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Changes in U.S. Agricultural Imports From Latin America and the Caribbean

Steven Zahniser, William Johnson, and Constanza Valdes

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Abstract

U.S. agricultural imports from Latin America and the Caribbean (LAC) underwent substantial growth between 2007–09 and 2019–21—increasing at a compound annual growth rate (CAGR) of 6.9 percent (nominal value—i.e., not inflation-adjusted). Primarily, this import growth was a story about Mexico, whose share of total U.S. agricultural imports from LAC increased from 44.1 percent to 58.2 percent during the same period. Consumer-oriented products accounted for 81.5 percent of U.S. agricultural imports from LAC in 2019–21—up from 72.2 percent in 2007–09. Five products led the growth in U.S. imports of consumer-oriented agricultural products from LAC: fresh berries, tequila, fresh avocados, beef and beef products, and beer. While Mexico remained LAC's leading supplier of fresh berries to the United States throughout the period studied, Peru recently displaced Chile from the number-two position.

Keywords: Agricultural trade, imports, United States, Latin America, Caribbean, Mexico, Peru, Chile, Nicaragua, Brazil, berries, strawberries, raspberries, blueberries, tequila, avocados, beef, beer, coffee, grapes, bananas, ethanol, orange juice.

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About the authors

Steven Zahniser, Will Johnson, and Constanza Valdes are all agricultural economists in the Market and Trade Economics Division's International Trade and Development Branch at USDA, Economic Research Service.

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Changes in U.S. Agricultural Imports From Latin America and the Caribbean

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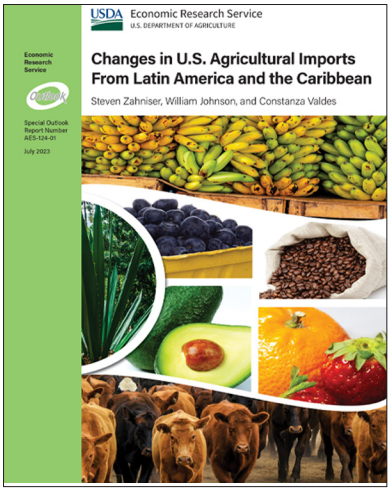
What Is the Issue?



Between 2007–09 and 2019–21, U.S. agricultural imports from the world increased at a compound annual growth rate (CAGR) of 5.6 percent (nominal value—i.e., not inflation-adjusted). Consumer-oriented products (such as beef, fruit, vegetables, and alcoholic beverages) became a more prominent part of imports, with their share rising from 66.3 percent to 70.7 percent. These trends were even stronger when considering imports from Latin America and the Caribbean (LAC). U.S. agricultural imports from LAC grew at a CAGR of 6.9 percent, and consumer-oriented products' share of these imports rose from 72.2 percent to 81.5 percent. To understand how and why U.S. agricultural imports from LAC changed in this fashion, USDA, Economic Research Service (ERS) economists used detailed trade statistics to explore the changing product and supplying-country composition of these imports. In addition, ERS economists conducted a detailed market and trade analysis of the five product groups for which the share of U.S. agricultural imports from LAC increased the most between 2007–09 and 2019–21 and the five product groups whose share decreased the most. These aspects of U.S. agricultural trade are significant, given LAC's role as a leading source of agricultural products and the market competition between U.S. and LAC producers of certain products, such as fresh berries and beef.

What Did the Study Find?

Examination of the trade data revealed that the increase in U.S. agricultural imports from LAC between 2007–09 and 2019–21 was primarily a story about Mexico. Mexico has been a partner of the United States in free-trade agreements (FTA) for nearly three decades—first through the North American Free Trade Agreement (NAFTA, January 1, 1994–June 30, 2020) and currently through the United States-Mexico-Canada Agreement (USMCA, July 1, 2020–present). During the period studied, U.S. agricultural imports from Mexico grew faster than corresponding imports from most other countries in LAC, including all other U.S. FTA partners in the region except Peru. As a result, Mexico's share of U.S. agricultural imports from LAC increased from 44.1 percent during 2007–09 to 58.2 percent during 2019–21.

Five products led the growth in U.S. imports of consumer-oriented agricultural products from LAC: fresh berries, tequila, fresh avocados, beef and beef products, and beer. While Mexico is the leading foreign supplier of these five products to the United States, other countries have seen their shares of the U.S. market increase in recent years. One key export example is fresh berries from Peru. In recent years, Peru has emerged as a major producer of blueberries and surpassed Chile as a major producer of blueberries to become the second leading foreign supplier of fresh berries to the United States, with Mexico retaining the leading position. Another important export example is beef and beef products from Nicaragua. Nicaragua is a growing supplier to the United States of beef and beef products—a category in which Mexico also emerged as an important exporter.

The five products whose share of total U.S. agricultural imports from LAC decreased the most were unroasted coffee, non-beverage ethanol, fresh bananas and plantains, fresh grapes, and orange juice. These products tended to have slower rates of growth in both the quantity of imports and their unit value. Coffee and bananas come from mature industries whose sales are expected to grow slower than sales of less mature industries such as fresh berries. Orange juice imports have been affected by the citrus disease Huanglongbing (HLB)—also known as citrus greening, which reduces fruit size, causes the fruit to drop prematurely, and eventually kills the tree—and by consumer preferences shifting away from beverages with high amounts of sugar. Ethanol's lower share of U.S. agricultural imports from LAC is due to the elimination of a U.S. ethanol tariff that partially exempted beneficiary countries under the Caribbean Basin Economic Recovery Act (CBERA).

How Was the Study Conducted?

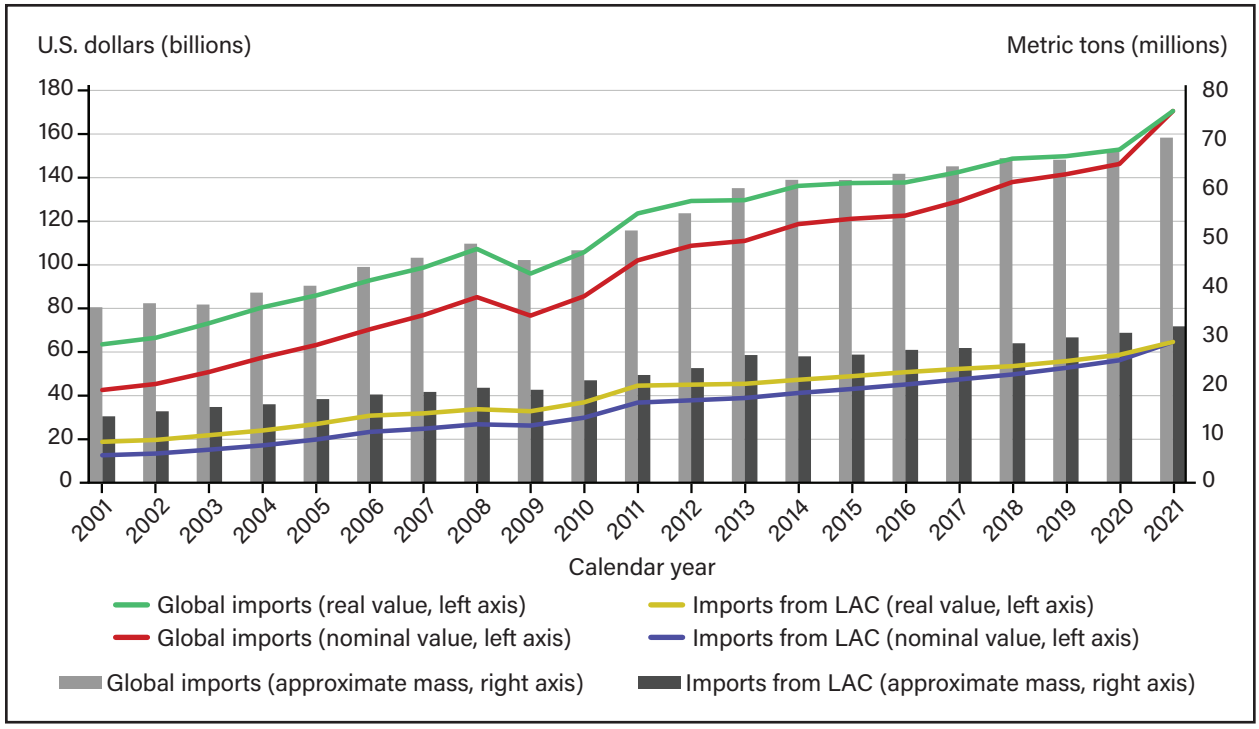
This study explores changes in U.S. agricultural imports from LAC between 2007–09 and 2019–21. The study primarily relies upon trade data collected by the U.S. Department of Commerce's Bureau of the Census and compiled by USDA's Foreign Agricultural Service. Annual data were used to identify changes in the product and supplying-country composition of these imports. A more detailed market and trade analysis was conducted for the five product groups with the largest increases and decreases in their share of U.S. agricultural imports from LAC. The starting point (2007–09) of the period studied roughly corresponds to the completion of NAFTA's transition to intraregional free trade on January 1, 2008, while the period studied as a whole (2007–09 to 2019–21) spans an entire business cycle for the U.S. economy, starting with the Great Recession (December 2007–June 2009) and ending approximately with the onset of the Coronavirus (COVID-19) pandemic in late 2019 and early 2020.

Changes in U.S. Agricultural Imports From Latin America and the Caribbean

Introduction

Since the emergence of the U.S. economy from the Great Recession (December 2007–June 2009) and continuing with the economic stimulus implemented in response to the Coronavirus (COVID-19) pandemic (March 2020–present), total U.S. agricultural imports have seen substantial growth. Between 2007–09 and 2019–21, the 3-year annual average of global U.S. agricultural imports grew from $79.6 billion to $152.8 billion in nominal value (not adjusted for inflation), from $100.7 billion to $157.8 billion in real terms (adjusted for inflation, expressed in 2021 dollars), and from 46.7 million to 68.0 million metric tons in approximate mass (figure 1). This expansion in imports corresponds to compound annual growth rates (CAGRs) of 5.6 percent for nominal value, 3.8 percent for real value, and 3.2 percent for approximate mass.

Figure 1
U.S. agricultural imports globally, and from Latin America and the Caribbean, 2001–21: Nominal value, real value, and approximate mass



Note: LAC = Latin America and the Caribbean.

Source: USDA, Economic Research Service calculations using import data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA, Foreign Agricultural Service (2022a). Gross domestic product (GDP) price indices are from U.S. Department of Commerce, Bureau of Economic Analysis (2022).

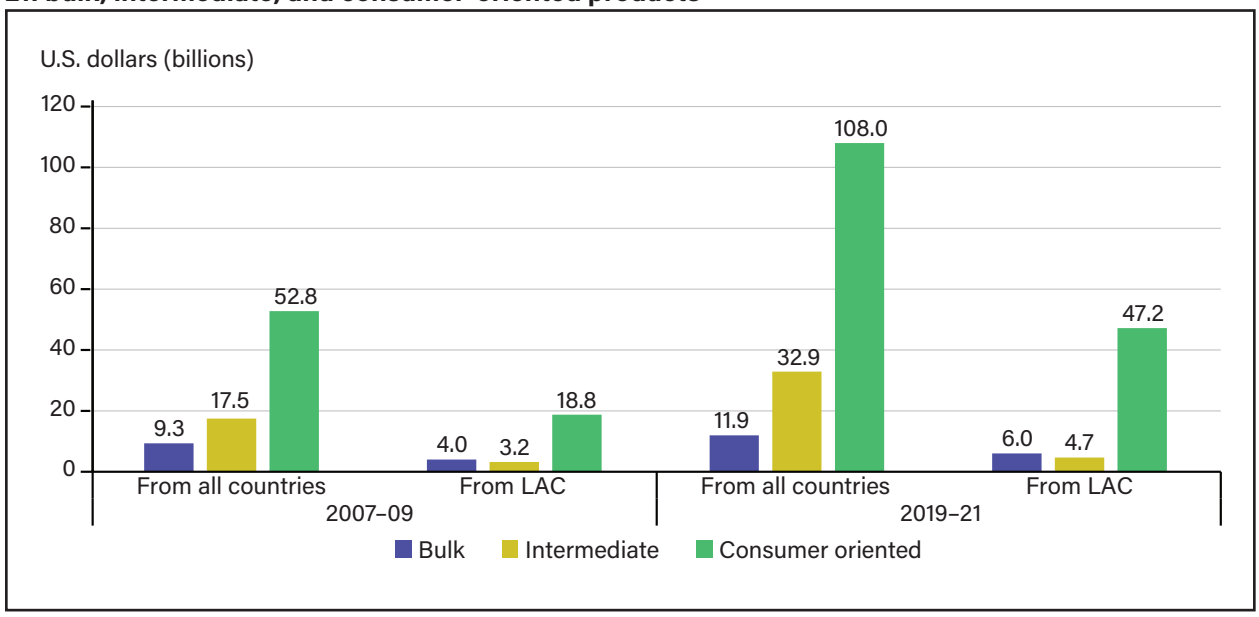
Given that the U.S. population grew at a CAGR of 0.8 percent over this period (U.S. Department of Commerce, Bureau of the Census, 2021)—about 2.5 percentage points slower than the approximate mass of agricultural imports—U.S. agricultural imports increased on a per capita basis as well.[1]

As global U.S. agricultural imports (from all countries) expanded from 2007–09 to 2019–21, the product composition of these imports shifted as well. The Bulk-Intermediate-Consumer-Oriented (BICO) classification scheme, developed by the U.S. Department of Agriculture (USDA), categorizes agricultural products into three groups:

- Bulk commodities—Products transported in large quantities, often with little, if any, packaging and limited processing (such as rice, coffee, and cocoa beans).
- Intermediate goods—Products used primarily as inputs to manufacture consumer-oriented products and usually obtained from bulk agricultural commodities (such as vegetable oils, sugar, and livestock).
- Consumer-oriented products—Products destined for direct human consumption (such as meat, fruit, vegetables, and alcoholic beverages).

While global U.S. agricultural imports increased in nominal value between 2007–09 and 2019–21 in each of the three BICO groups, the composition of those imports shifted toward consumer-oriented products (figure 2). During 2019–21, consumer-oriented products accounted for 70.3 percent of global U.S. agricultural imports, compared with 66.7 percent during 2007–09 (shares based on nominal values). Meanwhile, the share corresponding to bulk commodities dropped from 11.7 percent to 7.8 percent. The share corresponding to intermediate goods declined slightly from 22.0 percent during 2007–09 to 21.5 percent during 2019–21.

Figure 2
U.S. agricultural imports globally and from Latin America and the Caribbean, 2007–09 versus 2019–21: bulk, intermediate, and consumer-oriented products



LAC = Latin America and the Caribbean.

Notes: Values are annual averages in nominal (not inflation-adjusted) terms.

Source: USDA, Economic Research Service calculations using import data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA, Foreign Agricultural Service (2022a).

[1] Agricultural trade values are commonly presented in nominal terms (not adjusted for inflation) rather than in real terms (adjusted for inflation). For simplicity, both nominal and real values are discussed in the introduction and conclusion of this report, while the main text limits its discussion to nominal values. This choice has little effect on the report's findings since much of the analysis focuses on changes across time in the proportions of total imports.

U.S. agricultural imports from LAC (bulk, intermediate, and consumer-oriented) also saw substantial growth between 2007–09 and 2019–21, with the 3-year annual averages rising from $26.0 billion to $57.9 billion in nominal value, from $32.8 billion to $59.8 billion in real value (2021 dollars), and from 19.0 million to 30.7 million metric tons in approximate mass (figure 1). However, U.S. agricultural imports from LAC grew faster than corresponding imports from the rest of the world, with CAGRs of 6.9 percent, 5.1 percent, and 4.1 percent (respectively) for the nominal values, real values, and approximate mass. As a result, the share of U.S. agricultural imports supplied by LAC increased from 32.6 percent during 2007–09 to 37.9 percent during 2019–21 (based on nominal values presented in figure 1).

As was the case for total U.S. agricultural imports, the composition of U.S. agricultural imports from LAC also shifted toward more consumer-oriented products (figure 2). During 2019–21, consumer-oriented products accounted for 81.5 percent of U.S. agricultural imports from LAC, compared with 72.2 percent during 2007–09. Across the same two periods, bulk commodities' share of U.S. agricultural imports dropped from 15.4 percent to 10.4 percent, while intermediate goods' share fell from 12.3 percent to 8.1 percent (calculations based on nominal values presented in figure 2).

Given the long-term growth in U.S. agricultural imports and their shift toward consumer-oriented products, this report explores two related questions. First, how did the composition of U.S. agricultural imports from LAC (by supplying country) change between 2007–09 and 2019–21? Second, how did the composition of these imports change at the product level over this period? The period studied in this report begins with the years 2007–09, which correspond to the Great Recession and to the conclusion of the 14-year transition (January 1, 1994, to January 1, 2008) to intraregional free trade in agricultural products among the United States, Mexico, and Canada via the North American Free Trade Agreement (NAFTA).[2] As shown below, tariff- and quota-free access to the U.S. market has been an important factor behind the continuing rise in U.S. agricultural imports from Mexico. The period studied ends with the years 2019–21, which are the three most recent years for which full-year international trade data were available at the time of writing and which correspond to the onset of the Coronavirus (COVID-19) pandemic in late 2019 and early 2020. Thus, the period of analysis spans an entire business cycle for the U.S. economy, beginning with the Great Recession and ending with the COVID-19 pandemic.

The trade data analyzed in this report are from the U.S. Department of Commerce, Bureau of the Census—as compiled by USDA's Foreign Agricultural Service (FAS) in its *Global Agricultural Trade System* database (USDA, FAS, 2022a). Agricultural trade is classified using the definition of the World Trade Organization (WTO)—which includes those products in chapters 1–24 of the Harmonized Commodity Description and Coding System (HS)—less fish and fish products, plus a handful of products in other chapters, such as cotton, essential oils, and hides and skins.[3] USDA uses this definition in its reporting on international agricultural trade (USDA, Foreign Agricultural Service, 2021). The trade data do not provide information about the extent to which the exporting and importing companies have foreign ownership. While U.S. agricultural imports from LAC are the focus of this report, it should be remembered that the United States is also a major agricultural exporter to the region (see box, "The U.S. Role as an Agricultural Exporter to Latin America and the Caribbean").

[2] While NAFTA's transition to intraregional free trade in agricultural products ended in 2008, at least one nonagricultural product had a transitional period longer than 14 years. In 2009, Mexico started to allow the importation of used cars from the United States, and this trade became free of tariff restrictions in 2018.

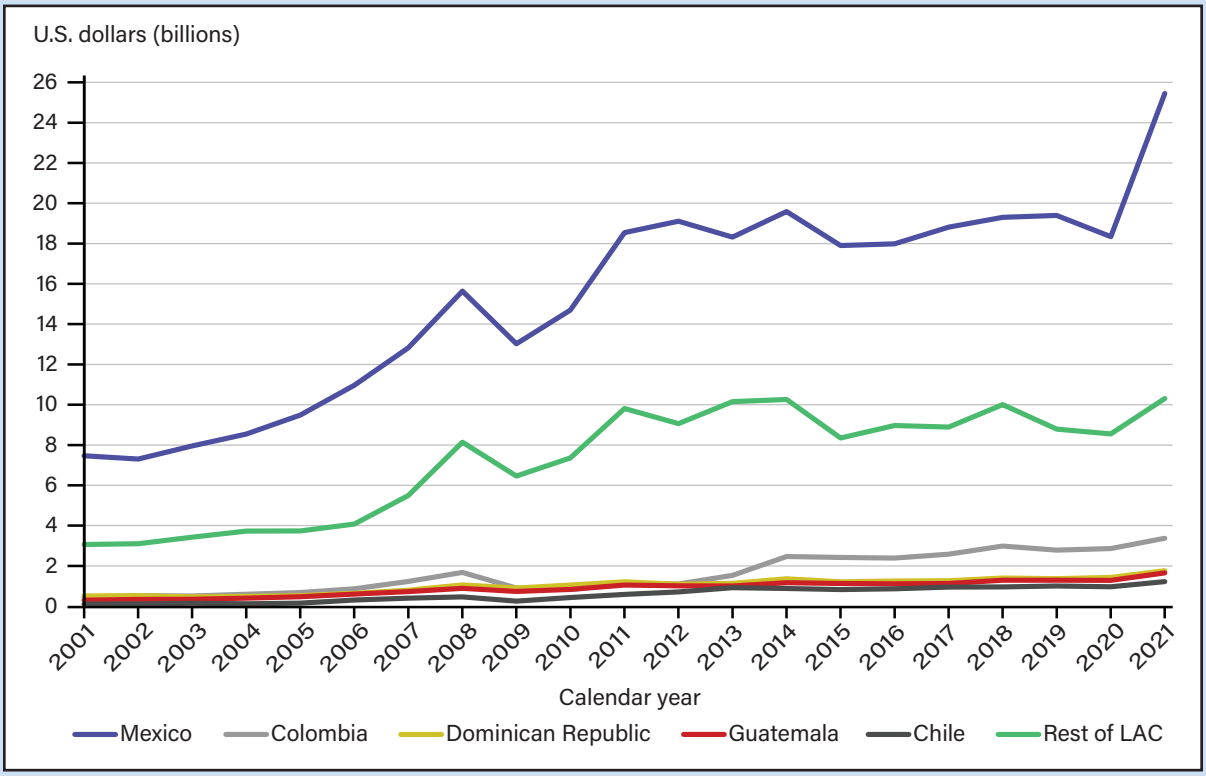
[3] See annex 1 of the 1994 Uruguay Round Agreement on Agriculture (World Trade Organization, 2021) for the precise definition.

The U.S. Role as an Agricultural Exporter to Latin America and the Caribbean

The United States is a significant agricultural exporter to Latin America and the Caribbean (LAC) in terms of total exports and exports in certain product categories. During 2019–21, U.S. agricultural exports to LAC totaled about $37.3 billion (nominal value), accounting for 23.9 percent of global U.S. agricultural exports (U.S. Department of Commerce, Bureau of the Census, as compiled by USDA, Foreign Agricultural Service, 2022a). All five of the top destination countries in LAC for U.S. agricultural exports are free trade agreement (FTA) partners of the United States. Mexico was the leading destination, accounting for 56.5 percent of U.S. agricultural exports to LAC during 2019–21 and followed by Colombia (8.1 percent), Dominican Republic (4.1 percent), Guatemala (3.8 percent), and Chile (2.8 percent) (box figure 1). Between 2007–09 and 2019–21, U.S. agricultural exports to LAC expanded at a compound annual growth rate (CAGR) of 5.8 percent in nominal terms and 2.0 percent in real terms.

