	45.5	53.2
Cultivated organic	10.9	12.3	7.7
All frozen cultivated	56.7	57.8	60.8
All frozen wild	43.3	42.2	39.2
All frozen blueberries	100.0	100.0	100.0
Fresh, chilled, or frozen blueberries.--			
Cultivated conventional	72.8	70.9	71.5
Cultivated organic	11.8	11.6	12.4
All cultivated	84.6	82.5	83.9
All wild	15.4	17.5	16.1
All blueberries	100.0	100.0	100.0

Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, 0810.40.0029, 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020.

Changes in purchasing patterns

Purchasers were asked about changes in their purchasing patterns of domestic and imported blueberries since 2015 (table V-9). A majority or plurality of responding purchasers reported increased purchases of both domestic and imported fresh or chilled and frozen

blueberries. Many purchasers cited increased consumer demand as the reason for increased purchases. Some firms reported increased availability of imports to fill in gaps in supply, particularly during the low production season in the United States. *** reported that market demand for higher quality, fresher fruit has led to reduced demand for late season stored fruit from the Pacific Northwest in favor of fresher, better quality imports, and *** reported increased purchases of wild frozen blueberries from Canada.

Most responding purchasers (28 of 41) reported that they had changed suppliers since January 1, 2015. Many purchasers reported using a large number of suppliers and frequently qualifying new suppliers to ensure availability of product. Reasons for changing suppliers included price, product quality, freshness, best blueberry varieties, and mitigating the risk of single-sourced frozen blueberries. Purchasers reported adding smaller farms, U.S. growers, organic suppliers, and adding multiple suppliers to diversify the supplier base, ensure year-round supply, and to meet increased demand for wild blueberries. Firms reported reducing purchases from particular suppliers because of a lack of reliability, firms going out of business, lack of availability, growers changing to another crop, and uncompetitive pricing. Purchaser *** stated that since blueberries require 3 to 5 years to reach full maturity, relationships are built over time rather than over short-term negotiations.

Table V-9
Blueberries: Changes in purchase patterns from United States and all other sources

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
Fresh or chilled blueberries:					
U.S.-origin	4	5	20	4	2
Foreign-origin	10	2	14	3	2
Frozen blueberries:					
U.S.-origin	4	3	11	4	5
Foreign-origin	8	2	10	4	3

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

Comparisons of domestic products and imported articles

Purchasers were asked to compare U.S.-produced and imported blueberries on the same 27 factors (tables V-6 and V-7) for which they were asked to rate the importance. As shown in tables V-10 and V-11, most purchasers rated fresh or chilled and frozen blueberries from the United States and other countries as comparable for all 27 factors. More than a third of purchasers reported that domestic fresh or chilled blueberries were superior on freshness (which was rated as very important by most purchasers) and delivery time and U.S. transportation costs (which were rated as very important by less than half of purchasers).

Table V-10
Fresh or chilled blueberries: Purchasers' comparisons of domestic and imported products

Factor	Number of firms (count)		
	U.S.-origin vs foreign-origin		
	S	C	I
	Fresh or chilled blueberries		
Availability overall	3	22	2
Availability of varieties	1	18	7
Color	1	24	1
Delivery terms	4	21	---
Delivery time	10	15	---
Discounts offered	---	22	2
Firmness	2	23	1
Flavor	3	20	3
Freshness	10	16	---
Lack of bruising/punctures	2	23	1
Extension of credit	1	23	1
Minimum quantity requirements	1	24	1
Organic or non-organic	4	19	3
Packaging	---	26	---
Payment terms	1	24	1
Price	2	21	3
Product consistency	3	20	3
Product range	1	25	---
Quality meets industry standards	2	23	1
Quality exceeds industry standards	1	19	6
Reliability of supply	3	18	5
Ripeness	2	24	---
Shape	1	24	1
Shelf life	4	20	2
Texture	1	25	---
Technical support/service	3	21	1
U.S. transportation costs	9	15	2

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

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

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

Table V-11
Frozen blueberries: Purchasers' comparisons of domestic and imported products

Factor	Number of firms (count)		
	U.S.-origin vs foreign-origin		
	S	C	I
	Frozen blueberries		
Availability overall	2	19	---
Availability of varieties	5	16	---
Color	2	19	---
Delivery terms	3	16	2
Delivery time	5	15	1
Discounts offered	1	18	2
Firmness	2	17	2
Flavor	3	17	1
Freshness	1	19	---
Lack of bruising/punctures	1	18	2
Extension of credit	2	19	---
Minimum quantity requirements	4	17	---
Organic or non-organic	3	13	4
Packaging	2	19	---
Payment terms	2	19	---
Price	3	14	3
Product consistency	3	16	2
Product range	3	17	1
Quality meets industry standards	2	19	---
Quality exceeds industry standards	3	17	1
Reliability of supply	3	16	2
Ripeness	2	19	---
Shape	1	19	1
Shelf life	1	19	---
Texture	3	18	---
Technical support/service	5	16	---
U.S. transportation costs	3	18	---

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

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

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

Comparisons of domestic and imported blueberries

In order to determine whether U.S.-produced blueberries can generally be used in the same applications as imports, U.S. producers, importers, and purchasers were asked whether the products can be used interchangeably. As shown in table V-12, most U.S. producers, importers, and purchasers reported that domestic and imported fresh or chilled and frozen blueberries can be used interchangeably. Some firms reported differences in quality or taste and some U.S. producers reported that imported blueberries may not have the same food safety standards as domestic product.

Table V-12
Blueberries: Interchangeability between product produced in the United States and in other countries

Firm type	Number of firms (count)	
	No	Yes
	Fresh or chilled blueberries	
U.S. producers	16	101
U.S. importers	7	21
U.S. purchasers	3	28
	Frozen blueberries	
U.S. producers	5	86
U.S. importers	7	14
U.S. purchasers	4	24

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

In addition, producers, importers, and purchasers were asked to assess how differences other than price were significant in sales of domestic and imported blueberries. As seen in table V-13, for fresh or chilled blueberries, a slight majority of U.S. producers reported that factors other than price were and were not significant, but a majority of importers and purchasers reported they were significant. For frozen blueberries, most U.S. producers reported that factors other than price were not significant, but most importers and purchasers reported they were significant.

U.S. producers reported that differences other than price included taste, quality and seasonal availability. The major non-price factors identified by purchasers and importers were quality (including flavor, firmness, and freshness) and availability (including availability of wild blueberries). Other factors reported were transportation network, location, security of supply, blueberry genetics/varieties, diversity of supply as insurance against adverse weather events, and limited domestic supply from fall through early spring. Purchaser *** stated that many U.S. producers have not improved on varietal development because of the cost and time it takes from planting new varieties to getting a return on the crop (typically 4-5 years). It continued that areas in Peru with a climate favorable to blueberry growth can get a crop within

one year. Purchaser *** stated that in the fall, blueberries from Peru are firmer than domestic blueberries.

Table V-13
Blueberries: Importance of factors other than price between product produced in the United States and in other countries

Firm type	Number of firms (count)	
	No	Yes
	Fresh or chilled blueberries	
U.S. producers	53	52
U.S. importers	7	22
U.S. purchasers	12	20
	Frozen blueberries	
U.S. producers	57	20
U.S. importers	6	12
U.S. purchasers	13	15

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

Elasticity estimates

This section discusses elasticity estimates. Parties were encouraged to comment on these estimates in their prehearing or posthearing brief; Canadian Respondents responded in their prehearing brief and American Blueberry Growers Alliance (ABGA) responded in their posthearing brief. As noted below, Canadian respondents recommended changes to the domestic demand elasticity estimated by staff in the prehearing report.

U.S. supply elasticity

The domestic supply elasticity for blueberries measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of blueberries. 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 blueberries. Analysis of these factors above indicates that the U.S. industry has limited ability to increase or decrease shipments to the U.S. market in the short run; an estimate in the range of 1 to 4 is suggested, with growers on the lower end of the range and freezers on the higher end of the range.

Import supply elasticity

The import supply elasticity for blueberries measures the sensitivity of the quantity supplied by U.S. importers (in connection with foreign producers) to changes in the U.S. market price of blueberries. It depends on the same type of factors as the elasticity of domestic supply. Analysis of these factors above indicates that U.S. imports have an ability to increase or decrease shipments to the U.S. market; an estimate in the range of 3 to 7 is suggested as foreign producers have more of an ability to export to non-U.S. markets.

U.S. demand elasticity

The U.S. demand elasticity for blueberries measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of blueberries. This estimate depends on factors discussed above such as the existence, availability, and commercial viability of substitute products, as well as the component share of the blueberries in the production of any downstream products and consumer diet. In the prehearing report, staff estimated that the U.S. demand elasticity for blueberries to be moderately inelastic with a range of -0.5 to -1.0. The Canadian Respondents took issue with the estimate and argued that this range is out of line with estimates of U.S. blueberry demand in the literature and estimates of U.S. tomato demand in the 2019 USITC decision for *Fresh Tomatoes from Mexico*. The Canadian Respondents suggested that the U.S. demand elasticity for blueberries would be -1.5.[32] After receiving revised questionnaire data, party arguments, and reviewing academic and industry studies,[33] staff is maintaining its proposed estimated range of -0.5 to -1.0 (moderately inelastic).

[32] Canadian Respondent's prehearing brief, Exhibit 6, Report of Dr. Rodney Ludema, p. 4.

[33] ABGA referenced, *Economic Analysis of Domestic Market Impacts of the U.S. Highbush Blueberry Council*, 2015. The Canadian Respondents referenced, *Demand Elasticities for Fresh Fruit at the Retail Level*, Durham and Eales, 2010; *Market Analysis of Fresh Berries in the United States*, Sobekova Thomsen and Ahrendsen, 2013; and *Consumers' Welfare and Off-season Produce Imports*, Arnade and Kuchler, 2015. The studies referenced by Canadian Respondents cover an assortment of berries and fruits with a wider scope than blueberries. The studies consider either fresh fruits (apples, pears, bananas, oranges, grapes) as substitutes for one another or different berries (strawberries, blueberries, blackberries, raspberries) as substitutes for one another at the retail level. Most firms responding to Commission questionnaires reported that there were no substitutes for blueberries.

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[34] Product differentiation, in turn, depends upon such factors as quality (e.g., firmness, flavor, freshness, etc.) and conditions of sale (e.g., seasonal and overall availability, sales terms/discounts/promotions, etc.). Based on available information, the elasticity of substitution between U.S.-produced blueberries and imported blueberries is likely to be in the range of 3 to 5.

Factors affecting prices

Raw material costs

The main underlying raw material inputs for blueberries production are seeds/plants, fertilizer, herbicides, pesticides, and packing materials. Other agricultural inputs reported by U.S. producers include energy and fuel, sawdust, woodchips, peat moss, and irrigation. Most U.S. producers reported that raw material costs have increased overall since January 1, 2015. Raw material costs for the cultivation of fresh blueberries accounted for 25.3 percent of U.S. producers' total operating expenses during 2019, up from 22.3 percent in 2015. Raw material costs for the production of frozen blueberries accounted for 39.1 percent of U.S. producers' total operating expenses in 2019, up from 36.2 percent in 2015.

Most U.S. producers reported that raw material supplies for organic blueberries have not impacted their firm's operations since January 1, 2015; however, there were few responding firms that identified themselves as having a majority organic blueberry harvest in 2019. The U.S. producers that reported an impact on their firm's operations from raw material supplies for organic blueberries described organic fertilizer, compost, and weeding labor costs as the most impactful raw material costs. The majority of importers reported that raw material supplies for organic blueberries have not impacted their firm's operations. Importer *** reported that raw material costs have less of an impact on organic sales, and that the lower yields of organic blueberries are a larger factor.

[34] 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.

Transportation costs to the U.S. market

Transportation costs for foreign-origin blueberries shipped to the United States averaged 6.3 percent during 2019. These estimates were derived from official import data and represent the transportation and other charges on imports.[35]

U.S. inland transportation costs

Most responding U.S. producers (71 of 96) reported that transportation is typically arranged by the purchaser while most responding importers (29 of 39) reported that they typically arrange transportation to their customers. Most U.S. producers and importers reported that their U.S. inland transportation costs ranged from 1 to 11 percent.

Pricing practices

Pricing methods

U.S. producers and importers reported setting prices using transaction-by-transaction, contracts, price lists, and other methods.[36] As presented in table V-14, most U.S. producers reported selling on a transaction-by-transaction basis and about one-fifth of producers reported using contracts. Importers sell primarily on a transaction-by-transaction basis, as well as through contracts.

Table V-14
Blueberries: U.S. producers and importers reported price setting methods, by number of responding firms

Method	U.S. producers	U.S. importers
Transaction-by-transaction	67	34
Contract	24	23
Set price list	7	3
Other	56	5
Responding firms	116	39

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

[35] The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2019 and then dividing by the customs value based on the HTS subheadings 0810.40.0024, 0810.40.0026, 0810.40.0029, 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040.

[36] Regarding other methods, numerous firms reported that they do not set the price and that they are price-takers from marketers who tell them the price once the berries are sold.

U.S. producers reported selling the majority of their blueberries through spot sales and long-term contracts and most of the remainder through annual contracts (table V-15). Importers reported selling just over half of their blueberries through spot sales. U.S. producers and importers reported short-term contract durations of up to 12 months.

Table V-15
Blueberries: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2019

Item	U.S. producers	Subject U.S. importers
	Share (percent)	
Share of commercial U.S. shipments.--		
Long-term contracts	***	***
Annual contract	***	***
Short-term contracts	***	***
Spot sales	***	***
Total	100.0	100.0

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

Twelve purchasers reported that they purchase product daily, five purchase weekly, five purchase monthly, one purchases quarterly, and nine purchase annually.[37] Twenty-seven of 41 responding purchasers reported that their purchasing frequency had not changed since 2015. Purchasers generally contact 1 to 10 suppliers before making a purchase, and 29 of 42 purchasers report that negotiations take place between the supplier and purchaser.[38] Most responding purchasers (22 of 39) reported that they do not hold frozen blueberries in inventory or storage before re-selling to the ultimate customer; the 16 purchasers that do reported that frozen blueberries are held in a range between 10 days to 18 months.

[37] Several purchasers reported purchasing as needed or when available.

[38] Negotiations are typically based on price, volume, quality, packaging, reliability, time period of shipment, variety, origin, and payment terms. Several firms reported that they do not quote competing prices while one firm reported that competing quotes are typically mentioned.

Marketers

Fifty-four U.S. producers reported being members of a cooperative, and ninety-five utilize a marketer that acts as a broker to sell its fresh and/or frozen blueberries.[39] Some marketers sell exclusively U.S.-origin blueberries but others offer domestic as well as imported blueberries for sale to the U.S. market.[40] Of the marketing firms that sell both domestic and imported blueberries, 6 of 10 reported that they do not negotiate price with the supplier. Of the four firms that do negotiate price, *** reported that USDA prices can be used as a benchmark. When describing major purchasing factors, one of these marketing firms (***) ranked price as the third most important factor for fresh or chilled blueberries, *** ranked price as the second most important factor for frozen blueberries, and *** ranked price as the third most important factor for frozen blueberries. Of the ten marketing firms, five reported that price was "not" an important purchase factor for fresh blueberries and four reported that price was "somewhat" important (one firm did not respond to the question). For frozen blueberries, two firms reported that price was "very" important (eight firms did not respond). When asked how often the firm purchases blueberries that are offered at the lowest price, five marketing firms reported "never," four reported "sometimes," and one reported "usually." Five of these ten marketing firms reported purchasing imported fresh or chilled blueberries when U.S.-produced blueberries were available; of these five, two firms reported that the imported product was priced lower than the domestic product.[41] Two of these ten marketing firms reported purchasing imported frozen cultivated blueberries when U.S.-produced blueberries were available; of these two, one firm (***) reported that the imported product was priced lower than the domestic product, that price was the primary reason for purchasing imports instead of the domestic product, and that the quantity of imports purchased instead of domestic product since January 2015 was an estimated

[39] As reported in Part III, footnote 5, 23 companies reported being members of Michigan Blueberry Growers Association ("MBG"), 30 percent owner of Naturipe Farms, a fresh fruit marketing company. Other common marketing firms reported include, ***.

[40] Firms that indicated in their purchaser questionnaire that they distribute domestic and import blueberries include ***.

[41] One firm (***) reported that price was a primary reason for purchasing imports rather than domestic product and estimated the quantity of imports purchased instead of domestic product since January 2015 was ***.

***.[42] Five marketing firms reported that U.S. producers did not reduce prices for fresh or chilled cultivated blueberries in order to compete with lower-priced imports, while two reported that U.S. producers did reduce prices;[43] one firm reported reduced prices for frozen cultivated blueberries.[44]

Sales terms and discounts

The majority of the responding U.S. producers (67 of 106) reported that they typically quote prices on an f.o.b. basis. The majority of importers (22 of 39) reported that they typically quote prices on a delivered basis.

Eighty-five U.S. producers reported having no discount policy, nine reported offering quantity discounts,[45] one reported offering an annual total volume discount, and 16 reported offering other discounts (based on the market at the time of purchase, availability, performance, marketing company set discounts, and importer competition).

Thirty-four importers reported having no discount policy, two importers reported offering quantity discounts, one reported offering an annual total volume discount, and 2 reported offering other discounts.

[42] *** reported purchasing imports of frozen wild blueberries instead of domestic product, that the imported product was priced lower than the domestic product, that price was the primary reason for purchasing imports instead of domestic product, and estimated the quantity of imports purchased instead of domestic product since January 2015 was ***.

[43] *** estimated the reduction in U.S. prices to be *** and cited that price reductions have typically occurred ***. *** estimated U.S. price reductions at *** during the months of April, May, July, August, and September.

[44] *** estimated the reduction in U.S. prices to be ***.

[45] This discount is applied to shipments of blueberries that are purchased frequently and large enough to warrant a discount.

Price data

The Commission gathered monthly USDA shipping point price data for the two most common containers used to transport fresh or chilled blueberries that were traded at prominent points in the United States and at ports of entry for imports (products 1-4, below).[46] [47] These data have available prices, but not quantities. The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of Grade A frozen blueberries shipped to unrelated U.S. customers during January 2015-September 2020 (products 5-8, below).[48] [49]

Product 1.--Fresh conventional flats, 12 6-oz cups with lids.

Product 2.--Fresh conventional flats, 12 1-pt cups with lids.

Product 3.--Fresh organic flats, 12 6-oz cups with lids.

Product 4.--Fresh organic flats, 12 1-pt cups with lids.

Product 5.--Individual quick frozen (IQF), Cultivated, Grade A, Organic, 30 lbs box (labeled product 1 in questionnaire).

Product 6.--Individual quick frozen (IQF), Cultivated, Grade A, Conventional, 30 lbs box (labeled product 2 in questionnaire).

Product 7.--Individual quick frozen (IQF), Wild, Grade A, Organic, 30 lbs box (labelled product 3 in questionnaire).

Product 8.--Individual quick frozen (IQF), Wild, Grade A, Conventional, 30 lbs box (labelled product 4 in questionnaire).

[46] Prices represent open (spot) market sales by first handlers on product of generally good quality and condition unless otherwise stated and may include promotional allowances or other incentives. No consideration is given to after-sale adjustments unless otherwise stated. Reported prices generally include, but are not limited to, applicable brokerage fees and commissions, Customs fees and duties, U.S. packaging and U.S. freight costs prior to first sale, paid by the shipper/seller. Delivered Sales, Shipping Point Basis excludes all charges for freight after sale. *See* United States Department of Agriculture, Agricultural Marketing Service (USDA AMS), Specialty Crops Shipping Point Market Price Reports, available at https://www.ams.usda.gov/market-news/fruit-and-vegetable-shipping-point-market-price-reports.

[47] Daily Shipping Point dataset for January 1, 2015 – September 30, 2020 was downloaded from the USDA AMS website on October 27, 2020.

[48] Data were requested net of all discounts, both direct and indirect, as well as U.S.-inland transportations costs. Grade A is defined by the U.S. standards for grades of frozen blueberries to be the quality of frozen blueberries that possess similar varietal characteristics; that are practically free from defects; that possess a good character, normal flavor and odor; and are of such quality with respect to color as to score not less than 90 points when scored in accordance with USDA's U.S. standards.

[49] The Commission also received voluntarily-provided weekly quantity and value of sales from two importers and one foreign producer. These data were not included in the price data analysis.

USDA shipping point prices (for products 1-4) are reported in two sets of ranges; the overall low-high transaction price range per product from a given origin on a given day and the mostly low-high price range.[50] Commission staff calculated a midpoint price based on the reported low and high prices for each product on each day.[51] A simple average monthly calculation was made by using the mostly midpoint price calculation for each product.[52] [53]

Thirty-two U.S. producers and ten importers provided usable pricing data for sales of the requested frozen blueberry products (products 5-8), although not all firms reported pricing for all products for all quarters.[54] [55] Pricing data reported by these firms accounted for approximately 36.4 percent of U.S. producers' net sales of frozen blueberries and 15.2 percent of U.S. shipments of frozen blueberries imports in 2019.[56]

Price data for products 1-8 are presented in tables V-16 to V-23 and figures V-2 to V-9. For the purposes of this report, prices from individual import sources are shown, in addition to aggregate import prices, due to pronounced differences in the timing of sales by source.

[50] The overall low-high price is the primary price range showing low price and high price while the mostly low-high price is the price range where most of the sales are made, showing both the mostly low and the mostly high price within the overall range. *See* USDA, Shipping Point Report – Report Details, available at
https://www.marketnews.usda.gov/mnp/fv-help-15.

[51] The midpoint price for pricing product 1 is calculated for 3,855 daily entries (1,011 for domestic-origin and 2,844 for foreign-origin) between January 1, 2015 and September 30, 2020; pricing product 2 for 3,166 daily entries (1,563 for domestic-origin and 1,603 for foreign-origin); pricing product 3 for 1,972 (787 for domestic-origin and 1,185 for foreign origin); and pricing product 4 for 447 (323 for domestic-origin and 154 for foreign-origin).

[52] If the mostly low-high range is not reported for a given entry, the overall midpoint price is used in the monthly average calculation.

[53] There are instances where Argentina and Uruguay are comingled in the USDA AMS Shipping Point database. This is likely due to USDA having only enough contacts to satisfy its confidentiality requirements if the two districts were combined (USITC staff email with USDA, 11/9/2020). As such pricing data are reported for combined Argentina/Uruguay.

[54] 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.

[55] Michigan Blueberry Growers (MBG) provided frozen price data for products 5 and 6 on behalf of 37 of its cooperative members that submitted a U.S. Producers' questionnaire.

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

Table V-16
Fresh or chilled blueberries: Simple-average shipping point prices of domestic and imported product 1, by month, January 2015 through September 2020

Period	United States	All import sources	Canada	Mexico
	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)
2015:				
January.	---	15.22	---	17.00
February	---	17.98	---	18.89
March	30.29	14.99	---	18.86
April	17.72	18.73	---	18.73
May	12.96	12.10	---	12.10
June	10.32	---	---	---
July	10.25	---	---	---
August	15.89	15.23	15.23	---
September	24.70	32.19	17.50	---
October	30.00	35.42	---	34.42
November	---	28.06	---	27.53
December	---	19.50	---	20.36
2016:				
January.	---	16.79	---	18.26
February	---	14.47	---	14.65
March	---	17.50	---	20.55
April	31.00	30.71	---	30.71
May	13.87	14.40	---	14.40
June	11.17	11.88	11.88	---
July	11.13	11.03	11.03	---
August	15.96	14.91	14.91	---
September	23.20	33.75	17.00	---
October	---	26.45	---	26.13
November	---	17.70	---	17.25
December	---	14.26	---	13.81
2017:				
January.	---	10.70	---	11.45
February	---	14.92	---	17.53
March	30.20	18.32	---	23.04
April	22.17	21.15	---	21.15
May	17.54	16.20	---	16.20
June	15.00	---	---	---
July	12.69	11.03	11.03	---
August	13.60	12.52	12.52	---
September	17.73	20.65	14.90	---
October	24.00	21.86	---	20.13
November	---	21.96	---	21.50
December	---	23.21	---	21.05

Table continued on next page.

