



Sugar and Sweeteners Outlook

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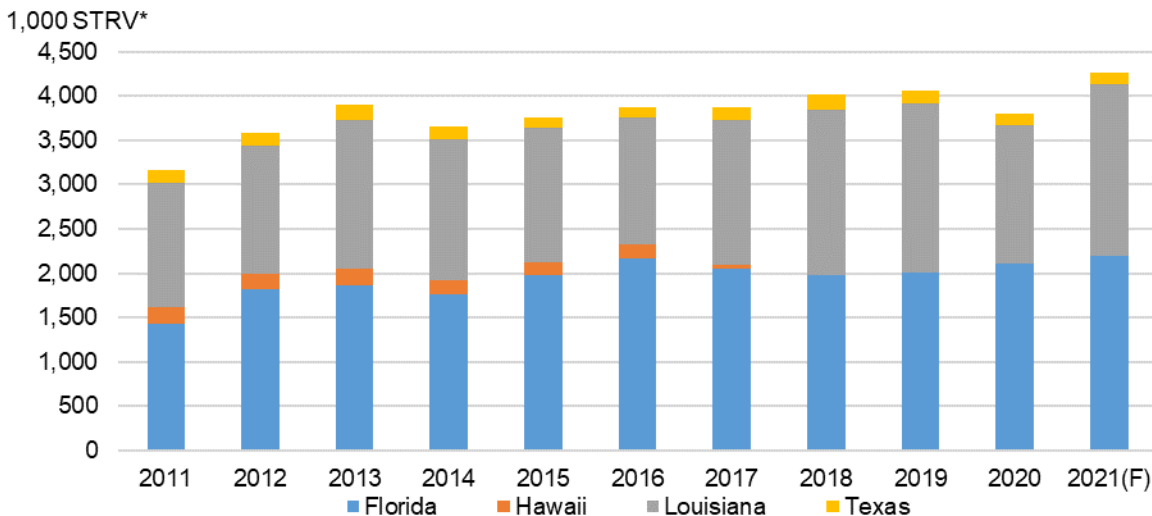
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U.S. Sugar Supplies Raised on Larger Production and Imports

Sugar production is raised in 2020/21, mainly driven by upward revisions to cane sugar production in Florida and Louisiana. Beet sugar production is also revised up with a higher expected extraction rate. Imports are forecast higher with larger projected high-tier shipments. With total supplies increased and deliveries unchanged, ending stocks and the U.S. stocks-to-use ratio are both raised. There are no changes to Mexico’s supply and utilization figures this month.

Figure 1
U.S. cane sugar production projected at record in fiscal year 2021



*Short tons, raw value
 Source: USDA, Farm Service Agency; USDA, World Agricultural Outlook Board.

United States Outlook

Production Up, Driving Total Supplies and Stocks Higher

In the USDA's February *World Agricultural Supply and Demand Estimates (WASDE)*, U.S. supplies of sugar totaled 14.333 million short tons, raw value (STRV), a 216,000-STRV increase from the previous month based on upward revisions to cane and beet sugar production as well as larger imports. Cane sugar production is projected up by 102,000 STRV to a record 4.265 million. Production is projected larger for Florida and Louisiana, with both states now expected to produce record quantities of cane sugar. Total 2020/21 imports are boosted 60,000 STRV to 3.404 million STRV based on an upward revision to high-tier imports. Deliveries are unchanged and stocks are revised upward by 216,000 STRV to 1.993 million STRV, implying a stocks-to-use ratio of 16.15 percent, up from 14.40 percent estimated last month.