Box Figure 1

U.S. agricultural exports to Latin America and the Caribbean, 2001–21



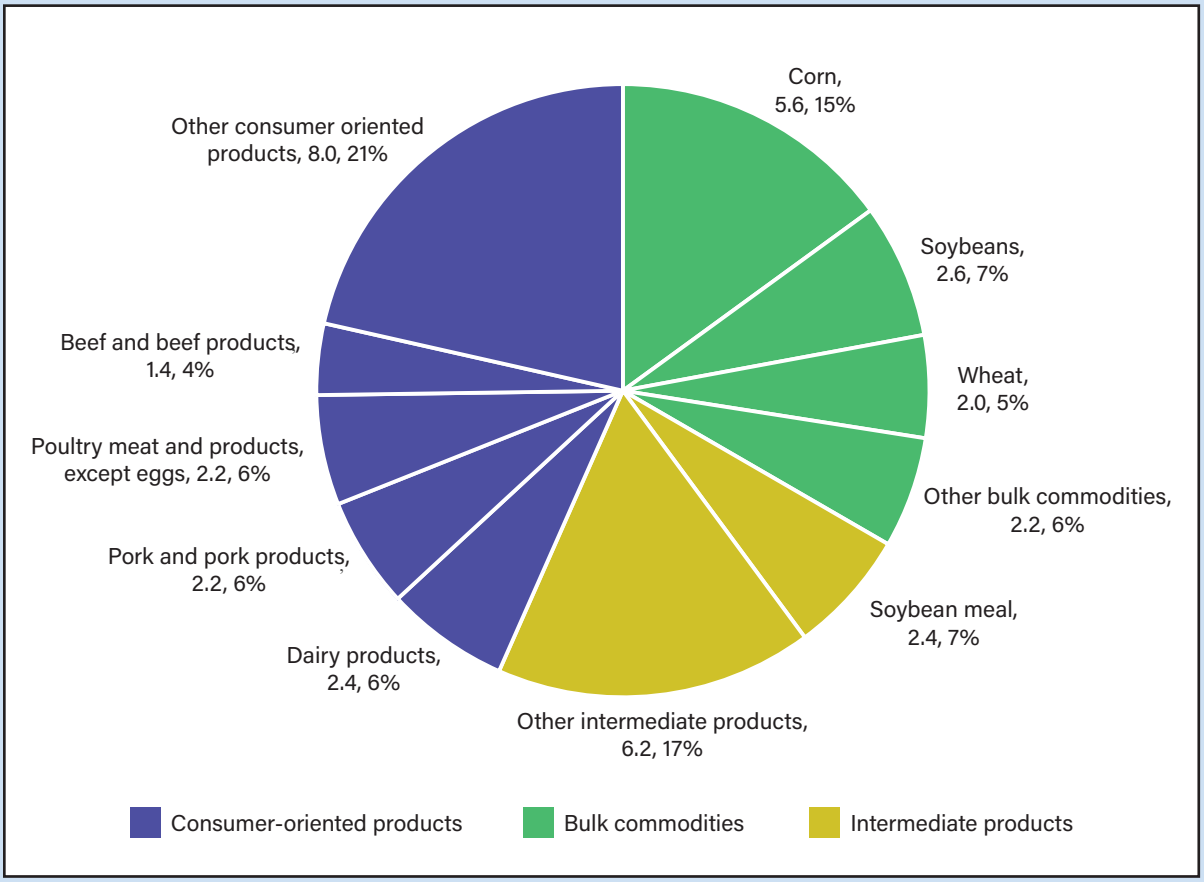
Notes: Values are in nominal (not inflation-adjusted) terms.

Source: USDA, Economic Research Service calculations using export data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA, Foreign Agricultural Service (2022a).

The United States exports a wide range of agricultural products to LAC, but these sales are concentrated in a handful of product categories. Using the Bulk, Intermediate, and Consumer Oriented (BICO) classification system, bulk commodities accounted for 33.3 percent of U.S. agricultural exports to LAC during 2019–21, intermediate products for 23.3 percent, and consumer-oriented products for 43.4 percent (box figure 2). But the five leading BICO product groups within these three categories accounted for 41.0 percent of total U.S. agricultural exports to LAC during 2019–21: corn (15.0 percent of the total); soybeans (7.1 percent); soybean meal (6.5 percent); dairy products (6.5 percent); and pork and pork products (5.8 percent). In general, the leading exports correspond either to grains and oilseeds—bulk commodities in which U.S. agriculture has a comparative advantage due to resource endowments and accumulated expertise in production—or to intermediate or

consumer-oriented products made using these crops (such as soybean meal, dairy products, and meat). These products tend to be different from the leading products that the United States imports from LAC, with the major exception of beef and beef products.

Box Figure 2
Composition of U.S. agricultural exports to Latin America and the Caribbean by selected product category, 2017–19



Note: Values are expressed in billions of nominal (not-inflation adjusted) dollars.

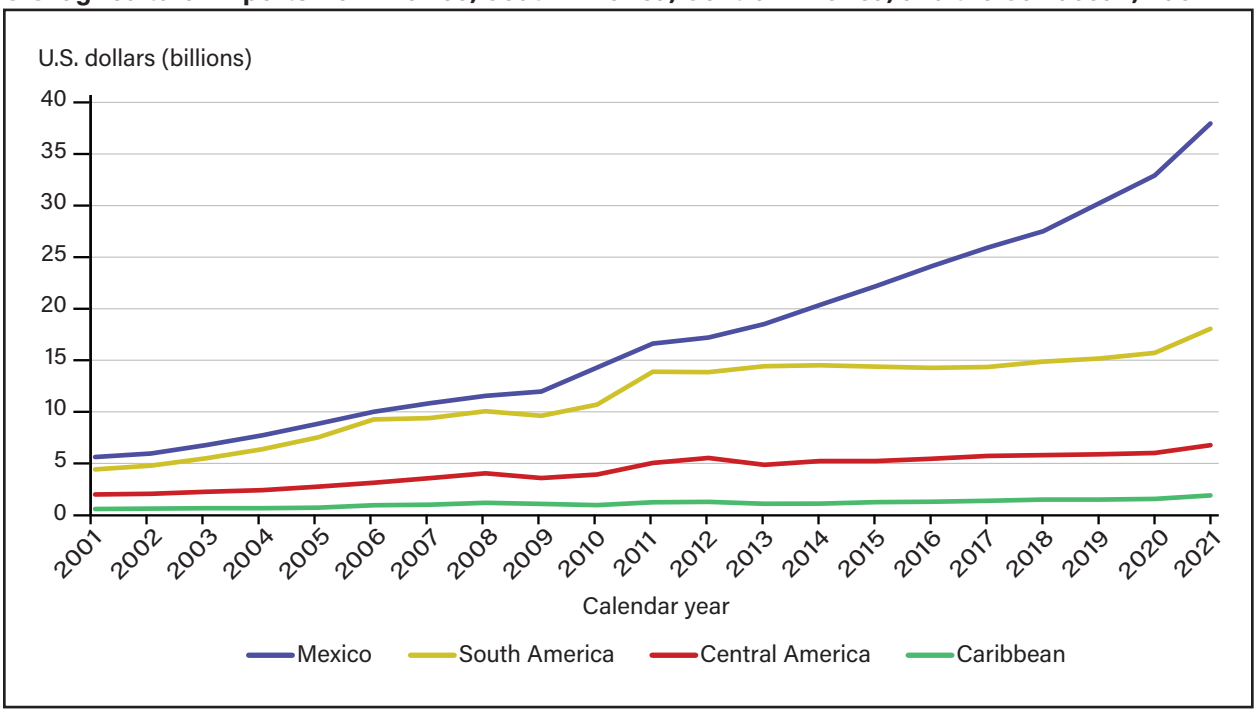
Source: USDA, Economic Research Service calculations using export data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA, Foreign Agricultural Service (2022a).

Changes in the Country Composition of U.S. Agricultural Imports From Latin America and the Caribbean

Analysis of the changing composition of U.S. agricultural imports from LAC by supplying country provides further insights into the rise in these imports. Mexico has been the world's leading agricultural exporter to the United States since 2016, as well as LAC's leading agricultural exporter to the United States since 1989. During 2019–21, U.S. agricultural imports from Mexico averaged $33.7 billion per year, compared with $6.1 billion during 2007–09 (nominal values, figure 3). Over this period, these imports grew at a CAGR of 9.4 percent compared with 6.9 percent for U.S. agricultural imports from

LAC. As a result, Mexico's average annual share of U.S. agricultural imports from LAC increased from 44.1 percent during 2007–09 to 58.2 percent during 2019–21 (based on nominal values). The growth rate of U.S. agricultural imports from Mexico between 2007–09 and 2019–21 compares favorably with the growth rate of corresponding imports from South America, Central America, and the Caribbean (figure 3). U.S. agricultural imports from South America, Central America, and the Caribbean each grew at rates slower than U.S. agricultural imports from LAC between 2007–09 and 2019–21, with CAGRs of 4.4 percent, 4.3 percent, and 3.6 percent, respectively (based on nominal values).

Figure 3
U.S. agricultural imports from Mexico, South America, Central America, and the Caribbean, 2001–21



Note: Values are in nominal (not inflation-adjusted) terms.

Source: USDA, Economic Research Service presentation of import data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA, Foreign Agricultural Service (2022a).

Among the 16 LAC countries whose annual agricultural sales to the United States averaged at least $100 million during 2019–21, just 4 countries other than Mexico saw these sales grow faster than the regional average: Peru, Nicaragua, Dominican Republic, and Paraguay (table 1). The other 11 countries (Argentina, Brazil, Chile, Colombia, Ecuador, Uruguay, Costa Rica, El Salvador, Guatemala, Honduras, and Jamaica) saw slower sales growth than the regional average.

Table 1

U.S. agricultural imports from Latin America and the Caribbean by country: real and nominal, 2007–09 versus 2019–21

	Nominal (not inflation-adjusted) 3-year annual averages				Real (inflation-adjusted) 3-year annual averages			
Supplying country/region	2007–09	2019–21	Change	CAGR	2007–09	2019–21	Change	CAGR
	U.S. dollars (billions)		*Percent*	*Percent*	*U.S. dollars (billions, 2021 prices)*		*Percent*	*Percent*
Latin America and the Caribbean	25.967	57.883	122.9	6.9	32.828	59.754	82.0	5.1
Mexico	11.455	33.696	194.2	9.4	14.480	34.779	140.2	7.6
Caribbean	1.085	1.653	52.4	3.6	1.371	1.706	24.4	1.8
Barbados	0.020	0.023	17.4	1.3	0.025	0.024	-4.1	-0.3
Bermuda	0.001	0.002	105.5	6.2	0.001	0.002	68.6	4.4
The Bahamas	0.008	0.001	-91.7	-18.8	0.010	0.001	-93.1	-20.0
Cayman Islands	0.0012	0.0003	-76.2	-11.3	0.0015	0.0003	-80.7	-12.8
Dominican Republic	0.605	1.376	127.7	7.1	0.764	1.420	85.8	5.3
Haiti	0.021	0.032	54.5	3.7	0.026	0.033	26.3	2.0
Jamaica	0.297	0.171	-42.5	-4.5	0.376	0.177	-53.0	-6.1
Netherlands Antilles	0.001	0.001	-12.0	-1.1	0.001	0.001	-27.5	-2.6
Trinidad and Tobago	0.125	0.036	-71.3	-9.9	0.157	0.037	-76.5	-11.4
Turks and Caicos Islands	0	0.00002	*	*	0	0.00002	*	*
Leeward-Windward Islands	0.006	0.010	53.3	3.6	0.008	0.010	25.3	1.9
French West Indies	0.0003	0.0014	359.8	13.6	0.0004	0.0015	275.2	11.6
Central America	3.736	6.224	66.6	4.3	4.724	6.429	36.1	2.6
Belize	0.039	0.023	-41.9	-4.4	0.049	0.023	-52.5	-6.0
Costa Rica	1.247	1.626	30.4	2.2	1.578	1.680	6.5	0.5
El Salvador	0.347	0.251	-27.7	-2.7	0.439	0.260	-40.8	-4.3
Guatemala	1.209	2.278	88.4	5.4	1.528	2.353	54.0	3.7
Honduras	0.475	0.931	95.9	5.8	0.601	0.962	60.1	4.0
Nicaragua	0.366	1.046	185.9	9.1	0.462	1.080	133.6	7.3
Panama	0.052	0.068	31.9	2.3	0.066	0.070	7.3	0.6
South America	9.692	16.309	68.3	4.4	12.254	16.840	37.4	2.7
Argentina	1.142	1.465	28.3	2.1	1.444	1.513	4.8	0.4
Bolivia	0.051	0.086	69.1	4.5	0.064	0.090	38.9	2.8
Brazil	2.919	4.286	46.8	3.3	3.694	4.426	19.8	1.5
Chile	2.016	2.902	44.0	3.1	2.547	2.998	17.7	1.4
Colombia	1.715	2.916	70.0	4.5	2.168	3.009	38.8	2.8
Ecuador	0.789	1.271	61.1	4.1	0.997	1.312	31.6	2.3
French Guiana	0	0.00001	*	*	0	0.00001	*	*
Falkland Islands (Islas Malvinas)	0.000004	0.000032	638.5	18.1	0.000006	0.000034	509.1	16.2
Guyana	0.007	0.021	214.3	10.0	0.008	0.022	158.0	8.2
Suriname	0.0003	0.0006	116.9	6.7	0.0004	0.0006	76.3	4.8
Paraguay	0.042	0.115	175.3	8.8	0.053	0.119	124.8	7.0
Peru	0.770	2.828	267.1	11.4	0.974	2.921	200.1	9.6
Uruguay	0.197	0.385	95.4	5.7	0.250	0.397	58.8	3.9
Venezuela	0.043	0.033	-24.5	-2.3	0.055	0.034	-38.7	-4.0

CAGR = compound annual growth rate; * = cannot be calculated due to division by zero.

Note: Nominal (not inflation-adjusted) values are converted to real (inflation-adjusted) values expressed in 2021 dollars using gross domestic product (GDP) price indices.

Source: USDA, Economic Research Service calculations using import data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA, Foreign Agricultural Service (2022a) and GDP price indices from U.S. Department of Commerce, Bureau of Economic Analysis (2022).

What caused Mexico's position as LAC's leading agricultural exporter to the United States to be solidified in this fashion? Part of the answer lies in proximity. As the United States' southern neighbor, Mexico has direct transportation connections to the United States via road and rail and short connections by sea. Another part of the answer lies in the free-trade area created by NAFTA on January 1, 1994, and continued by the United States-Mexico-Canada Agreement (USMCA) since July 1, 2020. By eliminating nearly all tariff and quota barriers governing intraregional trade, encouraging regulatory cooperation among the member countries, and fostering greater cross-border investment, NAFTA facilitated market integration in the agri-food sector, leading to growing levels of intraregional agricultural trade and significant amounts of cross-border investments (Zahniser et al., 2015). For U.S.-Mexican agricultural trade, the removal of tariffs and quotas was completed on January 1, 2008, toward the beginning of the period studied in this report. The USMCA retains NAFTA's provisions for intraregional free trade while adding new provisions in the areas of biotechnology, sanitary and phytosanitary regulations, and the monitoring and enforcement of labor rights (Zahniser, 2020).

The United States has free-trade agreements (FTAs) with 18 countries, in addition to Mexico and Canada. Ten of these additional FTA partners are in LAC (table 2). U.S. agricultural imports from these 10 countries (as a group) grew at a CAGR of 5.2 percent between 2007–09 and 2019–21, slower than the pace of 9.4 percent set by U.S. agricultural imports from Mexico but faster than the CAGR of 2.8 percent recorded by LAC countries that do not have an FTA with the United States. U.S. agricultural imports from two FTA partners, however, increased at a particularly fast rate. Imports from Peru grew at a CAGR of 11.4 percent, with fresh fruit (a consumer-oriented product) accounting for 68.5 percent of the increase in these imports between 2007–09 and 2019–21. Imports from Nicaragua, a member of the Central America-Dominican Republic-United States Free Trade Agreement (CAFTA-DR), increased at a CAGR of 9.1 percent, with beef and beef products accounting for 34.5 percent of the increase during this period and manufactured tobacco accounting for 28.4 percent. The categories of beef and beef products and manufactured tobacco are both defined as consumer oriented. Peru is the fifth leading supplier of U.S. agricultural imports from LAC, with agricultural imports from Peru averaging per year $2.8 billion during 2019–21, while Nicaragua is ranked tenth, with imports from Nicaragua averaging $1.0 billion.

The United States also provides duty-free access to designated beneficiary countries in LAC through a set of trade programs known as the Caribbean Basin Initiative (CBI). The CBI has its origins in the Caribbean Basin Economic Recovery Act (CBERA), implemented on January 1, 1984, and includes programs instituted by several later acts. For many products, beneficiary countries have duty-free access to the U.S. market. CBERA has no set expiration date. As of November 2022, CBERA has 17 beneficiary countries: Antigua and Barbuda, Aruba, The Bahamas, Barbados, Belize, the British Virgin Islands, Curacao, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago (Office of the U.S. Trade Representative, 2022a). Together, these 17 countries account for a small portion of U.S. agricultural imports from LAC—just 0.5 percent of the total during 2019–21. Interestingly, all six of the U.S. free-trade partners in CAFTA-DR and Panama were CBERA beneficiaries until they entered their respective FTAs with the United States.

Table 2
The 20 countries with free-trade agreements with the United States

Country	Date when agreement entered into force
Latin America and the Caribbean	
Chile	January 1, 2004
Colombia	May 15, 2012
Costa Rica[2]	January 1, 2009
Dominican Republic[2]	March 1, 2007
El Salvador[2]	March 1, 2006
Guatemala[2]	July 1, 2006
Honduras[2]	April 1, 2006
Mexico[1]	January 1, 1994
Nicaragua[2]	April 1, 2006
Panama	October 31, 2012
Peru	February 1, 2009
Rest of world	
Australia	January 1, 2005
Bahrain	January 11, 2006
Canada[1]	January 1, 1989
Israel	September 1, 1985
Jordan	December 17, 2001
Korea	March 15, 2012
Morocco	January 1, 2006
Oman	January 1, 2009
Singapore	January 1, 2004

[1]Canada and Mexico are members of the United States-Mexico-Canada Agreement (USMCA), which took effect on July 1, 2020. The USMCA replaces the North American Free Trade Agreement (NAFTA), which took effect on January 1, 1994, and also had Canada, Mexico, and the United States as its members. In addition, NAFTA subsumed the Canada-U.S. Free Trade Agreement, which took effect on January 1, 1989. Thus, Mexico and Canada have been parties to a free-trade agreement with the United States since 1994 and 1989, respectively.

[2]Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, and the United States are members of the Central America-Dominican Republic-United States Free Trade Agreement (CAFTA-DR). Because the member countries did not all ratify the agreement in the same year, CAFTA-DR did not take effect in the same year for all the members.

Source: USDA, Economic Research Service presentation of information from Organization of American States (2022a).

The timing of agricultural trade liberalization is key to explaining the timing of changes in U.S. agricultural imports from LAC. For more than half a century, the United States has provided duty-free status for a number of tropical agricultural products, including coffee, bananas, cocoa beans, tea, and certain types of wool, imported from countries with Permanent Normal Trade Relations (PNTR) with the United States (U.S. Department of State, Office of the Historian, 2022).[4] At the global level, neither successive rounds of multilateral trade negotiations within the General Agreement on Tariffs and Trade (GATT) nor regional and bilateral FTAs generated much progress toward agricultural trade liberalization until two major developments occurred in international trade policy: the Uruguay Round Agreement on Agriculture (URAA) and the formation of the World Trade Organization (WTO) in 1994; and the flurry of regional and bilateral FTAs

[4] For each specific good, imports from all countries with "Permanent Normal Trade Relations (PNTR)" with the United States are subject to the same tariff rate. The term "PNTR" replaces the terms "Normal Trade Relations (NTR)" and "Most Favored Nation (MFN)," which were used to describe this status in the past. All three of these terms refer to the principle of nondiscrimination among trade partners.

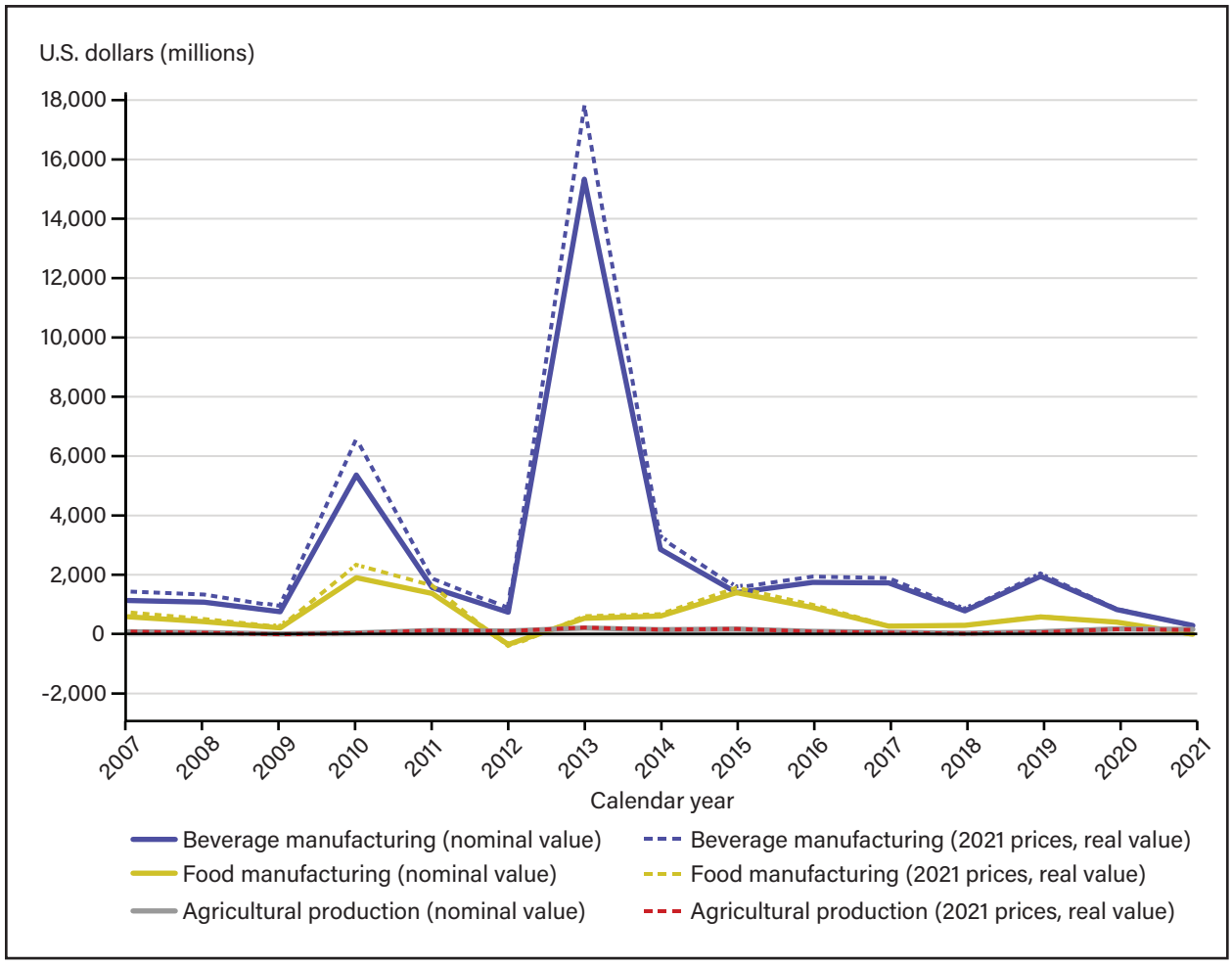
of the late 20th and early 21st centuries (Sheffield, 1998). While the URAA required WTO member countries to reduce their average "bound" tariffs and make minimum cuts for each tariff line (Burfisher, 2001), the FTAs between the United States and certain trade partners in LAC went much further, providing for the gradual elimination of nearly all tariffs and quotas among the participating countries. For U.S.-Mexican agricultural trade, the transition to free trade was completed on January 1, 2008, and for U.S.-Chilean agricultural trade, the transition was completed on January 1, 2015. For the other U.S. FTA partners, the transition to free trade is still underway but nearing completion.