Table V-16--Continued
Fresh or chilled blueberries: Simple-average shipping point prices of domestic and imported product 1, by month, January 2015 through September 2020

Period	United States	All import sources	Canada	Mexico
	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)	Simple average shipping point price (dollars per flat 12 6-oz cups with lids	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)
2018:				
January.	---	16.25	---	16.10
February	---	11.94	---	12.53
March	27.25	11.40	---	14.42
April	19.25	17.81	---	17.81
May	20.12	16.95	---	16.95
June	13.19	14.00	---	14.00
July	10.38	8.83	8.83	---
August	13.00	23.00	---	---
September	16.32	22.33	15.00	---
October	---	25.74	---	25.05
November	---	13.59	---	12.90
December	---	16.63	---	14.79
2019:				
January.	---	11.46	---	10.67
February	---	10.77	---	11.11
March	24.45	13.39	---	14.90
April	16.71	16.80	---	16.80
May	12.19	9.00	---	9.00
June	14.24	---	---	---
July	11.34	11.16	11.16	---
August	11.86	12.60	11.36	---
September	13.51	18.60	---	16.33
October	---	17.71	---	16.41
November	---	15.69	---	15.00
December	---	9.91	---	9.05
2020:				
January.	---	7.80	---	8.05
February	---	14.64	---	14.97
March	23.75	20.84	---	19.45
April	12.31	10.91	---	10.91
May	12.23	9.80	---	9.80
June	12.78	8.63	---	8.63
July	12.14	10.33	10.33	---
August	10.50	9.56	9.56	---
September	17.00	19.08	---	18.00

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Table V-16--Continued
Fresh or chilled blueberries: Simple-average shipping point prices of domestic and imported product 1, by month, January 2015 through September 2020

Period	Argentina/Uruguay	Chile	Peru
	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)
2015:			
January.	---	14.49	---
February	---	17.45	---
March	---	12.75	---
April	---	---	---
May	---	---	---
June	---	---	---
July	---	---	---
August	---	---	---
September	32.93	---	---
October	35.91	---	---
November	28.35	---	---
December	21.00	18.31	---
2016:			
January.	---	16.01	---
February	---	14.37	---
March	---	13.31	---
April	---	---	---
May	---	---	---
June	---	---	---
July	---	---	---
August	---	---	---
September	36.00	---	38.20
October	25.87	---	27.29
November	17.23	18.67	18.18
December	14.50	14.19	14.90
2017:			
January.	---	10.25	11.57
February	---	14.05	---
March	---	16.19	---
April	---	---	---
May	---	---	---
June	---	---	---
July	---	---	---
August	---	---	---
September	25.80	---	27.00
October	22.59	---	22.23
November	21.31	25.17	20.97
December	22.67	23.91	23.38

Table continued on next page.

Table V-16--Continued
Fresh or chilled blueberries: Simple-average shipping point prices of domestic and imported product 1, by month, January 2015 through September 2020

Period	Argentina/Uruguay	Chile	Peru
	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)	Simple average shipping point price (dollars per flat 12 6-oz cups with lids	Simple average shipping point price (dollars per flat 12 6-oz cups with lids
2018:			
January.	---	16.32	---
February	---	11.67	---
March	---	10.20	---
April	---	---	---
May	---	---	---
June	---	---	---
July	---	---	---
August	---	---	23.00
September	---	---	23.28
October	26.42	---	25.18
November	15.63	15.00	13.00
December	---	17.07	17.48
2019:			
January.	---	11.50	11.83
February	---	10.50	11.13
March	---	11.88	---
April	---	---	---
May	---	---	---
June	---	---	---
July	---	---	---
August	---	---	15.50
September	19.00	---	18.98
October	18.64	---	17.90
November	16.16	---	15.81
December	16.00	8.13	10.91
2020:			
January.	---	8.07	7.14
February	---	14.47	---
March	---	21.93	---
April	---	---	---
May	---	---	---
June	---	---	---
July	---	---	---
August	---	---	---
September	---	---	20.17

Note: Product 1: Fresh Conventional Flats 12 6-oz cups with lids.

Source: Compiled from USDA AMS.

Table V-17
Fresh or chilled blueberries: Simple-average shipping point prices of domestic and imported product 2, by month, January 2015 through September 2020

Period	United States	All import sources	Canada
	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)
2015:			
January.	---	25.52	---
February	---	27.73	---
March	---	23.20	---
April	28.65	---	---
May	21.32	---	---
June	13.47	12.20	12.20
July	13.84	12.41	12.41
August	23.69	22.05	22.05
September	30.42	---	---
October	---	---	---
November	---	---	---
December	---	31.31	---
2016:			
January.	---	26.86	---
February	---	22.66	---
March	---	20.25	---
April	28.75	---	---
May	19.45	---	---
June	15.29	14.07	14.07
July	13.97	11.63	11.63
August	23.07	20.27	20.27
September	29.35	---	---
October	---	---	---
November	---	---	---
December	---	21.28	---
2017:			
January.	---	15.08	---
February	---	20.83	---
March	---	21.06	---
April	32.31	---	---
May	26.94	---	---
June	20.77	---	---
July	18.08	14.34	14.34
August	20.01	17.57	17.57
September	27.25	23.80	23.80
October	---	---	---
November	---	---	---
December	---	33.67	---

Table continued on next page.

Table V-17--Continued
Fresh or chilled blueberries: Simple-average shipping point prices of domestic and imported product 2, by month, January 2015 through September 2020

Period	United States	All import sources	Canada
	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)
2018:			
January.	---	23.40	---
February	---	20.69	---
March	49.50	19.11	---
April	34.28	---	---
May	31.03	---	---
June	19.80	---	---
July	14.48	10.97	10.97
August	19.10	20.19	18.26
September	22.38	32.52	22.00
October	---	---	---
November	---	28.78	---
December	---	25.86	---
2019:			
January.	---	19.87	---
February	---	16.29	---
March	46.67	15.09	---
April	27.57	---	---
May	17.88	---	---
June	19.31	---	---
July	15.57	13.42	13.42
August	16.68	16.87	14.83
September	20.24	26.79	19.45
October	---	29.23	---
November	---	25.42	---
December	---	19.08	---
2020:			
January.	---	16.64	---
February	---	24.92	---
March	45.33	32.14	---
April	20.24	---	---
May	21.42	---	---
June	20.60	---	---
July	19.48	16.18	16.18
August	16.33	16.38	15.26
September	21.25	27.61	19.00

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Table V-17--Continued
Fresh or chilled blueberries: Simple-average shipping point prices of domestic and imported product 2, by month, January 2015 through September 2020

Period	Argentina/Uruguay	Chile	Peru
	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)
2015:			
January.	---	25.52	---
February	---	27.73	---
March	---	23.20	---
April	---	---	---
May	---	---	---
June	---	---	---
July	---	---	---
August	---	---	---
September	---	---	---
October	---	---	---
November	---	---	---
December	---	31.31	---
2016:			
January.	---	26.86	---
February	---	22.66	---
March	---	20.25	---
April	---	---	---
May	---	---	---
June	---	---	---
July	---	---	---
August	---	---	---
September	---	---	---
October	---	---	---
November	---	---	---
December	---	20.47	23.40
2017:			
January.	---	14.60	17.14
February	---	20.83	---
March	---	21.06	---
April	---	---	---
May	---	---	---
June	---	---	---
July	---	---	---
August	---	---	---
September	---	---	---
October	---	---	---
November	---	---	---
December	---	33.50	34.00

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Table V-17--Continued
Fresh or chilled blueberries: Simple-average shipping point prices of domestic and imported product 2, by month, January 2015 through September 2020

Period	Argentina/Uruguay	Chile	Peru
	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)
2018:			
January.	---	23.40	---
February	---	20.69	---
March	---	19.11	---
April	---	---	---
May	---	---	---
June	---	---	---
July	---	---	---
August	---	---	35.00
September	---	---	35.44
October	---	---	---
November	---	---	28.78
December	---	26.57	25.50
2019:			
January.	---	19.78	20.08
February	---	16.24	16.36
March	---	15.20	14.00
April	---	---	---
May	---	---	---
June	---	---	---
July	---	---	---
August	---	---	25.40
September	---	---	28.63
October	---	---	29.23
November	25.00	---	25.51
December	---	17.96	19.75
2020:			
January.	---	17.23	15.63
February	---	24.92	---
March	---	32.14	---
April	---	---	---
May	---	---	---
June	---	---	---
July	---	---	---
August	---	---	17.61
September	---	---	29.69

Note: Product 2: Fresh Conventional Flats 12 1-pt cups with lids.

Note: Prices were not reported for Product 2 from Mexico.

Source: Compiled from USDA AMS.

Table V-18
Fresh or chilled blueberries: Simple-average shipping point prices of domestic and imported product 3, by month, January 2015 through September 2020

Period	United States	All import sources	Argentina/Uruguay	Chile	Peru
	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)
2015:					
January.	---	---	---	---	---
February	---	---	---	---	---
March	---	---	---	---	---
April	29.19	---	---	---	---
May	23.26	---	---	---	---
June	20.70	---	---	---	---
July	22.00	---	---	---	---
August	29.79	---	---	---	---
September	---	---	---	---	---
October	---	---	---	---	---
November	---	---	---	---	---
December	---	39.75	---	39.75	---
2016:					
January.	---	33.61	---	33.61	---
February	---	23.87	---	23.87	---
March	---	20.00	---	20.00	---
April	---	---	---	---	---
May	23.48	---	---	---	---
June	19.12	---	---	---	---
July	17.45	---	---	---	---
August	26.70	---	---	---	---
September	38.33	---	---	---	---
October	---	---	---	---	---
November	---	29.63	21.00	30.86	---
December	---	26.95	21.00	27.05	---
2017:					
January.	---	20.02	---	20.02	---
February	---	18.73	---	18.73	---
March	38.00	22.00	---	22.00	---
April	35.35	---	---	---	---
May	25.96	---	---	---	---
June	21.70	---	---	---	---
July	---	---	---	---	---
August	22.40	---	---	---	---
September	23.00	---	---	---	---
October	---	49.00	49.00	---	---
November	---	34.43	35.37	25.25	38.13
December	---	28.96	25.00	29.20	---

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Table V-18--Continued
Fresh or chilled blueberries: Simple-average shipping point prices of domestic and imported product 3, by month, January 2015 through September 2020

Period	United States	All import sources	Argentina/Uruguay	Chile	Peru
	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)	Simple average shipping point price (dollars per flat 12 6-oz cups with lids)
2018:					
January.	---	26.32	---	26.32	---
February	---	21.76	---	21.76	---
March	---	17.36	---	17.36	---
April	24.50	---	---	---	---
May	24.13	---	---	---	---
June	19.25	---	---	---	---
July	14.03	---	---	---	---
August	24.62	---	---	---	---
September	26.65	---	---	---	---
October	---	38.00	38.00	---	38.00
November	---	33.24	38.00	29.88	34.00
December	---	22.71	---	21.58	24.23
2019:					
January.	---	22.71	---	22.41	23.63
February	---	17.44	---	17.34	20.50
March	34.35	15.28	---	15.28	---
April	28.67	---	---	---	---
May	17.25	---	---	---	---
June	18.17	---	---	---	---
July	17.34	---	---	---	---
August	18.62	---	---	---	---
September	25.94	31.79	---	---	31.79
October	---	28.58	27.55	---	29.52
November	---	20.66	19.63	---	21.24
December	---	13.85	15.75	12.08	14.53
2020:					
January.	---	11.03	---	11.43	10.41
February	---	19.76	---	19.76	---
March	33.33	24.82	---	24.82	---
April	21.50	---	---	---	---
May	16.02	---	---	---	---
June	15.50	---	---	---	---
July	19.36	---	---	---	---
August	18.83	---	---	---	---
September	24.26	30.37	---	---	30.37

Note: Product 3: Fresh Organic Flats 12 6-oz cups with lids.

Note: Prices were not reported for Product 3 from Canada and Mexico.

Source: Compiled from USDA AMS.

Table V-19
Fresh or chilled blueberries: Simple-average shipping point prices of domestic and imported product 4, by month, January 2015 through September 2020

Period	United States	All import sources	Chile	Peru
	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)
2015:				
January.	---	---	---	---
February	---	---	---	---
March	---	---	---	---
April	---	---	---	---
May	---	---	---	---
June	28.02	---	---	---
July	28.27	---	---	---
August	---	---	---	---
September	---	---	---	---
October	---	---	---	---
November	---	---	---	---
December	---	---	---	---
2016:				
January.	---	---	---	---
February	---	---	---	---
March	---	---	---	---
April	---	---	---	---
May	---	---	---	---
June	24.14	---	---	---
July	26.60	---	---	---
August	31.30	---	---	---
September	---	---	---	---
October	---	---	---	---
November	---	---	---	---
December	---	---	---	---
2017:				
January.	---	---	---	---
February	---	---	---	---
March	---	---	---	---
April	---	---	---	---
May	---	---	---	---
June	---	---	---	---
July	28.00	---	---	---
August	28.50	---	---	---
September	---	---	---	---
October	---	---	---	---
November	---	---	---	---
December	---	---	---	---

Table continued on next page.

Table V-19--Continued
Fresh or chilled blueberries: Simple-average shipping point prices of domestic and imported product 4, by month, January 2015 through September 2020

Period	United States	All import sources	Chile	Peru
	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)	Simple average shipping point price (dollars per flat 12 1-pt cups with lids)
2018:				
January.	---	---	---	---
February	---	28.33	28.33	---
March	---	25.97	25.97	---
April	---	---	---	---
May	---	---	---	---
June	24.67	---	---	---
July	19.45	---	---	---
August	29.41	---	---	---
September	---	---	---	---
October	---	---	---	---
November	---	---	---	---
December	---	---	---	---
2019:				
January.	---	---	---	---
February	---	23.74	23.74	---
March	---	17.42	17.42	---
April	---	---	---	---
May	25.94	---	---	---
June	28.86	---	---	---
July	26.29	---	---	---
August	26.78	---	---	---
September	---	---	---	---
October	---	---	---	---
November	---	---	---	---
December	---	---	---	---
2020:				
January.	---	25.00	25.00	---
February	---	26.27	26.27	---
March	---	34.89	34.89	---
April	28.00	---	---	---
May	25.83	---	---	---
June	26.00	---	---	---
July	28.19	---	---	---
August	27.96	---	---	---
September	32.73	43.36	---	43.36

Note: Product 4: Fresh Organic Flats 12 1-pt cups with lids.

Note: Prices were not reported for Product 4 from Canada, Mexico, and Argentina/Uruguay.

Source: Compiled from USDA AMS.

Table V-20
Frozen blueberries: Weighted-average f.o.b. prices and quantities of domestic and imported product 5, by quarter, January 2015 through September 2020

Period	United States		All import sources		Canada		Argentina		Chile	
	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)
2015: Jan.-Mar.	***	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***	***
2016: Jan.-Mar.	***	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***	***
2017: Jan.-Mar.	***	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***	***
2018: Jan.-Mar.	***	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***	***
2020: Jan.-Mar.	***	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***	***

Note: Product 5: IQF, Cultivated, Grade A, Organic, 30 lbs box (labeled product 1 in questionnaire).

Note: No importers provided price data for Product 5 from ***.

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

Table V-21
Frozen blueberries: Weighted-average f.o.b. prices and quantities of domestic and imported product 6, by quarter, January 2015 through September 2020

Period	United States		All import sources		Canada		Argentina		Chile	
	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)
2015:										
Jan.-Mar.	0.99	5,720,786	1.55	3,960,384	***	***	***	***	***	***
Apr.-Jun.	0.93	11,031,680	2.34	3,244,668	***	***	***	***	***	***
Jul.-Sep.	0.83	13,939,291	1.69	3,905,616	***	***	***	***	***	***
Oct.-Dec.	0.96	5,759,476	1.74	4,170,791	***	***	***	***	***	***
2016:										
Jan.-Mar.	1.01	7,652,965	1.70	4,490,369	***	***	***	***	***	***
Apr.-Jun.	0.96	8,894,301	1.86	3,864,673	***	***	***	***	***	***
Jul.-Sep.	0.75	8,496,246	1.75	3,979,448	***	***	***	***	***	***
Oct.-Dec.	0.95	6,669,445	1.94	5,735,028	***	***	***	***	***	***
2017:										
Jan.-Mar.	0.88	5,721,245	1.61	4,517,490	***	***	***	***	***	***
Apr.-Jun.	0.85	5,133,448	1.02	1,650,810	***	***	***	***	***	***
Jul.-Sep.	0.72	10,170,802	1.37	2,372,538	***	***	***	***	***	***
Oct.-Dec.	0.97	8,949,419	1.95	5,410,942	***	***	***	***	***	***
2018:										
Jan.-Mar.	0.99	7,251,258	1.86	3,126,995	***	***	***	***	***	***
Apr.-Jun.	0.87	6,230,580	2.18	1,770,994	***	***	***	***	***	***
Jul.-Sep.	0.77	6,497,077	1.92	4,549,630	***	***	***	***	***	***
Oct.-Dec.	1.00	4,536,810	1.52	3,509,114	***	***	***	***	***	***
2019:										
Jan.-Mar.	0.94	5,402,978	0.91	4,967,312	***	***	***	***	***	***
Apr.-Jun.	0.74	4,041,000	1.52	2,422,492	***	***	***	***	***	***
Jul.-Sep.	0.62	11,683,263	1.57	4,605,044	***	***	***	***	***	***
Oct.-Dec.	0.92	5,189,031	1.56	6,989,374	***	***	***	***	***	***
2020:										
Jan.-Mar.	0.88	4,658,229	0.96	4,462,860	***	***	***	***	***	***
Apr.-Jun.	0.87	4,940,820	1.34	5,245,692	***	***	***	***	***	***
Jul.-Sep.	0.79	9,193,793	1.75	5,915,370	***	***	***	***	***	***

Note: Product 6: IQF, Cultivated, Grade A, Conventional, 30 lbs box (labeled product 2 in questionnaire).

Note: No importers provided price data for Product 6 from ***.

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

Table V-22
Frozen blueberries: Weighted-average f.o.b. prices and quantities of domestic and imported product 7, by quarter, January 2015 through September 2020

Period	United States		All import sources		Canada		Chile		All other sources	
	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)
2015: Jan.-Mar.	***	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***	***
2016: Jan.-Mar.	***	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***	***
2017: Jan.-Mar.	***	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***	***
2018: Jan.-Mar.	***	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***	***	***
2020: Jan.-Mar.	***	***	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***	***	***

Note: Product 7: IQF, Wild, Grade A, Organic, 30 lbs box (labelled product 3 in questionnaire).

Note: No importers provided price data for Product 7 from ***.

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

Table V-23
Frozen blueberries: Weighted-average f.o.b. prices and quantities of domestic and imported product 8, by quarter, January 2015 through September 2020

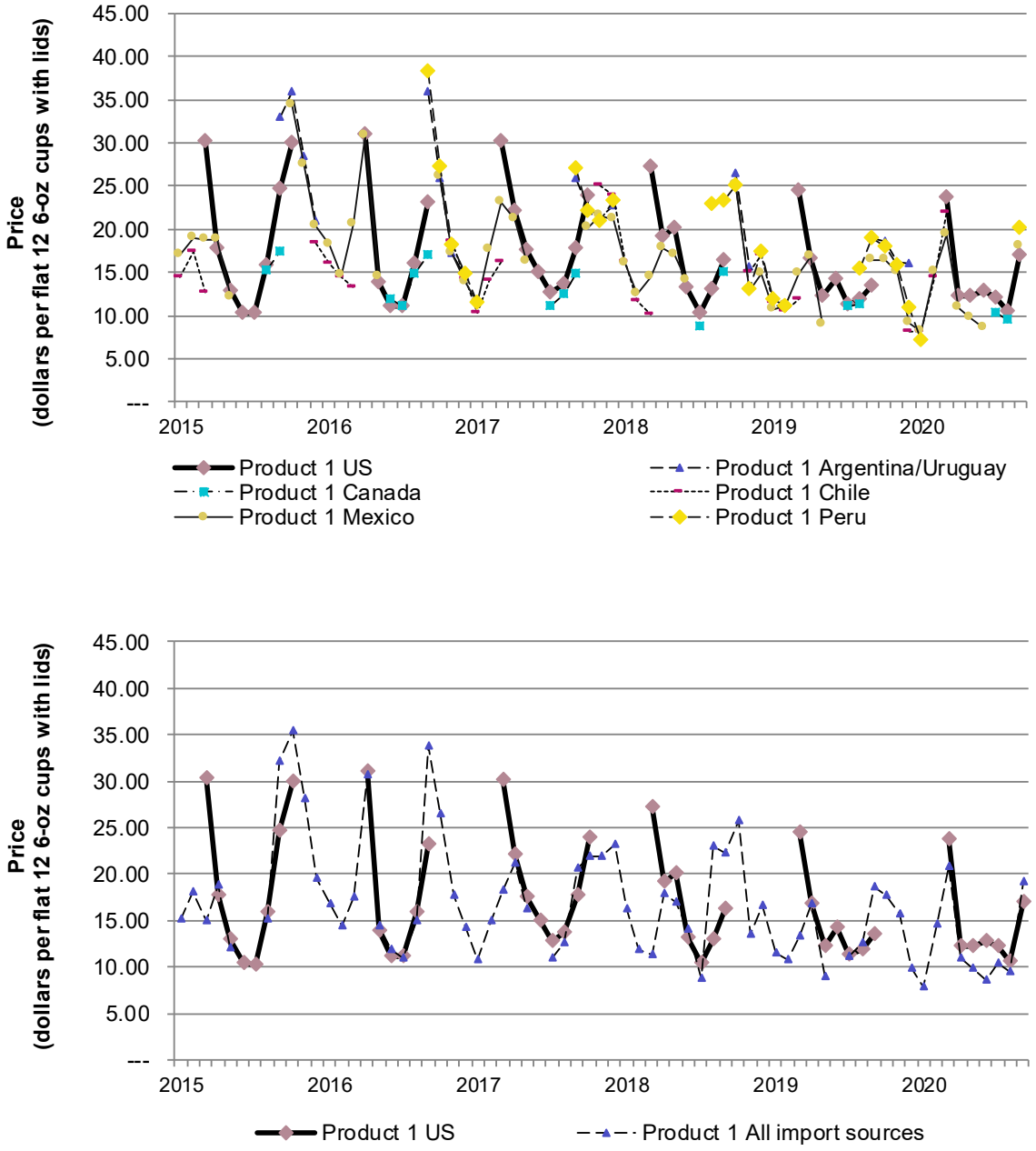
Period	United States		All import sources		Canada		Chile	
	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)	Price (dollars per pound)	Quantity (pounds)
2015:								
Jan.-Mar.	1.58	5,865,215	1.80	6,247,727	***	***	***	***
Apr.-Jun.	1.53	6,606,337	1.71	7,156,867	***	***	***	***
Jul.-Sep.	1.47	5,869,249	1.70	7,626,881	***	***	***	***
Oct.-Dec.	1.23	6,494,040	1.61	6,937,305	***	***	***	***
2016:								
Jan.-Mar.	1.31	6,339,096	1.59	4,912,460	***	***	***	***
Apr.-Jun.	1.28	7,767,830	1.38	8,335,594	***	***	***	***
Jul.-Sep.	1.21	9,892,862	1.47	4,577,549	***	***	***	***
Oct.-Dec.	0.94	13,118,199	1.32	7,106,198	***	***	***	***
2017:								
Jan.-Mar.	0.96	6,210,459	1.08	6,077,916	***	***	***	***
Apr.-Jun.	1.02	6,052,677	1.02	5,727,396	***	***	***	***
Jul.-Sep.	0.93	6,385,793	0.97	4,388,717	***	***	***	***
Oct.-Dec.	0.96	10,565,069	0.98	5,886,615	***	***	***	***
2018:								
Jan.-Mar.	1.01	11,480,009	0.80	10,584,260	***	***	***	***
Apr.-Jun.	1.11	3,508,846	0.88	8,458,228	***	***	***	***
Jul.-Sep.	1.03	4,074,588	1.00	5,457,855	***	***	***	***
Oct.-Dec.	1.13	6,214,831	1.09	5,101,171	***	***	***	***
2019:								
Jan.-Mar.	1.13	7,380,300	1.17	5,390,569	***	***	***	***
Apr.-Jun.	1.05	4,842,952	1.09	11,280,413	***	***	***	***
Jul.-Sep.	1.16	5,119,281	1.17	5,380,498	***	***	***	***
Oct.-Dec.	1.22	5,868,053	1.17	7,735,859	***	***	***	***
2020:								
Jan.-Mar.	1.16	8,455,367	1.19	8,673,301	***	***	***	***
Apr.-Jun.	1.22	5,574,426	1.29	5,561,945	***	***	***	***
Jul.-Sep.	1.25	6,259,991	1.39	5,207,781	***	***	***	***

Note: Product 8: IQF, Wild, Grade A, Conventional, 30 lbs box (labelled product 4 in questionnaire).

Note: No importers provided price data for Product 8 from ***.