Table 1: U.S. sugar: Supply and use by fiscal year (Oct./Sept.), February 2021

Items	2018/19	2019/20	2020/21 (forecast) January	2020/21 (forecast) February	2020/21 (forecast) Change
	1,000 Short tons, raw value				
Beginning stocks	2,008	1,783	1,618	1,618	0
Total production	8,999	8,149	9,156	9,312	156
Beet sugar	4,939	4,351	4,992	5,046	54
Cane sugar	4,060	3,798	4,163	4,265	102
Florida	2,005	2,106	2,135	2,200	65
Louisiana	1,907	1,566	1,886	1,931	45
Texas	147	126	142	134	-8
Hawaii	0	0	0	0	0
Total imports	3,070	4,235	3,344	3,404	60
Tariff-rate quota imports	1,541	2,152	1,721	1,721	0
Other program imports	438	432	350	350	0
Non-program imports	1,092	1,651	1,273	1,333	60
Mexico	1,000	1,376	1,163	1,163	0
High-duty	91	275	110	170	60
Total supply	14,077	14,166	14,117	14,333	216
Total exports	35	61	35	35	0
Miscellaneous	28	74	0	0	0
Deliveries for domestic use	12,231	12,414	12,305	12,305	0
Transfer to sugar-containing products for exports under re-export program	98	78	80	80	0
Transfer to polyhydric alcohol, feed, other alcohol	27	20	25	25	0
Commodity Credit Corporation (CCC) sale for ethanol, other	0	0	0	0	0
Deliveries for domestic food and beverage use	12,106	12,316	12,200	12,200	0
Total use	12,294	12,549	12,340	12,340	0
Ending stocks	1,783	1,618	1,777	1,993	216
Private	1,783	1,618	1,777	1,993	216
Commodity Credit Corporation (CCC)	0	0	0	0	0
Stocks-to-use ratio	14.50	12.89	14.40	16.15	1.75

Source: USDA, Economic Research Service, *Sugar and Sweeteners Outlook*.

Cane Sugar Production Raised on Larger Florida and Louisiana Output

The projection for cane sugar production in 2020/21 is raised 102,000 STRV as larger output for Florida and Louisiana more than offsets a slight reduction for Texas. Florida sugar production is boosted 65,000 STRV to 2.20 million based on processors' reporting of stronger sugarcane area harvested and slightly higher yields, as reported by USDA's Farm Service Agency (FSA) in its *Sweetener Market Data* publication (*SMD*). Similarly, cane sugar production in Louisiana is adjusted higher based on industry data showing that strong production in that State had extended into January. Crop year 2020/21 production is forecast at a record 1.957 million STRV, while the fiscal year is projected at 1.931 million STRV based on adjustments made for September production. Texas cane sugar production is lowered 8,000 STRV to 134,000 based on processor reported data in *SMD* indicating lower yields late in the sugarcane harvest season.

Beet Sugar Production Raised with Stronger Extraction Rate

USDA's National Agricultural Statistics Service (NASS) did not report on sugar beet production this month. As indicated in table 2, beet sugar production is raised 54,000 STRV to 5.046 million, driven by a higher anticipated extraction rate. The expected extraction rate is raised to 15.126 percent to match the cumulative extraction rate for August through December, which is shown in figure 2. Recovery rates in all regions, except the Upper Midwest, are projected to be at historically strong levels. Overall, the cumulative extraction rate to-date is well above the 10-year average and is toward the upper end of the 10-year range for this point in the year.