Foreign direct investment (FDI) in the Mexican agri-food sector is another factor that has supported U.S. agricultural imports from Mexico—particularly in the beverage industry. Between 2007 and 2021, the Mexican economy received net inflows of FDI totaling $462.2 billion, of which $48.6 billion (10.5 percent of the total) was destined for the agri-food sector (i.e., agricultural production, food manufacturing, or beverages) (nominal values from Mexico's Secretaría de Economía, 2022). The beverage industry accounted for $37.5 billion (77.2 percent) of FDI in Mexico's agri-food sector during 2007–21. In contrast, the production of fruit, vegetables, and tree nuts accounted for just $506 million (1.0 percent), even though Mexico is a prominent exporter of such products. This relatively small level of FDI in Mexico's fruit, vegetable, and tree nut production suggests that cross-border relationships in this part of the Mexican agri-food sector tend to take other forms, such as contracting, the specification of food safety procedures and socially responsible employment practices, and the supply of particular plant varieties and other inputs.[5]

Net inflows of FDI into the Mexican agri-food sector can vary greatly from 1 year to the next due to large acquisitions occurring in a specific year (figure 4). For instance, the high level of net inflows into the Mexican beverage industry in 2013 reflected the completed purchase of a large Mexican brewer by a multinational brewing and beverage company. Following this acquisition, U.S. beer imports from Mexico grew at a faster pace—a development that is discussed in greater detail later in this report.

[5] Doan et al. (2005) discuss various forms of cross-border business relationships, in addition to trade and foreign direct investment, within the context of the North American agri-food sector.

Figure 4
Net inflows of foreign direct investment into Mexico's agri-food sector, 2007–21



Note: Nominal values (not inflation-adjusted) are converted to real values (inflation-adjusted) using the implicit U.S. price deflator for gross domestic product (GDP).

Source: USDA, Economic Research Service calculations using foreign direct investment data from Mexico's Secretaría de Economía (2022) and the implicit price deflator for GDP from U.S. Department of Commerce, Bureau of Economic Analysis (2022).

Countries that supply the United States with certain consumer-oriented agricultural products tended to see their share of total U.S. agricultural imports increase during the period studied. In the case of Mexico, consumer-oriented products accounted for 91.7 percent of total U.S. agricultural imports from that country during 2019–21 (nominal value). These imports of consumer-oriented products were concentrated in several categories (fresh vegetables, beer, distilled spirits, and fresh fruit), which together accounted for a combined 63.3 percent of total U.S. agricultural imports from Mexico during that period.

A similar pattern is present in the composition of agricultural imports from countries (other than Mexico) whose agricultural sales to the United States grew faster than total sales from the LAC region during the period studied. For Peru, consumer-oriented products accounted for 85.5 percent of the total during 2019–21, with the consumer-oriented categories of fresh fruit, fresh vegetables, and processed fruit and vegetables making up 78.9 percent. Consumer-oriented products accounted for 65.9 percent of the total U.S. agricultural imports from Nicaragua. Two consumer-oriented product categories, beef and beef products and manufactured tobacco, made up 54.7 percent of that total. For the Dominican Republic, consumer-oriented products accounted for 83.1 percent of U.S. agricultural imports from that country. A single product category, manufactured tobacco, made up 61.7 percent of the total. U.S. agricultural imports from Paraguay have a different pattern. Consumer-oriented products made up just 8.3 percent of U.S. agricultural imports from Paraguay during 2019–21, with oilseeds (a bulk product) and sugar (an intermediate product) accounting for 46.4 percent of the total.

Changes in Product Composition of U.S. Agricultural Imports From Latin America and the Caribbean

Consumer-oriented products accounted for a significantly larger share of U.S. agricultural imports from LAC in 2019–21 than in 2007–09. Between these 3-year periods, this share grew from 72.2 percent to 81.5 percent—an increase of 9.3 percentage points. This increase in share was not distributed evenly across all consumer-oriented products, with some products gaining share and others losing share (table 3). The five products whose share of U.S. agricultural imports from LAC increased the most were all consumer-oriented products: fresh berries, tequila, fresh avocados, beef and beef products, and beer. For these five products, the annual average quantity imported from LAC increased by 97.8 percent (beer) to 277.7 percent (fresh berries), and the nominal unit value increased by 35.4 percent (beer) to 101.0 percent (tequila). Together, these five products accounted for a combined increase of 12.5 percentage points in the share corresponding to consumer-oriented products between 2007–09 and 2019–21, while all other consumer-oriented products accounted for a net decrease of 3.2 percentage points (12.5 – 9.3 = 3.2).

The five products whose share of U.S. agricultural imports from LAC decreased the most were unroasted coffee, ethanol, fresh bananas and plantains, fresh grapes, and orange juice (table 3). Of these, unroasted coffee is a bulk commodity, ethanol is an intermediate product, and the remaining three are consumer-oriented products. These five products saw more modest increases in their average annual quantity imported from LAC than the five products whose share increased the most. Among the five products whose share decreased the most, unroasted coffee saw the highest increase in quantity imported from LAC (24.5 percent), and non-beverage ethanol imports from LAC decreased by 43.2 percent. In addition, the five products whose share decreased the most tended to see smaller increases in nominal (not inflation-adjusted)—from 1.3 percent for non-beverage ethanol to 57.0 percent for fresh grapes. Several of the products that lost share come from mature industries, as the LAC region has exported coffee and bananas for more than a century. For instance, coffee exports from Colombia took place as early as 1845 (Palacios, 1980), and banana exports from that country started in the late 19th century (Bucheli, 2005). Thus, it should not be surprising that imports of these products would grow slower than agricultural imports from less mature industries (such as berries or avocados) that have only occurred in sizable quantities over the last generation.

Table 3

U.S. agricultural imports from Latin America and the Caribbean by product: annual averages, nominal value, share, quantity, and unit value, 2007–09 versus 2019–21

Product	Nominal value		Change in nominal value	Share		Difference in share	Quantity		Change in quantity	Unit value		Change in unit value
	2007–09	2019–21		2007–09	2019–21		2007–09	2019–21		2007–09	2019–21	
	U.S. dollars (millions)		*Percent*	*Percent of total*		*Percent-age points*	*Metric tons (thousands)*		*Percent*	*U.S. dollars per kilogram*		*Percent*
Total agricultural imports	25,967	57,882	122.9	100.0	100.0	0.0	--	--	--	--	--	--
Bulk total	4,007	6,024	50.4	15.4	10.4	-5.0	2,858	4,205	47.1	1.40	1.43	2.2
Coffee, unroasted	2,637	3,773	43.1	10.2	6.5	-3.6	935	1,164	24.5	2.82	3.24	14.9
Raw cane sugar	531	1,022	92.6	2.0	1.8	-0.3	1,411	1,901	34.7	0.38	0.54	42.9
Tobacco, unmanufactured	407	257	-37.0	1.6	0.4	-1.1	109	64	-41.3	3.73	4.00	7.3
Other bulk commodities	431	973	125.5	1.7	1.7	0.02	402	1,075	167.1	1.07	0.90	-15.6
Intermediate total	3,204	4,668	45.7	12.3	8.1	-4.3	--	--	--	--	--	--
Ethanol	855	492	-42.5	3.3	0.8	-2.4	1,592	904	-43.2	0.54	0.54	1.3
Refined sugar[5]	321	533	66.4	1.2	0.9	-0.3	605	801	32.3	0.53	0.67	25.8
Live cattle and calves[1]	385	855	122.2	1.5	1.5	-0.005	911	1,296	42.3	422.43	659.67	56.2
Other intermediate products	1,643	2,788	69.6	6.3	4.8	-1.5	--	--	--	--	--	--
Consumer-oriented total	18,757	47,190	151.6	72.2	81.5	9.3	--	--	--	--	--	--
Beef and beef products	631	2,776	340.2	2.4	4.8	2.4	174	444	154.5	3.62	6.25	72.9
Avocados, fresh	613	2,746	348.2	2.4	4.7	2.4	364	1,145	214.4	1.68	2.40	42.6
Bananas and plantains, fresh	1,385	2,402	73.4	5.3	4.2	-1.2	4,126	5,052	22.4	0.34	0.48	41.7
Berries, fresh	488	3,690	656.0	1.9	6.4	4.5	168	634	277.7	2.91	5.82	100.2
Grapes, fresh	989	1,719	73.9	3.8	3.0	-0.8	589	652	10.8	1.68	2.64	57.0
Pineapple, fresh or dried	444	632	42.2	1.7	1.1	-0.6	706	1,143	61.9	0.63	0.55	-12.2
Limes, fresh	159	524	229.1	0.6	0.9	0.3	355	684	92.9	0.45	0.77	70.6
Mangoes, fresh	207	494	138.7	0.8	0.9	0.1	293	532	81.6	0.71	0.93	31.5
Other fresh fruit	972	1,976	103.4	3.7	3.4	-0.3	1,718	2,517	46.5	0.57	0.79	38.9
Tomatoes, fresh	1,082	2,277	110.4	4.2	3.9	-0.2	999	1,711	71.2	1.08	1.33	22.9

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Product	Nominal value		Change in nominal value	Share		Difference in share	Quantity		Change in quantity	Unit value		Change in unit value
	2007–09	2019–21		2007–09	2019–21		2007–09	2019–21		2007–09	2019–21	
	U.S. dollars (millions)		*Percent*	*Percent of total*		*Percent-age points*	*Metric tons (thousands)*		*Percent*	*U.S. dollars per kilogram*		*Percent*
Bell peppers, fresh[2]	239	862	261.0	0.9	1.5	0.6	177	501	182/7	1.35	1.72	27.7
Asparagus, fresh	295	671	127.4	1.1	1.2	0.02	139	274	97.4	2.13	2.45	15.2
Cucumbers, fresh	300	612	104.2	1.2	1.1	-0.1	439	839	91.0	0.68	0.73	6.9
Other fresh vegetables	1,372	3,364	145.2	5.3	5.8	0.5	1,684	3,571	112.0	0.81	0.94	15.7
Processed fruit & vegetables	1,514	3,565	135.5	5.8	6.2	0.3	1,170	1,930	65.0	1.29	1.85	42.7
Orange juice[3]	459	585	27.3	1.8	1.0	-0.8	1,403	1,446	3.0	0.33	0.40	23.6
Other fruit and vegetable juices[3]	426	512	20.2	1.6	0.9	-0.8	1,096	867	-20.8	0.39	0.59	51.8
Pecans, fresh or dried	172	604	250.9	0.7	1.0	0.4	45	76	69.1	3.81	7.90	107.5
Wine and related beverages	416	623	49.8	1.6	1.1	-0.5	164	279	69.8	2.53	2.23	-11.8
Beer[3]	1,629	4,360	167.7	6.3	7.5	1.3	1,632	3,228	97.8	1.00	1.35	35.4
Tequila[4]	552	2,622	375.3	2.1	4.5	2.4	83	196	136.4	6.64	13.35	101.0
Roses, fresh	325	614	89.1	1.3	1.1	-0.2	1,386	2,206	59.2	0.23	0.28	18.8
Roasted and instant coffee	258	407	57.7	1.0	0.7	-0.3	41	65	59.2	6.27	6.22	-0.9
Sweet biscuits, not frozen	204	703	244.0	0.8	1.2	0.4	4	11	150.0	45.70	62.88	37.6
Manufactured tobacco	440	1,213	175.8	1.7	2.1	0.4	14	40	191.8	31.92	30.17	-5.5
Confections and sweetmeats, other than candied nuts and cough drops	397	781	97.0	1.5	1.3	-0.2	253	338	33.5	1.57	2.31	47.6
Other consumer-oriented products	2,792	5,857	109.8	10.8	10.1	-0.6	--	--	--	--	--	--

Based on annual averages of nominal (not inflation-adjusted) import values and quantities of imports for 2007–09 and 2019–21.

-- = Quantities and unit values are not calculated due to varying units of measure across products.

[1]Quantity is measured in thousands of head, and unit value is measured in dollars per head.

[2]Imports for 2007 are estimated by multiplying imports of peppers other than chili peppers in 2007, and by bell peppers' share of imports of peppers other than chili peppers in 2008 and 2009.

[3]Quantity is measured in millions of liters, and unit value is measured in dollars per liter. Juice volumes are not adjusted for strength.

[4]Quantity is measured in millions of proof liters, and unit value is measured in dollars per proof liter.

[5]Sum of HS 1701.91 and HS 1701.99.

Source: USDA, Economic Research Service calculations using import data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA, Foreign Agricultural Service (2022a).

Changes in the composition of U.S. agricultural imports from LAC are rooted in economic changes on the demand side (in the United States) and on the supply side (in LAC)—a topic that is explored in the product-specific analysis that follows. Among the determinants of demand, changes in the tastes and preferences of consumers constitute an important explanatory factor, particularly with respect to distilled spirits such as tequila versus other alcoholic beverages, imported beer versus domestically produced beer, and nonalcoholic beverages containing high amounts of sugar versus nonalcoholic beverages containing low amounts of sugar. For many of the leading agricultural products imported from LAC, per capita availability and consumption in the United States increased between 2007–09 and 2017–19, but some products saw much larger increases than others (table 4). At the top of the list are fresh raspberries, fresh blueberries, and avocados, each of which saw increases in consumption of more than 100 percent over this period. Meanwhile, per capita consumption decreased for orange juice, beer, beef, and strawberries. In addition, the share of adults smoking cigarettes declined, helping to explain the decreased imports of unmanufactured tobacco (table 3).

Table 4
Selected indicators of U.S. per capita consumption of food and agriculture-related products: 2007–09 and 2017–19

Product	Per capita availability or consumption, annual average		Change
	2007–09	2017–19	
	Kilograms		*Percent*
Raspberries, fresh, retail	0.1	0.4	323.9
Blueberries, fresh, retail	0.3	0.8	158.8
Avocados, fresh, retail	1.7	3.5	109.5
Limes, fresh	1.0	1.7	63.2
Mangoes, fresh	0.9	1.4	54.9
Pineapple, fresh, retail	2.2	3.3	52.9
Asparagus, fresh	0.5	0.7	41.1
Cucumbers, fresh	2.7	3.3	19.5
Bell peppers, fresh	4.0	4.7	18.0
Bananas, fresh, retail	11.0	12.7	15.4
Coffee, green	4.3	4.8	10.8
Refined sugar	28.7	31.3	9.2
Tomatoes, fresh	7.4	7.8	6.0
Grapes, fresh, retail	3.3	3.4	2.7
Pecans, fresh or dried	0.2	0.2	2.3
Strawberries, fresh, retail	2.8	2.6	-4.3
Beef, boneless	27.2	24.8	-8.5
	Liters		*Percent*
Fuel ethanol	114.6	156.5	36.6
Distilled spirits	2.8	3.3	19.7
Wine	1.4	1.6	13.2
Beer	4.5	4.0	-11.2
Orange juice, single-strength equivalent	15.0	8.9	-40.6
	Current cigarette use, ages 18 or over		
	Percent		*Percentage points*
Cigarettes	20.3	14.6	-5.7
Electronic cigarettes	--	3.7	--

-- = Data are not available.

Note: Data for pecans are for 2007–09 and 2016–18. Data for wine, beer, and distilled spirits are for 2007–09 and 2017–19.

Sources: USDA, Economic Research Service calculations using food availability data from USDA, Economic Research Service (2021), coffee consumption data from USDA, Foreign Agricultural Service (2022b), data on alcohol consumption, ages 14 and up, from table 1 of Slater and Alpert (2021), fuel ethanol consumption data from U.S. Department of Energy, Energy Information Service (2022), population data from U.S. Department of Commerce, Bureau of the Census (2021), cigarette smoking data from U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics (2021), and electronic cigarette use data from Adjaye-Gbewonyo and Boersma (2021).

The changing composition of U.S. agricultural imports from LAC and the general growth in these imports during the period studied may also be explained by determinants of supply, including:

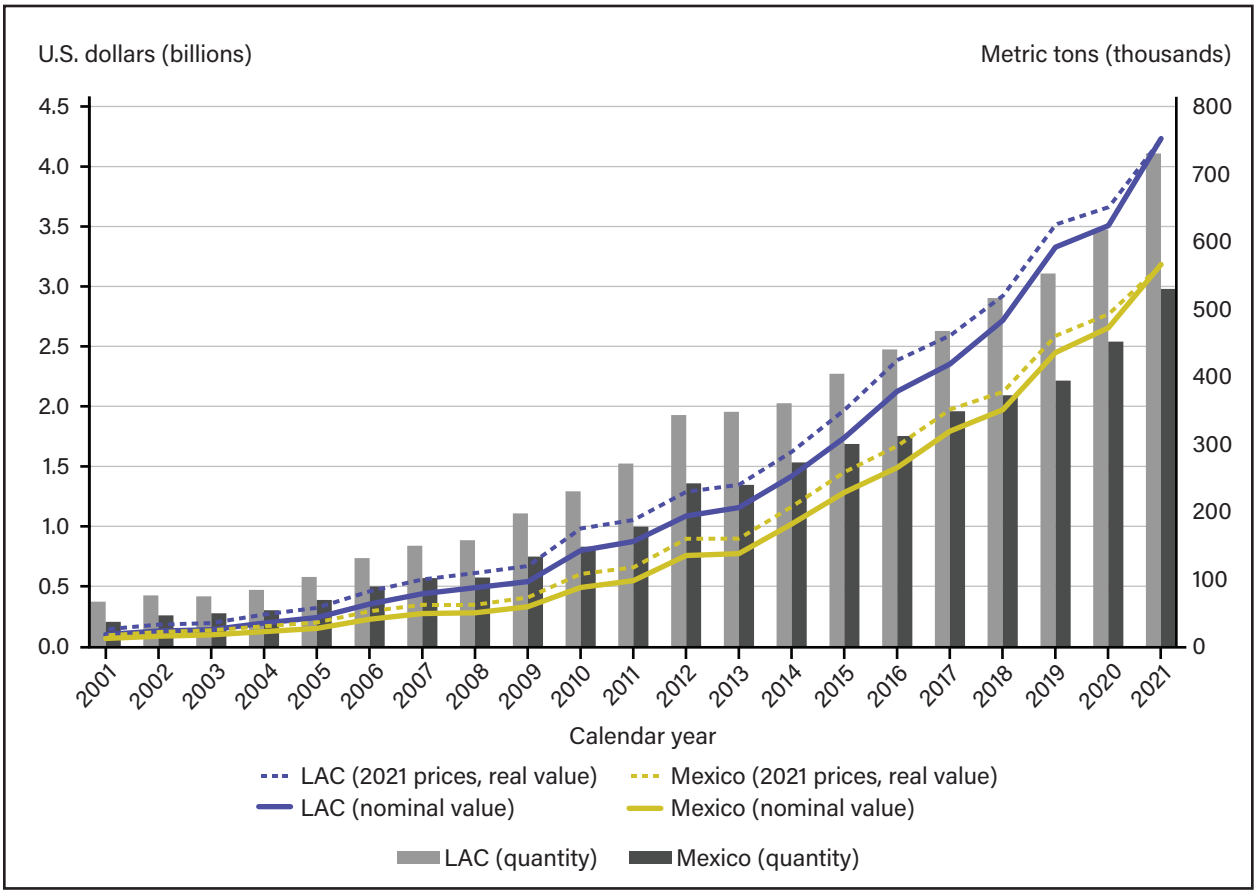
- The relative affordability of land and labor in LAC versus the United States,
- The availability of suitable production technologies in LAC,
- The entrance of new suppliers in LAC, and
- Expectations among LAC exporters that they will be able to sell more of their product in the United States, a high-income country whose economy grew during much of the period studied.

While a thorough evaluation of these factors is beyond the scope of this report, the product-specific analysis below touches upon these factors.

Fresh Berries

Fresh berries accounted for 6.4 percent of U.S. agricultural imports from LAC during 2019–21, compared with 1.9 percent in 2007–09—an increase of 4.5 percentage points (table 3). Between 2007–09 and 2019–21, the average annual quantity of these imports increased from 168,000 metric tons (nominal value of $488 million) to 635,000 metric tons ($3.7 billion) (figure 5). Mexico, Peru, and Chile are the main sources of U.S. fresh berry imports from LAC. Mexico is the leading supplier of these imports. In terms of volume, Mexico's share of this trade climbed from an annual average of 66.7 percent during 2007–09 to a peak of 73.5 percent during 2014–16 and then declined slightly to 72.3 percent during 2019–21.