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

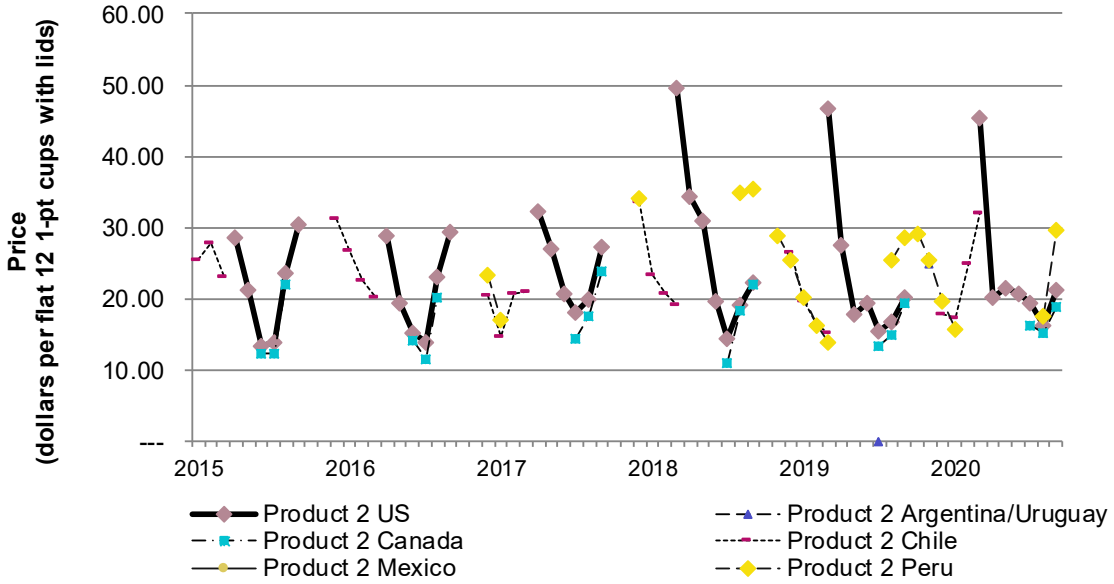
Figure V-2
Fresh or chilled blueberries: Simple-average shipping point prices of domestic and imported product 1, by month, January 2015 through September 2020

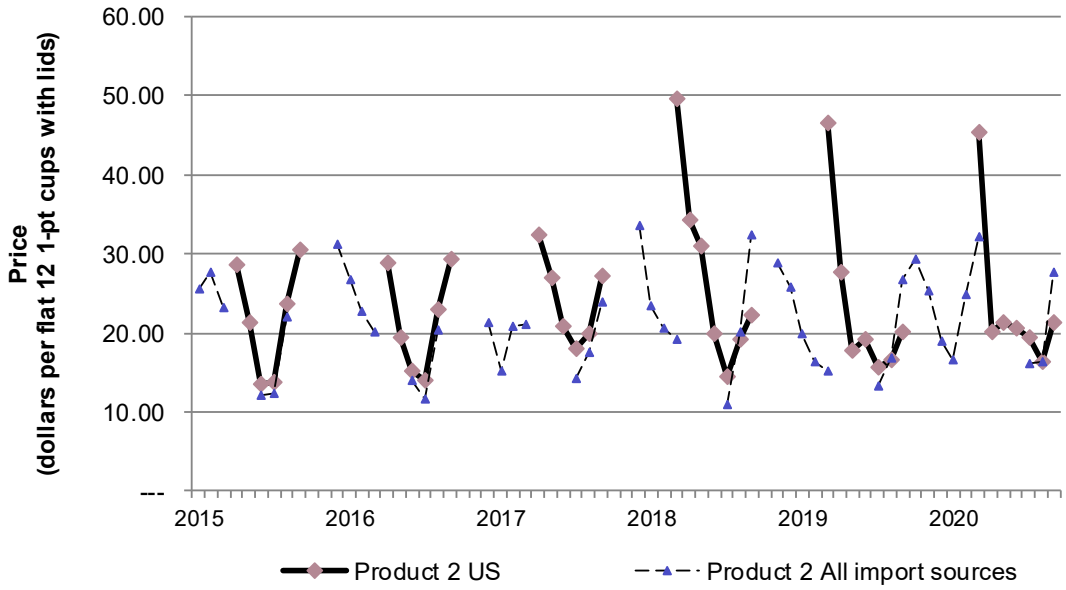


Product 1: Fresh Conventional Flats 12 6-oz cups with lids.

Source: Compiled from USDA AMS.

Figure V-3
Fresh or chilled blueberries: Simple-average shipping point prices of domestic and imported product 2, by month, January 2015 through September 2020

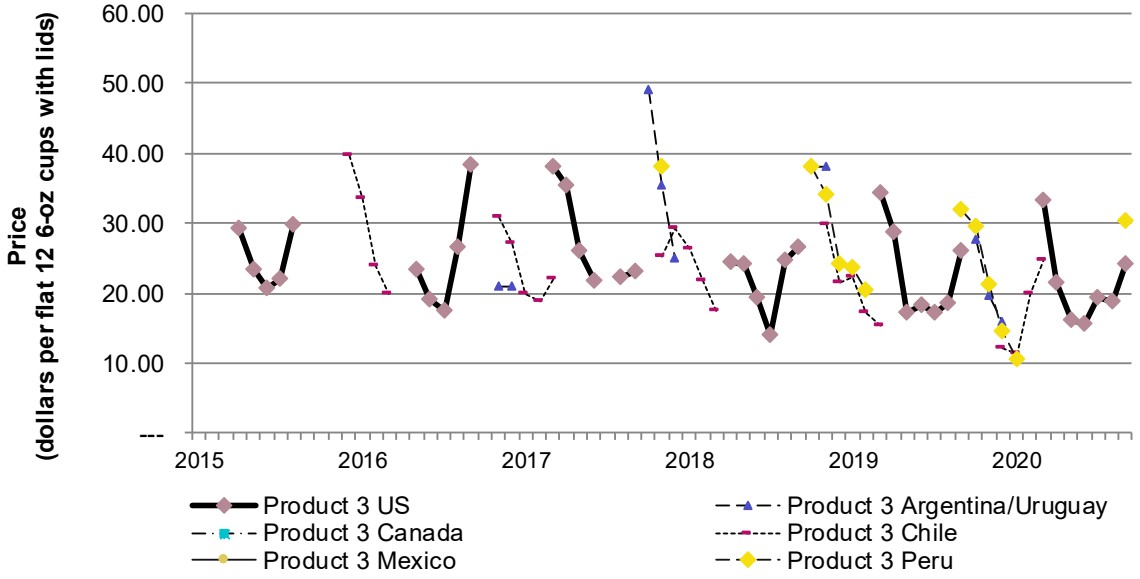


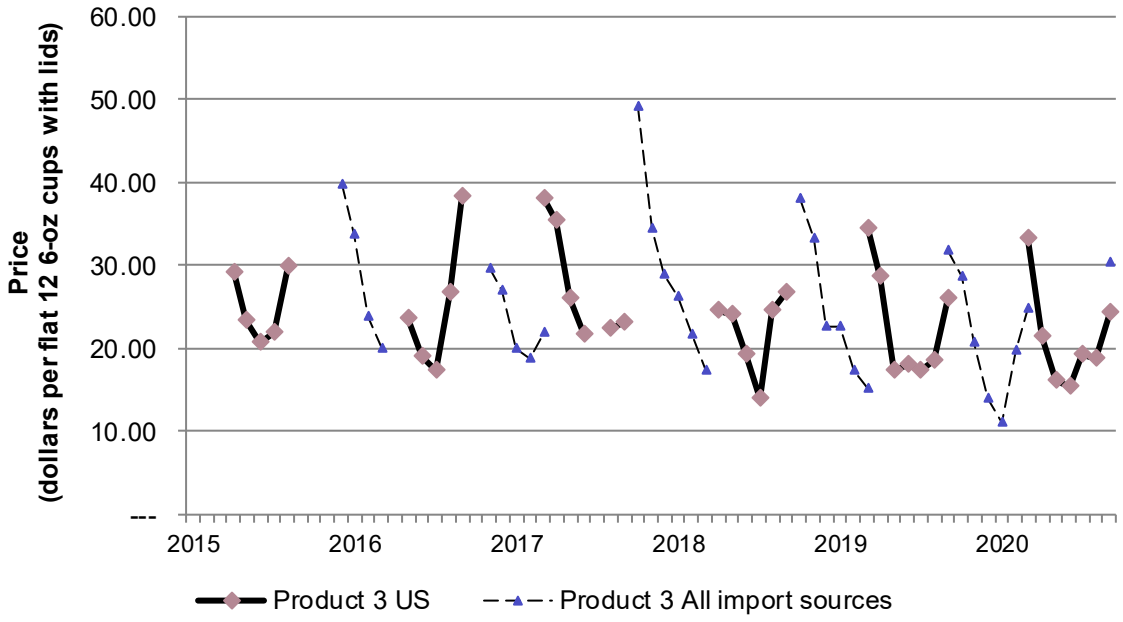


Product 2: Fresh Conventional Flats 12 1-pt cups with lids.

Source: Compiled from USDA AMS.

Figure V-4
Fresh or chilled blueberries: Simple-average shipping point prices of domestic and imported product 3, by month, January 2015 through September 2020

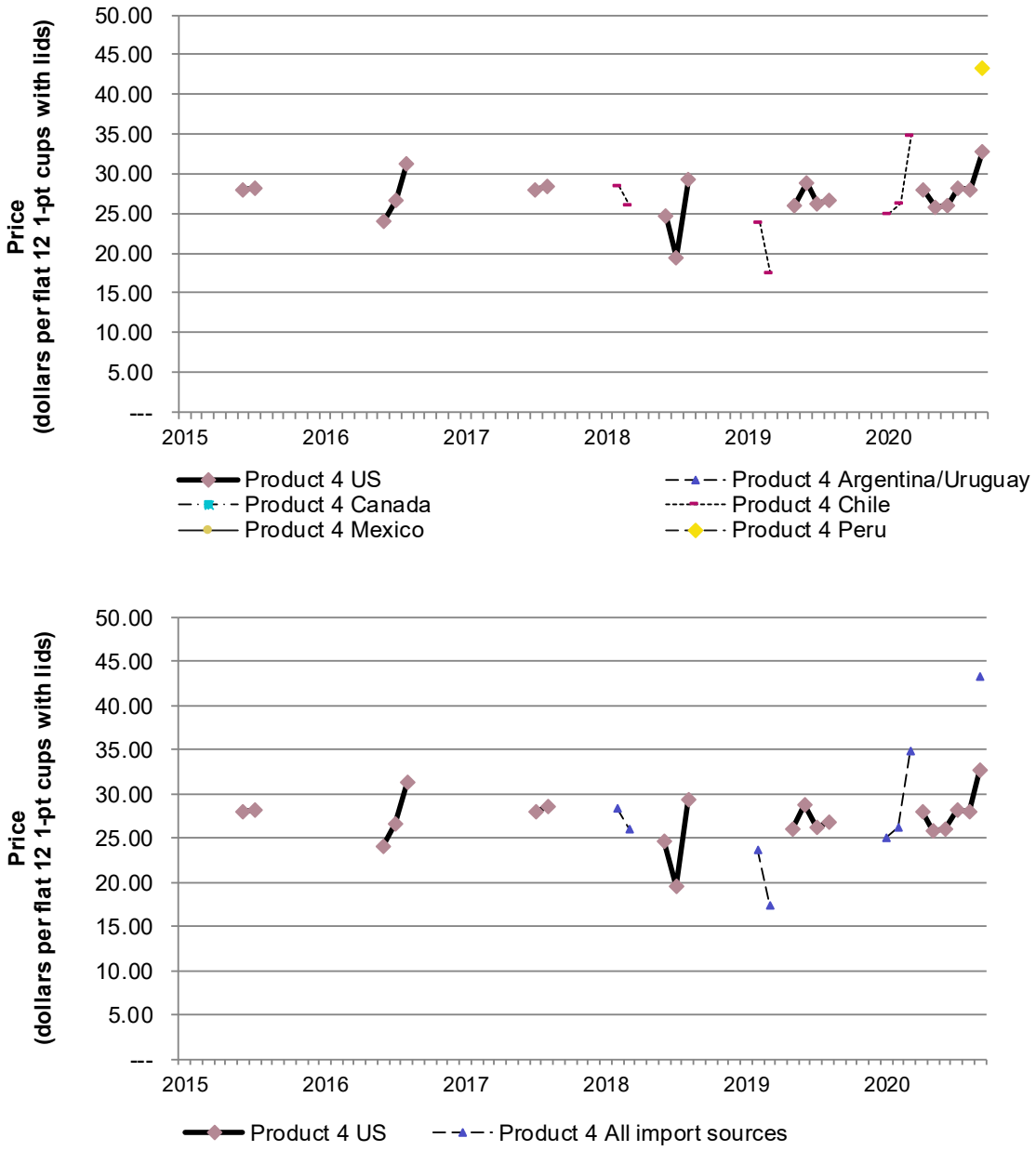




Product 3: Fresh Organic Flats 12 6-oz cups with lids.

Source: Compiled from USDA AMS.

Figure V-5
Fresh or chilled blueberries: Simple-average shipping point prices of domestic and imported product 4, by month, January 2015 through September 2020



Product 4: Fresh Organic Flats 12 1-pt cups with lids.

Source: Compiled from USDA AMS.

Figure V-6
Frozen blueberries: Weighted-average f.o.b. prices and quantities of domestic and imported product 5, by quarter, January 2015 through September 2020

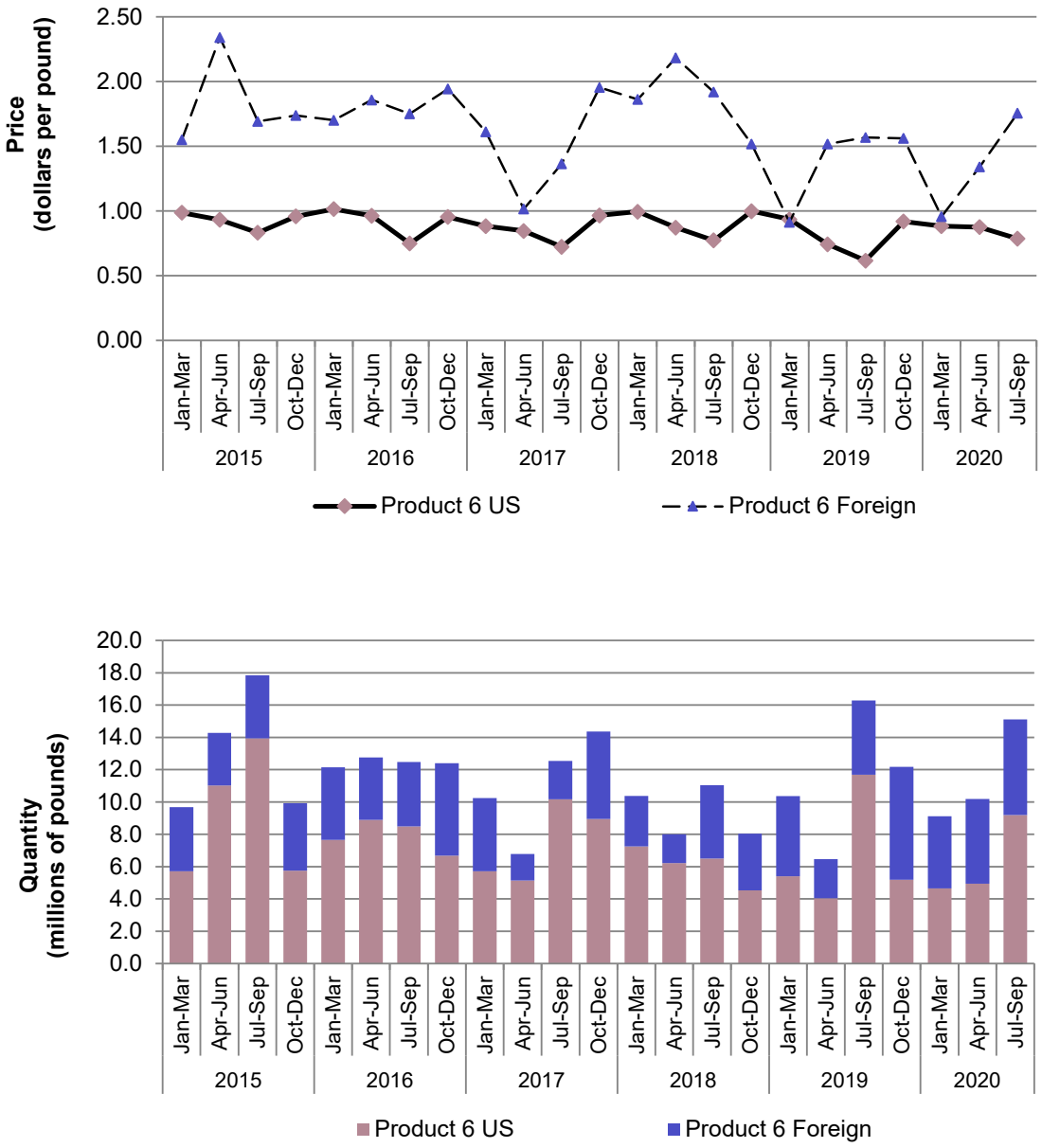
* * * * * * *

* * * * * * *

Product 5: IQF, Cultivated, Grade A, Organic, 30 lbs box (labeled product 1 in questionnaire).

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

Figure V-7
Frozen blueberries: Weighted-average f.o.b. prices and quantities of domestic and imported product 6, by quarter, January 2015 through September 2020



Product 6: IQF, Cultivated, Grade A, Conventional, 30 lbs box (labeled product 2 in questionnaire).

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

Figure V-8
Frozen blueberries: Weighted-average f.o.b. prices and quantities of domestic and imported product 7, by quarter, January 2015 through September 2020

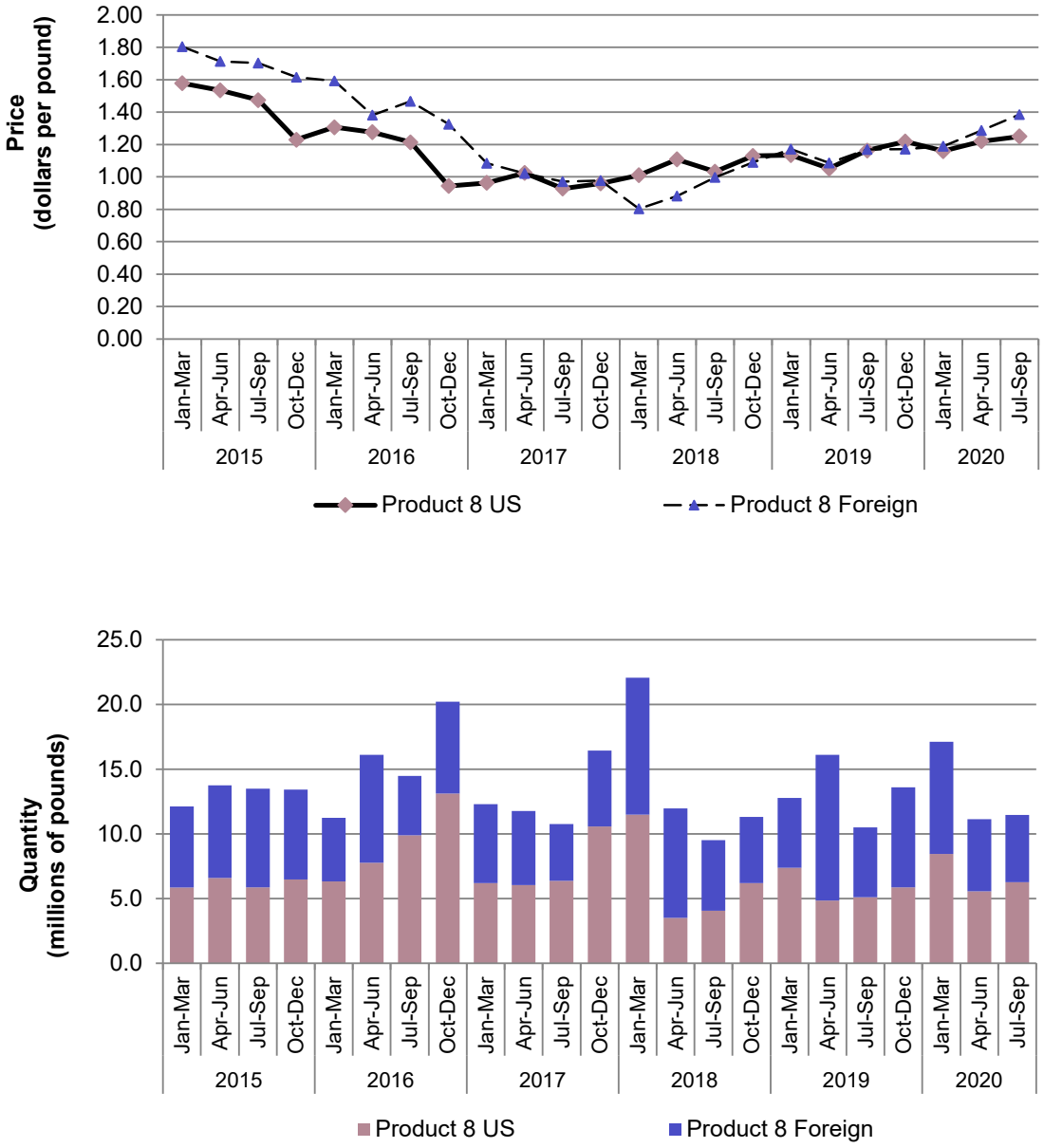
* * * * * * *

* * * * * * *

Product 7: IQF, Wild, Grade A, Organic, 30 lbs box (labelled product 3 in questionnaire).

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

Figure V-9
Frozen blueberries: Weighted-average f.o.b. prices and quantities of domestic and imported product 8, by quarter, January 2015 through September 2020



Product 8: IQF, Wild, Grade A, Conventional, 30 lbs box (labelled product 4 in questionnaire).

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

Price trends and comparisons

In general, prices decreased during 2015-19. Table V-24 summarizes the price trends, by source and by product.[57] As shown in the table, U.S.-origin fresh or chilled blueberries price decreases ranged from 4.2 to 21.6 percent during 2015-19 while foreign-origin fresh or chilled blueberries price decreases ranged from 8.3 to 46.0 percent.[58] U.S.-origin frozen blueberries price decreases ranged from *** to *** percent while foreign-origin frozen blueberries price decreases ranged from *** to *** percent.

[57] In a special article within the September 2020 USDA Fruit and Tree Nuts Outlook, *U.S. Market for Cultivated Fresh-Market Blueberries Over Time*, the author states "In 2010, there was little overlap in season between U.S. producers and foreign suppliers to the United States. The periods between the main domestic and import seasons had very high prices. Domestic growers and importers tried to produce or market in those periods, if possible, to capture the high prices. In 2010, Peru and Mexico produced much smaller quantities of blueberries. Since then, imports and domestic supplies have started to overlap, putting pressure on U.S. producer and importer prices. In August and September 2019, domestic shipping prices averaged $11.50 to $13.50 per flat (12 6-ounce cups with lids), compared to $17 to $25 per flat in 2010. In September to October 2019, 70 percent of import shipments were from Peru. In early spring, imports from Mexico have grown (imports from Chile have declined slightly), while Florida and Georgia now harvest more in March and April. In May 2019, the domestic shipping point price was $12 per flat, compared to $19 per flat in 2010.

Mexico is likely to continue to put downward pressure on spring blueberry prices if production there continues to increase. U.S. imports from Mexico in 2020, compared to 2019, increased 48 percent in March, 43 percent in April, and 94 percent in May. Changes in prices reflect growth of domestic and imported supplies in the U.S. market, as well as economies of scale." USDA Fruit and Tree Nuts Outlook, September 2020, pp. 41-42.

[58] For U.S.-origin product 1, the average price for March decreased 21.6 percent from $30.29 in 2015 to $23.75 in 2020; April decreased 30.5 percent from $17.72 in 2015 to $12.31 in 2020; May decreased 5.6 percent from $12.96 in 2015 to $12.23 in 2020; June increased 23.9 percent from $10.32 in 2015 to $12.78 in 2020; July increased 18.4 percent from $10.25 in 2015 to $12.14 in 2020; August decreased 33.9 percent from $15.89 in 2015 to $10.50 in 2020; and September decreased 31.2 percent from $24.70 in 2015 to $17.00 in 2020. For U.S.-origin product 2, the average price for April decreased 29.4 percent from $28.65 in 2015 to $20.24 in 2020; May increased 0.5 percent from $21.32 in 2015 to $21.42 in 2020; June increased 52.9 percent from $13.47 in 2015 to $20.60 in 2020; July increased 40.8 percent from $13.84 in 2015 to $19.48 in 2020; August decreased 31.1 percent from $23.69 in 2015 to $16.33 in 2020; and September decreased 30.1 percent from $20.42 in 2015 to $21.25 in 2020.

Table V-24
Blueberries: Price trends by product type and source

Item	Number of months	First full year average price (2015)	Last full year average price (2019)	Change 2015-19 (percent)
	Fresh or chilled blueberries			
Product 1: U.S.-origin	43	19.01	14.90	(21.6)
Foreign-origin	65	20.94	13.37	(36.2)
Product 2: U.S.-origin	39	21.90	19.54	(10.8)
Foreign-origin	44	22.06	20.23	(8.3)
Product 3: U.S.-origin	36	24.99	22.91	(8.3)
Foreign-origin	29	39.75	21.47	(46.0)
Product 4: U.S.-origin	20	28.15	26.97	(4.2)
Foreign-origin	8	---	20.58	---
Item	**Number of quarters**	**First full year average price (2015)**	**Last full year average price (2019)**	**Change 2015-19 (percent)**
	Frozen blueberries			
Product 5: U.S.-origin	***	***	***	***
Foreign-origin	***	***	***	***
Product 6: U.S.-origin	***	***	***	***
Foreign-origin	***	***	***	***
Product 7: U.S.-origin	***	***	***	***
Foreign-origin	***	***	***	***
Product 8: U.S.-origin	***	***	***	***
Foreign-origin	***	***	***	***

Note: Product 2 U.S.-origin full year 2019 number excludes the higher price March observation not in the comparable full year 2015 period.