Table 2: Beet sugar production projection calculation, 2019/20 and 2020/21

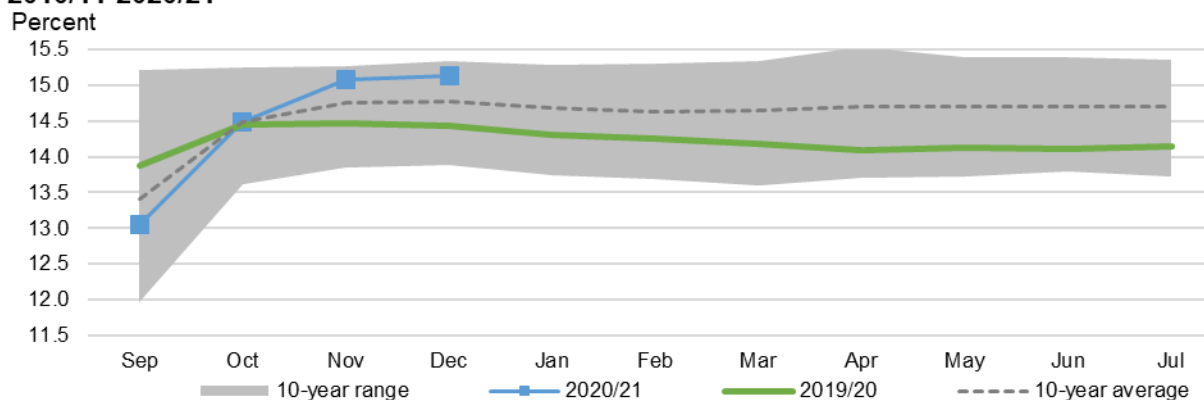
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21 January	2020/21 February
Sugar beet production (1,000 short tons) 1/	35,371	36,881	35,325	33,282	28,600	33,618	33,618
Sugar beet shrink (percent)	6.52	8.26	7.31	5.17	5.34	6.58	6.58
Sugar beet sliced (1,000 short tons)	33,066	33,834	32,742	31,561	27,072	31,405	31,405
Sugar extraction rate from slice (percent)	14.58	13.72	15.18	14.77	14.14	14.96	15.126
Sugar from beets slice (1,000 STRV) 2/	4,820	4,643	4,970	4,660	3,828	4,696	4,750
Sugar from molasses (1,000 STRV) 2/	380	352	368	352	341	360	360
Crop-year sugar production (1,000 STRV) 2/	5,201	4,995	5,338	5,012	4,169	5,056	5,110
August-September sugar production (1,000 STRV)	688	606	715	655	582	765	765
August-September sugar production of subsequent crop (1,000 STRV)	606	715	655	582	765	665	665
Sugar from imported beets (1,000 STRV) 3/	--	--	--	--	--	36	36
Fiscal year sugar production (1,000 STRV)	5,119	5,103	5,279	4,939	4,351	4,992	5,046

1/ USDA, National Agricultural Statistics Service for historical data. 2/ August-July basis. 3/ Sugar from imported beets split out for projections only, included in total once full crop-year slice is recorded. Sugar from imported beets is incorporated into total production in historical data.

Note: STRV = short tons, raw value.

Source: USDA, Economic Research Service; USDA, World Agricultural Outlook Board; USDA, Farm Service Agency.

Figure 2
Cumulative sugar extraction rate, beet sugar produced per sugarbeet sliced, by crop year, 2010/11-2020/21



Source: USDA, Economic Research Service and USDA, Farm Service Agency.

Deliveries Unchanged in 2020/21

Deliveries for 2020/21 are unchanged at 12.2 million STRV. Total deliveries in the first quarter (October-December) of 2020/21 are down 1.9 percent from last year. Deliveries from reporting companies are down 2.0 percent from last year as deliveries from cane refiners and beet processors are both estimated smaller. Non-reporter (direct consumption) imports are down 1.1 percent from the same period last year.

Table 3: Food and beverage deliveries, 2015/16 to 2020/21, October-December

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Annual change
	1,000 short tons, raw value						Percent
Beet sugar processors	1,084	1,295	1,372	1,222	1,277	1,242	-2.7
Cane sugar refiners	1,617	1,558	1,491	1,597	1,612	1,590	-1.4
Total reporters	2,700	2,854	2,863	2,818	2,889	2,832	-2.0
Non-reporter, direct consumption	127	208	180	221	107	105	-1.1
Total deliveries	2,827	3,062	3,043	3,039	2,995	2,937	-1.9
Final fiscal year deliveries	11,881	12,102	12,048	12,106	12,316	12,200	-0.9

Source: USDA, Farm Service Agency.