Figure 5
U.S. fresh berry imports from Latin America and the Caribbean and from Mexico, 2001–21



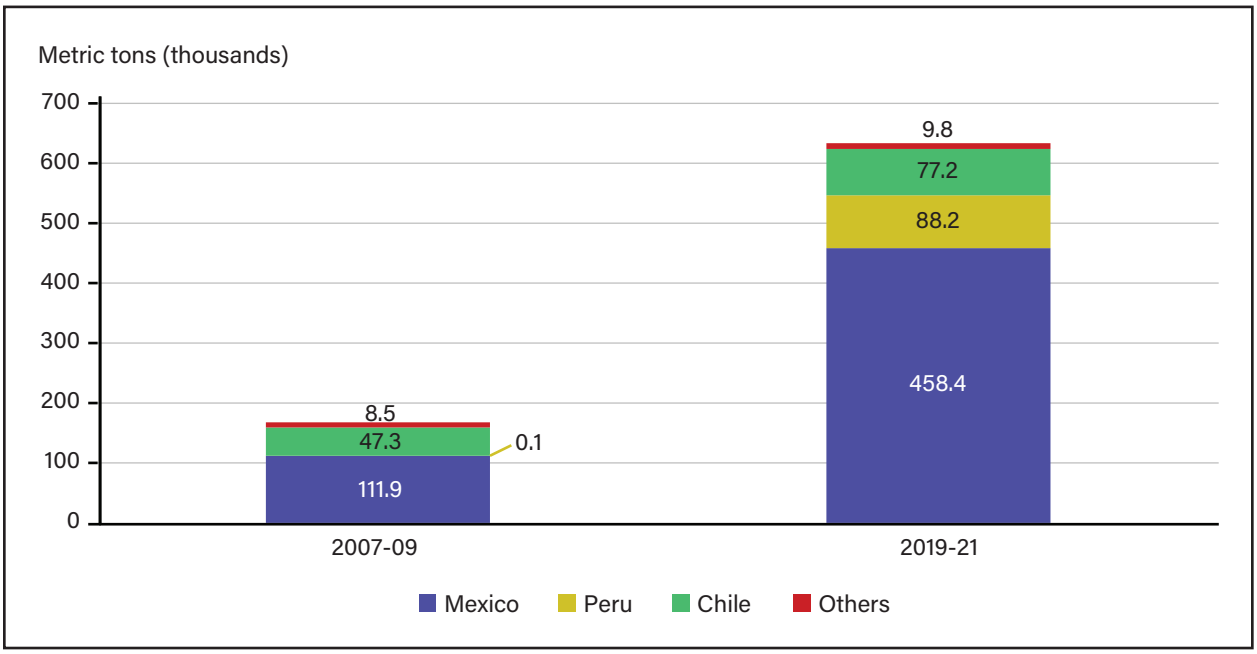
LAC = Latin American and the Caribbean.

Note: Nominal values (not inflation-adjusted) are converted to real values (inflation-adjusted) using the implicit price deflator for gross domestic product (GDP). Fresh berry imports from the Caribbean were negligible during the period studied.

Source: USDA, Economic Research Service presentation of import data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA, Foreign Agricultural Service (2022a), and the implicit price deflator for GDP from U.S. Department of Commerce, Bureau of Economic Analysis (2022).

The recent slight decline in Mexico's share reflects Peru's emergence as a major exporter of fresh berries—ranking as the second leading supplier of U.S. fresh berry imports from LAC. During 2019–21, U.S. fresh berry imports from Peru averaged about 88,000 metric tons, accounting for 13.9 percent of U.S. fresh berry imports from LAC, compared with a negligible quantity of imports during 2007–09 (figure 6). With the growth in U.S. fresh berry imports from Peru, Chile now ranks as the third leading supplier of U.S. fresh berry imports from LAC.

Figure 6
U.S. fresh berry imports from Latin America and the Caribbean, by selected supplying country, 2007–09 and 2019–21



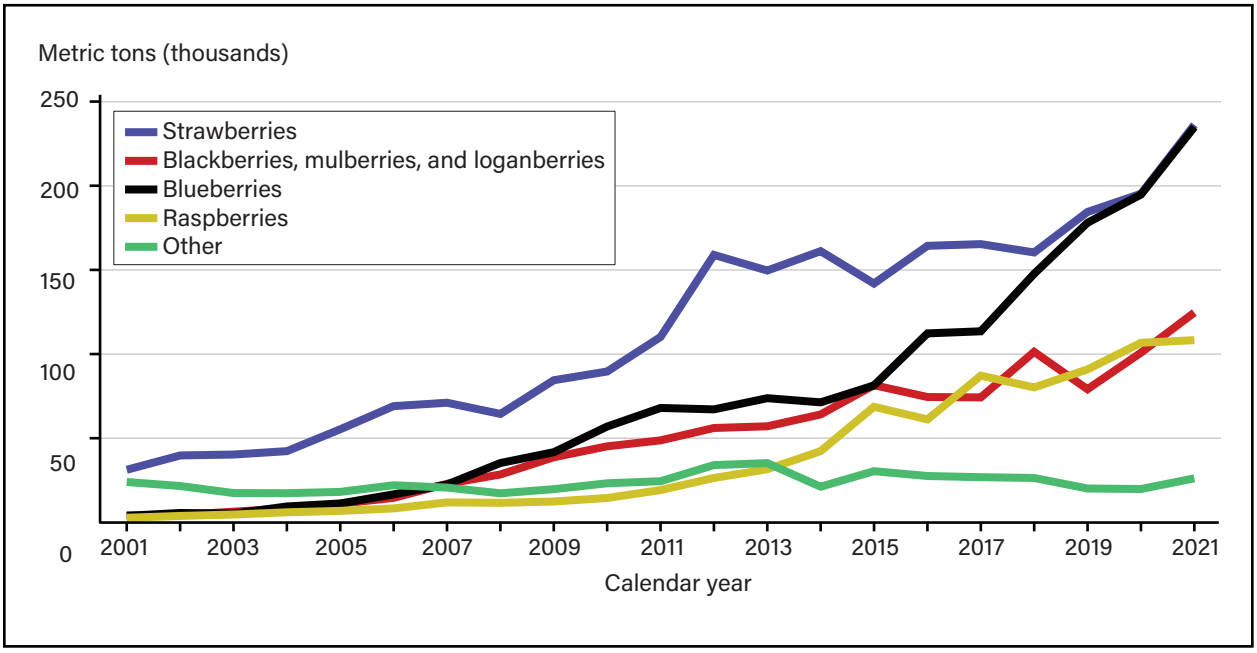
Note: Based on annual averages of import quantities for 2007–09 and 2019–21.

Source: USDA, Economic Research Service presentation of import data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA Foreign Agricultural Service (2022a).

Differences in phytosanitary conditions across and within countries affect the competitiveness of foreign suppliers of fresh berries to the United States. In the Chilean blueberry sector, for instance, profit margins are squeezed by the U.S. requirement that blueberries from most parts of Chile must be sprayed with methyl bromide due to the presence of the European grapevine moth (Lobesia botrana, EGVM) (Gonzales, 2022). Since October 2020, however, blueberries from the Biobío and Ñuble regions of central Chile have been subject to a systems approach to "mitigate the risks of introducing or disseminating plant pests via the importation of blueberries from Chile" as an alternative to methyl bromide spraying (USDA, Animal and Plant Health Inspection Service, 2020). Blueberries imported from Peru are not subject to a methyl bromide requirement.

For each of the four main categories of berries (strawberries; blueberries; blackberries, mulberries, and loganberries; and raspberries), the quantity of fresh berries imported by the United States from LAC has increased dramatically (figure 7). The quantity imported during 2017–19 was more than twice as high as the quantity imported during 2007–09 for strawberries; more than three times higher for blueberries; more than six times higher for blackberries, mulberries, and loganberries; and more than eight times higher for raspberries. At the beginning of the 21st century, the quantity of imports for each of these berry types (except strawberries) was negligible.

Figure 7
U.S. fresh berry imports from Latin America and the Caribbean by type of berry, 2001–21



Source: USDA, Economic Research Service presentation of data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA, Foreign Agricultural Service (2022a).

Trade liberalization for U.S. berry imports from LAC was already at an advanced level at the start of the period studied (table 5). For blueberries, blackberries, mulberries, cranberries, currants, gooseberries, kiwifruit, and tamarinds year-round (and for raspberries and loganberries if entering between July 1 to August 31), imports from countries with PNTR with the United States were allowed to enter duty-free throughout the period studied. Indeed, these provisions have been in effect since at least 1987, based on the oldest volume (1987–88) in the online *Harmonized Tariff Schedule (HTS) Archive* of the U.S. International Trade Commission (2022c).

Table 5
U.S. trade policy toward fresh fruit in Harmonized System 4-Digit Code 0810

HS Code	Product	PNTR	Duty-free status for U.S. partners in FTAs and CBERA	Other
0810.10.20	Stawberries, if entered during the period from June 15 to September 15, inclusive, in any year	0.2 cents per kilogram (since January 1, 1999)	Chile (since January 1, 2004), Colombia (since May 15, 2012), Mexico (since January 1, 1994), Peru (since February 1, 2009); CBERA beneficiaries, CAFTA-DR members, and Panama (since at least January 1, 1987)	2.8 cents per kilogram (since January 1, 1989)
0810.10.40	Strawberries, if entered at any other time	1.1 cents per kilogram (since January 1, 2000)	Chile (since January 1, 2004), Colombia (since May 15, 2012), Mexico (since January 1, 1994), Peru (since February 1, 2009); CBERA beneficiaries, CAFTA-DR members, and Panama (since at least January 1, 1987)	2.8 cents per kilogram (since January 1, 1989)
0810.20.10	Raspberries and loganberries entered during the period from September 1 in any year to June 30 of the following year	0.18 cents per kilogram (since January 1, 2000)	Chile (since January 1, 2004), Colombia (since May 15, 2012), Mexico (since January 1, 1994), Peru (since February 1, 2009); CBERA beneficiaries, CAFTA-DR members, and Panama (since at least January 1, 1987)	2.8 cents per kilogram (since January 1, 1989)
0810.20.90	Raspberries and loganberries entered at any other time and blackberries and mulberries	Free (since at least January 1, 1987)	Free (since at least January 1, 1987)	2.8 cents per kilogram (since January 1, 1989)
0810.30.00	Black, white or red currants and gooseberries (other than kiwifruit).	Free (since at least January 1, 1987)	Free (since at least January 1, 1987)	2.8 cents per kilogram (since January 1, 1989)
0810.40.00	Cranberries, blueberries and other fruits of the genus Vaccinium	Free (since at least January 1, 1987)	Free (since at least January 1, 1987)	2.8 cents per kilogram (since January 1, 1989)
0810.50.00	Kiwifruit	Free (since at least January 1, 1987)	Free (since at least January 1, 1987)	2.8 cents per kilogram (since January 1, 1989)
0810.60.00	Durians	2.2 percent (since January 1, 2000)	Chile (since January 1, 2004), Colombia (since May 15, 2012), Mexico (since January 1, 1998), Peru (since February 1, 2009); CBERA beneficiaries, CAFTA-DR members, and Panama (since at least January 1, 1987)	35 percent (since at least January 1, 1987)
0810.70.00	Persimmons	2.2 percent (since January 1, 2000)	Chile (since January 1, 2004), Colombia (since May 15, 2012), Mexico (since January 1, 1998), Peru (since February 1, 2009); CBERA beneficiaries, CAFTA-DR members, and Panama (since at least January 1, 1987)	35 percent (since at least January 1, 1987)
0810.90.27	Other berries; tamarinds	Free (since at least January 1, 1987)	Free (since at least January 1, 1987)	2.8 cents per kilogram (since January 1, 1989)
0810.90.46	Other fresh fruit, not elsewhere specified or indicated	2.2 percent (since January 1, 2000)	Chile (since January 1, 2004), Colombia (since May 15, 2012), Mexico (since January 1, 1998), Peru (since February 1, 2009); CBERA beneficiaries, CAFTA-DR members, and Panama (since at least January 1, 1987)	35 percent (since at least January 1, 1987)

HS = Harmonized System. PNTR = Permanent Normal Trade Relations.

CAFTA-DR = Central America-Dominican Republic Free Trade Agreement. CAFTA-DR's members are Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, and the United States.

CBERA = Caribbean Basin Economic Recovery Act. CBERA's current beneficiary countries are Antigua and Barbuda, Aruba, The Bahamas, Barbados, Belize, British Virgin Islands, Curacao, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago. Former beneficiary countries include the CAFTA-DR members (other than the United States) and Panama.

Source: USDA, Economic Research Service presentation of trade policy information from U.S. International Trade Commission (2022) and Office of the U.S. Trade Representative (2009).

For all other berries (including strawberries, durians, and persimmons at any time during the year and raspberries and loganberries if entering from September 1 to June 30), the United States provided duty-free access to many LAC countries during much or all the period studied. CBERA's designated beneficiaries had duty-free access during the entire period, as did FTA partners Mexico, Chile, and the CAFTA-DR member countries (Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, and Nicaragua). Interestingly, the CAFTA-DR partners had duty-free access prior to joining that agreement because these countries were beneficiaries of CBERA. Finally, Peru, Colombia, and Panama each gained duty-free access to the U.S. market for these other berries when they implemented their respective FTAs with the United States. Among the U.S. FTA partners in LAC, these three countries were the only ones that did not have duty-free access to the U.S. market for all berries during the entire period studied.

The additional market access gained by Peru, Colombia, and Panama (through their FTAs with the United States) provided little direct impetus to U.S. berry imports from LAC for two main reasons. First, Peru and Colombia primarily export types of berries that have duty-free status in the United States if imported from any country with PNTR status. Second, Panama exports hardly any berries to the United States. Blueberries—duty-free in the United States if imported from a supplying country with PNTR status—accounted for 99.9 percent of U.S. fresh berry imports from Peru during 2019–21 in value terms. Similarly, cranberries, currants, and blueberries—again, all duty-free products for supplying countries with PNTR with the United States—accounted for 96.5 percent of U.S. fresh berry imports from Colombia during 2019–21 (also value terms).

Growth in U.S. produce imports from Mexico (and other LAC countries to a lesser extent) led to the exploration of ways to address import competition—especially in markets for seasonal and perishable products. Imports of such products vary by season, competing with the subset of U.S. growers who seek to supply the domestic market during the seasons when imports occur. In many instances, these growers are concentrated in specific regions of the United States. For instance, in the case of blueberries, the seasonal overlap of domestic supplies and imports increased between 2010 and 2019, with more imports from Mexico during the early spring and more shipments from Florida and Georgia in March and April (Kramer, 2020).

During the renegotiation of NAFTA, one stated objective of U.S. negotiators was to "seek a separate domestic industry provision for perishable and seasonal products in AD/CVD [antidumping/countervailing duty] proceedings" (Office of the U.S. Trade Representative, 2017). While the Office of the United States Trade Representative (USTR) did not announce the specifics of its proposal, a Congressional Research Service (CRS) report cited correspondence from the proposal's supporters indicating that the proposal would "establish new rules for seasonal and perishable products, such as fruits and vegetables, and ensure that producers who are susceptible to trade surges at certain times of the year have recourse to trade remedies." The CRS report also cited sources saying that the proposal would seek "to modify U.S. AD/CVD laws by allowing growers to bring an injury case by domestic region and draw on seasonal data," and that the proposal "allow regional groups representing less than 50 percent of nationwide seasonal growers to initiate an injury [case]" (Congressional Research Service, 2017: 4-5). In the end, NAFTA's successor accord (the USMCA) did not contain any provisions along these lines for seasonal and perishable products.

In September 2020—about 2 months after the USMCA's implementation—USTR requested that the U.S. International Trade Commission (USITC) launch a Section 201 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" (U.S. International Trade Commission, 2021b: 1). In March 2021, the USITC issued a negative determination in this case. While the USITC observed that increased imports had indeed occurred during the period of investigation (January 2015–September 2020), USITC did not find conclusive evidence of serious injury or threat of serious injury to the domestic industry. Instead, the USITC found that the U.S. blueberry industry "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" (U.S. International Trade Commission, 2021b: 35). The determination in the blueberry investigation was followed by two other USITC reports (also requested by USTR) on the effects of imports on seasonal U.S. markets, with a focus on the southeast United States. Cucumbers were the focus of one report (U.S. International Trade Commission, 2021a), while the other covered squash (U.S. International Trade Commission, 2021c).

Should the USITC have found serious injury or threat thereof in its Section 201 investigation of blueberries, USITC would have provided the President of the United States with a list of recommended actions to remedy the situation, such as marketing agreements, higher tariffs, or the imposition of quotas (U.S. International Trade Commission, 2022b). In the instance of an affirmative finding of serious injury or threat of serious injury, Section 203 of the Trade Act of 1974 requires the President to "take all appropriate and feasible action within his power that he determines will facilitate efforts by the domestic industry in question to make a positive adjustment to import competition and provide greater economic and social benefits than costs" (Office of the U.S. Trade Representative, 2022b).

In September 2022, USTR received a petition from a group of members of Congress from Florida requesting an investigation of allegations that "certain acts, policies, and practices" of the Mexican Government constituted an "export targeting scheme"[6] and that this alleged scheme is "unreasonable and burdens or restricts U.S. commerce." Specifically, the petition pointed to "certain programs" used by the Mexican Government "beginning in the early 2000s … to subsidize its seasonal and perishable agricultural industry, and to enable that industry to expand its exports to the United States" as well as to wage rates in Mexico "that give Mexico's seasonal and perishable agricultural industry an unfair competitive advantage."[7] In October 2022, USTR announced that it "could not conclude during the 45-day statutory review period that an investigation would be effective" and that it had decided not to open an investigation at this time. In addition, USTR indicated that it would work with USDA to take the following three steps to address the issues raised in the petition:

- Create a "private-sector industry advisory panel to recommend measures to promote the competitiveness of producers of seasonal and perishable produce in the southeastern United States;"
- Consider the panel's recommendations and "work with Members of Congress as appropriate to develop possible administrative actions and legislation that would benefit U.S. producers;" and
- "[W]ork with the petitioners and producers to examine the issues raised in the petition and to consider any further actions that may be appropriate" (Office of the U.S. Trade Representative, 2022c).

[6] Export targeting is defined as "any government plan or scheme consisting of a combination of coordinated actions (whether carried out severally or jointly) that are bestowed on a specific enterprise, industry, or group thereof, the effect of which is to assist the enterprise, industry, or group to become more competitive in the export of a class or kind of merchandise" (19 U.S. Code § 2411).

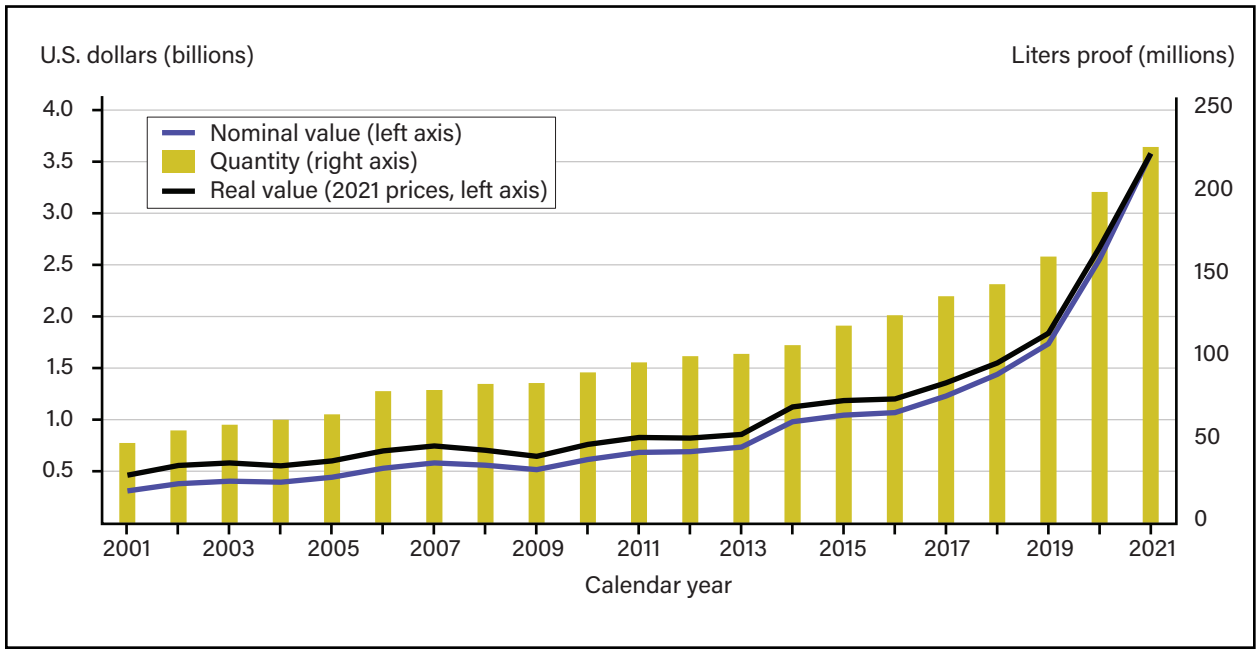
[7] The tightening supply of farm labor is a concern to agricultural employers in both the United States and Mexico—especially in labor-intensive activities such as fruit and vegetable production (Zahniser et al., 2018). However, the wage rate for hired farm labor is still much higher in the United States than in Mexico: $15.56 per hour in 2021 for non-supervisory U.S. crop and livestock workers (USDA, National Agricultural Statistics Service, 2022) versus $10–$15 per day plus benefits (such as year-end bonuses and contributions to Mexico's social security system) in Mexico's produce export sector in 2019 (Escobar Latapí et al., 2019).

Tequila

Tequila is a distilled spirit obtained from the fermentation of sugars from agave plants. Under Article 3.C.2 of the USMCA, the United States and Canada recognize tequila and mezcal—another distilled spirit made from agave—as "distinctive products" of Mexico and agree that they "shall not permit the sale of any product Tequila or Mezcal unless it has been manufactured in Mexico in accordance with the laws and regulations of Mexico governing the manufacture of Tequila and Mezcal" (Office of the U.S. Trade Representative, 2019).[8] Thus, virtually all tequila consumed in the United States and Canada is imported directly from Mexico. Under first NAFTA and now USMCA, U.S. tequila imports from Mexico have been duty-free since the start of 1994.

Tequila has become a more prominent part of U.S. agricultural imports from LAC, with its share of these imports rising from 2.1 percent in 2007–09 to 4.5 percent in 2019–21—an increase of 2.4 percentage points (table 3). Over this period, the 3-year annual average of U.S. tequila imports from Mexico increased from 83.1 million proof liters (worth $552 million) to 196.4 million proof liters ($2.6 billion)—an increase of 136.4 percent in terms of volume (figure 8). To facilitate the growth of this trade, Mexico's average annual area harvested with agave (the main crop used to produce tequila) increased from about 17,000 hectares during agricultural years 2007–09 to 25,000 hectares during agricultural years 2019–21—corresponding to a CAGR of 3.3 percent (Mexico's Secretaría de Agricultura y Desarrollo Rural, Servicio de Información Agroalimentaria y Pesquera [SADER/SIAP], 2022). Recent market research contends that the uninterrupted rise in U.S. tequila imports since 2007 is part of a long-term shift in U.S. alcoholic beverage consumption toward greater consumption of distilled spirits (Giammona and Reinicke, 2019).

Figure 8
U.S. tequila imports from Mexico, 2001–21



Note: Nominal values (not inflation-adjusted) are converted to real values (inflation-adjusted) using the implicit price deflator for gross domestic product (GDP).