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

Prices for foreign-origin fresh or chilled blueberries were lower than prices for U.S.-origin fresh or chilled blueberries in 62 of 91 instances for products 1 through 4 (tables V-16 – V-19, United States prices compared to all import sources). Prices for foreign-origin frozen blueberries were lower than prices for U.S.-origin frozen blueberries in 45 of 132 instances for products 5 through 8 (tables V-20 – V-23, United States prices compared to all import sources).

Lost sales and lost revenue

Most U.S. producers (83 of 101 responding) reported that, since 2015, they had to reduce prices to avoid losing sales to competitors selling imported blueberries. These reported price reductions occurred throughout the year, from prior to the season beginning to the end of the season. Eighteen of 54 responding U.S. producers reported that they had to roll back announced price increases. Reporting U.S. producers estimated that the total lost sales were at least 60 million pounds since 2015 and the estimated revenue lost totaled approximately $100 million.

As noted in Part I, the Commission received purchaser questionnaire responses from 42 purchasers. Responding purchasers reported that more than half (554.8 million pounds) of their purchases of all blueberries were foreign-origin in 2019 (table V-25). Of the foreign-origin purchases in 2019, approximately two-thirds (375.6 million pounds) were fresh or chilled cultivated blueberries. Most of the reported purchases of foreign-origin fresh or chilled cultivated blueberries were imported from Mexico, followed by Peru, Chile, Canada, then Argentina. Most of the frozen blueberries purchased in 2019 were foreign-origin (167.3 million pounds).

Table V-25
Blueberries: U.S. purchasers' purchases by product type and source, 2019

Source	Purchase type						
	Fresh cultivated	Fresh wild	Fresh	Frozen cultivated	Frozen wild	Frozen	All blueberries
	Quantity (1,000 pounds)						
United States	291,610	19,912	311,522	72,591	13,891	86,482	398,004
Argentina	7,659	---	7,659	3,660	---	3,660	11,320
Canada	44,517	11,953	56,470	66,162	66,186	132,348	188,818
Chile	77,962	---	77,962	19,334	---	19,334	97,296
Mexico	129,957	---	129,957	2,649	---	2,649	132,607
Peru	108,561	---	108,561	3,823	---	3,823	112,384
Other FTA partners	---	---	---	---	---	---	---
All other sources	6,988	---	6,988	4,647	790	5,436	12,424
All known import sources	375,644	11,953	387,597	100,276	66,975	167,252	554,849
Unknown sources	21,529	---	21,529	3,650	---	3,650	25,179
All sources	688,783	31,865	720,648	176,518	80,866	257,384	978,032
	Share of all blueberries (percent)						
United States	73.3	5.0	78.3	18.2	3.5	21.7	100.0
Argentina	67.7	---	67.7	32.3	---	32.3	100.0
Canada	23.6	6.3	29.9	35.0	35.1	70.1	100.0
Chile	80.1	---	80.1	19.9	---	19.9	100.0
Mexico	98.0	---	98.0	2.0	---	2.0	100.0
Peru	96.6	---	96.6	3.4	---	3.4	100.0
Other FTA partners	---	---	---	---	---	---	---
All other sources	56.2	---	56.2	37.4	6.4	43.8	100.0
All known import sources	67.7	2.2	69.9	18.1	12.1	30.1	100.0
Unknown sources	85.5	---	85.5	14.5	---	14.5	100.0
All sources	70.4	3.3	73.7	18.0	8.3	26.3	100.0
	Share of quantity (percent)						
United States	42.3	62.5	43.2	41.1	17.2	33.6	40.7
Argentina	1.1	---	1.1	2.1	---	1.4	1.2
Canada	6.5	37.5	7.8	37.5	81.8	51.4	19.3
Chile	11.3	---	10.8	11.0	---	7.5	9.9
Mexico	18.9	---	18.0	1.5	---	1.0	13.6
Peru	15.8	---	15.1	2.2	---	1.5	11.5
Other FTA partners	---	---	---	---	---	---	---
All other sources	1.0	---	1.0	2.6	1.0	2.1	1.3
All known import sources	54.5	37.5	53.8	56.8	82.8	65.0	56.7
Unknown sources	3.1	---	3.0	2.1	---	1.4	2.6
All sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Of the 30 responding purchasers, 15 reported that they had purchased imported fresh or chilled cultivated blueberries instead of U.S.-origin product. Three of these purchasers reported that import prices were lower than U.S.-produced product, and one of these purchasers reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced fresh or chilled cultivated blueberries and estimated the

quantity of imported fresh or chilled blueberries purchased instead of domestic fresh or chilled cultivated blueberries was *** pounds.[59] As noted above, 20 of 32 responding purchasers reported that factors other than price between fresh or chilled blueberries produced in the United States and in other countries are a significant factor in sales of the product. These purchasers identified availability, distribution needs, quality, taste, transportation time, reliability of supply, and genetics/varieties.

Eleven of 26 responding purchasers reported that they had purchased imported frozen cultivated blueberries instead of U.S.-origin product. Five of these purchasers reported that import prices were lower than U.S.-produced product and three firms reported that price was a primary reason. One firm reported an estimated *** pounds of imported frozen blueberries were purchased instead of the U.S.-produced product.[60] As noted above, 15 of 28 responding purchasers reported that factors other than price are a significant factor in the sales of frozen cultivated blueberries. Firms identified seasonal availability, proximity to the marketplace, quality, appearance, flavor, food safety, availability of IQF, transportation, technical support, quantity, size, technical performance within the food manufacturing applications, and geographic location to processing plant.

Table V-26
Blueberries: Purchasers' responses to purchasing imported blueberries instead of domestic blueberries, by country

Product type	Count of purchasers reporting imports instead of domestic	Count of purchasers reported that imports were priced lower	Count of purchasers reporting that price was a primary reason for shift	Quantity imports purchased (1,000 pounds)
Fresh cultivated	15	3	1	***
Fresh wild	1	---	---	***
Frozen cultivated	11	5	3	***
Frozen wild	6	2	2	***
Any product type	22	8	4	***

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

Of the 30 responding purchasers, 14 reported that U.S. producers had not reduced prices of fresh or chilled cultivated blueberries in order to compete with lower-priced imports, 12 purchasers reported that they did not know, and four reported U.S. producers did reduce prices. The reported estimated price reduction of fresh or chilled cultivated blueberries ranged from 2.3 to 40.0 percent, averaging 20.6 percent. In describing the price reductions, purchasers

[59] This estimate came from ***, which is described as a marketer in "Pricing methods".
[60] This estimate came from ***, which is described as a marketer in "Pricing methods".

indicated that domestic prices are reduced throughout the season and can change on a weekly basis.

Nine of 28 responding purchasers reported that U.S. producers had not reduced prices of frozen cultivated blueberries, three reported U.S. producers had reduced prices, and 16 did not know. The reported estimated price reduction of frozen cultivated blueberries ranged from 15.0 to 40.0 percent, averaging 23.3 percent.

Table V-27
Blueberries: Purchasers' responses to U.S. producer price reductions, by product type

Product type	Count of purchasers reporting U.S. producers reduced prices	Simple average of estimated U.S. price reduction (percent)	Range of estimated U.S. price reductions (percent)
Fresh cultivated	4	***	***
Fresh wild	---	***	***
Frozen cultivated	3	***	***
Frozen wild	1	***	***
Any product type	6	***	***

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

Some purchasers described the likely effect of an imposition of safeguard relief from imports of blueberries. Purchasers commonly reported that purchase prices for blueberries would increase, consumer demand would flatten, there would be insufficient supply, and suppliers would experience a negative impact on ability to provide the best quality fruit. On the other hand, purchasers also reported that U.S. producers would obtain higher prices.

Factors other than imports affecting the U.S. blueberry market

Weather

Weather is frequently mentioned by firms as a leading factor affecting the U.S. blueberry market. The USDA Fruit and Tree Nuts Outlook reports typically cover weather-related disruptions to the U.S. blueberry market, especially early-season events. In 2015, north Florida and Georgia experienced freezing temperatures in mid-February. Growers applied frost protection to their blueberry bushes but still experienced a delay to the harvest and leaving some supply gap in the market, likely providing a boost to domestic blueberry prices.[61] The Michigan crop in 2015 experienced some winter kill damage from 2-consecutive years of below-normal winter temperatures, having a negative impact on yields.[62] Harvest delays in Florida occurred during 2016 due to unseasonably warm winter weather followed by a cold snap in early spring, causing an overlap with early-supply build in Georgia and North Carolina, putting downward pressure on prices.[63] In 2017, the USDA reported potential tight supplies in Georgia due to a mid-March freeze would strengthen blueberry prices.[64] A delayed harvest in Florida and freeze-related damage to crops in Georgia slowed early-season shipments and likely helped strengthen prices in the spring of 2018.[65] The USDA reported a promising 2019 crop in Florida with good fruit set as the winter provided sufficient chill hours for the crop.[66]

Domestic competition

As mentioned in the "U.S. market characteristics" section above, of the sales of blueberries reported by U.S. producers (collectively), 63.6 percent of sales were between 101 and 1,000 miles of their packing facility, 26.5 percent were over 1,000 miles, and 9.9 percent were within 100 miles. Sales of blueberries can occur by different states at the same time in the U.S. market. For example, an overlap in supply can occur between Florida, Georgia, and North Carolina (as described earlier having an impact on prices). Table V-28 shows the quantity and percent of blueberries shipped from individual blueberry-producing states and V-29 shows the geographic market areas served by producers in each state.

[61] USDA Fruit and Tree Nuts Outlook, March 2015, p. 22.
[62] USDA Fruit and Tree Nuts Outlook, June 2015, p. 13.
[63] USDA Fruit and Tree Nuts Outlook, June 2016, p. 10.
[64] USDA Fruit and Tree Nuts Outlook, April 2017, p. 17.
[65] USDA Fruit and Tree Nuts Outlook, March 2018, pp. 20-21.
[66] USDA Fruit and Tree Nuts Outlook, March 2019, p. 20.

Table V-28
Blueberries: U.S. producers' net sales by distance shipped and state of origin

Source	Zero to 100 miles	101 miles to 1,000 miles	Over 1,000 miles	All shipments
	Quantity (1,000 pounds)			
California	1,102	34,605	7,894	43,601
Florida	788	5,390	3,080	9,259
Georgia	4,516	10,739	1,219	16,474
Michigan	6,683	24,217	10,121	41,022
New Jersey	***	***	***	***
North Carolina	***	***	***	***
Oregon	8,885	6,978	24,068	39,931
Washington	***	***	***	***
Other states	3,061	88,743	31,343	123,148
	Share across (percent)			
California	2.5	79.4	18.1	100.0
Florida	8.5	58.2	33.3	100.0
Georgia	27.4	65.2	7.4	100.0
Michigan	16.3	59.0	24.7	100.0
New Jersey	***	***	***	100.0
North Carolina	***	***	***	100.0
Oregon	22.3	17.5	60.3	100.0
Washington	***	***	***	100.0
Other states	2.5	72.1	25.5	100.0

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

Table V-29
Blueberries: U.S. producers' sales by region of shipment and state of origin

Item	CA	FL	GA	MI	NJ	NC	OR	WA	Other states
	Fresh or chilled (count of firms)								
Region of sale: Northeast	2	6	19	12	***	***	3	***	2
Midwest	2	6	18	16	***	***	1	***	---
Southeast	2	5	21	12	***	***	1	***	---
Central Southwest	2	5	18	11	***	***	1	***	---
Mountains	4	5	16	10	***	***	3	***	---
Pacific Coast	5	6	17	9	***	***	10	***	---
Other	2	1	2	1	***	***	1	***	---
Reporting firms	5	6	22	16	***	***	10	***	2
	Frozen (count of firms)								
Region of sale: Northeast	1	---	1	4	***	***	1	***	4
Midwest	1	---	2	7	***	***	1	***	4
Southeast	1	---	2	4	***	***	1	***	3
Central Southwest	1	---	1	2	***	***	1	***	2
Mountains	1	---	1	2	***	***	1	***	2
Pacific Coast	1	---	1	2	***	***	5	***	4
Other	---	---	---	---	***	***	---	***	1
Reporting firms	1	---	3	7	***	***	5	***	4
	Fresh, chilled, or frozen (count of firms)								
Region of sale: Northeast	2	6	19	13	***	***	3	***	6
Midwest	2	6	18	17	***	***	2	***	4
Southeast	2	5	21	13	***	***	2	***	3
Central Southwest	2	5	18	12	***	***	2	***	2
Mountains	4	5	16	11	***	***	3	***	2
Pacific Coast	5	6	17	11	***	***	10	***	4
Other	2	1	2	1	***	***	1	***	1
Reporting firms	5	6	22	17	***	***	10	***	6

Note: All other U.S. markets, including AK, HI, PR, and VI.

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

Varieties

Among other reported effects, U.S. producer *** reported that the blueberry industry is going through a maturity curve where better genetics, such as flavor, firmness and shelf life are now more important to consumers. As previously mentioned, U.S.-origin cultivated blueberries are primarily grown in eight states that have different climates and new varieties of blueberries have been developed to yield more appealing fruit to consumers. Common varieties are northern highbush, rabbiteye, and southern highbush.[67] Southern highbush is a hybrid of northern highbush, and rabbiteye and is used by growers in Georgia and Florida to extend their season.[68] U.S. producers are also shifting to varieties that are able to withstand machine harvesting.[69] Increased production of foreign-origin blueberries can also be attributed to newer varieties. For example, the Biloxi blueberry variety was developed in the United States, has become a successful variety grown in Peru and Mexico for several years, and is now being replaced with new varieties in those countries.[70]

COVID-19

The COVID-19 pandemic was reported by several firms as affecting the U.S. blueberry market. Several producers reported a reduction or retraction in orders due to restaurant, school, resort, and cruise line closures. Some producers reported no pick-your-own fruit sales in 2020. One producer reported that 25 percent of the blueberry market was "gone." Producers reported delayed receipt of crop inputs such as fertilizer. One producer reported delayed deliveries to its processor due to a COVID hotspot at the freezer plant. One producer reported that migrant workers left before the season was over due to mandatory COVID testing. One importer reported that more people are grocery shopping online, and thus buying less fresh fruit because people prefer to pick out their own fresh fruit off the shelves.

[67] Purchaser *** reported that rabbiteye blueberries are not interchangeable with highbush blueberries.

[68] USDA Fruit and Tree Nuts Outlook, September 2020.

[69] Hearing transcript, pp. 84-85 (Lee).

[70] Coalition's posthearing brief, Appendix B, Affidavit of ***.

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
85 FR 64162, October 9, 2020	*Fresh, Chilled, or Frozen Blueberries; Institution of Investigation, Scheduling of Public Hearings, and Determination That the Investigation Is Extraordinarily Complicated*	https://www.govinfo.gov/content/pkg/FR-2020-10-09/pdf/2020-22423.pdf
85 FR 66360, October 19, 2020	*Fresh, Chilled, or Frozen Blueberries; Institution of Investigation, Scheduling of Public Hearings, and Determination That the Investigation Is Extraordinarily Complicated, Amendment*	https://www.govinfo.gov/content/pkg/FR-2020-10-19/pdf/2020-23017.pdf
86 FR 3195, January 14, 2021	*Fresh, Chilled, or Frozen Blueberries; Change in Starting Time of January 12, 2021 Hearing to 9:00 a.m. From 9:30 a.m.*	https://www.govinfo.gov/content/pkg/FR-2021-01-14/pdf/2021-00623.pdf

APPENDIX B

LIST OF HEARING WITNESSES

CALENDAR OF PUBLIC HEARING

Those listed below appeared in the United States International Trade Commission's hearing via videoconference:

Subject: Fresh, Chilled, or Frozen Blueberries

Inv. No.: TA-201-77 (Injury)

Date and Time: January 12, 2021 – 9:00 a.m.

CONGRESSIONAL APPEARANCES:

The Honorable Austin Scott, U.S. Representative, 8th District, Georgia

The Honorable Bill Huizenga, U.S. Representative, 2nd District, Michigan

The Honorable Earl L. "Buddy" Carter, U.S. Representative, 1st District, Georgia

The Honorable John H. Rutherford, U.S. Representative, 4th District, Florida

U.S. STATE GOVERNMENT WITNESSES:

The Honorable Nicole Fried, Commissioner of Agriculture, Florida Department of Agriculture and Consumer Services

The Honorable Gary W. Black, Commissioner of Agriculture, Georgia Department of Agriculture and Consumer Services

EMBASSY WITNESSES:

Embassy of the Republic of Chile
Washington, DC

His Excellency Oscar Alfonso Silva Navarro, Ambassador of Chile to the United States of America

Rodrigo Alejandro Yanez Benitez, Vice Minister of International Economic Affairs, Ministry of Foreign Affairs

EMBASSY WITNESSES (continued):

Embassy of Mexico
Washington, DC

Gerardo Lameda, Minister

Embassy of the Argentine Republic
Washington, DC

Gustavo Lunazzi, Minister

Embassy of Canada
Washington, DC

Nadia Bourély, Minister Counsellor

FOREIGN GOVERNMENT APPEARANCE:

Government of Perú

Diego Sebastian Llosa Velasquez, Vice Minister of Foreign Trade, Ministry of Foreign Trade and Tourism

OPENING REMARKS:

In Support of Safeguard (**Bradford Ward**, King & Spalding LLP)
In Opposition to Safeguard (**Matthew R. Nicely**, Akin Gump Strauss Hauer & Feld LLP)

IN SUPPORT OF SAFEGUARD:

King & Spalding LLP
Washington, DC
on behalf of

American Blueberry Growers Alliance ("ABGA")

Jerome Crosby, Pineneedle Farms (GA), Chair, Steering Committee, ABGA; and Chairman of the Board, Georgia Blueberry Commodity Commission

Kevin Eason, Kevin Eason Farm (GA), MBG Co-Operative

Rex Schultz, Heritage Blueberries (MI), President, Michigan Blueberry Advisory Committee

Shelly Hartmann, True Blue Farms (MI), Vice Chair of the Board, U.S. Highbush Blueberry Council; and Secretary, Michigan Blueberry Commission

Brittany H. Lee, Florida Blue Farms (FL), Executive Director, Florida Blueberry Growers Association

Ryan Atwood, Atwood Family Farms, H & A Farms (FL), Past President, Florida Blueberry Growers Association

Todd Sanders, Executive Director, California Blueberry Commission

Jayson Scarborough, Blueberry Marketing Consultant (CA)

Hugh Eisele, President, Eisele Farms, Inc. (OR)

Mike Townsend, President, Townsend Farms, Inc. (OR)

Alan Schreiber, Executive Director, Washington Blueberry Commission (WA)

Charles Anderson, Principal, Capital Trade

Andrew Szamosszegi, Principal, Capital Trade

Travis Pope, Project Manager, Capital Trade

R. Scott Moore, R. Scott Moore, CPA, P.C.

IN SUPPORT OF SAFEGUARD (continued):

Bonnie B. Byers, Senior International Trade Consultant,
King & Spalding LLP

Jamieson Greer)
Stephen J. Orava)
) – OF COUNSEL
Neal Reynolds)
Bradford Ward)

IN OPPOSITION TO SAFEGUARD:

Akin Gump Strauss Hauer & Feld LLP
Washington, DC
on behalf of

Blueberry Coalition for Progress and Health ("Coalition")

Joseph Barsi, President, California Giant Berry Farms

Soren Bjorn, President, Driscoll's of the Americas

Christopher Fountas, Director, Alpine Fresh Inc.

David Jackson, Founder, Co-Owner, Farmer, Family Tree Farms

Daniel Jackson, Co-Owner, Farmer, Family Tree Farms

Andy Muxlow, Co-Owner, Farmer, Family Tree Farms

Hector Lujan, Chief Executive Officer, Reiter Affiliated Companies

Dr. Thomas J. Prusa, Professor of Economics, Rutgers University

James P. Dougan, Vice President, Economic Consulting Services, LLC

Jerrie V. Mirga, Vice President, Economic Consulting Services, LLC

IN OPPOSITION TO SAFEGUARD (continued):

Rebecca E. Tuzel, Staff Economist, Economic Consulting Services, LLC

Matthew R. Nicely)
Julia K. Eppard) – OF COUNSEL
Sydney L. Stringer)

Morris, Manning & Martin, LLP
Washington, DC
on behalf of

Government of Perú

Emma K. Peterson, Director of International Trade Analytics,
Morris, Manning & Martin, LLP

Julie C. Mendoza)
Donald B. Cameron) – OF COUNSEL
Edward J. Thomas III)

Curtis, Mallet-Prevost, Colt & Mosle LLP
Washington, DC
on behalf of

Government of Canada
British Columbia Blueberry Council ("BCBC")
Wild Blueberry Association of North America ("WBANA")

Professor Emeritus David Yarborough, Department of Horticulture,
University of Maine

John Shelford, Principal, Shelford Associates

Milton Wood, Chief Operating Office, Oxford Frozen Foods, Ltd.

John Tentomas, President and Chief Executive Officer,
Nature's Touch Frozen Foods, LLC

Tom Phillips, President and General Manager, Berryhill Foods

IN OPPOSITION TO SAFEGUARD (continued):

Professor Rodney Ludema, Department of Economics,
Georgetown University

Daniel L. Porter	)
James P. Durling	)
Antonio Riva Palacio	) – OF COUNSEL
Ana Amador	)
Luis Ramirez	)

Pillsbury Winthrop Shaw Pittman LLP
Washington, DC
on behalf of

Government of Mexico

Stephan E. Becker	)
	) – OF COUNSEL
Moushami P. Joshi	)

Arent Fox LLP
Washington, DC
on behalf of

Government of Québec

Gilbert Lavoie, agr., M.Sc., Consulting Economist,
Forest Lavoie Conseil Inc.

Matthew J. Clark	)
Nancy A. Noonan	)
	) – OF COUNSEL
Leah N. Scarpelli	)
Jessica R. DiPietro	)

IN OPPOSITION TO SAFEGUARD (continued):

Arnold & Porter Kaye Scholer LLP
Washington, DC
on behalf of

Asociación de Productores de Arándanos del Peru ("Pro Arándanos")

Daniel Bustamante, President, Pro Arándanos

Luis Miguel Vegas, Manager, Pro Arándanos

Lynn Fischer Fox)
) – OF COUNSEL
Gina M. Colarusso)

Steptoe & Johnson LLP
Law Offices of Gary N. Horlick
Washington, DC
on behalf of

Subsecretaria de Relaciones Economicas Internacionales de Chile
Asociaction de Exportadores de Frutas de Chile A.G.

Rodrigo Alejandro Yañez Benítez, Vice Minister of
International Economic Affairs, Ministry of Foreign Affairs

Felipe Silva, Chief Executive Officer, Zurgroup,
President, Chilean Blueberry Committee - ASOEX

Andrés Armstrong, Executive Director, Chilean Blueberry
Committee - ASOEX

Andrea Cerda, Head of Market Access Division,
General Directorate, Bilateral Economic Affairs,
Undersecretary, International Economic Affairs

Thomas J. Trendl)
Luke Tillman) – OF COUNSEL
Gary N. Horlick)

IN OPPOSITION TO SAFEGUARD (continued):

Cameron LLP
Washington, DC
on behalf of

The Chilean Food Processing Companies Association ("Chilealimentos")

Antonio Dominguez, Chairman, Nevada Chile S.A.