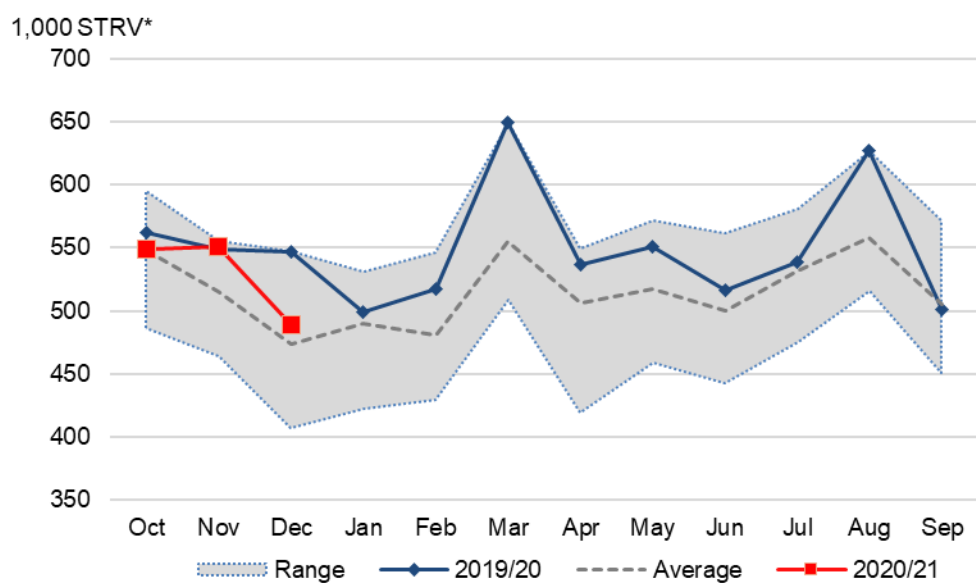
At 2.937 million STRV, October-December deliveries represent 24.1 percent of the total projected deliveries for 2020/21, as indicated in table 4. This compares with last year when these three months accounted for 24.3 percent of the total. Over the previous 10 years, first quarter deliveries represent between 23.6 percent and 25.3 percent of deliveries for the full fiscal year, with a weighted average of 24.6 percent. The slightly weak pace of deliveries to-date is mainly explained by a slowdown during December, which is partly influenced by a weaker refiners' melt during that month (figure 3). Given the high levels of raw stocks that refiners have on hand (figure 4), this trend could reverse in the coming months. Furthermore, sugar beet processors have much larger inventories on-hand than at the same point last year, as indicated in figure 5.

Table 4: Pace of U.S. deliveries through first quarter of fiscal year

	<i>Oct-Dec</i>	<i>Fiscal year</i>	<i>Percent of total</i>
FY11	2,791	11,193	24.9
FY12	2,716	11,141	24.4
FY13	2,833	11,511	24.6
FY14	2,897	11,786	24.6
FY15	2,815	11,921	23.6
FY16	2,827	11,881	23.8
FY17	3,062	12,102	25.3
FY18	3,043	12,048	25.3
FY19	3,039	12,106	25.1
FY20	2,995	12,316	24.3
FY21 (forecast)	2,937	12,200	24.1
10-year average	2,902	11,800	24.6

Source: USDA, Farm Service Agency, Sweetener Market Data; USDA, Economic Research Service.

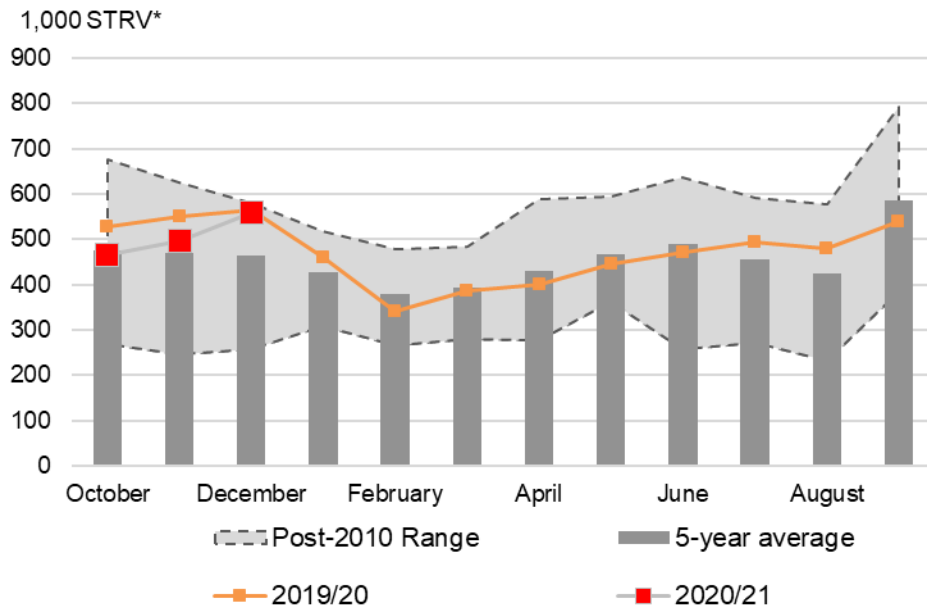
**Figure 3
Sugarcane refiners' melt, monthly, 2010/11 to 2020/21**