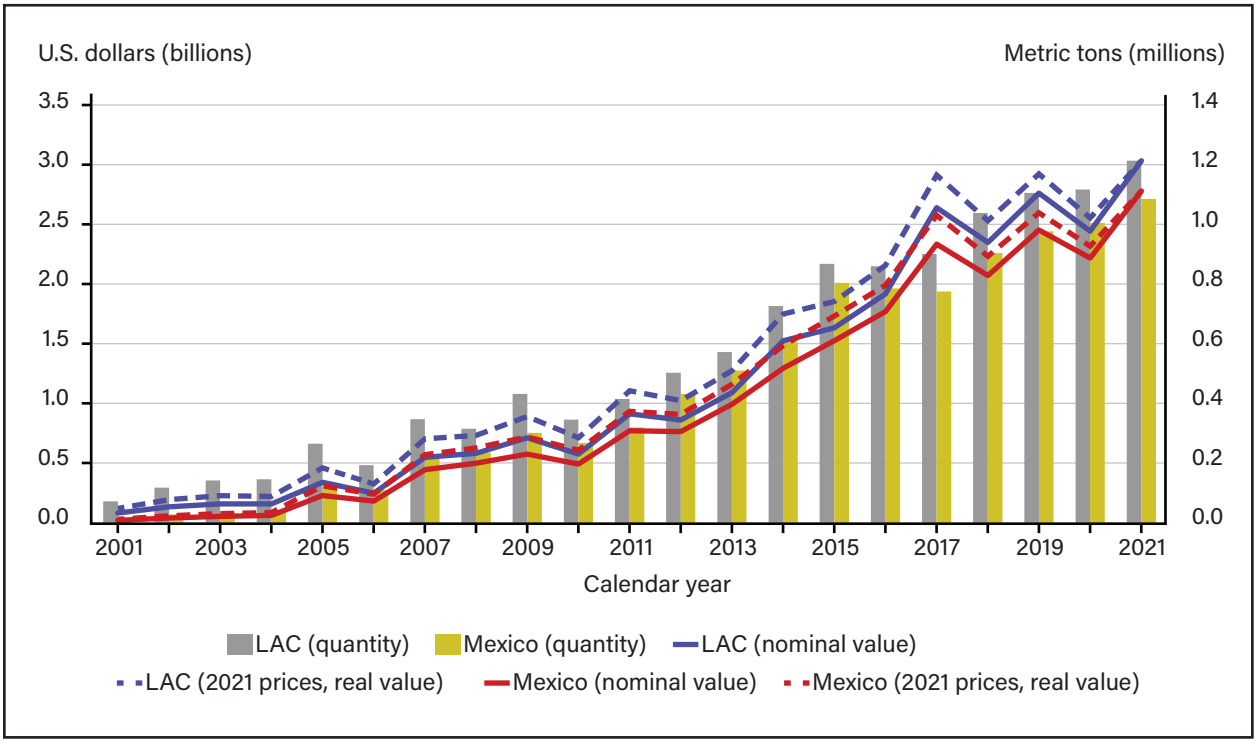
Sources: USDA, Economic Research Service calculations using import data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA, Foreign Agricultural Service (2022a) and the implicit price deflator for GDP from U.S. Department of Commerce, Bureau of Economic Analysis (2022).

[8] Annex 313 of NAFTA contained a similar provision (Organization of American States, 2022b).

Fresh Avocados

Fresh avocados' share of U.S. agricultural imports from LAC increased from 2.4 percent in 2007–09 to 4.7 percent in 2019–21—an increase of 2.4 percentage points (table 3). During 2019–21, U.S. fresh avocado imports from LAC averaged 1.1 million metric tons per year (worth $2.7 billion) (figure 9). In terms of volume, 89 percent of these imports came from Mexico. During 2019–21, U.S. fresh avocado imports from Mexico averaged 1.0 million metric tons per year (worth $2.5 billion). To facilitate the growth of this trade, Mexico's average annual area harvested with avocados increased from about 115,000 hectares during agricultural years 2007–09 to 222,000 hectares during agricultural years 2019–21—corresponding to a CAGR of 5.7 percent (Mexico's Secretaría de Agricultura y Desarrollo Rural, Servicio de Información Agroalimentaria y Pesquera [SADER/SIAP], 2022). In addition, since 2014, imports of Mexican avocados have been bolstered by a series of advertising campaigns focused on the 3–4 weeks leading up to the Super Bowl (Fast Company, 2021; Swanger, 2022).

Figure 9
U.S. fresh avocado imports from Latin America and the Caribbean and Mexico, 2001–21



LAC = Latin America and the Caribbean.

Note: Nominal values (not inflation-adjusted) are converted to real values (inflation-adjusted) using the implicit price deflator for gross domestic product (GDP).

Source: USDA, Economic Research Service calculations using import data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA, Foreign Agricultural Service (2022a) and the implicit price deflator for GDP from U.S. Department of Commerce, Bureau of Economic Analysis (2022).

All five of the countries that exported an annual average of at least 1,000 metric tons of fresh avocados to the United States during 2019–21 (Mexico, Peru, Dominican Republic, Chile, and Colombia, in descending order) have duty-free access to the U.S. market for fresh avocados via their FTAs with the United States. These agreements provide avocado growers in these countries with a competitive edge in relation to growers in countries that are not U.S. FTA partners. As of November 2022, avocados imported from countries with PNTR (but not an FTA with the United States) face a U.S. import tariff of 11.2 cents per kilogram (U.S. International Trade Commission, 2022a). While avocado growers in LAC countries other than Mexico seek

to increase their sales at home and abroad (FreshFruitPortal.com, 2021a; Infobae, 2022; Ramírez, 2022), Mexico's share of annual U.S. avocado imports from LAC consistently remained above 84 percent for the past 11 years (2010–21).

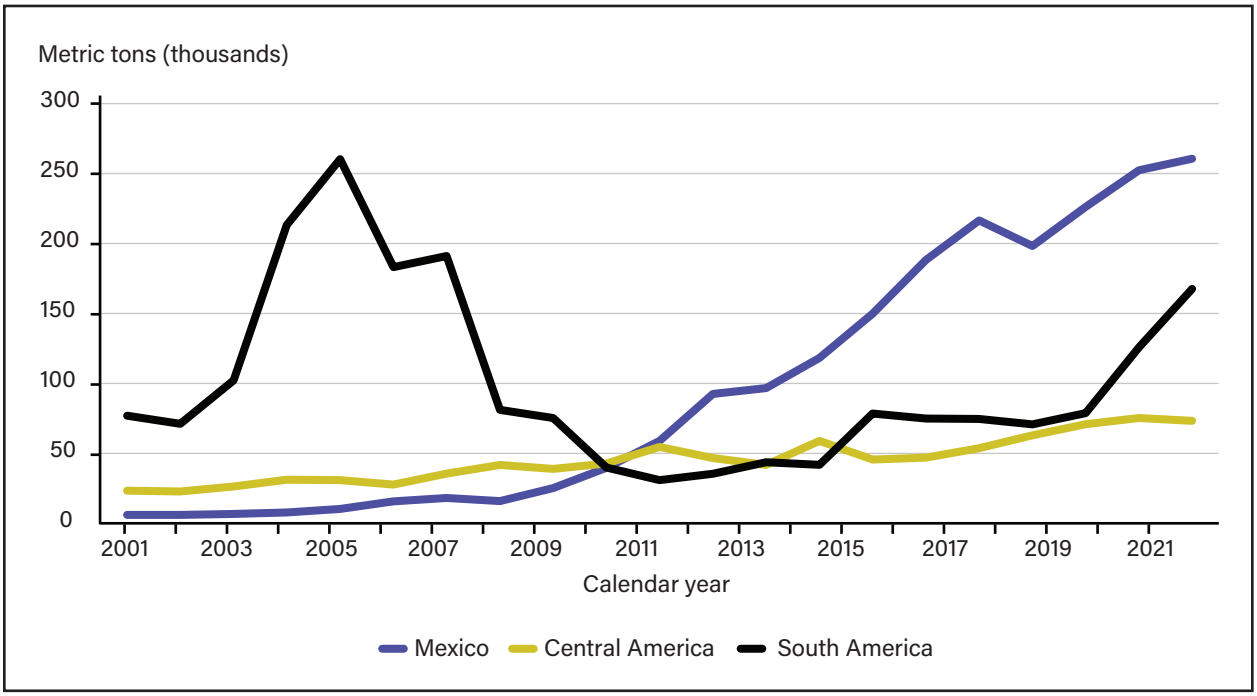
To be eligible for export to the United States, fresh avocados must comply with U.S. phytosanitary requirements. For instance, fresh avocados from Mexico are subject to a systems approach that features pest-control requirements in production, packing, and transportation to minimize the risk of introducing pests that could threaten the health of U.S. avocado groves (Zahniser and Link, 2002: 120). To provide for the oversight and preclearance of fresh avocados from Mexico, USDA's Animal and Plant Health Inspection Service (APHIS) has a Cooperative Service Agreement with the Mexican Government and the Asociación de Productores y Empacadores Exportadores de Aguacate de México (APPEAM—Mexican Association of Exporting Producers and Packers of Avocados). In conjunction with the Mexican Government, APHIS surveys orchards annually for target pests and certifies for export only those orchards that are free of such pests. APHIS also participates in the cutting and inspection of fruit at Mexican packing houses prior to export (Osoyo, 2021). From the start of this systems approach in January 2017 until 2021, only growers in the State of Michoacán have been allowed to participate. Starting with the growing season that began in April 2022, however, qualifying growers in the State of Jalisco have also been allowed to do so (FreshFruitPortal.com, 2021b).

Beef and Beef Products

The "beef and beef products" BICO product group encompasses meat from bovine animals (fresh, chilled, or frozen), sausages and other food preparations made from such meat, and offal from bovine animals. During 2019–21, beef and beef products accounted for 4.8 percent of U.S. agricultural imports from LAC, compared with 2.4 percent during 2007–09—an increase of 2.4 percentage points (table 3). Between 2007–09 and 2019–21, the 3-year annual average of U.S. beef and beef product imports from LAC grew from about 174 thousand metric tons (worth $288 million) to 444 thousand metric tons ($2.2 billion)—an increase of 154.5 percent in terms of volume. Over this period, LAC's average annual share of the total volume of U.S. beef and beef product imports climbed from 19.2 percent to 35.5 percent.

Since 2007–09, Mexico's share of U.S. beef and beef product imports from LAC has increased, while South America's has declined (figure 10). Between 2007–09 and 2019–21, Mexico's share of these imports increased from 11.4 percent to 55.5 percent, while South America's share dropped from 66.4 percent to 28.0 percent, and Central America's share fell from 22.2 percent to 16.5 percent. U.S. beef and beef product imports from the Caribbean have been negligible throughout the 21st century. Among the countries of LAC, Mexico was the leading supplier of U.S. beef and beef product imports during 2019–21, followed by Brazil with a 15.4-percent share of such imports from LAC and Nicaragua with a 14.4-percent share.

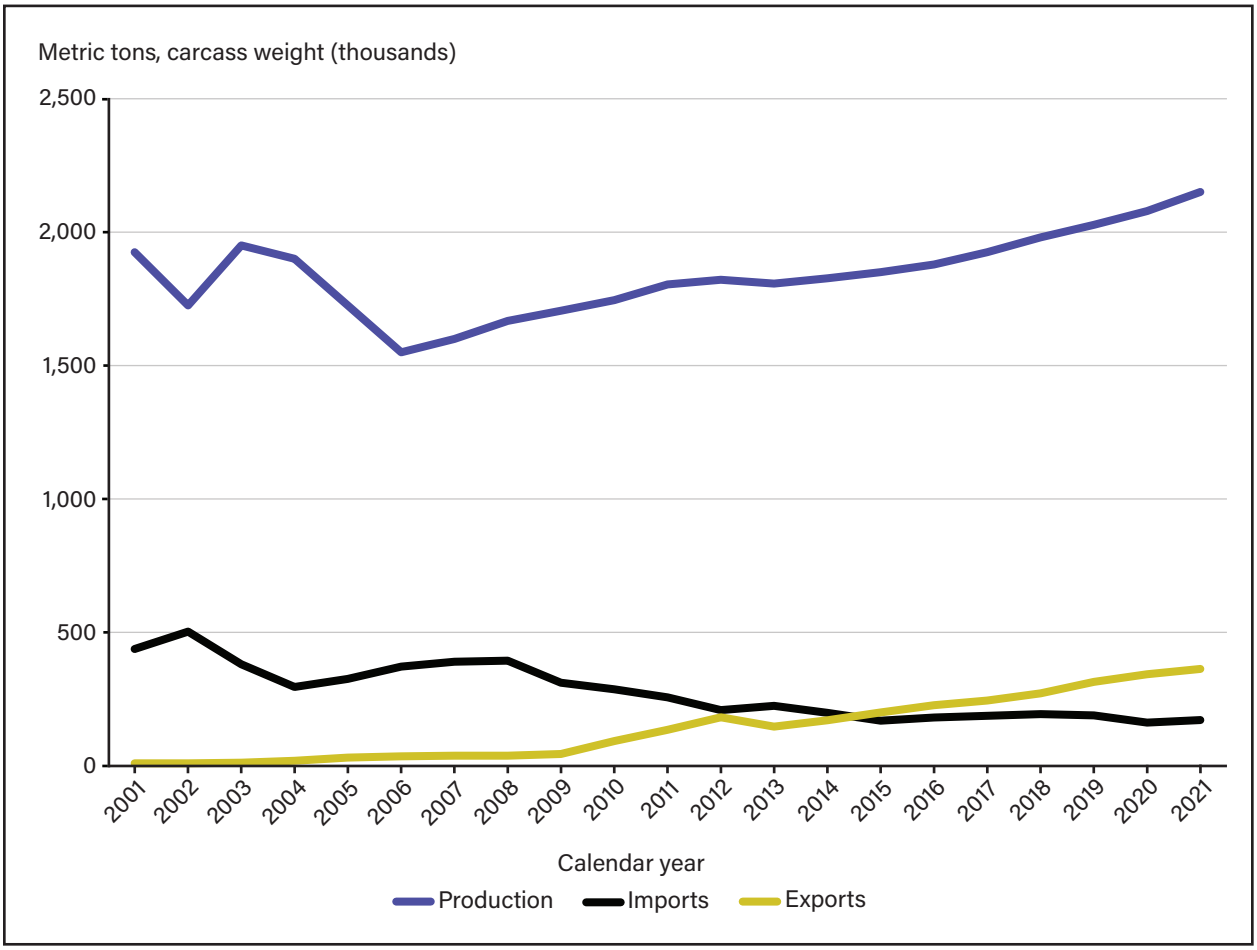
Figure 10
U.S. beef and beef product imports from Latin America, 2001–21



Source: USDA, Economic Research Service presentation of data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA Foreign Agricultural Service (2022a).

Two developments help to explain this change in the composition by supplying country of U.S. beef and beef product imports from LAC and the rise in Mexico's share of this trade. First, with access to both domestically produced and imported feedstuffs (much of which comes from Mexico's USMCA partner, the United States), advanced technologies in cattle production and meatpacking, and a competitive labor force, Mexico's cattle and beef sector has expanded rapidly. Between 2007–09 and 2017–19, Mexican beef production increased from an annual average of 1.7 million metric tons (carcass weight) to 2.1 million metric tons during 2017–19—an increase of 25.8 percent (figure 11). The sector now features an export-oriented segment, with the country becoming a net exporter of beef in 2015. A single firm (SuKarne) accounts for about three-fourths of Mexico's beef exports (Peel, 2022). Mexican beef exporters tend to ship higher-quality cuts to the United States and trimmed, labor-intensive products to Japan (Lara, 2021: 12). U.S. beef imports from Mexico have been duty-free since the implementation of NAFTA in 1994.

Figure 11
Mexican beef production, exports, and imports, 2001–21



Source: USDA, Economic Research Service presentation of data from USDA, Foreign Agricultural Service (2022b).

Second, sanitary concerns restricted U.S. imports of fresh beef from Brazil for much of the first two decades of the 21st century. Brazil is the world's largest beef exporter—ahead of the United States, India, and Australia—with 2.3 million metric tons of exports in 2021 and is the second largest beef producer after the United States. Historically, U.S. beef imports from Brazil have been primarily heat-treated products, and Brazil has been a major supplier of processing-grade beef to the United States. The term "processing grade" refers to fresh, lean, boneless beef that is mixed with trimmings from grain-fed cattle to produce ground beef, and processing-grade beef is distinct from "processed beef," which is cooked, canned, or preserved meat. Beef imports from Brazil spiked in the last 2 years as U.S. demand for processing-grade beef has substantially increased. In 2021, U.S. beef and beef product imports from Brazil reached nearly 105,000 metric tons, accounting for 9.1 percent of total U.S. beef and beef product imports that year.

In 2005, the Brazilian Government requested that APHIS allow fresh beef (chilled or frozen) to be imported into the United States from a designated region in Brazil. At that time, fresh beef imports from Brazil were prohibited because that country was among the regions of the world where foot-and-mouth disease (FMD) was considered to exist. In August 2016, USDA's Food Safety and Inspection Service (FSIS) determined that fresh beef (chilled or frozen) could be safely imported from Brazil. In June 2017, however, fresh beef imports from Brazil were suspended due to concerns about food safety and animal health. In February 2020, FSIS again determined that fresh beef from Brazil was eligible for import (USDA, Food Safety Inspection Service, 2020).

High U.S. beef prices and China's embargo of Brazilian beef imports (based on animal health concerns) led to the record U.S. imports of processing-grade beef from Brazil in 2021. U.S. imports of fresh, chilled, or frozen beef are subject to a tariff-rate quota (TRQ), while imports of processed beef products are not. Under

the Uruguay Round Agreement on Agriculture (URAA) of the World Trade Organization (WTO), Brazil accesses the U.S. beef market via the "other countries" quota rather than a quota specific to Brazil. This "other countries" quota is set at 65,005 metric tons per calendar year. Within-quota imports are subject to a tariff of 4.4 cents per kilogram, while over-quota imports face a tariff equal to 26.4 percent of the value of the imports (Kuberka, 2016).

Nicaragua's beef industry has been one of the country's more productive agri-food sectors for many years (Leiva, 2003). This industry is very export oriented. During 2019–21, Nicaragua exported an estimated 91 percent of its beef production (USDA, Foreign Agricultural Service, 2022b), with 48.9 percent of Nicaragua's beef and beef product exports destined for the United States, according to the Nicaraguan Government's trade statistics (Nicaragua Ministerio de Fomento, Industria, y Comercio [MIFIC—Ministry of Promotion, Industry, and Commerce] and UN Comtrade, as cited by Trade Data Monitor, 2022).

The United States and Nicaragua are free-trade partners via CAFTA-DR. As part of that agreement, U.S. beef imports from Nicaragua were subject to a transitional tariff-rate quota (TRQ), with a duty-free quota that gradually expanded from 2006 until the start of 2021, when the TRQ was eliminated. Since then, beef and beef product imports from Nicaragua have enjoyed duty-free access in the United States. In this policy context, Nicaraguan beef production increased from an estimated annual average of 150,000 metric tons (carcass weight) during 2013–15 to 189,000 metric tons during 2019–21 (USDA, Foreign Agricultural Service, 2022b), and the annual average of U.S. beef and beef product imports from Nicaragua grew from about 37,000 metric tons to 64,000 metric tons (U.S. Department of Commerce, Bureau of the Census, as cited by USDA, Foreign Agricultural Service, 2022a).

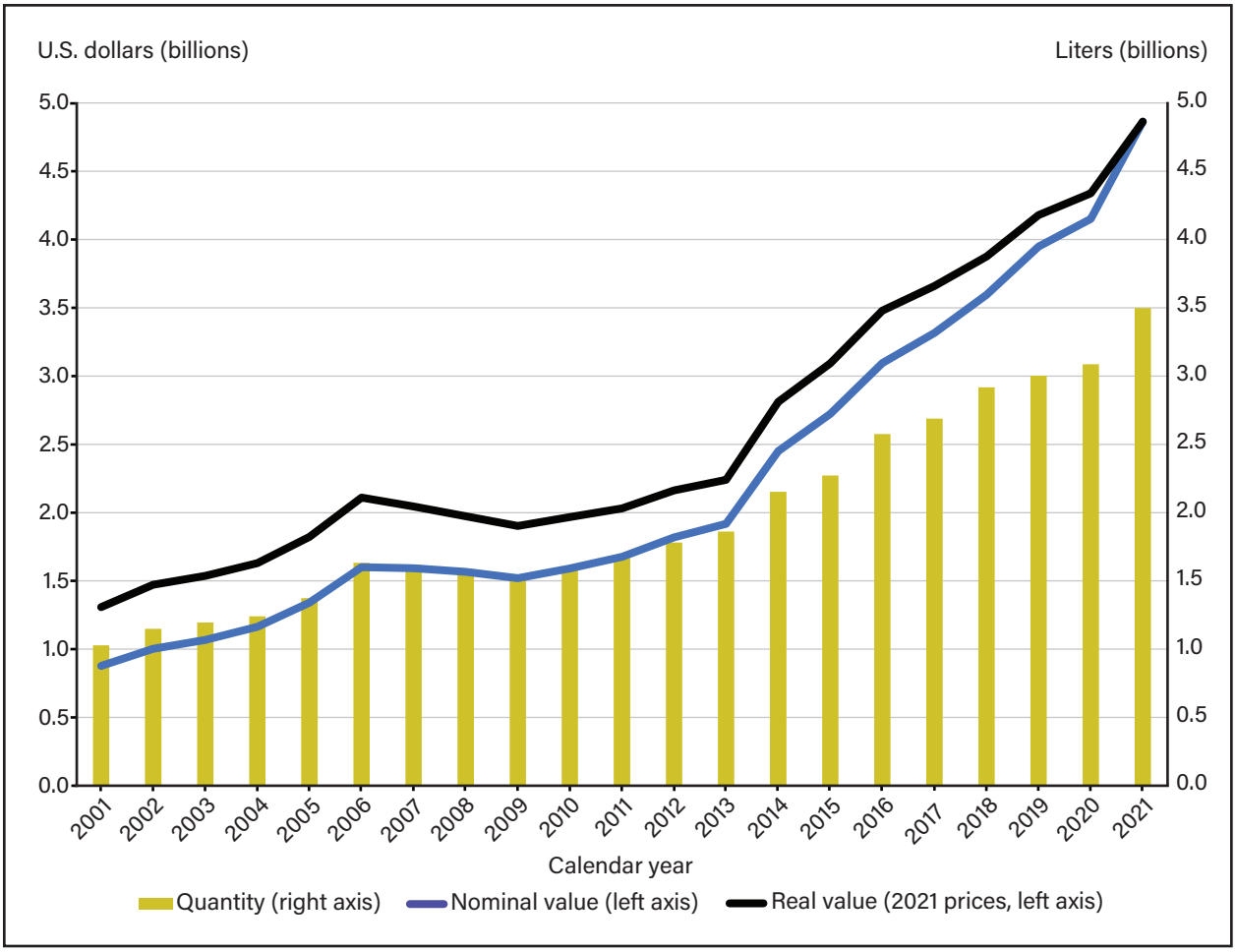
Concerns about the human rights situation in Nicaragua and human rights abuses by the Nicaraguan Government (U.S. Department of State, 2021, 2020, 2019) led the U.S. Government to impose sanctions on certain people associated with the Nicaraguan Government and to consider restrictions on U.S.-Nicaraguan trade and investment. In November 2021, the Reinforcing Nicaragua's Adherence to Conditions for Electoral Reform Act of 2021 (RENACER Act) was signed into law. The RENACER Act "creates measures to monitor, report on, and address corruption and human rights abuses in Nicaragua" (Congressional Research Service, 2021) and includes an expression of the "sense of Congress" that the United States should review Nicaragua's participation in CAFTA-DR "if the Government of Nicaragua continues to tighten its authoritarian rule in an attempt to subvert democratic elections in November 2021 and undermine democracy and human rights in Nicaragua" (RENACER Act, 2021). That election was subsequently viewed by the U.S. Government as "neither free nor fair, and certainly not democratic" (The White House, 2021). So far, no restrictions have been imposed on beef and beef product imports from Nicaragua. However, in October 2022, an amended Executive Order was signed that gives the U.S. Department of Treasury the authority to place sanctions on certain people who operate or have operated in the Nicaraguan gold industry, as well as the expanded authority to impose sanctions on new U.S. investments in Nicaragua and on U.S.-Nicaraguan trade (U.S. Department of Treasury, 2022).