Thomas E. Skilton) – OF COUNSEL

White & Case LLP
Washington, DC
on behalf of

Aneberries, A.C. ("Aneberries")

José Guillermo Romo Romero, Chairman of the Board of Directors,
Bloom Farms

Gregory J. Spak) – OF COUNSEL

REBUTTAL/CLOSING REMARKS:

In Support of Safeguard (**Stephen J. Orava**, King & Spalding LLP)
In Opposition to Safeguard (**James P. Durling**, Curtis, Mallet-Prevost, Colt & Mosle LLP; and
Matthew R. Nicely, Akin Gump Strauss Hauer & Feld LLP)

- END -

APPENDIX C

SUMMARY DATA

Table C-1
Blueberries: Summary data concerning the U.S. market, 2015-19, January to September 2019, and January to September 2020
(Quantity=1,000 pounds net packed weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound net packed weight; Period changes=percent--exceptions noted)

	Reported data						
	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
U.S. consumption quantity:							
Amount	950,708	1,039,506	886,432	1,028,600	1,221,772	954,536	967,758
Producers' share (fn1)	57.5	54.4	52.9	50.3	48.4	54.2	55.4
Importers' share (fn1):							
Argentina	2.5	2.6	2.9	2.3	1.8	0.7	0.4
Canada	21.7	19.6	17.3	16.2	18.3	19.6	17.5
Chile	14.3	17.0	16.9	17.1	12.8	13.1	11.6
Mexico	2.6	3.3	5.8	6.9	7.4	7.2	9.2
Peru	1.2	2.9	3.9	7.0	11.2	5.2	5.9
All other sources	0.2	0.3	0.2	0.2	0.1	0.0	0.1
All import sources	42.5	45.6	47.1	49.7	51.6	45.8	44.6
U.S. consumption value:							
Amount	1,575,535	1,636,053	1,672,691	1,943,508	2,191,181	1,565,702	1,552,855
Producers' share (fn1)	43.6	34.6	40.3	34.2	34.5	42.1	44.1
Importers' share (fn1):							
Argentina	5.4	6.8	5.2	3.5	2.2	0.6	0.3
Canada	16.1	13.3	12.0	11.6	12.1	14.6	13.2
Chile	22.1	27.5	20.7	22.1	17.0	18.4	15.0
Mexico	8.6	8.8	12.9	14.9	13.1	13.7	16.8
Peru	3.6	8.2	8.6	13.4	20.9	10.5	10.4
All other sources	0.6	0.8	0.4	0.3	0.2	0.0	0.1
All import sources	56.4	65.4	59.7	65.8	65.5	57.9	55.9
U.S. imports net of re-exports from:							
Argentina:							
Quantity	23,885	27,249	25,673	23,366	21,821	6,983	3,847
Value	85,175	111,239	86,628	68,755	48,395	9,920	4,737
Unit value	$3.57	$4.08	$3.37	$2.94	$2.22	$1.42	$1.23
Ending inventory quantity	***	***	***	***	***	***	***
Canada:							
Quantity	206,267	203,379	153,601	166,446	223,516	187,297	168,944
Value	253,999	218,221	200,948	225,322	264,306	228,506	204,544
Unit value	$1.23	$1.07	$1.31	$1.35	$1.18	$1.22	$1.21
Ending inventory quantity	***	***	***	***	***	***	***
Chile:							
Quantity	136,213	176,623	149,992	175,814	156,092	125,297	112,114
Value	348,794	449,343	345,462	429,557	371,996	287,892	233,502
Unit value	$2.56	$2.54	$2.30	$2.44	$2.38	$2.30	$2.08
Ending inventory quantity	***	***	***	***	***	***	***
Mexico:							
Quantity	24,477	33,955	51,544	70,769	90,408	68,369	88,628
Value	135,248	144,635	215,138	289,101	287,850	215,128	261,588
Unit value	$5.53	$4.26	$4.17	$4.09	$3.18	$3.15	$2.95
Ending inventory quantity	***	***	***	***	***	***	***

Table continued on next page.

Table C-1--Continued
Blueberries: Summary data concerning the U.S. market, 2015-19, January to September 2019, and January to September 2020
(Quantity=1,000 pounds net packed weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound net packed weight; Period changes=percent--exceptions noted)

	Period changes					
		Comparison years				Jan-Sep
	2015-19	2015-16	2016-17	2017-18	2018-19	2019-20
U.S. consumption quantity:						
Amount	▲28.5	▲9.3	▼(14.7)	▲16.0	▲18.8	▲1.4
Producers' share (fn1)	▼(9.0)	▼(3.1)	▼(1.4)	▼(2.6)	▼(1.9)	▲1.3
Importers' share (fn1):						
Argentina	▼(0.7)	▲0.1	▲0.3	▼(0.6)	▼(0.5)	▼(0.3)
Canada	▼(3.4)	▼(2.1)	▼(2.2)	▼(1.1)	▲2.1	▼(2.2)
Chile	▼(1.6)	▲2.7	▼(0.1)	▲0.2	▼(4.3)	▼(1.5)
Mexico	▲4.8	▲0.7	▲2.5	▲1.1	▲0.5	▲2.0
Peru	▲10.0	▲1.7	▲1.1	▲3.1	▲4.1	▲0.7
All other sources	▼(0.1)	▲0.1	▼(0.1)	▲0.0	▼(0.1)	▲0.0
All import sources	▲9.0	▲3.1	▲1.4	▲2.6	▲1.9	▼(1.3)
U.S. consumption value:						
Amount	▲39.1	▲3.8	▲2.2	▲16.2	▲12.7	▼(0.8)
Producers' share (fn1)	▼(9.1)	▼(9.0)	▲5.7	▼(6.1)	▲0.3	▲2.0
Importers' share (fn1):						
Argentina	▼(3.2)	▲1.4	▼(1.6)	▼(1.6)	▼(1.3)	▼(0.3)
Canada	▼(4.1)	▼(2.8)	▼(1.3)	▼(0.4)	▲0.5	▼(1.4)
Chile	▼(5.2)	▲5.3	▼(6.8)	▲1.4	▼(5.1)	▼(3.4)
Mexico	▲4.6	▲0.3	▲4.0	▲2.0	▼(1.7)	▲3.1
Peru	▲17.4	▲4.6	▲0.5	▲4.7	▲7.5	▼(0.0)
All other sources	▼(0.4)	▲0.2	▼(0.4)	▼(0.0)	▼(0.1)	▲0.1
All import sources	▲9.1	▲9.0	▼(5.7)	▲6.1	▼(0.3)	▼(2.0)
U.S. imports net of re-exports from:						
Argentina:						
Quantity	▼(8.6)	▲14.1	▼(5.8)	▼(9.0)	▼(6.6)	▼(44.9)
Value	▼(43.2)	▲30.6	▼(22.1)	▼(20.6)	▼(29.6)	▼(52.2)
Unit value	▼(37.8)	▲14.5	▼(17.3)	▼(12.8)	▼(24.6)	▼(13.3)
Ending inventory quantity	***	***	***	***	***	***
Canada:						
Quantity	▲8.4	▼(1.4)	▼(24.5)	▲8.4	▲34.3	▼(9.8)
Value	▲4.1	▼(14.1)	▼(7.9)	▲12.1	▲17.3	▼(10.5)
Unit value	▼(4.0)	▼(12.9)	▲21.9	▲3.5	▼(12.6)	▼(0.8)
Ending inventory quantity	▼***	▲***	▼***	▼***	▲***	▼***
Chile:						
Quantity	▲14.6	▲29.7	▼(15.1)	▲17.2	▼(11.2)	▼(10.5)
Value	▲6.7	▲28.8	▼(23.1)	▲24.3	▼(13.4)	▼(18.9)
Unit value	▼(6.9)	▼(0.6)	▼(9.5)	▲6.1	▼(2.5)	▼(9.4)
Ending inventory quantity	▲***	▲***	▲***	▲***	▼***	▼***
Mexico:						
Quantity	▲269.4	▲38.7	▲51.8	▲37.3	▲27.8	▲29.6
Value	▲112.8	▲6.9	▲48.7	▲34.4	▼(0.4)	▲21.6
Unit value	▼(42.4)	▼(22.9)	▼(2.0)	▼(2.1)	▼(22.1)	▼(6.2)
Ending inventory quantity	▲***	▼***	▲***	▲***	▼***	▼***

Table continued on next page.

Table C-1--Continued

Blueberries: Summary data concerning the U.S. market, 2015-19, January to September 2019, and January to September 2020

(Quantity=1,000 pounds net packed weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound net packed weight; Period changes=percent--exceptions noted)

	Reported data						
	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
U.S. imports net of re-exports from:--Continued							
Peru:							
Quantity	11,351	29,637	34,695	72,375	136,270	49,238	56,834
Value	56,116	133,665	144,542	260,167	458,435	163,830	162,033
Unit value	$4.94	$4.51	$4.17	$3.59	$3.36	$3.33	$2.85
Ending inventory quantity	***	***	***	***	***	***	***
All other sources:							
Quantity	2,241	3,326	1,638	2,065	1,745	401	780
Value	9,773	12,947	5,928	6,503	4,812	711	1,649
Unit value	$4.36	$3.89	$3.62	$3.15	$2.76	$1.77	$2.11
Ending inventory quantity	***	***	***	***	***	***	***
All import sources:							
Quantity	404,433	474,169	417,144	510,835	629,851	437,584	431,148
Value	889,104	1,070,051	998,647	1,279,404	1,435,795	905,987	868,053
Unit value	$2.20	$2.26	$2.39	$2.50	$2.28	$2.07	$2.01
Ending inventory quantity	***	***	***	***	***	***	***
U.S. producers':							
Total production	667,620	695,450	586,340	612,700	735,100	NA	NA
Yield (pounds per acre)	5,876	6,000	5,811	5,673	6,016	NA	NA
U.S. shipments:							
Quantity	546,274	565,337	469,288	517,765	591,921	516,952	536,610
Value	686,430	566,002	674,044	664,104	755,387	659,715	684,802
Unit value	$1.26	$1.00	$1.44	$1.28	$1.28	$1.28	$1.28
Export shipments:							
Quantity	114,416	125,093	111,102	88,155	135,359	119,767	102,960
Value	186,284	181,837	159,425	157,006	179,318	161,795	164,065
Unit value	$1.63	$1.45	$1.43	$1.78	$1.32	$1.35	$1.59
Ending inventory quantity	114,636	121,303	100,299	69,724	87,640	100,346	95,732
Production workers, reported	15,474	16,044	16,383	15,706	15,993	16,546	16,086
Hours worked (1,000s)	8,424	8,987	9,832	8,358	8,967	8,094	7,504
Wages paid ($1,000)	138,241	148,363	156,283	156,085	168,440	154,652	153,888
Hourly wages (dollars per hour)	$16.41	$16.51	$15.89	$18.67	$18.78	$19.11	$20.51
Productivity (pounds per hour)	29.8	32.2	28.3	33.1	35.8	34.3	33.3
Unit labor costs	$0.55	$0.51	$0.56	$0.56	$0.52	$0.56	$0.62

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Table C-1--Continued
Blueberries: Summary data concerning the U.S. market, 2015-19, January to September 2019, and January to September 2020
(Quantity=1,000 pounds net packed weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound net packed weight; Period changes=percent--exceptions noted)

	Period changes					
		Comparison years				Jan-Sep
	2015-19	2015-16	2016-17	2017-18	2018-19	2019-20
U.S. imports net of re-exports from:--Continued						
Peru:						
Quantity	▲1,100.5	▲161.1	▲17.1	▲108.6	▲88.3	▲15.4
Value	▲716.9	▲138.2	▲8.1	▲80.0	▲76.2	▼(1.1)
Unit value	▼(31.9)	▼(8.8)	▼(7.6)	▼(13.7)	▼(6.4)	▼(14.3)
Ending inventory quantity	▲***	▲***	▼***	▲***	▲***	▲***
All other sources:						
Quantity	▼(22.1)	▲48.4	▼(50.7)	▲26.0	▼(15.5)	▲94.8
Value	▼(50.8)	▲32.5	▼(54.2)	▲9.7	▼(26.0)	▲132.0
Unit value	▼(36.8)	▼(10.7)	▼(7.0)	▼(13.0)	▼(12.5)	▲19.1
Ending inventory quantity	▲***	▲***	▼***	▲***	▲***	▲***
All import sources:						
Quantity	▲55.7	▲17.2	▼(12.0)	▲22.5	▲23.3	▼(1.5)
Value	▲61.5	▲20.4	▼(6.7)	▲28.1	▲12.2	▼(4.2)
Unit value	▲3.7	▲2.7	▲6.1	▲4.6	▼(9.0)	▼(2.8)
Ending inventory quantity	▼***	▲***	▼***	▼***	▲***	▼***
U.S. producers':						
Total production	▲10.1	▲4.2	▼(15.7)	▲4.5	▲20.0	NA
Yield (pounds per acre)	▲2.4	▲2.1	▼(3.2)	▼(2.4)	▲6.0	NA
U.S. shipments:						
Quantity	▲8.4	▲3.5	▼(17.0)	▲10.3	▲14.3	▲3.8
Value	▲10.0	▼(17.5)	▲19.1	▼(1.5)	▲13.7	▲3.8
Unit value	▲1.6	▼(20.3)	▲43.5	▼(10.7)	▼(0.5)	---
Export shipments:						
Quantity	▲18.3	▲9.3	▼(11.2)	▼(20.7)	▲53.5	▼(14.0)
Value	▼(3.7)	▼(2.4)	▼(12.3)	▼(1.5)	▲14.2	▲1.4
Unit value	▼(18.6)	▼(10.7)	▼(1.3)	▲24.1	▼(25.6)	▲18.0
Ending inventory quantity	▼(23.5)	▲5.8	▼(17.3)	▼(30.5)	▲25.7	▼(4.6)
Production workers, reported	▲3.4	▲3.7	▲2.1	▼(4.1)	▲1.8	▼(2.8)
Hours worked (1,000s)	▲6.5	▲6.7	▲9.4	▼(15.0)	▲7.3	▼(7.3)
Wages paid ($1,000)	▲21.8	▲7.3	▲5.3	▼(0.1)	▲7.9	▼(0.5)
Hourly wages (dollars per hour)	▲14.5	▲0.6	▼(3.7)	▲17.5	▲0.6	▲7.3
Productivity (pounds per hour)	▲20.3	▲8.0	▼(12.0)	▲17.0	▲8.1	▼(2.9)
Unit labor costs	▼(4.9)	▼(6.9)	▲9.4	▲0.4	▼(7.0)	▲10.6

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Table C-1--Continued

Blueberries: Summary data concerning the U.S. market, 2015-19, January to September 2019, and January to September 2020

(Quantity=1,000 pounds net packed weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound net packed weight; Period changes=percent--exceptions noted)

	Reported data						
	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
U.S. producers':--Continued							
Net sales:							
Quantity	250,751	289,022	278,229	276,806	321,173	277,603	249,788
Value	464,717	472,443	504,584	495,166	543,148	483,174	471,443
Unit value	$1.85	$1.63	$1.81	$1.79	$1.69	$1.74	$1.89
Operating expenses	403,563	425,134	423,434	436,022	498,982	427,438	403,135
Operating income or (loss) (fn2)	61,154	47,309	81,150	59,144	44,166	55,736	68,309
Net income or (loss) (fn2)	30,594	17,652	57,698	35,364	6,515	26,475	37,905
Capital expenditures	64,219	46,181	46,838	42,264	42,122	36,777	28,026
Research and development expenses	***	***	***	***	***	***	***
Net assets	392,484	408,686	430,788	439,336	488,186	NA	NA
Unit operating expenses	$1.61	$1.47	$1.52	$1.58	$1.55	$1.54	$1.61
Unit operating income or (loss) (fn2)	$0.24	$0.16	$0.29	$0.21	$0.14	$0.20	$0.27
Unit net income or (loss) (fn2)	$0.12	$0.06	$0.21	$0.13	$0.02	$0.10	$0.15
Operating expenses/sales (fn1)	86.8	90.0	83.9	88.1	91.9	88.5	85.5
Operating income or (loss)/sales (fn1)	13.2	10.0	16.1	11.9	8.1	11.5	14.5
Net income or (loss)/sales (fn1)	6.6	3.7	11.4	7.1	1.2	5.5	8.0

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Table C-1--Continued
Blueberries: Summary data concerning the U.S. market, 2015-19, January to September 2019, and January to September 2020
(Quantity=1,000 pounds net packed weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound net packed weight; Period changes=percent--exceptions noted)

	Period changes					
		Comparison years				Jan-Sep
	2015-19	2015-16	2016-17	2017-18	2018-19	2019-20
U.S. producers':--Continued						
Net sales:						
Quantity	▲28.1	▲15.3	▼(3.7)	▼(0.5)	▲16.0	▼(10.0)
Value	▲16.9	▲1.7	▲6.8	▼(1.9)	▲9.7	▼(2.4)
Unit value	▼(8.7)	▼(11.8)	▲10.9	▼(1.4)	▼(5.5)	▲8.4
Operating expenses	▲23.6	▲5.3	▼(0.4)	▲3.0	▲14.4	▼(5.7)
Operating income or (loss) (fn2)	▼(27.8)	▼(22.6)	▲71.5	▼(27.1)	▼(25.3)	▲22.6
Net income or (loss) (fn2)	▼(78.7)	▼(42.3)	▲226.9	▼(38.7)	▼(81.6)	▲43.2
Capital expenditures	▼(34.4)	▼(28.1)	▲1.4	▼(9.8)	▼(0.3)	▼(23.8)
Research and development expenses	▲***	▼***	▲***	▼***	▲***	▼***
Net assets	▲24.4	▲4.1	▲5.4	▲2.0	▲11.1	NA
Unit operating expenses	▼(3.5)	▼(8.6)	▲3.5	▲3.5	▼(1.4)	▲4.8
Unit operating income or (loss) (fn2)	▼(43.6)	▼(32.9)	▲78.2	▼(26.7)	▼(35.6)	▲36.2
Unit net income or (loss) (fn2)	▼(83.4)	▼(49.9)	▲239.5	▼(38.4)	▼(84.1)	▲59.1
Operating expenses/sales (fn1)	▲5.0	▲3.1	▼(6.1)	▲4.1	▲3.8	▼(3.0)
Operating income or (loss)/sales (fn1)	▼(5.0)	▼(3.1)	▲6.1	▼(4.1)	▼(3.8)	▲3.0
Net income or (loss)/sales (fn1)	▼(5.4)	▼(2.8)	▲7.7	▼(4.3)	▼(5.9)	▲2.6

Note.--Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent (if positive) and greater than "(0.05)" percent (if negative). Zeroes, null values, and undefined calculations are suppressed and shown as "---". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.

Source: Compiled data submitted in response to Commission questionnaires, official U.S. agricultural statistics published by USDA/NASS (see part III for more details), official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, 0810.40.0029, 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020, and official U.S. export statistics using schedule B numbers 0810.40.0024, 0810.40.0026, 0810.40.0029, 0811.90.2024, and 0811.90.2028, accessed November 9, 2020.

Table C-2
Fresh or chilled blueberries: Summary data concerning the U.S. market, 2015-19, January to September 2019, and January to September 2020
(Quantity=1,000 pounds net packed weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound net packed weight; Period changes=percent--exceptions noted)

	Reported data						
	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
U.S. consumption quantity:							
Amount	500,876	557,035	544,988	629,592	731,275	564,224	552,979
Producers' share (fn1)	49.1	44.2	45.1	41.4	40.2	49.2	49.8
Importers' share (fn1):							
Argentina	3.8	4.1	3.9	3.1	2.0	0.1	0.1
Canada	18.1	14.4	12.7	10.9	10.9	14.0	9.6
Chile	21.6	25.6	22.2	22.4	16.9	17.1	15.1
Mexico	4.8	6.0	9.4	11.0	12.0	11.7	15.7
Peru	2.3	5.3	6.4	11.0	17.8	7.9	9.6
All other sources	0.4	0.4	0.2	0.3	0.2	0.0	0.1
All import sources	50.9	55.8	54.9	58.6	59.8	50.8	50.2
U.S. consumption value:							
Amount	1,160,621	1,313,181	1,414,520	1,616,714	1,859,729	1,337,148	1,297,052
Producers' share (fn1)	41.4	34.4	39.6	32.0	34.3	45.1	46.2
Importers' share (fn1):							
Argentina	6.8	7.8	5.7	3.9	2.1	0.2	0.1
Canada	9.7	7.4	8.2	7.1	6.4	8.8	6.7
Chile	25.0	28.5	20.8	22.9	17.2	18.1	14.7
Mexico	11.6	11.0	15.2	17.8	15.3	15.9	20.0
Peru	4.8	10.2	10.2	15.9	24.4	11.9	12.3
All other sources	0.8	0.8	0.4	0.4	0.2	0.0	0.1
All import sources	58.6	65.6	60.4	68.0	65.7	54.9	53.8
U.S. imports net of re-exports from:							
Argentina:							
Quantity	18,799	22,728	21,411	19,361	14,657	713	614
Value	78,868	102,948	80,445	63,666	39,922	2,422	1,347
Unit value	$4.20	$4.53	$3.76	$3.29	$2.72	$3.40	$2.19
Canada:							
Quantity	90,607	80,383	69,470	68,525	79,685	79,063	53,081
Value	112,040	96,757	115,379	114,946	118,697	117,854	86,412
Unit value	$1.24	$1.20	$1.66	$1.68	$1.49	$1.49	$1.63
Chile:							
Quantity	108,246	142,662	121,244	140,983	123,789	96,636	83,495
Value	289,626	373,816	294,847	370,121	320,305	241,608	190,694
Unit value	$2.68	$2.62	$2.43	$2.63	$2.59	$2.50	$2.28
Mexico:							
Quantity	24,073	33,514	51,068	69,262	87,526	65,838	86,657
Value	134,339	143,832	214,528	287,461	284,544	212,217	259,528
Unit value	$5.58	$4.29	$4.20	$4.15	$3.25	$3.22	$2.99

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Table C-2--Continued
Fresh or chilled blueberries: Summary data concerning the U.S. market, 2015-19, January to September 2019, and January to September 2020
(Quantity=1,000 pounds net packed weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound net packed weight; Period changes=percent--exceptions noted)

	Period changes					
		Comparison years				Jan-Sep
	2015-19	2015-16	2016-17	2017-18	2018-19	2019-20
U.S. consumption quantity:						
Amount	▲46.0	▲11.2	▼(2.2)	▲15.5	▲16.2	▼(2.0)
Producers' share (fn1)	▼(8.9)	▼(4.9)	▲0.9	▼(3.7)	▼(1.2)	▲0.6
Importers' share (fn1):						
Argentina	▼(1.7)	▲0.3	▼(0.2)	▼(0.9)	▼(1.1)	▼(0.0)
Canada	▼(7.2)	▼(3.7)	▼(1.7)	▼(1.9)	▲0.0	▼(4.4)
Chile	▼(4.7)	▲4.0	▼(3.4)	▲0.1	▼(5.5)	▼(2.0)
Mexico	▲7.2	▲1.2	▲3.4	▲1.6	▲1.0	▲4.0
Peru	▲15.6	▲3.0	▲1.1	▲4.6	▲6.9	▲1.8
All other sources	▼(0.2)	▲0.0	▼(0.2)	▲0.0	▼(0.1)	▲0.1
All import sources	▲8.9	▲4.9	▼(0.9)	▲3.7	▲1.2	▼(0.6)
U.S. consumption value:						
Amount	▲60.2	▲13.1	▲7.7	▲14.3	▲15.0	▼(3.0)
Producers' share (fn1)	▼(7.0)	▼(7.0)	▲5.2	▼(7.5)	▲2.3	▲1.0
Importers' share (fn1):						
Argentina	▼(4.6)	▲1.0	▼(2.2)	▼(1.7)	▼(1.8)	▼(0.1)
Canada	▼(3.3)	▼(2.3)	▲0.8	▼(1.0)	▼(0.7)	▼(2.2)
Chile	▼(7.7)	▲3.5	▼(7.6)	▲2.0	▼(5.7)	▼(3.4)
Mexico	▲3.7	▼(0.6)	▲4.2	▲2.6	▼(2.5)	▲4.1
Peru	▲19.5	▲5.3	▲0.0	▲5.7	▲8.5	▲0.3
All other sources	▼(0.6)	▲0.0	▼(0.5)	▼(0.0)	▼(0.1)	▲0.1
All import sources	▲7.0	▲7.0	▼(5.2)	▲7.5	▼(2.3)	▼(1.0)
U.S. imports net of re-exports from:						
Argentina:						
Quantity	▼(22.0)	▲20.9	▼(5.8)	▼(9.6)	▼(24.3)	▼(13.8)
Value	▼(49.4)	▲30.5	▼(21.9)	▼(20.9)	▼(37.3)	▼(44.4)
Unit value	▼(35.1)	▲8.0	▼(17.1)	▼(12.5)	▼(17.2)	▼(35.5)
Canada:						
Quantity	▼(12.1)	▼(11.3)	▼(13.6)	▼(1.4)	▲16.3	▼(32.9)
Value	▲5.9	▼(13.6)	▲19.2	▼(0.4)	▲3.3	▼(26.7)
Unit value	▲20.5	▼(2.7)	▲38.0	▲1.0	▼(11.2)	▲9.2
Chile:						
Quantity	▲14.4	▲31.8	▼(15.0)	▲16.3	▼(12.2)	▼(13.6)
Value	▲10.6	▲29.1	▼(21.1)	▲25.5	▼(13.5)	▼(21.1)
Unit value	▼(3.3)	▼(2.1)	▼(7.2)	▲8.0	▼(1.4)	▼(8.7)
Mexico:						
Quantity	▲263.6	▲39.2	▲52.4	▲35.6	▲26.4	▲31.6
Value	▲111.8	▲7.1	▲49.2	▲34.0	▼(1.0)	▲22.3
Unit value	▼(41.7)	▼(23.1)	▼(2.1)	▼(1.2)	▼(21.7)	▼(7.1)

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Table C-2--Continued
Fresh or chilled blueberries: Summary data concerning the U.S. market, 2015-19, January to September 2019, and January to September 2020
(Quantity=1,000 pounds net packed weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound net packed weight; Period changes=percent--exceptions noted)