*Short tons, raw value

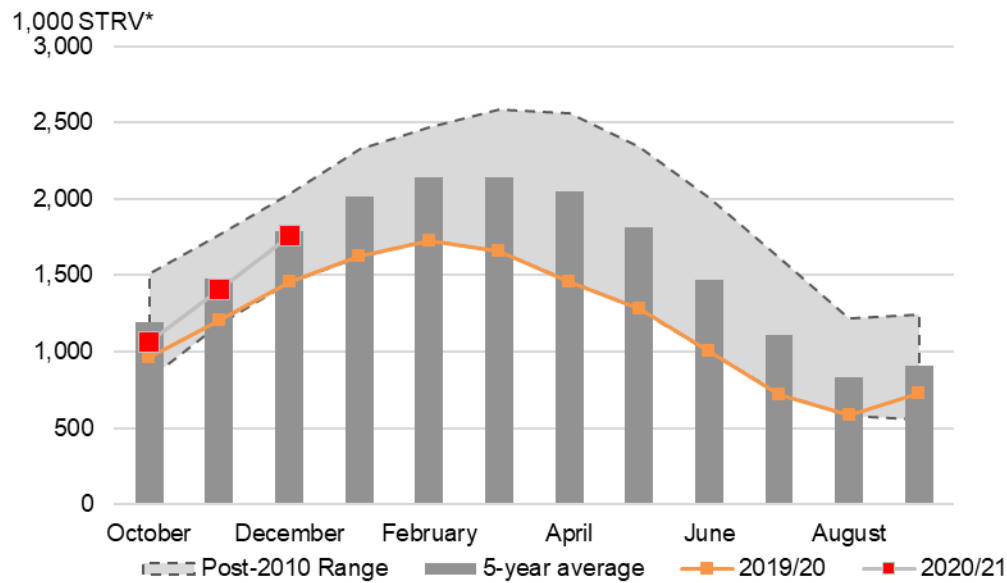
Source: USDA, Farm Service Agency.

Figure 4
Sugarcane refiners raw sugar inventories, monthly, 2015/16 to 2020/21



*Short tons, raw value
 Source: USDA, Farm Service Agency.

Figure 5
Sugarbeet processors' total sugar inventories, monthly, 2015/16 to 2020/21



*Short tons, raw value
 Source: USDA, Farm Service Agency.

2020/21 Imports Raised on Larger High-Tier Shipments

Total projected 2020/21 imports are raised 60,000 STRV to 3.404 million STRV. High-tier imports account for all of the increase and are now projected at 170,000 STRV. Table 5 shows that for the 3rd tranche of the specialty sugar tariff-rate quota (TRQ) that opened on January 22, 2021, 169,137 metric tons raw value (MTRV) were submitted against a quota limit of 40,000 MTRV, leaving 129,137 MTRV blocked and presumed to be held in bond. If we assume that all this sugar is submitted for the next two tranches, which combined total 60,000 MTRV, there would still be 69,137 MTRV left over. While there may be opportunities to submit some of this sugar for other tariff-rate quotas, the best option for much of this sugar would appear to be importing it at the over-quota duty rate of 16.23 cents per pound.