Beer

Mexico is the leading foreign supplier of beer to the United States. During 2019–21, its annual share of total U.S. beer imports averaged 72.4 percent, and its annual share of U.S. beer imports from LAC averaged 99.0 percent. U.S. beer imports from Mexico have seen uninterrupted growth in both quantity and nominal value since 2009. Between 2007–09 and 2019–21, the 3-year annual average of these imports increased from 1.6 billion liters (worth $1.6 billion) to 3.2 billion liters ($4.3 billion) (figure 12), and beer's share of U.S. agricultural imports from LAC grew from 6.3 percent to 7.5 percent—an increase of 1.2 percentage

points (table 3). Although Mexico obtained duty-free access to the U.S. beer market in 2001, beer imported from countries with PNTR with the United States started to enter duty-free in 2002, thereby covering the entire period studied. Beer imports may be subject to a U.S. Federal excise tax, however (U.S. International Trade Commission, 2022a). Thus, the FTAs between the United States and certain LAC countries have not provided more open access to the U.S. beer market than PNTR has provided since the start of 2002.

Figure 12
U.S. beer imports from Mexico, 2001–21



Note: Nominal values (not inflation-adjusted) are converted to real values (inflation-adjusted) using the implicit price deflator for gross domestic product (GDP).

Source: USDA, Economic Research Service calculations using import data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA Foreign Agricultural Service (2022a) and the implicit price deflator for GDP from U.S. Department of Commerce, Bureau of Economic Analysis (2022).

Growth in U.S. beer imports from Mexico reflects a long-term shift in U.S. beer consumption away from large domestic breweries and towards imported products and domestically produced craft beers (Giammona and Reinicke, 2019), even as U.S. consumers drank less beer overall. Total U.S. beer consumption (foreign and domestic) dropped from an annual average of 4.5 liters per capita during 2007–09 to 4.0 liters per capita during 2017–19 (table 4).

In the 1990s and early 2000s, the leading players in the U.S. imported beer market were European brands like Stella Artois and Heineken, which positioned themselves as more sophisticated than U.S. brands such as Budweiser or Coors (Bernot, 2022). However, with the tremendous growth of the American craft beer

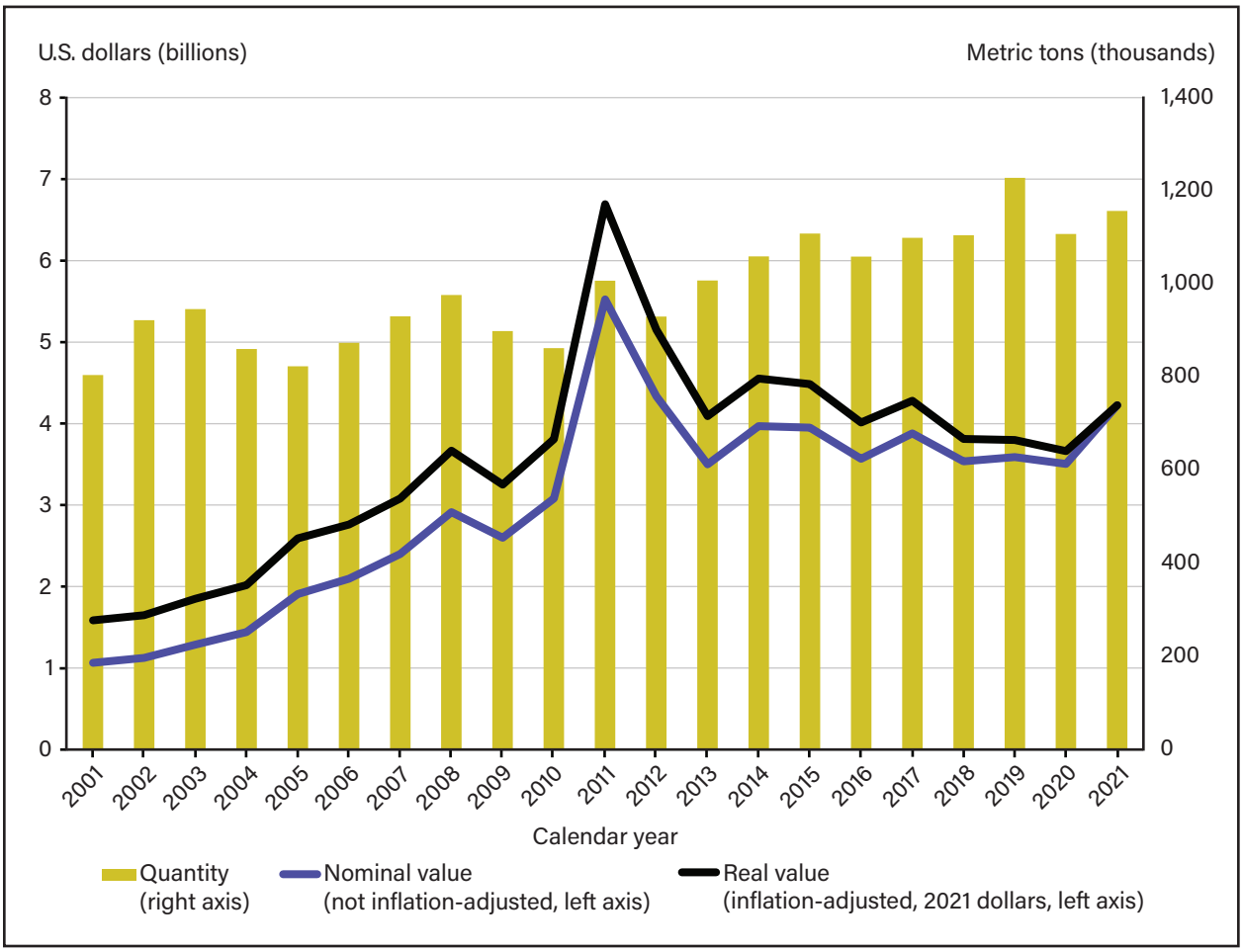
industry, European sophistication became less of a selling point. U.S. consumers turned more toward Mexican beers such as Corona and Dos Equis, which successfully pitched themselves as "lifestyle brands" associated with sun-filled beaches or the search for "a more interesting life," in the words of one marketing officer (Notte, 2017).

U.S. beer imports from Mexico grew at a faster pace following the completed acquisition in 2013 of the Mexican brewer Grupo Modelo by the multinational brewing and beverage company Anheuser-Busch (AB) InBev. Between 2013 and 2021, the volume of U.S. beer imports from Mexico grew at a CAGR of 8.2 percent, compared with 3.9 percent during 2005–13. Prior to the deal, AB InBev already owned a 50-percent stake in Grupo Modelo, and the two firms operated a joint venture called Crown that imported and distributed Modelo's beers in the United States. To address the concerns of U.S. antitrust regulators that the proposed merger would reduce the number of competitors in the U.S. beer industry, the deal was expanded to include Constellation Brands. This firm purchased an exclusive license to market Modelo's beers in the United States and full control of Crown, as well as Modelo's brewery in Piedras Negras, Coahuila—just across the Rio Grande from Eagle Pass, Texas—from where beer can be easily transported to the United States (U.S. Department of Justice, 2013; Chappell, 2013).

Unroasted Coffee

Unroasted coffee's share of U.S. agricultural imports from LAC dropped from 10.2 percent in 2007–09 to 6.5 percent in 2019–21—a decrease of 3.6 percentage points (table 3). Between 2007–09 and 2019–21, the 3-year annual average of these imports grew from 935,000 metric tons ($2.6 billion) to 1.2 million metric tons ($3.8 billion) (figure 13). Although U.S. unroasted coffee imports from LAC increased in value during the period studied, they grew at a slower pace than total U.S. agricultural imports from LAC, hence the decrease in share. In nominal terms, these imports grew at a CAGR of 3.0 percent between 2007–09 and 2019–21—about two-fifths the pace of the 7.8 percent set by U.S. agricultural imports from LAC overall. In real terms, expressed in 2021 dollars, the annual average value of U.S. unroasted coffee imports from LAC rose from $3.3 billion to $3.9 billion during the period studied, corresponding to a CAGR of 1.3 percent. Unroasted coffee imported from countries with PNTR with the United States has received duty-free status for more than half a century (U.S. Department of State, Office of the Historian, 2022).

Figure 13
U.S. unroasted coffee imports from Latin America and the Caribbean, 2001–21



Note: Nominal values (not inflation-adjusted) are converted to real values (inflation-adjusted) using the implicit price deflator for gross domestic product (GDP).

Source: USDA, Economic Research Service calculations using import data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA, Foreign Agricultural Service (2022a) and the implicit price deflator for GDP from U.S. Department of Commerce, Bureau of Economic Analysis (2022).

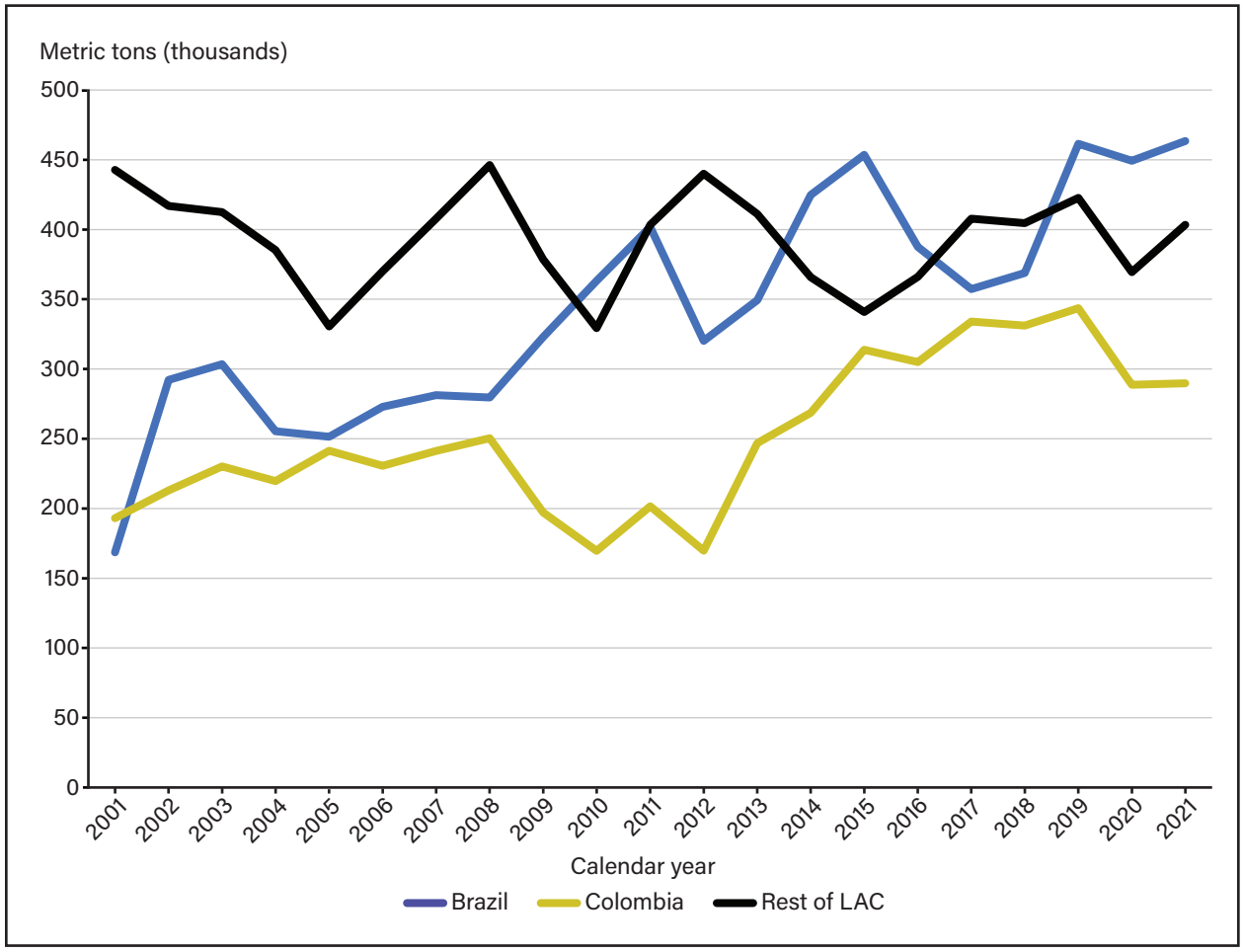
Slow growth in Colombia's coffee production, along with short-term factors that depressed Colombian exports in 2020 and 2021, helps to explain the decrease in unroasted coffee's share. Throughout the period studied, Brazil and Colombia were (respectively) the world's first and second leading suppliers of unroasted coffee to the United States in terms of quantity (figure 14).[9] During 2019–21, U.S. imports of unroasted coffee from Brazil averaged 458,000 metric tons per year, compared with 307,000 metric tons for imports from Colombia. But while coffee production in Brazil was on an upward trend throughout the period studied, production in Colombia plateaued at about 13–15 million 60-kilogram bags during marketing years 2014/15 to 2020/21 (figure 15).[10] As a result, Brazil's share of U.S. imports of unroasted coffee from LAC expanded from 30.0 percent during 2007–09 to 39.4 percent during 2019–21, while Colombia's share stayed roughly the same, growing from 26.0 percent to 26.4 percent.

[9] In terms of value, however, Colombia has been the world's leading supplier of coffee to the United States since 2016, with Brazil a close second. Colombian coffee tends to have a higher unit value than Brazilian coffee—largely due to differences in acidity and flavor. The premium in the U.S. market for the milder coffees that Colombia produces has increased, and demand for Arabica-washed coffee from Colombia also has increased.

[10] For Brazil, the marketing year for coffee is from July 1 to June 30. For Colombia, it runs from October 1 to September 30.

Colombia's annual coffee production was in the range of 10–13 million bags during marketing years 2000/01 to 2007/08 and then fell sharply to fluctuate in the range of 7–9 million bags during marketing years 2008/09 to 2011/12 (figure 15). This drop in production was the result of a joint effort by the Colombian Government and the National Federation of Colombian Coffee Growers (FEDECAFE—Federación Nacional de Cafeteros de Colombia) to rejuvenate aging coffee plantations through new plantings of rust-resistant varieties (Mello, 2009; Pinzon, 2010; Mello, 2011; Pinzon, 2012; Federación Nacional de Cafeteros de Colombia, 2013). Colombia's lower coffee production resulted in fewer exports to the United States during 2009–12 (figure 14). Because it takes newly planted coffee trees about 3–4 years (National Coffee Association of U.S.A., 2022), the effects of this rejuvenation program developed gradually, eventually lifting production to 13.9 million bags in 2018/19 and 14.1 million bags in 2019/20. Adverse weather conditions and transportation disruptions caused by the COVID-19 pandemic led Colombian coffee production to drop to 13.1 million bags in 2020/21, leading to fewer exports in 2021. Exports also were lower than usual in 2020 and 2021 due to the COVID-19 pandemic, which was accompanied by increased consumption of food at home and higher levels of domestic demand for coffee in Colombia (USDA, Foreign Agricultural Service, Office of Agricultural Affairs, Bogotá, 2021).

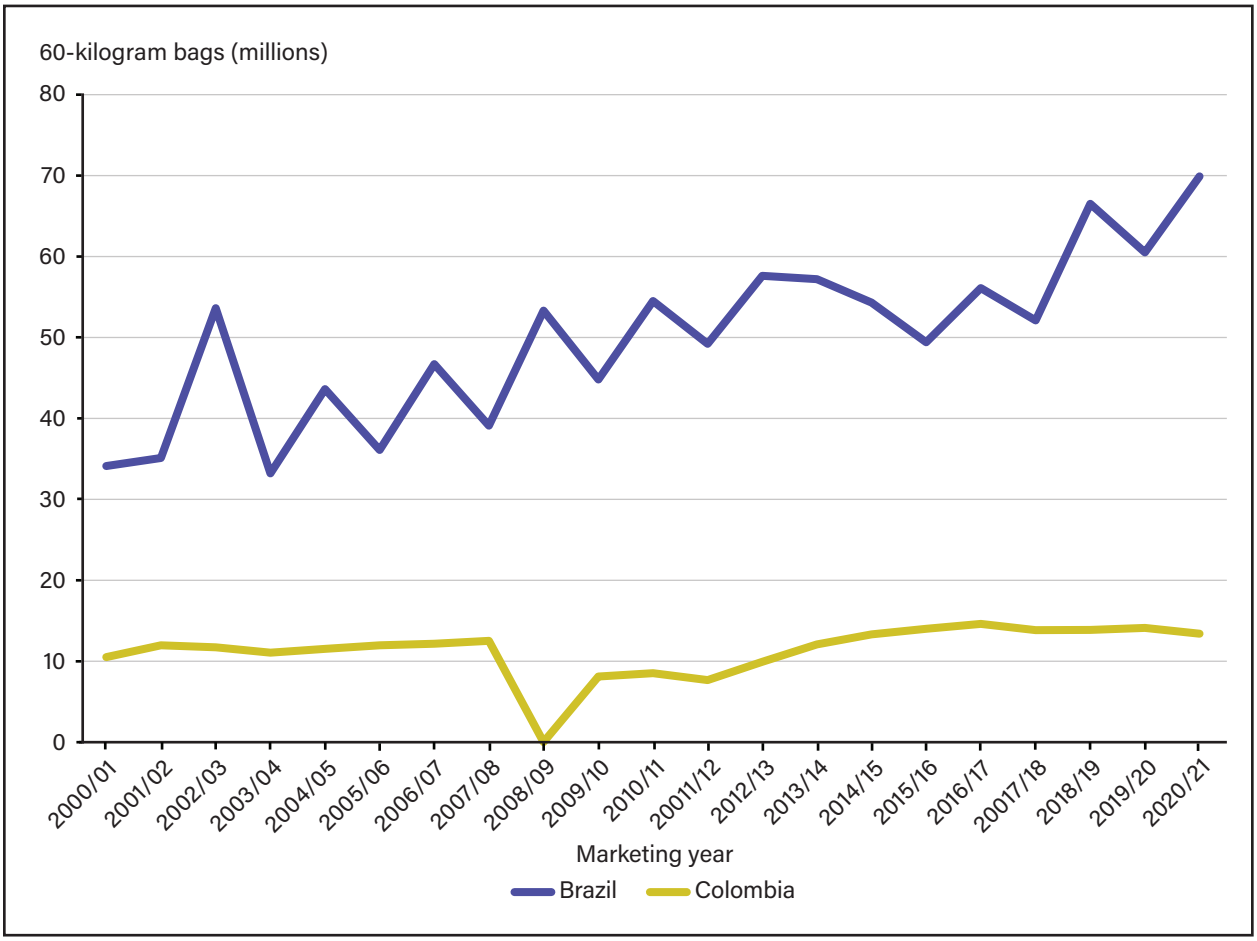
Figure 14
U.S. unroasted coffee imports from Brazil, Colombia, and the rest of Latin America and the Caribbean, 2001–21



LAC = Latin America and the Caribbean.

Source: USDA, Economic Research Service presentation of import data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA, Foreign Agricultural Service (2022a).