	Reported data						
	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
U.S. imports net of re-exports:--Continued							
Peru:							
Quantity	11,318	29,556	34,695	69,089	130,452	44,471	53,262
Value	56,074	133,584	144,542	257,198	453,207	159,574	159,073
Unit value	$4.95	$4.52	$4.17	$3.72	$3.47	$3.59	$2.99
All other sources:							
Quantity	1,994	2,236	1,297	1,751	1,436	134	582
Value	9,263	10,867	5,326	5,936	4,311	309	1,362
Unit value	$4.65	$4.86	$4.11	$3.39	$3.00	$2.30	$2.34
All import sources:							
Quantity	255,037	311,077	299,186	368,970	437,545	286,855	277,692
Value	680,209	861,804	855,069	1,099,328	1,220,987	733,984	698,417
Unit value	$2.67	$2.77	$2.86	$2.98	$2.79	$2.56	$2.52
U.S. producers':							
Total production	309,020	314,980	304,460	307,020	374,420	NA	NA
Yield (pounds per acre) (fn3)	6,210	6,397	6,180	6,304	6,628	NA	NA
U.S. shipments:							
Quantity	245,838	245,957	245,802	260,623	293,730	277,369	275,287
Value	480,412	451,377	559,452	517,386	638,742	603,164	598,636
Unit value	$1.95	$1.84	$2.28	$1.99	$2.17	$2.17	$2.17
Export shipments:							
Quantity	63,182	69,023	58,658	46,397	80,690	77,956	58,830
Value	116,776	116,248	107,009	110,541	121,058	116,434	117,191
Unit value	$1.85	$1.68	$1.82	$2.38	$1.50	$1.49	$1.99
Ending inventory quantity	1,838	2,193	2,675	1,688	1,419	1,420	1,390
Production workers, reported	11,366	11,606	12,953	11,995	12,215	13,017	12,884
Hours worked (1,000s)	5,490	5,772	7,162	5,632	6,160	5,812	5,529
Wages paid ($1,000)	92,328	93,674	114,078	104,712	116,896	110,994	111,908
Hourly wages (dollars per hour)	$16.82	$16.23	$15.93	$18.59	$18.98	$19.10	$20.24
Productivity (pounds per hour)	20.4	19.1	16.8	20.8	21.7	22.9	22.7
Unit labor costs	$0.82	$0.85	$0.95	$0.89	$0.87	$0.83	$0.89

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Table C-2--Continued
Fresh or chilled blueberries: Summary data concerning the U.S. market, 2015-19, January to September 2019, and January to September 2020
(Quantity=1,000 pounds net packed weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound net packed weight; Period changes=percent--exceptions noted)

	Period changes					
		Comparison years				Jan-Sep
	2015-19	2015-16	2016-17	2017-18	2018-19	2019-20
U.S. imports net of re-exports:--Continued						
Peru:						
Quantity	▲1,052.6	▲161.1	▲17.4	▲99.1	▲88.8	▲19.8
Value	▲708.2	▲138.2	▲8.2	▲77.9	▲76.2	▼(0.3)
Unit value	▼(29.9)	▼(8.8)	▼(7.8)	▼(10.6)	▼(6.7)	▼(16.8)
All other sources:						
Quantity	▼(28.0)	▲12.1	▼(42.0)	▲35.0	▼(18.0)	▲332.6
Value	▼(53.5)	▲17.3	▼(51.0)	▲11.4	▼(27.4)	▲340.7
Unit value	▼(35.3)	▲4.6	▼(15.6)	▼(17.4)	▼(11.4)	▲1.9
All import sources:						
Quantity	▲71.6	▲22.0	▼(3.8)	▲23.3	▲18.6	▼(3.2)
Value	▲79.5	▲26.7	▼(0.8)	▲28.6	▲11.1	▼(4.8)
Unit value	▲4.6	▲3.9	▲3.2	▲4.3	▼(6.3)	▼(1.7)
U.S. producers':						
Total production	▲21.2	▲1.9	▼(3.3)	▲0.8	▲22.0	NA
Yield (pounds per acre) (fn3)	▲6.7	▲3.0	▼(3.4)	▲2.0	▲5.1	NA
U.S. shipments:						
Quantity	▲19.5	▲0.0	▼(0.1)	▲6.0	▲12.7	▼(0.8)
Value	▲33.0	▼(6.0)	▲23.9	▼(7.5)	▲23.5	▼(0.8)
Unit value	▲11.3	▼(6.1)	▲24.0	▼(12.8)	▲9.5	---
Export shipments:						
Quantity	▲27.7	▲9.2	▼(15.0)	▼(20.9)	▲73.9	▼(24.5)
Value	▲3.7	▼(0.5)	▼(7.9)	▲3.3	▲9.5	▲0.6
Unit value	▼(18.8)	▼(8.9)	▲8.3	▲30.6	▼(37.0)	▲33.4
Ending inventory quantity	▼(22.8)	▲19.3	▲22.0	▼(36.9)	▼(15.9)	▼(2.2)
Production workers, reported	▲7.5	▲2.1	▲11.6	▼(7.4)	▲1.8	▼(1.0)
Hours worked (1,000s)	▲12.2	▲5.1	▲24.1	▼(21.4)	▲9.4	▼(4.9)
Wages paid ($1,000)	▲26.6	▲1.5	▲21.8	▼(8.2)	▲11.6	▲0.8
Hourly wages (dollars per hour)	▲12.8	▼(3.5)	▼(1.9)	▲16.7	▲2.1	▲6.0
Productivity (pounds per hour)	▲6.5	▼(6.3)	▼(12.1)	▲23.9	▲4.4	▼(0.8)
Unit labor costs	▲6.0	▲3.0	▲11.7	▼(5.8)	▼(2.2)	▲6.9

Table continued on next page.

Table C-2--Continued
Fresh or chilled blueberries: Summary data concerning the U.S. market, 2015-19, January to September 2019, and January to September 2020
(Quantity=1,000 pounds net packed weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound net packed weight; Period changes=percent--exceptions noted)

	Reported data						
	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
U.S. producers':--Continued							
Net sales:							
Quantity	112,059	110,359	120,337	117,222	133,853	132,976	125,448
Value	278,908	254,374	311,818	296,276	326,856	323,233	313,058
Unit value	$2.49	$2.30	$2.59	$2.53	$2.44	$2.43	$2.50
Operating expenses	213,370	222,322	252,873	260,605	292,608	277,916	256,683
Operating income or (loss) (fn2)	65,538	32,052	58,945	35,671	34,247	45,318	56,375
Net income or (loss) (fn2)	43,689	11,032	43,874	20,851	5,868	22,352	30,997
Capital expenditures	36,061	33,335	37,740	29,942	24,678	21,126	16,063
Research and development expenses	***	***	***	***	***	***	***
Net assets	202,463	210,678	273,045	261,607	299,738	NA	NA
Unit operating expenses	$1.90	$2.01	$2.10	$2.22	$2.19	$2.09	$2.05
Unit operating income or (loss) (fn2)	$0.58	$0.29	$0.49	$0.30	$0.26	$0.34	$0.45
Unit net income or (loss) (fn2)	$0.39	$0.10	$0.36	$0.18	$0.04	$0.17	$0.25
Operating expenses/sales (fn1)	76.5	87.4	81.1	88.0	89.5	86.0	82.0
Operating income or (loss)/sales (fn1)	23.5	12.6	18.9	12.0	10.5	14.0	18.0
Net income or (loss)/sales (fn1)	15.7	4.3	14.1	7.0	1.8	6.9	9.9

Table continued on next page.

Table C-2--Continued
Fresh or chilled blueberries: Summary data concerning the U.S. market, 2015-19, January to September 2019, and January to September 2020
(Quantity=1,000 pounds net packed weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound net packed weight; Period changes=percent--exceptions noted)

	Period changes					
		Comparison years				Jan-Sep
	2015-19	2015-16	2016-17	2017-18	2018-19	2019-20
U.S. producers':--Continued						
Net sales:						
Quantity	▲19.4	▼(1.5)	▲9.0	▼(2.6)	▲14.2	▼(5.7)
Value	▲17.2	▼(8.8)	▲22.6	▼(5.0)	▲10.3	▼(3.1)
Unit value	▼(1.9)	▼(7.4)	▲12.4	▼(2.5)	▼(3.4)	▲2.7
Operating expenses	▲37.1	▲4.2	▲13.7	▲3.1	▲12.3	▼(7.6)
Operating income or (loss) (fn2)	▼(47.7)	▼(51.1)	▲83.9	▼(39.5)	▼(4.0)	▲24.4
Net income or (loss) (fn2)	▼(86.6)	▼(74.7)	▲297.7	▼(52.5)	▼(71.9)	▲38.7
Capital expenditures	▼(31.6)	▼(7.6)	▲13.2	▼(20.7)	▼(17.6)	▼(24.0)
Research and development expenses	▲***	▼***	▼***	▲***	▲***	▼***
Net assets	▲48.0	▲4.1	▲29.6	▼(4.2)	▲14.6	NA
Unit operating expenses	▲14.8	▲5.8	▲4.3	▲5.8	▼(1.7)	▼(2.1)
Unit operating income or (loss) (fn2)	▼(56.3)	▼(50.3)	▲68.7	▼(37.9)	▼(15.9)	▲31.9
Unit net income or (loss) (fn2)	▼(88.8)	▼(74.4)	▲264.7	▼(51.2)	▼(75.4)	▲47.0
Operating expenses/sales (fn1)	▲13.0	▲10.9	▼(6.3)	▲6.9	▲1.6	▼(4.0)
Operating income or (loss)/sales (fn1)	▼(13.0)	▼(10.9)	▲6.3	▼(6.9)	▼(1.6)	▲4.0
Net income or (loss)/sales (fn1)	▼(13.9)	▼(11.3)	▲9.7	▼(7.0)	▼(5.2)	▲3.0

Note.--Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent (if positive) and greater than "(0.05)" percent (if negative). Zeroes, null values, and undefined calculations are suppressed and shown as "---". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.
fn3.--Yield is based on cultivated blueberries regardless of whether frozen or fresh as all fresh yields are not published by USDA/NASS.

Source: Compiled data submitted in response to Commission questionnaires, official U.S. agricultural statistics published by USDA/NASS (see part III for more details), official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, and 0810.40.0029, accessed November 6, 2020, and official U.S. export statistics using schedule B numbers 0810.40.0024, 0810.40.0026, and 0810.40.0029, accessed November 9, 2020.

Table C-3
Frozen blueberries: Summary data concerning the U.S. market, 2015-19, January to September 2019, and January to September 2020

(Quantity=1,000 pounds net packed weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound net packed weight; Period changes=percent--exceptions noted)

	Reported data						
	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
U.S. consumption quantity:							
Amount	449,832	482,472	341,444	399,008	490,497	390,312	414,779
Producers' share (fn1)	66.8	66.2	65.5	64.4	60.8	61.4	63.0
Importers' share (fn1):							
Argentina	1.1	0.9	1.2	1.0	1.5	1.6	0.8
Canada	25.7	25.5	24.6	24.5	29.3	27.7	27.9
Chile	6.2	7.0	8.4	8.7	6.6	7.3	6.9
Mexico	0.1	0.1	0.1	0.4	0.6	0.6	0.5
Peru	0.0	0.0	---	0.8	1.2	1.2	0.9
All other sources	0.1	0.2	0.1	0.1	0.1	0.1	0.0
All import sources	33.2	33.8	34.5	35.6	39.2	38.6	37.0
U.S. consumption value:							
Amount	414,913	322,871	258,171	326,794	331,452	265,721	271,860
Producers' share (fn1)	49.7	35.5	44.4	44.9	35.2	35.3	37.6
Importers' share (fn1):							
Argentina	1.5	2.6	2.4	1.6	2.6	2.8	1.2
Canada	34.2	37.6	33.1	33.8	43.9	41.6	43.5
Chile	14.3	23.4	19.6	18.2	15.6	17.4	15.7
Mexico	0.2	0.2	0.2	0.5	1.0	1.1	0.8
Peru	0.0	0.0	---	0.9	1.6	1.6	1.1
All other sources	0.1	0.6	0.2	0.2	0.2	0.2	0.1
All import sources	50.3	64.5	55.6	55.1	64.8	64.7	62.4
U.S. imports net of re-exports from:							
Argentina:							
Quantity	5,085	4,521	4,262	4,005	7,165	6,270	3,233
Value	6,307	8,291	6,183	5,088	8,473	7,498	3,389
Unit value	$1.24	$1.83	$1.45	$1.27	$1.18	$1.20	$1.05
Canada:							
Quantity	115,660	122,997	84,130	97,921	143,831	108,234	115,863
Value	141,959	121,464	85,569	110,375	145,609	110,652	118,133
Unit value	$1.23	$0.99	$1.02	$1.13	$1.01	$1.02	$1.02
Chile:							
Quantity	27,967	33,961	28,749	34,831	32,303	28,661	28,619
Value	59,168	75,528	50,615	59,435	51,691	46,283	42,808
Unit value	$2.12	$2.22	$1.76	$1.71	$1.60	$1.61	$1.50
Mexico:							
Quantity	404	441	477	1,507	2,881	2,530	1,970
Value	909	803	610	1,640	3,306	2,911	2,060
Unit value	$2.25	$1.82	$1.28	$1.09	$1.15	$1.15	$1.05

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Table C-3--Continued
Frozen blueberries: Summary data concerning the U.S. market, 2015-19, January to September 2019, and January to September 2020

(Quantity=1,000 pounds net packed weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound net packed weight; Period changes=percent--exceptions noted)

	Period changes					
		Comparison years				Jan-Sep
	2015-19	2015-16	2016-17	2017-18	2018-19	2019-20
U.S. consumption quantity:						
Amount	▲9.0	▲7.3	▼(29.2)	▲16.9	▲22.9	▲6.3
Producers' share (fn1)	▼(6.0)	▼(0.6)	▼(0.7)	▼(1.0)	▼(3.7)	▲1.6
Importers' share (fn1):						
Argentina	▲0.3	▼(0.2)	▲0.3	▼(0.2)	▲0.5	▼(0.8)
Canada	▲3.6	▼(0.2)	▼(0.9)	▼(0.1)	▲4.8	▲0.2
Chile	▲0.4	▲0.8	▲1.4	▲0.3	▼(2.1)	▼(0.4)
Mexico	▲0.5	▲0.0	▲0.0	▲0.2	▲0.2	▼(0.2)
Peru	▲1.2	▲0.0	▼(0.0)	▲0.8	▲0.4	▼(0.4)
All other sources	▲0.0	▲0.2	▼(0.1)	▼(0.0)	▼(0.0)	▼(0.0)
All import sources	▲6.0	▲0.6	▲0.7	▲1.0	▲3.7	▼(1.6)
U.S. consumption value:						
Amount	▼(20.1)	▼(22.2)	▼(20.0)	▲26.6	▲1.4	▲2.3
Producers' share (fn1)	▼(14.5)	▼(14.2)	▲8.9	▲0.5	▼(9.7)	▲2.3
Importers' share (fn1):						
Argentina	▲1.0	▲1.0	▼(0.2)	▼(0.8)	▲1.0	▼(1.6)
Canada	▲9.7	▲3.4	▼(4.5)	▲0.6	▲10.2	▲1.8
Chile	▲1.3	▲9.1	▼(3.8)	▼(1.4)	▼(2.6)	▼(1.7)
Mexico	▲0.8	▲0.0	▼(0.0)	▲0.3	▲0.5	▼(0.3)
Peru	▲1.6	▲0.0	▼(0.0)	▲0.9	▲0.7	▼(0.5)
All other sources	▲0.0	▲0.5	▼(0.4)	▼(0.1)	▼(0.0)	▼(0.0)
All import sources	▲14.5	▲14.2	▼(8.9)	▼(0.5)	▲9.7	▼(2.3)
U.S. imports net of re-exports from:						
Argentina:						
Quantity	▲40.9	▼(11.1)	▼(5.7)	▼(6.0)	▲78.9	▼(48.4)
Value	▲34.3	▲31.5	▼(25.4)	▼(17.7)	▲66.5	▼(54.8)
Unit value	▼(4.7)	▲47.9	▼(20.9)	▼(12.4)	▼(6.9)	▼(12.3)
Canada:						
Quantity	▲24.4	▲6.3	▼(31.6)	▲16.4	▲46.9	▲7.0
Value	▲2.6	▼(14.4)	▼(29.6)	▲29.0	▲31.9	▲6.8
Unit value	▼(17.5)	▼(19.5)	▲3.0	▲10.8	▼(10.2)	▼(0.3)
Chile:						
Quantity	▲15.5	▲21.4	▼(15.3)	▲21.2	▼(7.3)	▼(0.1)
Value	▼(12.6)	▲27.6	▼(33.0)	▲17.4	▼(13.0)	▼(7.5)
Unit value	▼(24.4)	▲5.1	▼(20.8)	▼(3.1)	▼(6.2)	▼(7.4)
Mexico:						
Quantity	▲612.9	▲9.1	▲8.1	▲216.3	▲91.1	▼(22.1)
Value	▲263.6	▼(11.7)	▼(24.1)	▲168.8	▲101.6	▼(29.2)
Unit value	▼(49.0)	▼(19.0)	▼(29.7)	▼(15.0)	▲5.5	▼(9.1)

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Table C-3--Continued
Frozen blueberries: Summary data concerning the U.S. market, 2015-19, January to September 2019, and January to September 2020

(Quantity=1,000 pounds net packed weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound net packed weight; Period changes=percent--exceptions noted)

	Reported data						
	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
U.S. imports net of re-exports from:--Continued							
Peru:							
Quantity	33	81	---	3,286	5,817	4,767	3,572
Value	42	80	---	2,969	5,228	4,256	2,960
Unit value	$1.27	$0.99	---	$0.90	$0.90	$0.89	$0.83
All other sources:							
Quantity	247	1,091	341	314	310	266	199
Value	510	2,080	602	568	500	402	287
Unit value	$2.07	$1.91	$1.77	$1.81	$1.62	$1.51	$1.44
All import sources:							
Quantity	149,396	163,092	117,958	141,865	192,306	150,729	153,456
Value	208,895	208,246	143,578	180,076	214,807	172,002	169,637
Unit value	$1.40	$1.28	$1.22	$1.27	$1.12	$1.14	$1.11
U.S. producers':							
Total production	351,670	375,450	275,930	298,900	352,860	NA	NA
Yield (pounds per acre) (fn3)	4,514	4,409	3,988	2,681	2,790	NA	NA
U.S. shipments:							
Quantity	300,436	319,380	223,486	257,142	298,190	239,583	261,323
Value	206,018	114,625	114,592	146,718	116,645	93,719	102,223
Unit value	$0.69	$0.36	$0.51	$0.57	$0.39	$0.39	$0.39
Export shipments:							
Quantity	51,234	56,070	52,444	41,758	54,670	41,812	44,129
Value	69,508	65,589	52,416	46,465	58,260	45,361	46,875
Unit value	$1.36	$1.17	$1.00	$1.11	$1.07	$1.08	$1.06
Ending inventory quantity	112,798	119,110	97,624	68,036	86,220	98,926	94,343
Production workers, reported	4,108	4,438	3,430	3,711	3,778	3,529	3,202
Hours worked (1,000s)	2,933	3,215	2,670	2,726	2,807	2,282	1,975
Wages paid ($1,000)	45,913	54,689	42,205	51,373	51,544	43,658	41,981
Hourly wages (dollars per hour)	$15.65	$17.01	$15.81	$18.85	$18.36	$19.13	$21.26
Productivity (pounds per hour)	47.3	55.6	59.1	58.5	66.7	63.4	63.0
Unit labor costs	$0.33	$0.31	$0.27	$0.32	$0.28	$0.30	$0.34

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Table C-3--Continued
Frozen blueberries: Summary data concerning the U.S. market, 2015-19, January to September 2019, and January to September 2020

(Quantity=1,000 pounds net packed weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound net packed weight; Period changes=percent--exceptions noted)

	Period changes					
		Comparison years				Jan-Sep
	2015-19	2015-16	2016-17	2017-18	2018-19	2019-20
U.S. imports net of re-exports from:--Continued						
Peru:						
Quantity	▲17,530.3	▲146.2	▼(100.0)	▲***	▲77.0	▼(25.1)
Value	▲12,378.1	▲92.0	▼(100.0)	▲***	▲76.1	▼(30.5)
Unit value	▼(29.2)	▼(22.0)	▼(100.0)	▲***	▼(0.5)	▼(7.2)
All other sources:						
Quantity	▲25.4	▲341.8	▼(68.8)	▼(7.9)	▼(1.3)	▼(25.3)
Value	▼(1.9)	▲307.8	▼(71.0)	▼(5.7)	▼(11.9)	▼(28.6)
Unit value	▼(21.8)	▼(7.7)	▼(7.3)	▲2.3	▼(10.7)	▼(4.4)
All import sources:						
Quantity	▲28.7	▲9.2	▼(27.7)	▲20.3	▲35.6	▲1.8
Value	▲2.8	▼(0.3)	▼(31.1)	▲25.4	▲19.3	▼(1.4)
Unit value	▼(20.1)	▼(8.7)	▼(4.7)	▲4.3	▼(12.0)	▼(3.1)
U.S. producers':						
Total production	▲0.3	▲6.8	▼(26.5)	▲8.3	▲18.1	NA
Yield (pounds per acre) (fn3)	▼(38.2)	▼(2.3)	▼(9.5)	▼(32.8)	▲4.1	NA
U.S. shipments:						
Quantity	▼(0.7)	▲6.3	▼(30.0)	▲15.1	▲16.0	▲9.1
Value	▼(43.4)	▼(44.4)	▼(0.0)	▲28.0	▼(20.5)	▲9.1
Unit value	▼(43.0)	▼(47.7)	▲42.9	▲11.3	▼(31.4)	---
Export shipments:						
Quantity	▲6.7	▲9.4	▼(6.5)	▼(20.4)	▲30.9	▲5.5
Value	▼(16.2)	▼(5.6)	▼(20.1)	▼(11.4)	▲25.4	▲3.3
Unit value	▼(21.4)	▼(13.8)	▼(14.6)	▲11.3	▼(4.2)	▼(2.1)
Ending inventory quantity	▼(23.6)	▲5.6	▼(18.0)	▼(30.3)	▲26.7	▼(4.6)
Production workers, reported	▼(8.0)	▲8.0	▼(22.7)	▲8.2	▲1.8	▼(9.3)
Hours worked (1,000s)	▼(4.3)	▲9.6	▼(16.9)	▲2.1	▲3.0	▼(13.5)
Wages paid ($1,000)	▲12.3	▲19.1	▼(22.8)	▲21.7	▲0.3	▼(3.8)
Hourly wages (dollars per hour)	▲17.3	▲8.7	▼(7.1)	▲19.2	▼(2.6)	▲11.1
Productivity (pounds per hour)	▲41.1	▲17.5	▲6.4	▼(1.0)	▲14.0	▼(0.6)
Unit labor costs	▼(16.9)	▼(7.5)	▼(12.7)	▲20.4	▼(14.5)	▲11.8

Table continued on next page.

Table C-3--Continued
Frozen blueberries: Summary data concerning the U.S. market, 2015-19, January to September 2019, and January to September 2020

(Quantity=1,000 pounds net packed weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound net packed weight; Period changes=percent--exceptions noted)

	Reported data						
	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
U.S. producers':--Continued							
Net sales:							
Quantity	138,692	178,664	157,891	159,584	187,320	144,626	124,340
Value	185,808	218,069	192,766	198,890	216,293	159,941	158,385
Unit value	$1.34	$1.22	$1.22	$1.25	$1.15	$1.11	$1.27
Operating expenses	190,193	202,812	170,561	175,417	206,374	149,522	146,452
Operating income or (loss) (fn2)	(4,384)	15,257	22,205	23,474	9,919	10,419	11,933
Net income or (loss) (fn2)	(13,094)	6,620	13,825	14,513	647	4,124	6,909
Capital expenditures	28,158	12,846	9,098	12,322	17,444	15,651	11,964
Research and development expenses	***	***	***	***	***	***	***
Net assets	190,022	198,008	157,743	177,729	188,448	NA	NA
Unit operating expenses	$1.37	$1.14	$1.08	$1.10	$1.10	$1.03	$1.18
Unit operating income or (loss) (fn2)	$(0.03)	$0.09	$0.14	$0.15	$0.05	$0.07	$0.10
Unit net income or (loss) (fn2)	$(0.09)	$0.04	$0.09	$0.09	$0.00	$0.03	$0.06
Operating expenses/sales (fn1)	102.4	93.0	88.5	88.2	95.4	93.5	92.5
Operating income or (loss)/sales (fn1)	(2.4)	7.0	11.5	11.8	4.6	6.5	7.5
Net income or (loss)/sales (fn1)	(7.0)	3.0	7.2	7.3	0.3	2.6	4.4

Table continued on next page.