Table 5: Specialty sugar tariff-rate quota, FY 2021 tranches and prorated quantities

Tranche Number	Quantity 1/	Opening Date	Pro-rata	Submitted 1/	Blocked 2/
Tranche 1	1,656	10/1/2020	13.94894%	10,825	9,315
Tranche 2	40,000	10/8/2020	33.19446%	120,159	80,273
Tranche 3	40,000	1/22/2021	23.64947%	169,137	129,137
Tranche 4	30,000	4/15/2021	n/a	n/a	n/a
Tranche 5	30,000	7/15/2021	n/a	n/a	n/a
Total	141,656				

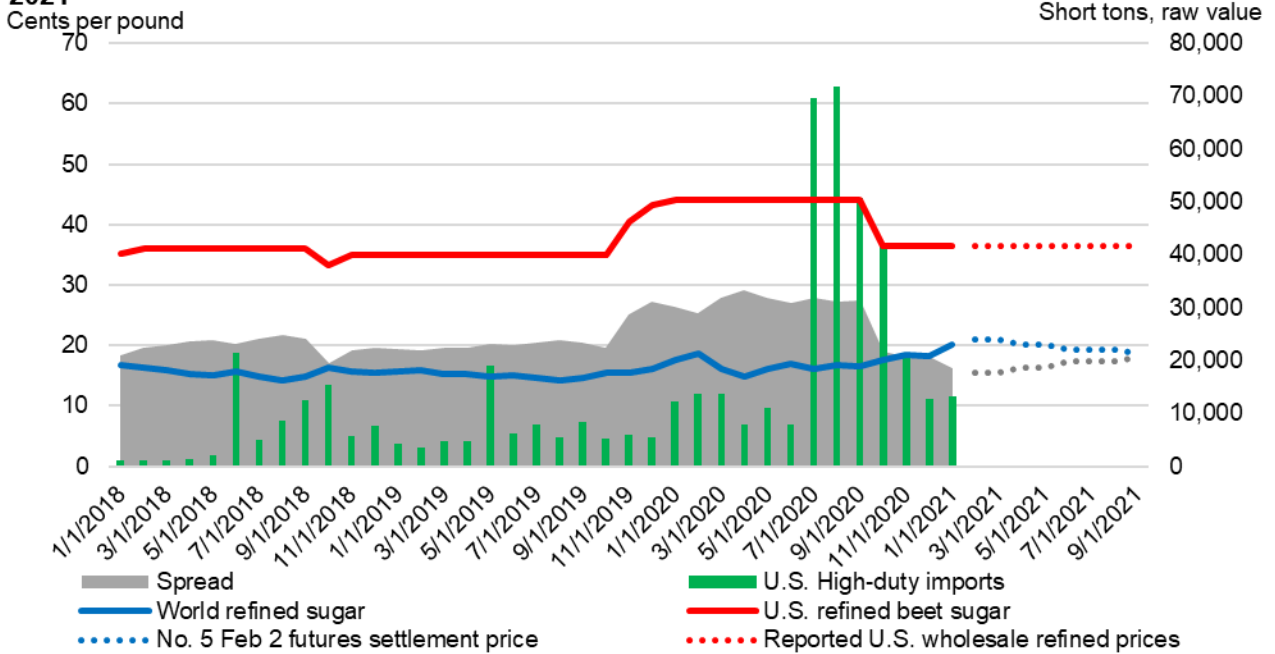
Source: U.S. Customs and Border Protection.

1/ Units are metric tons raw value (MTRV).

2/ These quantities, in MTRV, are assumed held in bond until a subsequent Tranche opens.