Figure 15
Green coffee production in Brazil and Colombia, marketing years 2000/01–2020/21

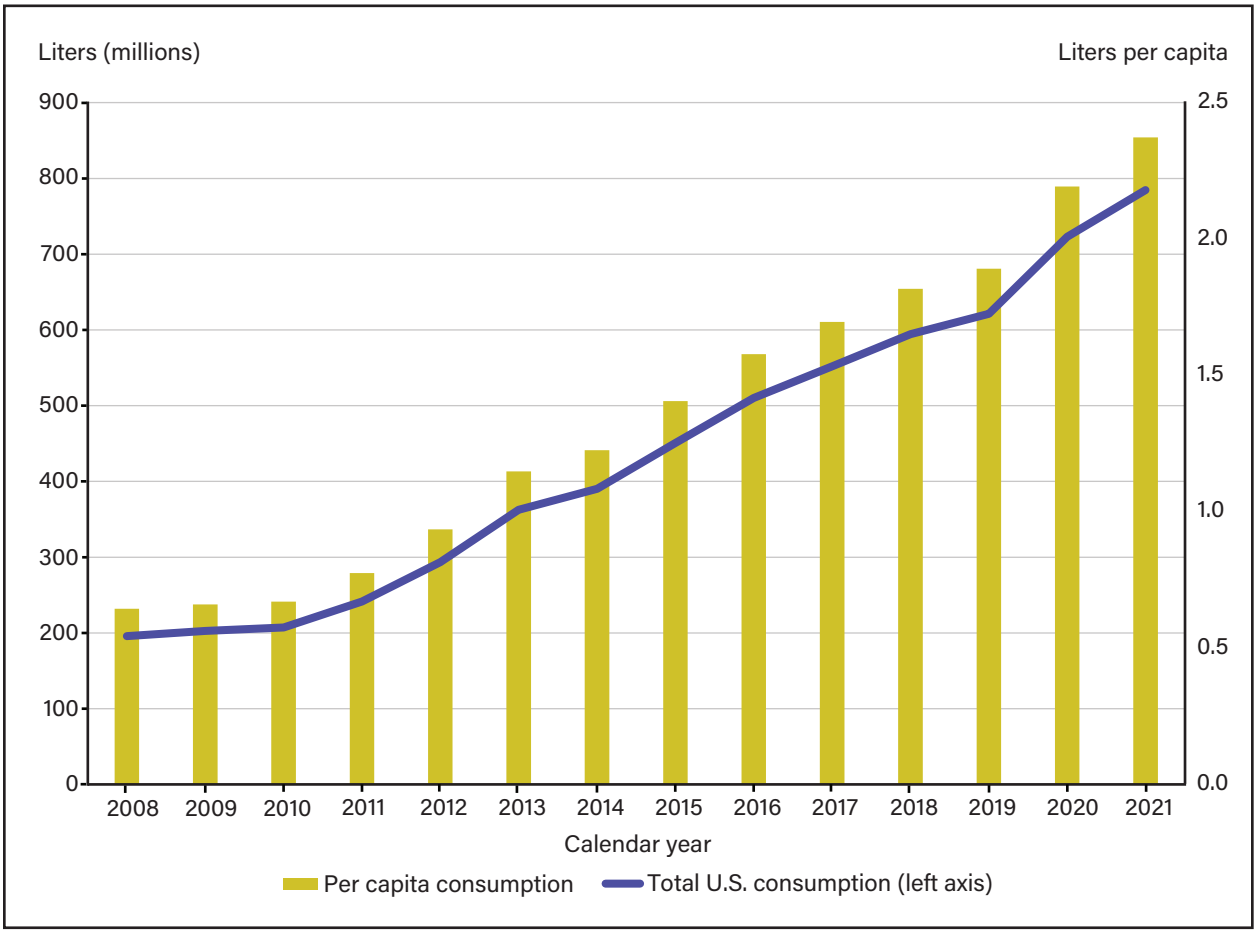


Note: For Brazil, the marketing year for coffee runs from July 1 to June 30. For Colombia, it runs from October 1 to September 30.

Source: USDA, Economic Research Service presentation of production data from USDA, Foreign Agricultural Service (2022b).

The decline in unroasted coffee's share of U.S. agricultural imports from LAC is not due to people in the United States consuming less coffee (figure 16). Between 2008 and 2021, total U.S. coffee consumption increased from 196 million liters to 785 million liters, and per capita coffee consumption grew from 0.64 liters to 2.37 liters. There is still room for U.S. coffee consumption to grow without rising to unhealthy levels. In Finland—the world's leading coffee-consuming country on a per capita basis—per capita coffee consumption is roughly 3 times the U.S. level (WorldAtlas, 2022). According to the U.S. Food and Drug Administration, 400 milligrams of caffeine (corresponding to 4–5 cups of coffee) is "[f]or healthy adults …an amount not generally associated with dangerous, negative effects" (U.S. Department of Health and Human Services, Food and Drug Administration, 2018).

Figure 16
U.S. coffee consumption, 2008–21

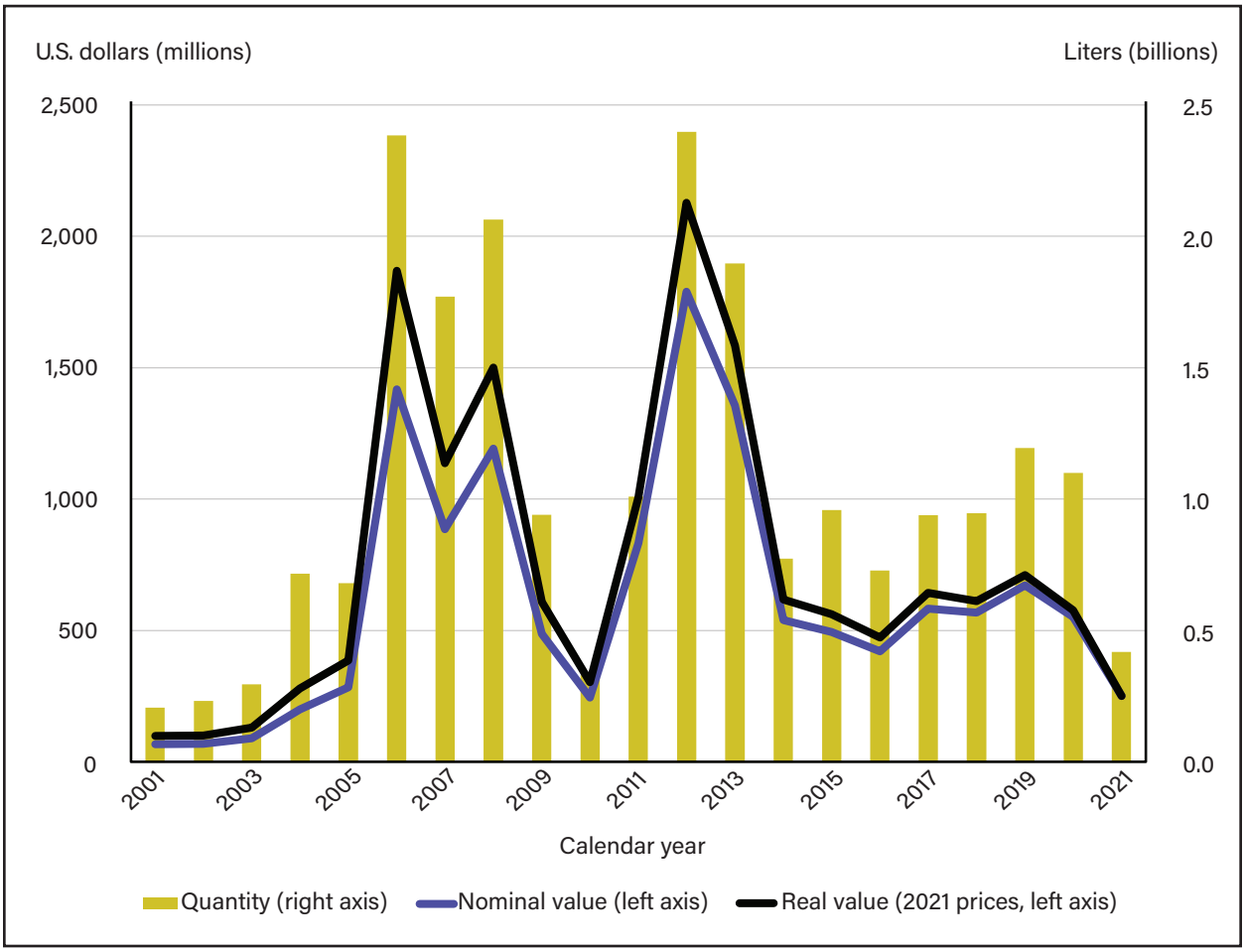


Source: USDA, Economic Research Service calculations using coffee consumption data from Euromonitor and population data (to determine per capita consumption) from USDA, Economic Research Service (2022).

Ethanol

Non-beverage ethanol's share of U.S. agricultural imports from LAC dropped from 3.3 percent in 2007–09 to 0.8 percent in 2019–21—a decrease of 2.4 percentage points (table 3). U.S. ethanol imports from LAC fluctuated greatly between 2007 and 2021. The years 2007–09 coincided with high-to-medium levels of imports, while the years 2019–21 coincided with medium-to-low levels (figure 17). Imports dropped from 2.1 billion liters in 2008 to 330 million liters in 2010, climbed back to 2.4 billion liters in 2012, and then stayed in the range of 400 million liters to 1.4 billion liters from 2014 to 2021.

Figure 17
U.S. imports of non-beverage ethanol from Latin America and the Caribbean, 2001–21



Note: Nominal values (not inflation-adjusted) are converted to real values (inflation-adjusted) using the implicit price deflator for gross domestic product (GDP).

Source: USDA, Economic Research Service presentation of import data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA, Foreign Agricultural Service (2022a) and the implicit price deflator for GDP from U.S. Department of Commerce, Bureau of Economic Analysis (2022).

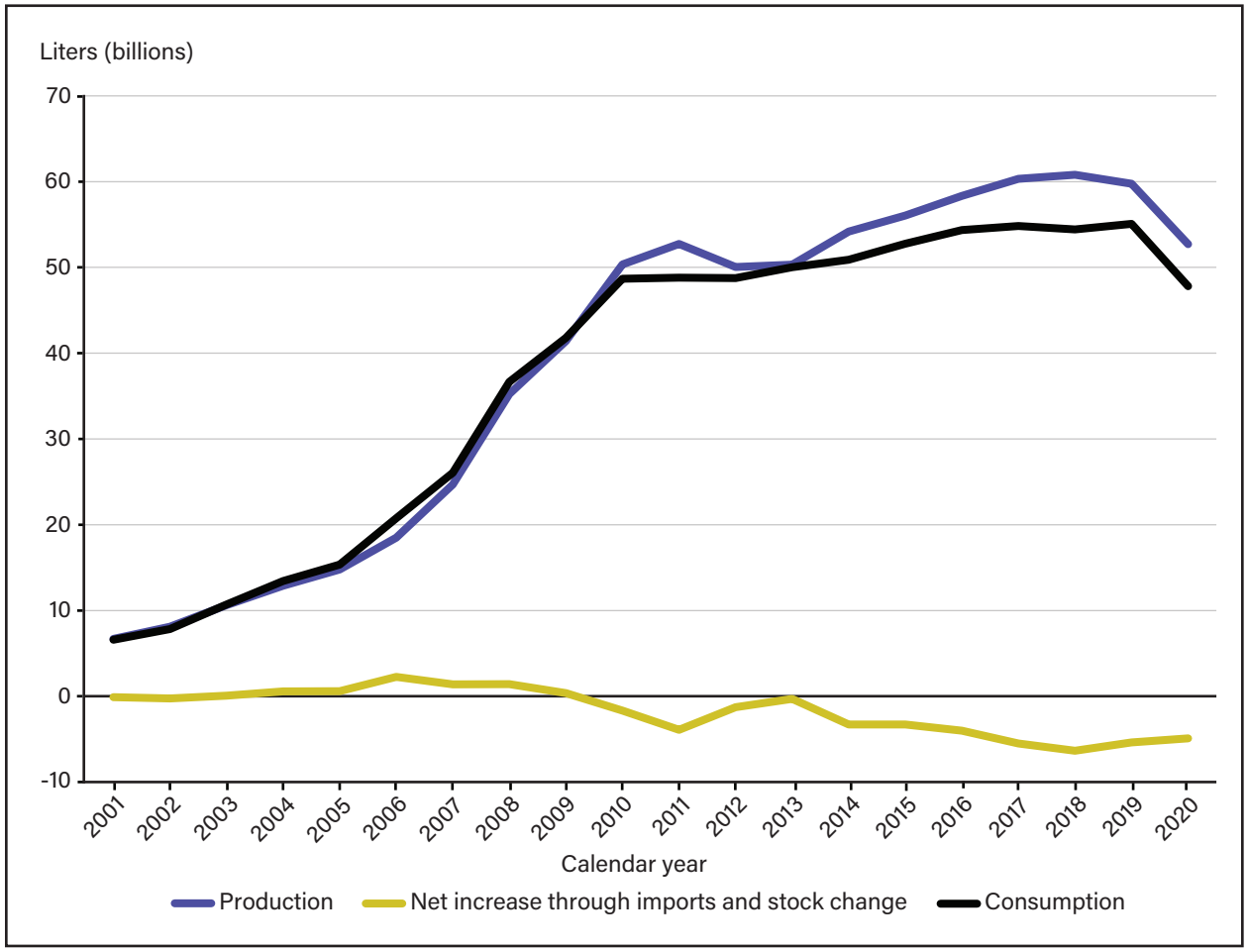
Ethanol imports supply a small share of U.S. ethanol consumption (figure 18). For example, when U.S. ethanol imports from LAC were at their highest level in 2012, these imports equaled 4.9 percent of U.S. consumption. During the first decade of the 21st century, U.S. ethanol production ramped up quickly in response to policy mandates, including the switch away from the use of methyl tertiary butyl ether (MTBE) as an oxygenate in gasoline. During the century's second decade, U.S. ethanol production and consumption grew at a slower pace, as consumption generally met blending mandates for ethanol in gasoline.

Growth in domestic ethanol production has enabled the United States to be a net exporter of ethanol since 2010 (as shown by the negative values of net increase through imports and stock change in figure 18). During 2019–21, U.S. ethanol imports from LAC equaled just 1.9 percent of U.S. consumption. Brazil supplied nearly all (99.4 percent) of those imports, compared with a share of 42.6 percent during 2007–09. In contrast, Jamaica accounted for 21.7 percent of U.S. ethanol imports from LAC during 2007–09 but has exported little ethanol to the United States since 2013.

The main factor behind the virtual end of U.S. ethanol imports from Jamaica was the elimination of the U.S. tariff on imported ethanol on January 1, 2012. Prior to that date, Jamaica and other countries partici-

pating in the Caribbean Basin Initiative (CBI) enjoyed favorable access to the U.S. ethanol market. Ethanol made from feedstocks, of which at least half originated in the CBI countries (for instance, sugarcane grown in Jamaica), entered the United States duty-free. In addition, up to 7 percent of the U.S. market could be supplied duty-free with ethanol that was produced entirely from feedstock from non-CBI countries. This provision allowed Jamaica to import hydrous ethanol from non-CBI countries (frequently Brazil), dehydrate that ethanol in Jamaica, and then export the resulting product duty-free to the United States (Yacobucci, 2008). With the elimination of the U.S. ethanol tariff, Jamaica no longer possessed this advantage and quickly lost its share of U.S. ethanol imports to more competitive suppliers—mainly Brazil.

Figure 18
U.S. ethanol production, consumption, and trade, 2001–20



Note: Negative values for net increase indicate net exports.

Source: USDA, Economic Research Service presentation of data from U.S. Department of Energy, Energy Information Administration (2021).

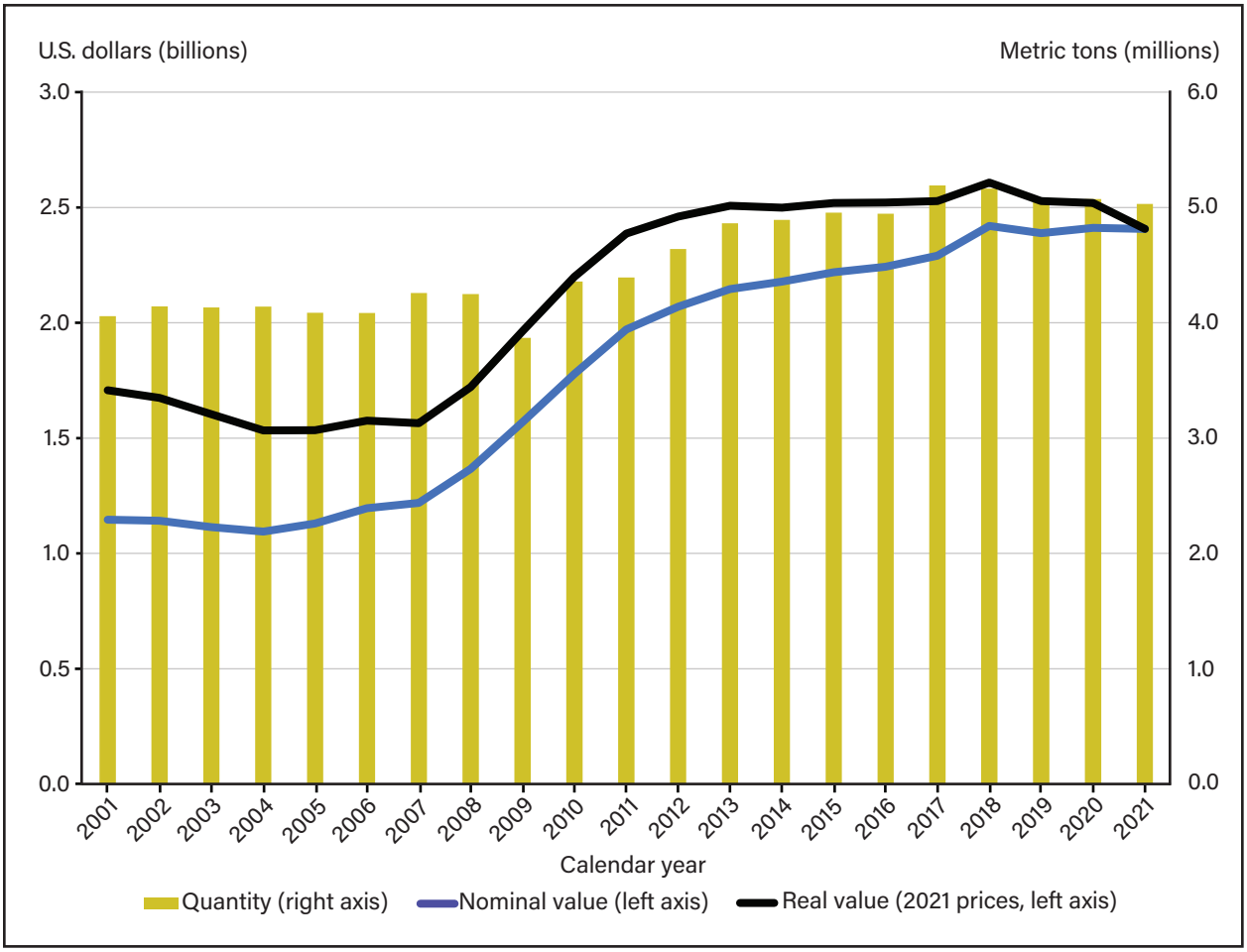
Bananas and Plantains

Bananas, like coffee, are a longstanding component of U.S. agricultural imports from LAC. Virtually all U.S. banana imports come from LAC. During 2019–21, the leading sources of U.S. banana imports in terms of quantity were Guatemala (41.6 percent), Costa Rica (16.2 percent), Ecuador (15.7 percent), Honduras (8.4 percent), Mexico (8.4 percent), Colombia (6.8 percent), Peru (1.6 percent), and Panama (0.9 percent). In general, LAC banana exporters sell bananas to countries across the globe, and Ecuador and Colombia export more bananas to the European Union than to the United States (Trade Data Monitor, 2022). Bananas

imported from countries with PNTR with the United States have received duty-free status for more than half a century (U.S. Department of State, Office of the Historian, 2022).

U.S. banana imports from LAC averaged 4.1 million metric tons per year during 2007–09. From 2010 to 2017, these imports were on an upward trend—climbing from 4.4 million metric tons to 5.2 million metric tons—before settling to an annual average of 5.1 million metric tons during 2019–21 (figure 19). As a result of higher imports, the per capita availability of bananas in the United States increased from 11.0 kilograms to 12.7 kilograms between 2007–09 and 2019–21 (table 4). Bananas and plantains' share of U.S. agricultural imports from LAC dropped from 5.3 percent in 2007–09 to 4.2 percent in 2019–21, a decrease of 1.2 percentage points (table 3).

Figure 19
U.S. imports of bananas and plantains from Latin America and the Caribbean, 2001–21



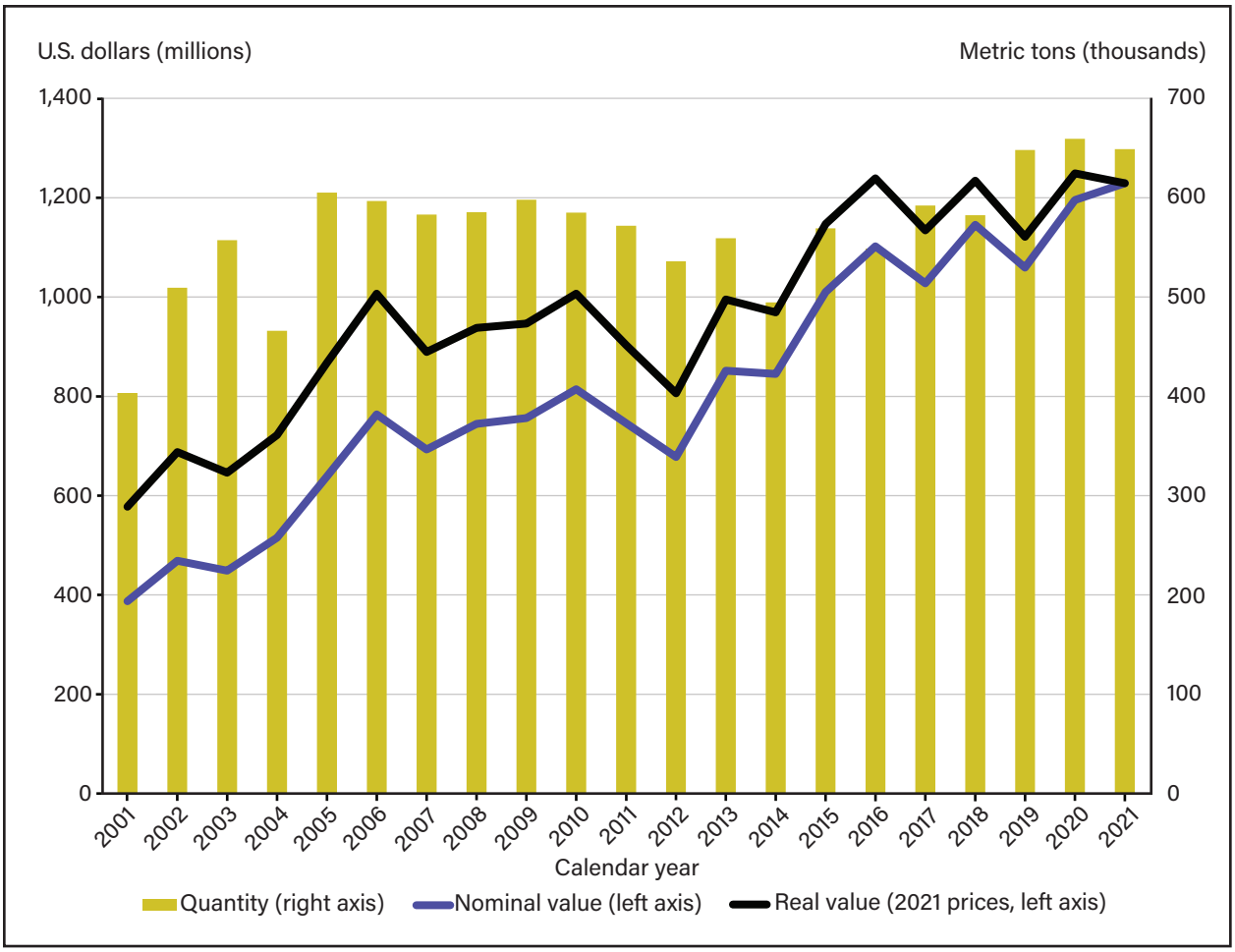
Note: Nominal values (not inflation-adjusted) are converted to real values (inflation-adjusted) using the implicit price deflator for gross domestic product (GDP).