Table C-3--Continued
Frozen blueberries: Summary data concerning the U.S. market, 2015-19, January to September 2019, and January to September 2020

(Quantity=1,000 pounds net packed weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound net packed weight; Period changes=percent--exceptions noted)

	Period changes					
		Comparison years				Jan-Sep
	2015-19	2015-16	2016-17	2017-18	2018-19	2019-20
U.S. producers':--Continued						
Net sales:						
Quantity	▲35.1	▲28.8	▼(11.6)	▲1.1	▲17.4	▼(14.0)
Value	▲16.4	▲17.4	▼(11.6)	▲3.2	▲8.7	▼(1.0)
Unit value	▼(13.8)	▼(8.9)	▲0.0	▲2.1	▼(7.4)	▲15.2
Operating expenses	▲8.5	▲6.6	▼(15.9)	▲2.8	▲17.6	▼(2.1)
Operating income or (loss) (fn2)	▲---	▲---	▲45.5	▲5.7	▼(57.7)	▲14.5
Net income or (loss) (fn2)	▲---	▲---	▲108.8	▲5.0	▼(95.5)	▲67.5
Capital expenditures	▼(38.1)	▼(54.4)	▼(29.2)	▲35.4	▲41.6	▼(23.6)
Research and development expenses	▼***	▼***	▲***	▼***	▼***	▼***
Net assets	▼(0.8)	▲4.2	▼(20.3)	▲12.7	▲6.0	NA
Unit operating expenses	▼(19.7)	▼(17.2)	▼(4.8)	▲1.8	▲0.2	▲13.9
Unit operating income or (loss) (fn2)	▲---	▲---	▲64.7	▲4.6	▼(64.0)	▲33.2
Unit net income or (loss) (fn2)	▲---	▲---	▲136.3	▲3.9	▼(96.2)	▲94.9
Operating expenses/sales (fn1)	▼(6.9)	▼(9.4)	▼(4.5)	▼(0.3)	▲7.2	▼(1.0)
Operating income or (loss)/sales (fn1)	▲6.9	▲9.4	▲4.5	▲0.3	▼(7.2)	▲1.0
Net income or (loss)/sales (fn1)	▲7.3	▲10.1	▲4.1	▲0.1	▼(7.0)	▲1.8

Note.--Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent (if positive) and greater than "(0.05)" percent (if negative). Zeroes, null values, and undefined calculations are suppressed and shown as "---". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.
fn3.--Yield is based on wild blueberries regardless of whether frozen or fresh as all frozen yields are not published by USDA/NASS.

Source: Compiled data submitted in response to Commission questionnaires, official U.S. agricultural statistics published by USDA/NASS (see part III for more details), official U.S. import statistics using HTS statistical reporting numbers 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020, and official U.S. export statistics using schedule B numbers 0811.90.2024 and 0811.90.2028, accessed November 9, 2020.

APPENDIX D

SELECT DATA FOR CULTIVATED AND WILD BLUEBERRIES

Table D-1
Blueberries: U.S. production and U.S. imports of blueberries, by type, 2015-19

Item	Calendar year				
	2015	2016	2017	2018	2019
	Quantity (1,000 pounds)				
Cultivated blueberries.--					
U.S. utilized production	559,690	588,790	512,740	555,620	673,050
U.S. imports, all sources	321,895	390,979	391,557	478,882	578,620
Total, cultivated U.S. production and imports	881,585	979,769	904,297	1,034,502	1,251,670
Wild blueberries.--					
U.S. utilized production	101,000	101,640	67,650	50,300	54,230
U.S. imports, all sources	101,276	104,159	65,429	75,985	105,512
Total, wild U.S. production and imports	202,276	205,799	133,079	126,285	159,742

Note: The data presented in this table do not deduct exports or re-exports.

Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0026, 0810.40.0029, 0811.90.2028, 0811.90.2030 and 0811.90.2040, accessed November 6, 2020, and USDA NASS Fruits and Nuts Summaries 2017, 2018, and 2019.

Table D-2
Blueberries: U.S. PRWs employed in the production of blueberries, by type, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
PRWs (number).--							
Firms primarily harvesting cultivated blueberries	15,065	15,617	16,009	15,316	15,615	16,212	15,760
Firms primarily harvesting wild blueberries	409	427	374	390	378	334	326
Total	15,474	16,044	16,383	15,706	15,993	16,546	16,086

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

APPENDIX E

U.S. MOVEMENTS BY MONTH AND SOURCE, 2015-19

Table E-1
Fresh or chilled blueberries, U.S. movements by month and source, 2015-19

U.S. producers

Source	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Full year
		Quantity (1,000 pounds)												
US	2015	---	---	2,420	30,148	58,748	83,717	51,927	6,580	12,210	88	---	---	245,838
US	2016	---	---	---	13,969	69,004	89,976	59,477	5,785	7,673	73	---	---	245,957
US	2017	---	---	5,996	29,113	53,700	59,903	64,115	14,016	18,540	417	---	---	245,802
US	2018	236	921	3,916	31,499	44,760	70,298	66,376	31,818	10,799	---	---	---	260,623
US	2019	---	712	6,509	40,882	68,737	80,919	63,016	14,523	18,256	177	---	---	293,730
		Change in quantity (percent)												
US	2015-19	---	▲ ---	▲169.0	▲35.6	▲17.0	▼(3.3)	▲21.4	▲120.7	▲49.5	▲102.3	---	---	▲19.5
US	2015-16	---	---	▼(100.0)	▼(53.7)	▲17.5	▲7.5	▲14.5	▼(12.1)	▼(37.2)	▼(16.5)	---	---	▲0.0
US	2016-17	---	---	▲ ---	▲108.4	▼(22.2)	▼(33.4)	▲7.8	▲142.3	▲141.6	▲470.1	---	---	▼(0.1)
US	2017-18	▲ ---	▲ ---	▼(34.7)	▲8.2	▼(16.6)	▲17.4	▲3.5	▲127.0	▼(41.8)	▼(100.0)	---	---	▲6.0
US	2018-19	▼(100.0)	▼(22.7)	▲66.2	▲29.8	▲53.6	▲15.1	▼(5.1)	▼(54.4)	▲69.1	▲ ---	---	---	▲12.7
		Share of reported movements(percent)												
US	2015	---	---	10.9	78.7	94.9	91.5	63.9	16.5	34.0	0.7	---	---	49.1
US	2016	---	---	---	59.7	93.8	91.1	69.9	15.5	26.8	0.3	---	---	44.2
US	2017	---	---	21.7	69.4	88.9	96.7	72.8	28.6	56.5	1.7	---	---	45.1
US	2018	0.4	1.6	9.9	65.6	82.8	96.7	74.5	47.7	36.8	---	---	---	41.4
US	2019	---	1.2	16.8	66.0	88.7	96.9	63.6	29.7	36.7	0.5	---	---	40.2
		Change in share of reported movements (percentage points)												
US	2015-19	---	▲1.2	▲5.9	▼(12.7)	▼(6.2)	▲5.4	▼(0.3)	▲13.2	▲2.7	▼(0.2)	---	---	▼(8.9)
US	2015-16	---	---	▼(10.9)	▼(19.0)	▼(1.0)	▼(0.4)	▲6.0	▼(1.0)	▼(7.1)	▼(0.3)	---	---	▼(4.9)
US	2016-17	---	---	▲21.7	▲9.7	▼(4.9)	▲5.6	▲2.9	▲13.2	▲29.6	▲1.4	---	---	▲0.9
US	2017-18	▲0.4	▲1.6	▼(11.8)	▼(3.7)	▼(6.1)	▼(0.0)	▲1.7	▲19.1	▼(19.7)	▼(1.7)	---	---	▼(3.7)
US	2018-19	▼(0.4)	▼(0.4)	▲6.9	▲0.3	▲5.9	▲0.2	▼(10.9)	▼(18.0)	▼(0.1)	▲0.5	---	---	▼(1.2)

Table continued.

Table E-1--Continued
Fresh or chilled blueberries, U.S. movements by month and source, 2015-19

Argentina

Source	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Full year
		Quantity (1,000 pounds)												
AR	2015	---	---	---	---	---	---	---	74	1,054	7,045	8,729	1,898	18,799
AR	2016	---	---	---	---	---	---	---	146	1,053	10,263	9,193	2,073	22,728
AR	2017	---	---	---	---	---	---	50	38	1,683	10,375	8,544	721	21,411
AR	2018	---	50	6	---	---	---	---	---	262	6,206	7,317	5,518	19,361
AR	2019	92	---	---	---	---	---	---	75	708	4,500	6,889	2,394	14,657
		Change in quantity (percent)												
AR	2015-19	▲ ---	---	---	---	---	---	---	▲1.5	▼(32.8)	▼(36.1)	▼(21.1)	▲26.1	▼(22.0)
AR	2015-16	---	---	---	---	---	---	---	▲98.5	▼(0.1)	▲45.7	▲5.3	▲9.2	▲20.9
AR	2016-17	---	---	---	---	---	---	▲ ---	▼(73.8)	▲59.8	▲1.1	▼(7.1)	▼(65.2)	▼(5.8)
AR	2017-18	---	▲ ---	▲ ---	---	---	---	▼(100.0)	▼(100.0)	▼(84.4)	▼(40.2)	▼(14.4)	▲665.1	▼(9.6)
AR	2018-19	▲ ---	▼(100.0)	▼(100.0)	---	---	---	---	▲ ---	▲169.9	▼(27.5)	▼(5.9)	▼(56.6)	▼(24.3)
		Share of reported movements (percent)												
AR	2015	---	---	---	---	---	---	---	0.2	2.9	56.1	50.7	7.5	3.8
AR	2016	---	---	---	---	---	---	---	0.4	3.7	49.0	39.0	4.4	4.1
AR	2017	---	---	---	---	---	---	0.1	0.1	5.1	43.3	30.2	2.3	3.9
AR	2018	---	0.1	0.0	---	---	---	---	---	0.9	19.4	21.6	11.3	3.1
AR	2019	0.1	---	---	---	---	---	---	0.2	1.4	11.9	14.6	3.9	2.0
		Change in share of reported movements (percentage points)												
AR	2015-19	▲0.1	---	---	---	---	---	---	▼(0.0)	▼(1.5)	▼(44.2)	▼(36.1)	▼(3.7)	▼(1.7)
AR	2015-16	---	---	---	---	---	---	---	▲0.2	▲0.8	▼(7.1)	▼(11.7)	▼(3.2)	▲0.3
AR	2016-17	---	---	---	---	---	---	▲0.1	▼(0.3)	▲1.4	▼(5.7)	▼(8.7)	▼(2.1)	▼(0.2)
AR	2017-18	---	▲0.1	▲0.0	---	---	---	▼(0.1)	▼(0.1)	▼(4.2)	▼(23.8)	▼(8.6)	▲9.0	▼(0.9)
AR	2018-19	▲0.1	▼(0.1)	▼(0.0)	---	---	---	---	▲0.2	▲0.5	▼(7.6)	▼(7.1)	▼(7.4)	▼(1.1)

Table continued.

Table E-1--Continued
Fresh or chilled blueberries, U.S. movements by month and source, 2015-19

Canada

Source	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Full year
		Quantity (1,000 pounds)												
CA	2015	40	---	597	337	120	6,954	29,073	32,738	20,087	263	277	121	90,607
CA	2016	---	90	105	121	323	7,258	25,464	30,675	15,393	515	381	57	80,383
CA	2017	206	39	93	201	272	248	23,586	34,660	9,452	353	237	123	69,470
CA	2018	162	66	160	114	798	38	22,281	32,722	10,697	917	215	355	68,525
CA	2019	358	36	60	198	84	707	35,545	30,150	11,926	273	118	231	79,685
		Change in quantity (percent)												
CA	2015-19	▲785.5	▲ ---	▼(90.0)	▼(41.2)	▼(30.5)	▼(89.8)	▲22.3	▼(7.9)	▼(40.6)	▲3.7	▼(57.2)	▲91.0	▼(12.1)
CA	2015-16	▼(100.0)	▲ ---	▼(82.4)	▼(64.0)	▲168.5	▲4.4	▼(12.4)	▼(6.3)	▼(23.4)	▲96.0	▲37.7	▼(53.2)	▼(11.3)
CA	2016-17	▲ ---	▼(56.8)	▼(11.5)	▲66.0	▼(15.9)	▼(96.6)	▼(7.4)	▲13.0	▼(38.6)	▼(31.5)	▼(37.7)	▲117.4	▼(13.6)
CA	2017-18	▼(21.2)	▲70.1	▲72.3	▼(43.5)	▲193.9	▼(84.7)	▼(5.5)	▼(5.6)	▲13.2	▲159.9	▼(9.6)	▲188.1	▼(1.4)
CA	2018-19	▲120.7	▼(46.0)	▼(62.7)	▲73.9	▼(89.5)	▲1,768.9	▲59.5	▼(7.9)	▲11.5	▼(70.3)	▼(44.8)	▼(34.9)	▲16.3
		Share of reported movements (percent)												
CA	2015	0.1	---	2.7	0.9	0.2	7.6	35.8	82.1	55.9	2.1	1.6	0.5	18.1
CA	2016	---	0.2	0.5	0.5	0.4	7.3	29.9	82.2	53.9	2.5	1.6	0.1	14.4
CA	2017	0.4	0.1	0.3	0.5	0.4	0.4	26.8	70.8	28.8	1.5	0.8	0.4	12.7
CA	2018	0.3	0.1	0.4	0.2	1.5	0.1	25.0	49.1	36.4	2.9	0.6	0.7	10.9
CA	2019	0.6	0.1	0.2	0.3	0.1	0.8	35.9	61.7	24.0	0.7	0.3	0.4	10.9
		Change in share of reported movements (percentage points)												
CA	2015-19	▲0.5	▲0.1	▼(2.5)	▼(0.6)	▼(0.1)	▼(6.8)	▲0.1	▼(20.4)	▼(31.9)	▼(1.4)	▼(1.4)	▼(0.1)	▼(7.2)
CA	2015-16	▼(0.1)	▲0.2	▼(2.2)	▼(0.4)	▲0.2	▼(0.3)	▼(5.9)	▲0.1	▼(2.0)	▲0.4	▲0.0	▼(0.4)	▼(3.7)
CA	2016-17	▲0.4	▼(0.1)	▼(0.2)	▼(0.0)	▲0.0	▼(6.9)	▼(3.1)	▼(11.3)	▼(25.1)	▼(1.0)	▼(0.8)	▲0.3	▼(1.7)
CA	2017-18	▼(0.1)	▲0.0	▲0.1	▼(0.2)	▲1.0	▼(0.3)	▼(1.8)	▼(21.7)	▲7.6	▲1.4	▼(0.2)	▲0.3	▼(1.9)
CA	2018-19	▲0.3	▼(0.1)	▼(0.3)	▲0.1	▼(1.4)	▲0.8	▲10.8	▲12.6	▼(12.5)	▼(2.2)	▼(0.4)	▼(0.4)	▲0.0

Table continued.

Table E-1--Continued
Fresh or chilled blueberries, U.S. movements by month and source, 2015-19

Chile

Source	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Full year
		Quantity (1,000 pounds)												
CH	2015	39,329	30,825	15,095	698	---	---	---	---	7	476	3,655	18,161	108,246
CH	2016	43,228	45,350	14,254	377	---	---	---	30	76	887	3,691	34,769	142,662
CH	2017	48,428	37,010	11,255	159	66	238	24	7	20	549	3,377	20,110	121,244
CH	2018	45,705	44,371	21,043	1,491	---	---	---	9	88	839	1,669	25,767	140,983
CH	2019	43,827	39,698	13,075	147	---	---	---	---	170	1,376	2,284	23,213	123,789
		Change in quantity (percent)												
CH	2015-19	▲11.4	▲28.8	▼(13.4)	▼(79.0)	---	---	---	---	▲2,459.1	▲188.8	▼(37.5)	▲27.8	▲14.4
CH	2015-16	▲9.9	▲47.1	▼(5.6)	▼(46.0)	---	---	---	▲ ---	▲1,053.2	▲86.1	▲1.0	▲91.4	▲31.8
CH	2016-17	▲12.0	▼(18.4)	▼(21.0)	▼(57.7)	▲ ---	▲ ---	▲ ---	▼(75.9)	▼(74.2)	▼(38.1)	▼(8.5)	▼(42.2)	▼(15.0)
CH	2017-18	▼(5.6)	▲19.9	▲87.0	▲835.3	▼(100.0)	▼(100.0)	▼(100.0)	▲21.1	▲346.5	▲53.0	▼(50.6)	▲28.1	▲16.3
CH	2018-19	▼(4.1)	▼(10.5)	▼(37.9)	▼(90.2)	---	---	---	▼(100.0)	▲93.0	▲63.9	▲36.9	▼(9.9)	▼(12.2)
		Share of reported movements (percent)												
CH	2015	94.6	92.5	68.2	1.8	---	---	---	---	0.0	3.8	21.2	72.0	21.6
CH	2016	90.2	90.6	70.2	1.6	---	---	---	0.1	0.3	4.2	15.6	73.3	25.6
CH	2017	85.8	86.2	40.7	0.4	0.1	0.4	0.0	0.0	0.1	2.3	11.9	63.6	22.2
CH	2018	78.6	77.1	53.3	3.1	---	---	---	0.0	0.3	2.6	4.9	52.8	22.4
CH	2019	67.6	66.3	33.8	0.2	---	---	---	---	0.3	3.6	4.8	37.5	16.9
		Change in share of reported movements (percentage points)												
CH	2015-19	▼(27.0)	▼(26.2)	▼(34.4)	▼(1.6)	---	---	---	---	▲0.3	▼(0.2)	▼(16.4)	▼(34.5)	▼(4.7)
CH	2015-16	▼(4.4)	▼(1.9)	▲2.0	▼(0.2)	---	---	---	▲0.1	▲0.2	▲0.4	▼(5.6)	▲1.3	▲4.0
CH	2016-17	▼(4.4)	▼(4.5)	▼(29.4)	▼(1.2)	▲0.1	▲0.4	▲0.0	▼(0.1)	▼(0.2)	▼(1.9)	▼(3.7)	▼(9.7)	▼(3.4)
CH	2017-18	▼(7.3)	▼(9.0)	▲12.5	▲2.7	▼(0.1)	▼(0.4)	▼(0.0)	▼(0.0)	▲0.2	▲0.3	▼(7.0)	▼(10.7)	▲0.1
CH	2018-19	▼(11.0)	▼(10.8)	▼(19.4)	▼(2.9)	---	---	---	▼(0.0)	▲0.0	▲1.0	▼(0.1)	▼(15.3)	▼(5.5)

Table continued.

Table E-1--Continued
Fresh or chilled blueberries, U.S. movements by month and source, 2015-19

Mexico

Source	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Full year
		Quantity (1,000 pounds)												
MX	2015	1,434	1,928	3,792	6,947	3,057	835	249	39	491	1,455	1,972	1,873	24,073
MX	2016	2,655	2,538	4,495	8,246	4,164	1,555	177	60	419	2,037	3,233	3,935	33,514
MX	2017	4,310	4,813	9,794	12,452	6,329	1,555	272	89	520	1,931	4,238	4,763	51,068
MX	2018	6,665	7,109	11,940	14,664	8,467	2,325	329	185	1,474	3,587	5,906	6,612	69,262
MX	2019	7,527	9,499	16,380	20,194	8,594	1,800	280	223	2,132	4,578	7,786	8,533	87,526
		Change in quantity (percent)												
MX	2015-19	▲424.8	▲392.6	▲332.0	▲190.7	▲181.1	▲115.6	▲12.3	▲468.3	▲334.2	▲214.7	▲294.7	▲355.6	▲263.6
MX	2015-16	▲85.1	▲31.6	▲18.5	▲18.7	▲36.2	▲86.2	▼(29.2)	▲53.9	▼(14.6)	▲40.0	▲63.9	▲110.1	▲39.2
MX	2016-17	▲62.3	▲89.6	▲117.9	▲51.0	▲52.0	▲0.0	▲54.3	▲47.0	▲24.1	▼(5.2)	▲31.1	▲21.0	▲52.4
MX	2017-18	▲54.6	▲47.7	▲21.9	▲17.8	▲33.8	▲49.4	▲20.8	▲107.9	▲183.3	▲85.7	▲39.4	▲38.8	▲35.6
MX	2018-19	▲12.9	▲33.6	▲37.2	▲37.7	▲1.5	▼(22.6)	▼(14.8)	▲20.8	▲44.6	▲27.6	▲31.8	▲29.1	▲26.4
		Share of reported movements (percent)												
MX	2015	3.4	5.8	17.1	18.1	4.9	0.9	0.3	0.1	1.4	11.6	11.4	7.4	4.8
MX	2016	5.5	5.1	22.1	35.2	5.7	1.6	0.2	0.2	1.5	9.7	13.7	8.3	6.0
MX	2017	7.6	11.2	35.5	29.7	10.5	2.5	0.3	0.2	1.6	8.1	15.0	15.1	9.4
MX	2018	11.5	12.4	30.2	30.6	15.7	3.2	0.4	0.3	5.0	11.2	17.5	13.6	11.0
MX	2019	11.6	15.9	42.4	32.6	11.1	2.2	0.3	0.5	4.3	12.1	16.5	13.8	12.0
		Change in share of reported movements (percentage points)												
MX	2015-19	▲8.2	▲10.1	▲25.2	▲14.5	▲6.2	▲1.2	▼(0.0)	▲0.4	▲2.9	▲0.5	▲5.0	▲6.4	▲7.2
MX	2015-16	▲2.1	▼(0.7)	▲5.0	▲17.1	▲0.7	▲0.7	▼(0.1)	▲0.1	▲0.1	▼(1.9)	▲2.3	▲0.9	▲1.2
MX	2016-17	▲2.1	▲6.1	▲13.3	▼(5.5)	▲4.8	▲0.9	▲0.1	▲0.0	▲0.1	▼(1.7)	▲1.3	▲6.8	▲3.4
MX	2017-18	▲3.8	▲1.2	▼(5.2)	▲0.9	▲5.2	▲0.7	▲0.1	▲0.1	▲3.4	▲3.2	▲2.5	▼(1.5)	▲1.6
MX	2018-19	▲0.2	▲3.5	▲12.1	▲2.0	▼(4.6)	▼(1.0)	▼(0.1)	▲0.2	▼(0.7)	▲0.8	▼(1.0)	▲0.2	▲1.0

Table continued.

Table E-1--Continued
Fresh or chilled blueberries, U.S. movements by month and source, 2015-19

Peru

Source	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Full year
		Quantity (1,000 pounds)												
PE	2015	732	561	234	192	---	---	---	399	1,903	2,406	1,903	2,988	11,318
PE	2016	2,035	2,067	1,431	586	---	---	---	627	3,913	6,011	6,326	6,559	29,556
PE	2017	3,478	1,092	488	33	7	---	---	113	2,367	9,631	11,594	5,894	34,695
PE	2018	5,403	5,006	2,435	228	13	53	107	1,914	5,983	19,584	17,922	10,442	69,089
PE	2019	13,051	9,910	2,629	557	84	73	297	3,836	16,472	26,827	29,418	27,297	130,452
		Change in quantity (percent)												
PE	2015-19	▲1,684.1	▲1,666.2	▲1,024.8	▲189.9	▲ ---	▲ ---	▲ ---	▲860.4	▲765.6	▲1,014.9	▲1,445.7	▲813.6	▲1,052.6
PE	2015-16	▲178.2	▲268.4	▲512.3	▲205.0	---	---	---	▲56.9	▲105.6	▲149.8	▲232.4	▲119.5	▲161.1
PE	2016-17	▲70.9	▼(47.2)	▼(65.9)	▼(94.4)	▲ ---	---	---	▼(82.0)	▼(39.5)	▲60.2	▲83.3	▼(10.1)	▲17.4
PE	2017-18	▲55.4	▲358.6	▲399.2	▲589.7	▲92.4	▲ ---	▲ ---	▲1,598.8	▲152.7	▲103.3	▲54.6	▲77.2	▲99.1
PE	2018-19	▲141.5	▲98.0	▲8.0	▲144.1	▲568.8	▲38.7	▲176.4	▲100.5	▲175.3	▲37.0	▲64.1	▲161.4	▲88.8
		Share of reported movements (percent)												
PE	2015	1.8	1.7	1.1	0.5	---	---	---	1.0	5.3	19.2	11.0	11.9	2.3
PE	2016	4.2	4.1	7.0	2.5	---	---	---	1.7	13.7	28.7	26.8	13.8	5.3
PE	2017	6.2	2.5	1.8	0.1	0.0	---	---	0.2	7.2	40.2	41.0	18.6	6.4
PE	2018	9.3	8.7	6.2	0.5	0.0	0.1	0.1	2.9	20.4	61.3	53.0	21.4	11.0
PE	2019	20.1	16.6	6.8	0.9	0.1	0.1	0.3	7.9	33.1	70.7	62.2	44.1	17.8
		Change in share of reported movements (percentage points)												
PE	2015-19	▲18.4	▲14.9	▲5.7	▲0.4	▲0.1	▲0.1	▲0.3	▲6.9	▲27.8	▲51.5	▲51.1	▲32.2	▲15.6
PE	2015-16	▲2.5	▲2.4	▲6.0	▲2.0	---	---	---	▲0.7	▲8.4	▲9.5	▲15.8	▲2.0	▲3.0
PE	2016-17	▲1.9	▼(1.6)	▼(5.3)	▼(2.4)	▲0.0	---	---	▼(1.4)	▼(6.5)	▲11.5	▲14.2	▲4.8	▲1.1
PE	2017-18	▲3.1	▲6.2	▲4.4	▲0.4	▲0.0	▲0.1	▲0.1	▲2.6	▲13.2	▲21.1	▲12.0	▲2.8	▲4.6
PE	2018-19	▲10.8	▲7.9	▲0.6	▲0.4	▲0.1	▲0.0	▲0.2	▲5.0	▲12.7	▲9.4	▲9.2	▲22.7	▲6.9

Table continued.

Table E-1--Continued
Fresh or chilled blueberries, U.S. movements by month and source, 2015-19

All other sources

Source	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Full year
		Quantity (1,000 pounds)												
AOS	2015	44	15	2	0	---	---	---	42	195	826	697	173	1,994
AOS	2016	5	---	25	116	37	0	0	8	51	1,172	768	53	2,236
AOS	2017	0	0	---	14	---	0	---	0	243	721	288	31	1,297
AOS	2018	4	0	---	0	0	0	---	0	60	809	789	90	1,751
AOS	2019	---	---	---	---	---	18	---	27	89	229	809	264	1,436
		Change in quantity (percent)												
AOS	2015-19	▼(100.0)	▼(100.0)	▼(100.0)	▼(100.0)	---	▲ ---	---	▼(36.4)	▼(54.2)	▼(72.3)	▲16.1	▲52.0	▼(28.0)
AOS	2015-16	▼(87.5)	▼(100.0)	▲1,101.3	▲ ---	▲ ---	▲ ---	▲ ---	▼(81.0)	▼(73.9)	▲41.8	▲10.2	▼(69.5)	▲12.1
AOS	2016-17	▼(100.0)	▲ ---	▼(100.0)	▼(87.7)	▼(100.0)	▼(91.0)	▼(100.0)	▼(100.0)	▲377.0	▼(38.5)	▼(62.5)	▼(40.8)	▼(42.0)
AOS	2017-18	▲ ---	▲6.7	---	▼(100.0)	▲ ---	▼(6.1)	---	▲700.4	▼(75.3)	▲12.2	▲174.0	▲186.5	▲35.0
AOS	2018-19	▼(100.0)	▼(100.0)	---	▼(100.0)	▼(100.0)	▲ ---	---	▲ ---	▲49.3	▼(71.7)	▲2.6	▲193.6	▼(18.0)
		Share of reported movements (percent)												
AOS	2015	0.1	0.0	0.0	0.0	---	---	---	0.1	0.5	6.6	4.0	0.7	0.4
AOS	2016	0.0	---	0.1	0.5	0.1	0.0	0.0	0.0	0.2	5.6	3.3	0.1	0.4
AOS	2017	0.0	0.0	---	0.0	---	0.0	---	0.0	0.7	3.0	1.0	0.1	0.2
AOS	2018	0.0	0.0	---	0.0	0.0	0.0	---	0.0	0.2	2.5	2.3	0.2	0.3
AOS	2019	---	---	---	---	---	0.0	---	0.1	0.2	0.6	1.7	0.4	0.2
		Change in share of reported movements (percentage points)												
AOS	2015-19	▼(0.1)	▼(0.0)	▼(0.0)	▼(0.0)	---	▲0.0	---	▼(0.1)	▼(0.4)	▼(6.0)	▼(2.3)	▼(0.3)	▼(0.2)
AOS	2015-16	▼(0.1)	▼(0.0)	▲0.1	▲0.5	▲0.1	▲0.0	▲0.0	▼(0.1)	▼(0.4)	▼(1.0)	▼(0.8)	▼(0.6)	▲0.0
AOS	2016-17	▼(0.0)	▲0.0	▼(0.1)	▼(0.5)	▼(0.1)	▼(0.0)	▼(0.0)	▼(0.0)	▲0.6	▼(2.6)	▼(2.2)	▼(0.0)	▼(0.2)
AOS	2017-18	▲0.0	▼(0.0)	---	▼(0.0)	▲0.0	▼(0.0)	---	▲0.0	▼(0.5)	▼(0.5)	▲1.3	▲0.1	▲0.0
AOS	2018-19	▼(0.0)	▼(0.0)	---	▼(0.0)	▼(0.0)	▲0.0	---	▲0.1	▼(0.0)	▼(1.9)	▼(0.6)	▲0.2	▼(0.1)

Table continued.

Table E-1--Continued
Fresh or chilled blueberries, U.S. movements by month and source, 2015-19

All import sources

Source	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Full year
		Quantity (1,000 pounds)												
IMP	2015	41,579	33,329	19,720	8,174	3,178	7,789	29,323	33,292	23,737	12,471	17,233	25,214	255,037
IMP	2016	47,924	50,045	20,311	9,446	4,524	8,813	25,641	31,546	20,905	20,885	23,592	47,446	311,077
IMP	2017	56,421	42,954	21,630	12,860	6,674	2,041	23,933	34,907	14,285	23,560	28,278	31,643	299,186
IMP	2018	57,939	56,602	35,585	16,498	9,277	2,415	22,717	34,829	18,564	31,942	33,816	48,784	368,970
IMP	2019	64,855	59,142	32,144	21,096	8,762	2,599	36,123	34,310	31,496	37,782	47,304	61,932	437,545
		Change in quantity (percent)												
IMP	2015-19	▲56.0	▲77.4	▲63.0	▲158.1	▲175.7	▼(66.6)	▲23.2	▲3.1	▲32.7	▲203.0	▲174.5	▲145.6	▲71.6
IMP	2015-16	▲15.3	▲50.2	▲3.0	▲15.6	▲42.4	▲13.1	▼(12.6)	▼(5.2)	▼(11.9)	▲67.5	▲36.9	▲88.2	▲22.0
IMP	2016-17	▲17.7	▼(14.2)	▲6.5	▲36.1	▲47.5	▼(76.8)	▼(6.7)	▲10.7	▼(31.7)	▲12.8	▲19.9	▼(33.3)	▼(3.8)
IMP	2017-18	▲2.7	▲31.8	▲64.5	▲28.3	▲39.0	▲18.3	▼(5.1)	▼(0.2)	▲30.0	▲35.6	▲19.6	▲54.2	▲23.3
IMP	2018-19	▲11.9	▲4.5	▼(9.7)	▲27.9	▼(5.6)	▲7.6	▲59.0	▼(1.5)	▲69.7	▲18.3	▲39.9	▲27.0	▲18.6
		Share of reported movements (percent)												
IMP	2015	100.0	100.0	89.1	21.3	5.1	8.5	36.1	83.5	66.0	99.3	100.0	100.0	50.9
IMP	2016	100.0	100.0	100.0	40.3	6.2	8.9	30.1	84.5	73.2	99.7	100.0	100.0	55.8
IMP	2017	100.0	100.0	78.3	30.6	11.1	3.3	27.2	71.4	43.5	98.3	100.0	100.0	54.9
IMP	2018	99.6	98.4	90.1	34.4	17.2	3.3	25.5	52.3	63.2	100.0	100.0	100.0	58.6
IMP	2019	100.0	98.8	83.2	34.0	11.3	3.1	36.4	70.3	63.3	99.5	100.0	100.0	59.8
		Change in share of reported movements (percentage points)												
IMP	2015-19	---	▼(1.2)	▼(5.9)	▲12.7	▲6.2	▼(5.4)	▲0.3	▼(13.2)	▼(2.7)	▲0.2	---	---	▲8.9
IMP	2015-16	---	---	▲10.9	▲19.0	▲1.0	▲0.4	▼(6.0)	▲1.0	▲7.1	▲0.3	---	---	▲4.9
IMP	2016-17	---	---	▼(21.7)	▼(9.7)	▲4.9	▼(5.6)	▼(2.9)	▼(13.2)	▼(29.6)	▼(1.4)	---	---	▼(0.9)
IMP	2017-18	▼(0.4)	▼(1.6)	▲11.8	▲3.7	▲6.1	▲0.0	▼(1.7)	▼(19.1)	▲19.7	▲1.7	---	---	▲3.7
IMP	2018-19	▲0.4	▲0.4	▼(6.9)	▼(0.3)	▼(5.9)	▼(0.2)	▲10.9	▲18.0	▲0.1	▼(0.5)	---	---	▲1.2

Table continued.

Table E-1--Continued
Fresh or chilled blueberries, U.S. movements by month and source, 2015-19

All sources

Source	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Full year
		Quantity (1,000 pounds)												
ALL	2015	41,579	33,329	22,139	38,322	61,926	91,506	81,249	39,873	35,947	12,559	17,233	25,214	500,876
ALL	2016	47,924	50,045	20,311	23,415	73,528	98,789	85,118	37,331	28,578	20,958	23,592	47,446	557,035
ALL	2017	56,421	42,954	27,626	41,973	60,374	61,944	88,048	48,923	32,826	23,978	28,278	31,643	544,988
ALL	2018	58,176	57,523	39,501	47,997	54,037	72,714	89,093	66,647	29,363	31,942	33,816	48,784	629,592
ALL	2019	64,855	59,854	38,653	61,978	77,499	83,518	99,139	48,833	49,752	37,959	47,304	61,932	731,275
		Change in quantity (percent)												
ALL	2015-19	▲56.0	▲79.6	▲74.6	▲61.7	▲25.1	▼(8.7)	▲22.0	▲22.5	▲38.4	▲202.3	▲174.5	▲145.6	▲46.0
ALL	2015-16	▲15.3	▲50.2	▼(8.3)	▼(38.9)	▲18.7	▲8.0	▲4.8	▼(6.4)	▼(20.5)	▲66.9	▲36.9	▲88.2	▲11.2
ALL	2016-17	▲17.7	▼(14.2)	▲36.0	▲79.3	▼(17.9)	▼(37.3)	▲3.4	▲31.1	▲14.9	▲14.4	▲19.9	▼(33.3)	▼(2.2)
ALL	2017-18	▲3.1	▲33.9	▲43.0	▲14.4	▼(10.5)	▲17.4	▲1.2	▲36.2	▼(10.5)	▲33.2	▲19.6	▲54.2	▲15.5
ALL	2018-19	▲11.5	▲4.1	▼(2.1)	▲29.1	▲43.4	▲14.9	▲11.3	▼(26.7)	▲69.4	▲18.8	▲39.9	▲27.0	▲16.2
		Share of reported movements (percent)												
ALL	2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
ALL	2016	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
ALL	2017	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
ALL	2018	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
ALL	2019	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		Change in share of reported movements (percentage points)												
ALL	2015-19	---	---	---	---	---	---	---	---	---	---	---	---	---
ALL	2015-16	---	---	---	---	---	---	---	---	---	---	---	---	---
ALL	2016-17	---	---	---	---	---	---	---	---	---	---	---	---	---
ALL	2017-18	---	---	---	---	---	---	---	---	---	---	---	---	---
ALL	2018-19	---	---	---	---	---	---	---	---	---	---	---	---	---

Table continued.

Table E-1--Continued
Fresh or chilled blueberries, U.S. movements by month and source, 2015-19

Note: Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent (if positive) and greater than "(0.05)" percent (if negative). Quantities shown as "0" percent represent non-zero values less than 500 pounds (if positive) and greater than "(500)" pounds (if negative). True zeroes, null values, and undefined calculations are suppressed and shown as "---". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

Source: Domestic source data are based on official U.S. agricultural statistics published by USDA/AMS (monthly movement data in annual Fresh Fruit and Vegetable Shipments reports) adjusted by annual totals reported by USDA/NASS and removing domestic exports as reported by the Census Bureau using schedule B numbers 0810.40.0024, 0810.40.0029, and 0810.40.0026, accessed November 9, 2020. Foreign source data are based on official U.S. import statistics as reported by the Census Bureau using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, and 0810.40.0029, accessed November 6, 2020, and adjusted to net out foreign-origin exports (re-exports) using the same schedule B numbers listed above from each individual source country using the profiles of responding U.S. importers in data compiled from Commission questionnaires.

Table E-2

Fresh or chilled blueberries, U.S. imports net of re-exports by month and sources, January through September 2020

Month	Source						
	Argentina	Canada	Chile	Mexico	Peru	Other	Total
	Quantity (1,000 pounds)						
2020.--							
January	88	40	35,864	10,394	14,088	127	60,601
February	---	60	32,636	11,958	2,787	21	47,462
March	---	---	14,676	19,928	1,725	56	36,385
April	---	277	77	24,798	75	50	25,277
May	---	119	---	11,876	---	77	12,072
June	---	---	---	3,592	68	69	3,729
July	---	19,127	---	668	1,241	53	21,090
August	---	26,219	15	480	8,882	27	35,623
September	526	7,239	227	2,963	24,397	101	35,453

Source: Foreign source data are based on official U.S. import statistics as reported by the Census Bureau using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, and 0810.40.0029, accessed November 6, 2020, and adjusted to net out foreign-origin exports (re-exports) using schedule B numbers 0810.40.0024, 0810.40.0029, and 0810.40.0026, accessed November 9, 2020 from each individual source country using the profiles of responding U.S. importers in data compiled from Commission questionnaires.

APPENDIX F

U.S. IMPORTS OF BLUEBERRIES BY SOURCE

Table F-1
Blueberries: U.S. imports, by source, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
U.S. imports from.--							
Antigua Barbuda	---	---	---	3	---	---	2
Argentina	26,023	28,856	26,144	23,709	22,509	7,186	3,905
Belgium	---	142	---	---	---	---	---
Brazil	---	16	11	50	---	---	---
Canada	209,213	206,491	171,355	182,717	241,751	199,527	180,013
Chile	148,584	188,907	162,352	188,204	167,108	133,915	120,672
China	---	33	31	25	74	74	---
Colombia	---	---	---	1	237	10	423
Ecuador	---	---	---	90	---	---	---
Estonia	---	56	13	---	---	---	---
Finland	---	56	10	---	---	---	---
France	2	15	1	10	13	8	1
Georgia	---	---	---	---	---	---	43
Germany	---	---	---	---	3	3	---
Greece	---	---	---	---	12	12	---
Guatemala	---	17	60	23	66	66	7
India	---	---	40	---	---	---	---
Italy	---	---	---	16	11	11	---
Korea	43	---	---	---	---	---	---
Lithuania	---	6	---	---	---	---	---
Mexico	25,485	35,232	53,724	72,921	93,788	71,733	92,005
Montenegro	---	---	---	---	---	---	70
Morocco	---	119	2	---	18	18	99
Netherlands	213	251	---	---	---	---	---
New Zealand	57	32	13	---	---	---	---
Peru	11,571	32,326	41,725	85,227	157,231	59,214	64,912
Poland	---	314	1	7	27	27	---
Russia	---	5	1	---	3	3	3
Serbia	---	119	115	1	35	35	29
Seychelles	6	---	---	---	---	---	---
South Africa	---	---	---	22	---	---	---
Sweden	---	---	---	10	12	12	---
Switzerland	---	---	---	154	---	---	---
Turkey	---	---	---	---	---	---	24
Ukraine	56	100	118	92	74	72	28
Uruguay	1,917	2,046	1,272	1,586	1,160	51	53
All import sources	423,171	495,138	456,986	554,868	684,132	471,976	462,287

Table continued.

Table F-1--Continued
Blueberries: U.S. imports, by source, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Share of quantity (percent)						
U.S. imports from.--							
Antigua Barbuda	---	---	---	0.0	---	---	0.0
Argentina	6.1	5.8	5.7	4.3	3.3	1.5	0.8
Belgium	---	0.0	---	---	---	---	---
Brazil	---	0.0	0.0	0.0	---	---	---
Canada	49.4	41.7	37.5	32.9	35.3	42.3	38.9
Chile	35.1	38.2	35.5	33.9	24.4	28.4	26.1
China	---	0.0	0.0	0.0	0.0	0.0	---
Colombia	---	---	---	0.0	0.0	0.0	0.1
Ecuador	---	---	---	0.0	---	---	---
Estonia	---	0.0	0.0	---	---	---	---
Finland	---	0.0	0.0	---	---	---	---
France	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Georgia	---	---	---	---	---	---	0.0
Germany	---	---	---	---	0.0	0.0	---
Greece	---	---	---	---	0.0	0.0	---
Guatemala	---	0.0	0.0	0.0	0.0	0.0	0.0
India	---	---	0.0	---	---	---	---
Italy	---	---	---	0.0	0.0	0.0	---
Korea	0.0	---	---	---	---	---	---
Lithuania	---	0.0	---	---	---	---	---
Mexico	6.0	7.1	11.8	13.1	13.7	15.2	19.9
Montenegro	---	---	---	---	---	---	0.0
Morocco	---	0.0	0.0	---	0.0	0.0	0.0
Netherlands	0.1	0.1	---	---	---	---	---
New Zealand	0.0	0.0	0.0	---	---	---	---
Peru	2.7	6.5	9.1	15.4	23.0	12.5	14.0
Poland	---	0.1	0.0	0.0	0.0	0.0	---
Russia	---	0.0	0.0	---	0.0	0.0	0.0
Serbia	---	0.0	0.0	0.0	0.0	0.0	0.0
Seychelles	0.0	---	---	---	---	---	---
South Africa	---	---	---	0.0	---	---	---
Sweden	---	---	---	0.0	0.0	0.0	---
Switzerland	---	---	---	0.0	---	---	---
Turkey	---	---	---	---	---	---	0.0
Ukraine	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uruguay	0.5	0.4	0.3	0.3	0.2	0.0	0.0
All import sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, 0810.40.0029, 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020.

Table F-2
Fresh or chilled blueberries: U.S. imports, by source, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
U.S. imports from.--							
Antigua Barbuda	---	---	---	3	---		
Argentina	20,938	24,335	21,882	19,704	15,345	915	672
Brazil	---	---	---	50	---	---	---
Canada	90,715	80,528	69,696	68,846	79,685	79,063	53,081
Chile	119,911	154,192	132,234	150,952	133,358	104,408	91,225
Colombia	---	---	---	1	191	---	423
Ecuador	---	---	---	90	---	---	---
France	---	---	---	---	1	---	---
Guatemala	---	---	60	23	66	66	7
Korea	43	---	---	---	---	---	---
Mexico	25,081	34,791	53,247	71,414	90,907	69,203	90,035
Morocco	---	119	2	---	18	18	99
Netherlands	25	5	---	---	---	---	---
New Zealand	57	32	13	---	---	---	---
Peru	11,538	32,244	41,725	81,941	151,413	54,448	61,340
Poland	---	33	---	---	---	---	---
Seychelles	6	---	---	---	---	---	---
South Africa	---	---	---	22	---	---	---
Uruguay	1,917	2,046	1,272	1,586	1,160	51	53
All import sources	270,231	328,326	320,130	394,633	472,144	308,172	296,934

Table continued.

Table F-2--Continued
Fresh or chilled blueberries: U.S. imports, by source, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Share of quantity (percent)						
U.S. imports from.--							
Antigua Barbuda	---	---	---	0.0	---	---	---
Argentina	7.7	7.4	6.8	5.0	3.2	0.3	0.2
Brazil	---	---	---	0.0	---	---	---
Canada	33.6	24.5	21.8	17.4	16.9	25.7	17.9
Chile	44.4	47.0	41.3	38.3	28.2	33.9	30.7
Colombia	---	---	---	0.0	0.0	---	0.1
Ecuador	---	---	---	0.0	---	---	---
France	---	---	---	---	0.0	---	---
Guatemala	---	---	0.0	0.0	0.0	0.0	0.0
Korea	0.0	---	---	---	---	---	---
Mexico	9.3	10.6	16.6	18.1	19.3	22.5	30.3
Morocco	---	0.0	0.0	---	0.0	0.0	0.0
Netherlands	0.0	0.0	---	---	---	---	---
New Zealand	0.0	0.0	0.0	---	---	---	---
Peru	4.3	9.8	13.0	20.8	32.1	17.7	20.7
Poland	---	0.0	---	---	---	---	---
Seychelles	0.0	---	---	---	---	---	---
South Africa	---	---	---	0.0	---	---	---
Uruguay	0.7	0.6	0.4	0.4	0.2	0.0	0.0
All import sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Source: Official U.S. import statistics using HTS statistical reporting numbers 0810.40.0024, 0810.40.0026, and 0810.40.0029, accessed November 6, 2020.

Table F-3
Frozen blueberries: U.S. imports, by source, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Quantity (1,000 pounds)						
U.S. imports from.--							
Antigua Barbuda	---	---	---	---	---	---	2
Argentina	5,085	4,521	4,262	4,005	7,165	6,270	3,233
Belgium	---	142	---	---	---	---	---
Brazil	---	16	11	---	---	---	---
Canada	118,498	125,963	101,659	113,871	162,066	120,464	126,932
Chile	28,673	34,715	30,118	37,251	33,749	29,507	29,447
China	---	33	31	25	74	74	---
Colombia	---	---	---	---	46	10	---
Estonia	---	56	13	---	---	---	---
Finland	---	56	10	---	---	---	---
France	2	15	1	10	12	8	1
Georgia	---	---	---	---	---	---	43
Germany	---	---	---	---	3	3	---
Greece	---	---	---	---	12	12	---
Guatemala	---	17	---	---	---	---	---
India	---	---	40	---	---	---	---
Italy	---	---	---	16	11	11	---
Lithuania	---	6	---	---	---	---	---
Mexico	404	441	477	1,507	2,881	2,530	1,970
Montenegro	---	---	---	---	---	---	70
Netherlands	188	246	---	---	---	---	---
Peru	33	81	---	3,286	5,817	4,767	3,572
Poland	---	280	1	7	27	27	---
Russia	---	5	1	---	3	3	3
Serbia	---	119	115	1	35	35	29
Sweden	---	---	---	10	12	12	---
Switzerland	---	---	---	154	---	---	---
Turkey	---	---	---	---	---	---	24
Ukraine	56	100	118	92	74	72	28
All import sources	152,940	166,812	136,856	160,235	211,988	163,804	165,353

Table continued.

Table F-3--Continued
Frozen blueberries: U.S. imports, by source, 2015-19, January to September 2019, and January to September 2020

Item	Calendar year					January to September	
	2015	2016	2017	2018	2019	2019	2020
	Share of quantity (percent)						
U.S. imports from.--							
Antigua Barbuda	---	---	---	---	---	---	0.0
Argentina	3.3	2.7	3.1	2.5	3.4	3.8	2.0
Belgium	---	0.1	---	---	---	---	---
Brazil	---	0.0	0.0	---	---	---	---
Canada	77.5	75.5	74.3	71.1	76.5	73.5	76.8
Chile	18.7	20.8	22.0	23.2	15.9	18.0	17.8
China	---	0.0	0.0	0.0	0.0	0.0	---
Colombia	---	---	---	---	0.0	0.0	---
Estonia	---	0.0	0.0	---	---	---	---
Finland	---	0.0	0.0	---	---	---	---
France	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Georgia	---	---	---	---	---	---	0.0
Germany	---	---	---	---	0.0	0.0	---
Greece	---	---	---	---	0.0	0.0	---
Guatemala	---	0.0	---	---	---	---	---
India	---	---	0.0	---	---	---	---
Italy	---	---	---	0.0	0.0	0.0	---
Lithuania	---	0.0	---	---	---	---	---
Mexico	0.3	0.3	0.3	0.9	1.4	1.5	1.2
Montenegro	---	---	---	---	---	---	0.0
Netherlands	0.1	0.1	---	---	---	---	---
Peru	0.0	0.0	---	2.1	2.7	2.9	2.2
Poland	---	0.2	0.0	0.0	0.0	0.0	---
Russia	---	0.0	0.0	---	0.0	0.0	0.0
Serbia	---	0.1	0.1	0.0	0.0	0.0	0.0
Sweden	---	---	---	0.0	0.0	0.0	---
Switzerland	---	---	---	0.1	---	---	---
Turkey	---	---	---	---	---	---	0.0
Ukraine	0.0	0.1	0.1	0.1	0.0	0.0	0.0
All import sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Source: Official U.S. import statistics using HTS statistical reporting numbers 0811.90.2024, 0811.90.2028, 0811.90.2030, and 0811.90.2040, accessed November 6, 2020.

APPENDIX G

COMPETITIVE EFFORTS AND PROPOSED ADJUSTMENTS

Table G-1
Blueberries: U.S. producers' efforts to compete more effectively in the U.S. market, by reporting firm, January 2015-present

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Note: This table is confidential in its entirety; the public representation of this table has been compressed to a single page.

Table G-2
Blueberries: U.S. producers' anticipated adjustments under safeguard import relief

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Note: This table is confidential in its entirety; the public representation of this table has been compressed to a single page.