Source: USDA, Economic Research Service calculations using import data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA, Foreign Agricultural Service (2022a) and the implicit price deflator for GDP from U.S. Department of Commerce, Bureau of Economic Analysis (2022).

Fresh Grapes

Fresh grapes' share of U.S. agricultural imports from LAC dropped from 3.8 percent in 2007–09 to 3.0 percent in 2019–21, a decrease of 0.8 percentage points (table 3). While the nominal value of these imports trended upward from 2007 to 2021, their quantity did not (figure 20). Instead, the annual quantity of these imports fluctuated between 490,000 and 600,000 metric tons between 2007 and 2018 and then increased to a 3-year annual average of 682,000 metric tons during 2019–21. This limited import growth is reflected in the slight increase in U.S. per capita availability of fresh grapes between 2007–09 and 2019–21 (table 4). Ninety-nine percent of U.S. fresh grape imports come from LAC, but the composition of these imports by supplying country changed during the period studied. While Chile has remained the leading supplier, Peru has almost surpassed Mexico, which has long been the second leading supplier of U.S. fresh grape imports from LAC. During 2007–09, Chile accounted for 74.0 percent of U.S. fresh grape imports from LAC in terms of quantity, compared with 21.9 percent for Mexico and 1.7 percent from Peru. During 2019–21, Chile accounted for 42.2 percent, compared with 30.2 percent for Mexico and 26.2 percent for Peru (USDA, Foreign Agricultural Service, 2022a).

Figure 20
U.S. fresh grape imports from Latin America and the Caribbean, 2001–21



Note: Nominal values (not inflation-adjusted) are converted to real values (inflation-adjusted) using the implicit price deflator for gross domestic product (GDP).

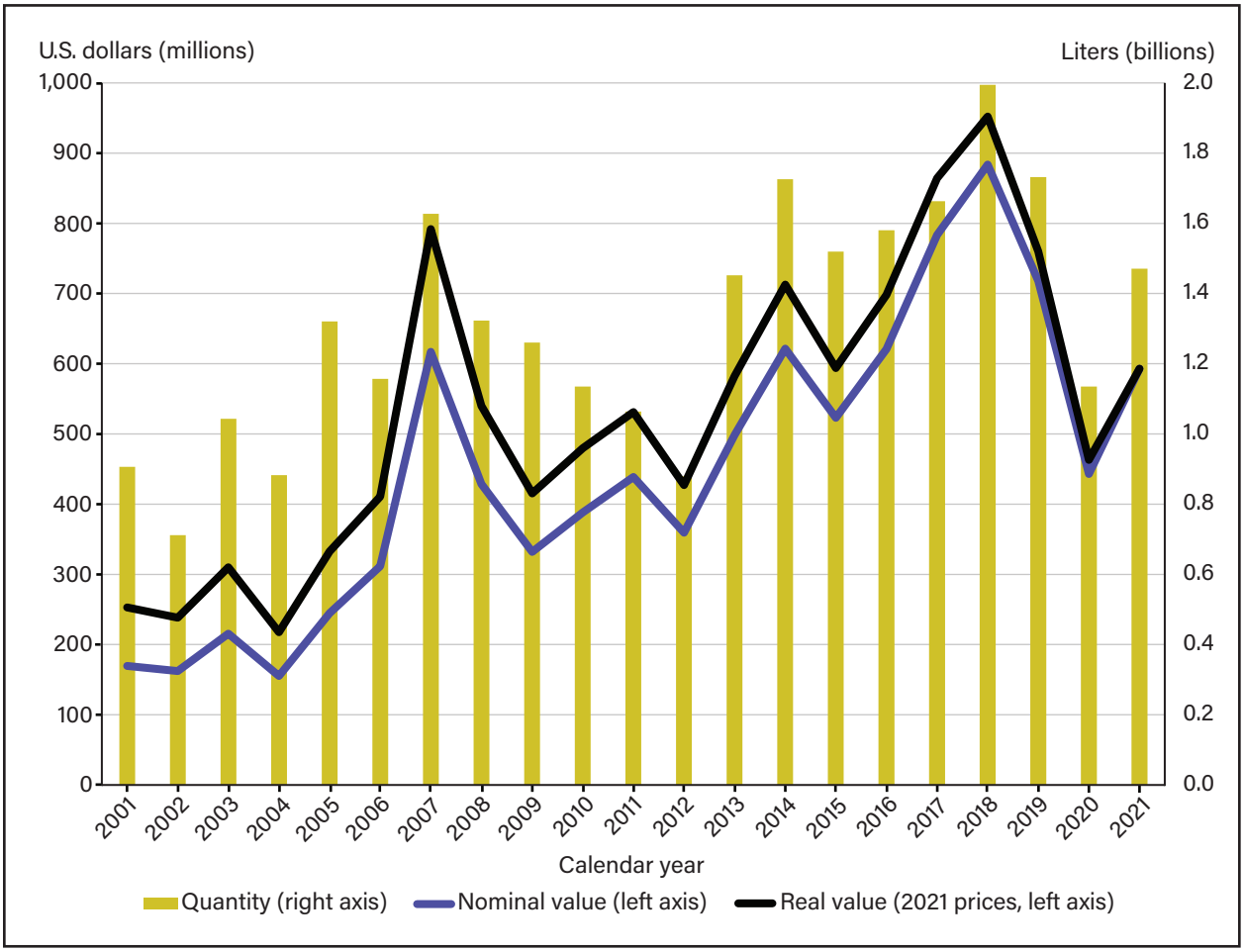
Source: USDA, Economic Research Service calculations using import data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA, Foreign Agricultural Service (2022a) and the implicit price deflator for GDP from the U.S. Department of Commerce, Bureau of Economic Analysis (2022).

U.S. import tariffs on fresh grapes are applied seasonally. For imports from countries with PNTR but no FTA with the United States, the tariff equals $1.13 per cubic meter if entering from February 15 to March 31, $1.80 per cubic meter if entering from July 1 to February 14, and zero if entering at any other time. For imports from countries without PNTR, the tariff equals $8.83 per cubic meter year-round. Several LAC countries have obtained duty-free access to the U.S. market for fresh grapes via their FTAs with the United States: Mexico in 1994, Chile in 2004, and Peru in 2009.

Orange Juice

U.S. orange juice imports from LAC did not display a clear upward or downward trend during the period 2007–21 (figure 21). From 2007 to 2012, imports fell from 1.6 million liters to 879,000 liters. Then, from 2013 to 2021, imports fluctuated in the range of 1.4 billion to 2.0 billion liters, except in 2000 when imports dropped to 1.2 billion. Between 2007–09 and 2019–21, the 3-year annual average of U.S. orange juice imports from LAC increased from 1.403 billion to 1.446 billion liters, and orange juice's share of U.S. agricultural imports from LAC (in terms of nominal value) dropped from 1.8 percent to 1.0 percent (table 4). Nearly all of U.S. orange juice imports—more than 98 percent in most years—come from LAC.

Figure 21
U.S. orange juice imports from Latin America and the Caribbean, 2001–21



Note: Nominal values (not inflation-adjusted) are converted to real values (inflation-adjusted) using the implicit price deflator for gross domestic product (GDP). Quantities are not adjusted for strength of orange juice.

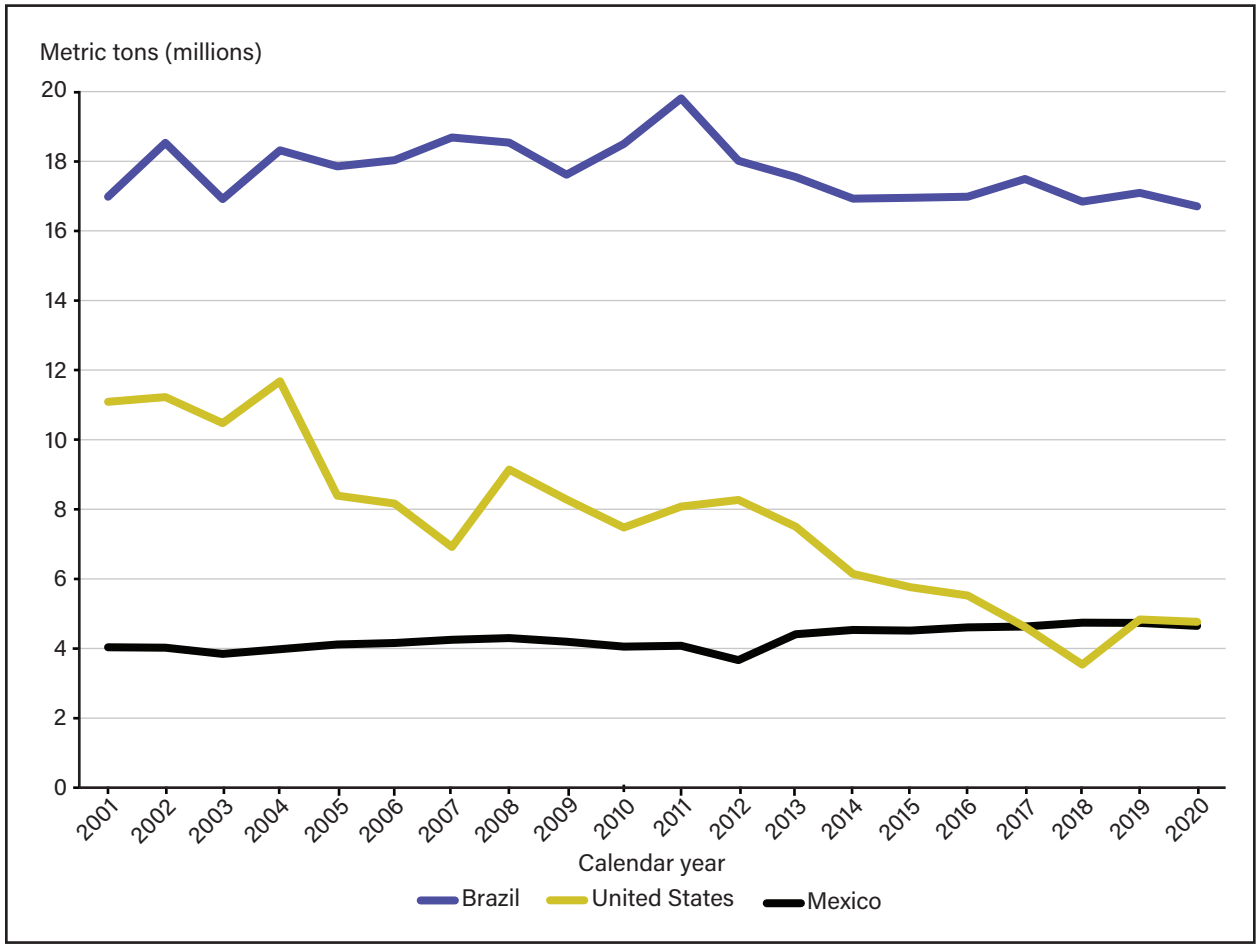
Source: USDA, Economic Research Service calculations using import data from U.S. Department of Commerce, Bureau of the Census as compiled by USDA, Foreign Agricultural Service (2022a) and the implicit price deflator for GDP from U.S. Department of Commerce, Bureau of Economic Analysis (2022).

Patterns in U.S. orange juice imports between 2007-09 and 2019-21 reflect major developments in supply and demand. On the supply side, citrus production throughout the world has been adversely affected by a disease called Huanglongbing (HLB). Also known as citrus greening, HLB is caused by bacteria transmitted by certain species of psyllids or plant lice (USDA, Animal and Plant Health Inspection Service [APHIS], 2021; University of California at Riverside, Center for Invasive Species Research, 2022). HLB bacteria damage the fruit and its juice:

> Fruit from HLB-infected trees are small, lopsided, poorly colored, and contain aborted seeds. The juice from affected fruit is low in soluble solids, high in acids and abnormally bitter. The fruit retains its green color at the navel end when mature, which is the reason for the common name "citrus greening disease." This fruit is of no value because of poor size and quality (University of California at Riverside, Center for Invasive Species Research, 2022).

HLB has had a deleterious effect on orange production—not only in the United States but also in Brazil and Mexico, the two leading suppliers of U.S. orange juice imports, although growers in Mexico have managed to increase their orange production in the face of this challenge (figure 22). HLB was first detected in Brazil in 2004, in the United States in 2005, and in Mexico in 2009 (García-Figuera et al., 2021). Since the first detection in the United States, U.S. orange production has fallen precipitously, with the 3-year annual average dropping from 11.4 million metric tons during 2002–04 to 4.4 million metric tons during 2018–20. Over the same period, Brazil's orange production decreased from 17.9 million metric tons to 16.9 million metric tons, while Mexico's production increased from 3.9 million metric tons to 4.7 million metric tons.

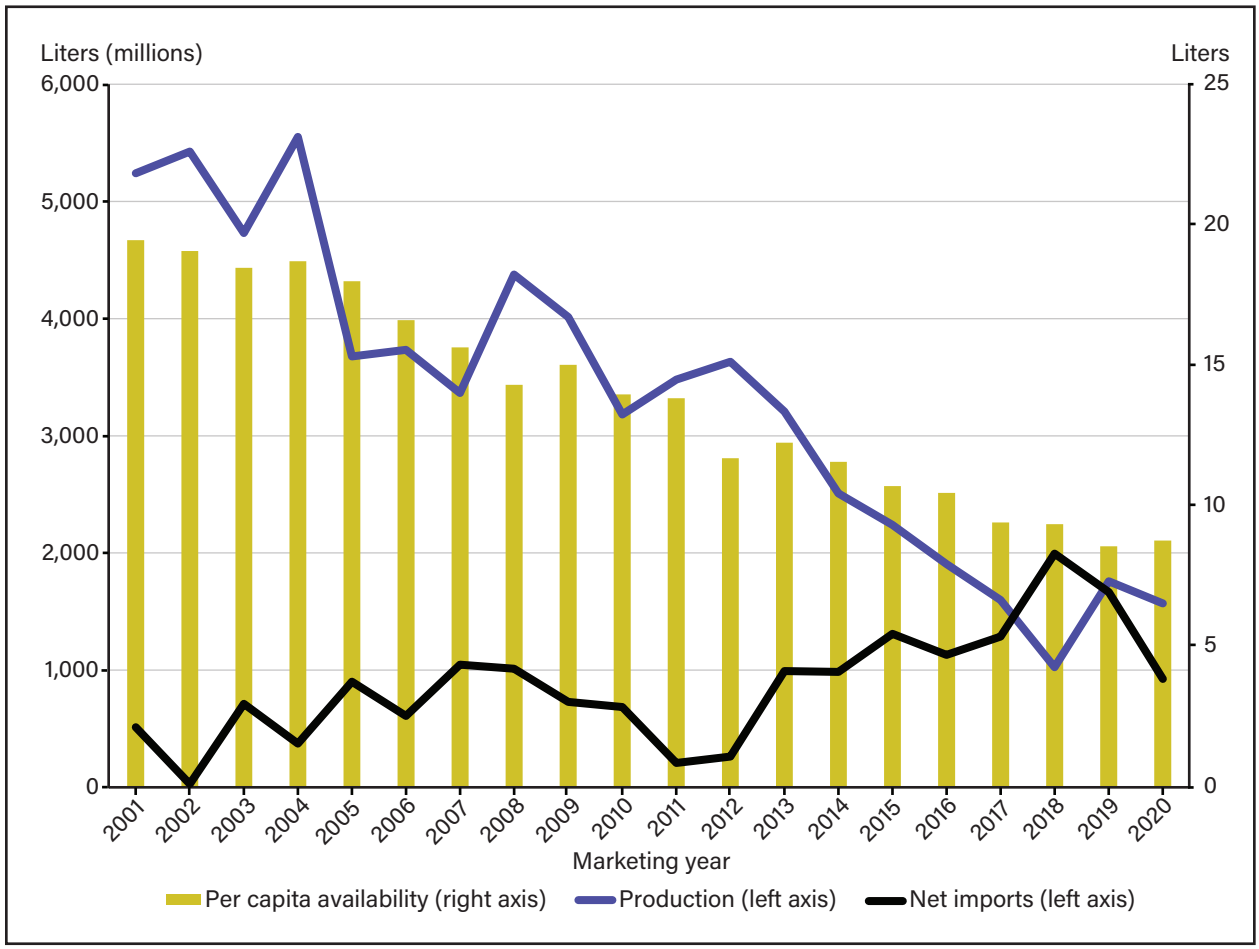
Figure 22
Orange production in Brazil, the United States, and Mexico, 2001–20



Source: USDA, Economic Research Service presentation of production data from Food and Agriculture Organization of the United Nations (2022).

On the demand side, at roughly the same time as the arrival of HLB in the United States, U.S. consumer preferences shifted partially away from orange juice as part of a broader move away from beverages containing high amounts of sugar, including beverages such as fruit juice that naturally contain sugar and beverages such as soft drinks and sports drinks that contain added sugar (Vercammen et al., 2020). This general change in preferences was motivated by research linking high levels of consumption of such beverages with obesity, diabetes, and heart disease, among other health ailments (Harvard T.H. Chan School of Public Health, 2022). In the wake of decreases in both supply and demand, the per capita availability of orange juice in the United States dropped from a 3-year annual average of 15.0 liters during marketing years 2007–09 to 8.9 liters during marketing years 2018–20 (figure 23). Additional imports made up for part of the decrease in domestic production, particularly during marketing years 2015–19.

Figure 23
Supply and use of orange juice in the United States, marketing years 2001–20



Note: Quantity of juice is measured in single-strength equivalent. The U.S. marketing year for orange juice begins on October 1. For instance, marketing year 2020 began on October 1, 2020, and ended on September 30, 2021.

Source: USDA, Economic Research Service presentation of data from USDA, Economic Research Service (2021).

U.S. import tariffs on orange juice vary by season, by the Brix value (how much dissolved sugar is in the juice), by whether the juice is frozen, and by whether the juice is concentrated. Two categories of juice constitute nearly all U.S. orange juice imports from Brazil. Frozen orange juice (HS 2009.11) made up 49.9 percent of the nominal value of these imports during 2019–21, while single-strength orange juice (SSOJ), which is of a Brix value not exceeding 20 and is neither frozen nor concentrated nor made from a juice having a degree of concentration of 1.5 or more (as determined before correction to the nearest 0.5 degree) (HS 2009.12.25), accounted for 47.9 percent. Brazil does not have an FTA with the United States, but like most countries, Brazil has PNTR with the United States. Frozen orange juice from Brazil (and other countries with PNTR

but no FTA with the United States) currently faces a U.S. import tariff of 7.85 cents per liter, while SSOJ in HS 2009.12.25 faces a tariff of 4.5 cents per liter.

Orange juice imports from Mexico consist primarily of frozen juice (71.7 percent of the total nominal value during 2019–21) and SSOJ in HS.2009.12.25 (25.3 percent). Through NAFTA, Mexico obtained duty-free status for frozen orange juice at the start of 2004 and for other types of orange juice at the start of 2008. All forms of orange juice imported from Mexico have enjoyed duty-free status in the United States since 1994. This duty-free status is continued by USMCA.

Conclusion

U.S. agricultural imports from Latin America and the Caribbean (LAC) underwent substantial growth between 2007–09 and 2019–21, increasing at a compound annual growth rate (CAGR) of 6.9 percent in terms of nominal value, 5.1 percent in terms of real value, and 4.1 percent in approximate mass. Primarily, this import growth was a story about Mexico, which borders the United States to the south. Mexico has been a free-trade partner of the United States since the start of 1994 and exports a wide variety of consumer-oriented agricultural products to the United States and other trade partners. During the period studied, U.S. agricultural imports from Mexico grew faster than corresponding imports from most other countries in LAC, including almost all the other free-trade partners of the United States. As a result, Mexico's share of U.S. agricultural imports from LAC (in terms of value) increased from 44.1 percent to 58.2 percent. U.S. agricultural imports from FTA partners in LAC (other than Mexico) grew faster than imports from non-FTA partners in LAC. U.S. agricultural imports from two U.S. free-trade partners in LAC grew quickly during the period studied (2007–09 to 2019–21): Peru has emerged over the past decade as a major exporter of fresh berries to the United States, and Nicaragua is a growing supplier of U.S. imports of beef and beef products.

Consumer-oriented products accounted for 81.5 percent of U.S. agricultural imports from LAC in 2019–21—up from 72.2 percent in 2007–09. Five products led the growth in U.S. imports of consumer-oriented agricultural products from LAC: fresh berries, tequila, fresh avocados, beef and beef products, and beer. While Mexico remained LAC's leading supplier of fresh berries to the United States throughout the period studied, Peru recently displaced Chile from the number-two position. For the other four leading consumer-oriented agricultural products, Mexico is the main foreign supplier to the United States, although other countries—for instance, Peru, the Dominican Republic, and Colombia in the case of fresh avocados and Nicaragua in beef and beef products—seek to increase their share of the U.S. market.

Behind these changes in the supplying country and product composition of U.S. agricultural imports from LAC were a variety of demand and supply determinants. Among determinants of demand, changes in the tastes and preferences of consumers were important explanatory factors, particularly with respect to tequila, beer, and orange juice. In addition, the per capita availability of fresh raspberries, fresh blueberries, and avocados more than doubled during the period studied, suggesting that imports of these products not merely competed with domestically grown crops but also helped to respond to increases in domestic demand. Advertising campaigns are sometimes used to bolster demand for specific products from certain countries, as is the case for avocados imported from Mexico.

Among the determinants of supply, several factors appear relevant to the changing composition of U.S. agricultural imports from LAC. The relative affordability of farm labor in the United States versus Mexico is a long-standing concern of U.S. agricultural producers, especially in labor-intensive activities such as fruit and vegetable production. This concern was raised again in a September 2022 request for an investigation

of seasonal and perishable products from Mexico. Suitable production technologies are available to many producers of agricultural imports from LAC, as is evidenced by the advanced breweries in Mexico that export beer to the United States. New supplying countries from LAC have entered or expanded their share of the U.S. market for certain products, including fresh berries, avocados, and beef and beef products, and the growth in the area dedicated to agave and avocado production in Mexico (during the period studied) hints at the entry of new suppliers. At the same time, agricultural producers in the United States and LAC have faced sanitary and phytosanitary challenges that limited output and affected trade, such as the disease Huanglongbing that damaged oranges and orange juice and foot-and-mouth disease in the case of beef imported from Brazil. Because these determinants of supply can concern the relative competitiveness of U.S. agricultural producers in relation to producers in LAC and other parts of the world, they are worthy topics for further study.

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