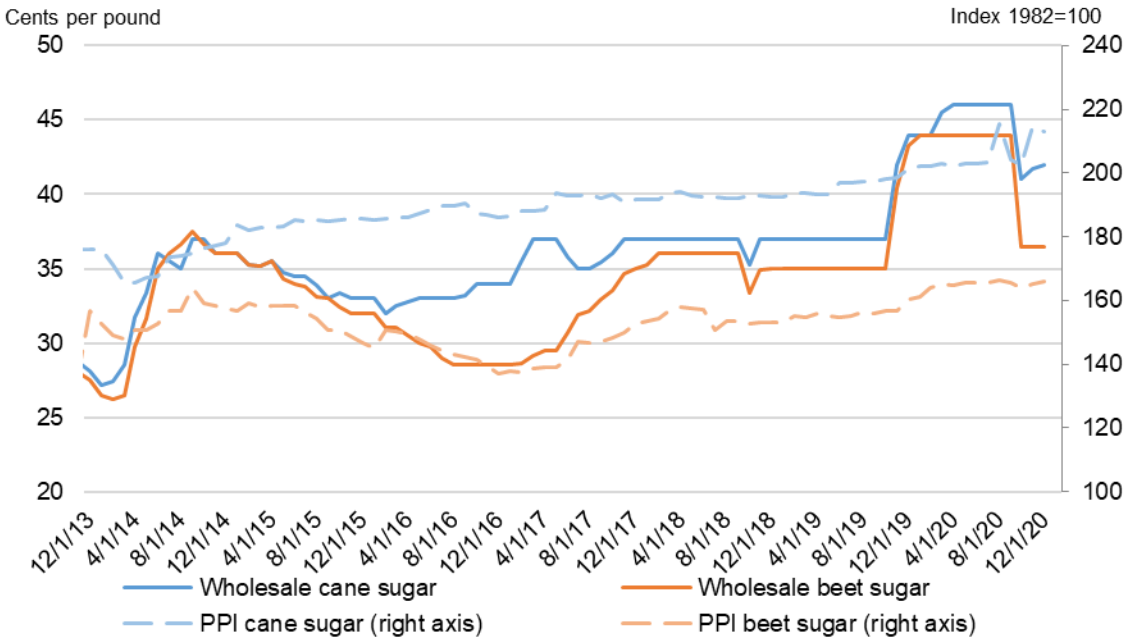
Figure 6 shows that high-duty imports surged in July and August to more than 70,000 STRV each month, then declined to about 50,000 STRV in September and about 40,000 STRV in October. The spread between the U.S. refined beet sugar and world refined sugar prices was around 28 cents per pound from July through September, then fell sharply to less than 20 cents per pound as the U.S. beet sugar price declined based on projections of a much-improved 2020/21 beet crop. Based on forward price indications, the spread would remain below 20 cents per pound for the next 6 months. Figure 7 shows the decline in October of both the refined beet and refined cane prices as quoted by *Milling and Baking News*. Note that for raw sugar, the tariff is set at 33.87 cents per kilogram or 15.4 cents per pound; for refined sugar, it is set at 35.74 cents per kilogram or 16.21 cents per pound. Depending upon the country of origin, the usual cost of freight and associated logistics can be as low as 2-4 cents per pound for raw sugar and 5-6 cents per pound for refined sugar. Most of the sugar that is in bond after being blocked from the specialty sugar TRQ is organic sugar, which carries a premium price. Therefore, the reduced incentive to import at the high-duty rate shown in figure 6 would not likely be applicable for organic sugar.

Figure 6
U.S. and world refined sugar prices, monthly, January 2018 to September 2021



Source: USDA, Economic Research Service.

Figure 7
Refined sugar prices, wholesale and Producer Price Indexes, monthly



Note: Producer Price Index (PPI).

Source: USDA, Economic Research Service.

Mexico Outlook

Outlook Unchanged

The USDA's February 2021 *World Agricultural Supply and Demand Estimates (WASDE)* publication forecasts Mexico's sugar production at 5.95 million metric tons, actual value (MT), unchanged from last month. Mexico's National Committee for the Sustainable Development of Sugarcane (CONADESUCA) recently published its second estimate of sugar production, lowering projected output from 6.14 million MT to 6.06 million MT. This change was mainly attributed to lower expected sugarcane production due to reduced area and yield, while the expected extraction rate was lowered slightly as well. The *WASDE* forecast is about 2 percent lower, mainly due to a smaller projection for area harvested – about 785,000 hectares (compared with CONADESUCA's estimate of 805,491). This year's sugar production remains somewhat hampered by pest infestations as well as lingering effects from last year's severe drought. Sucrose levels are reported lower in Michoacán based on frost damage, which affected more than 100,000 MT of sugarcane. Campeche and Veracruz are experiencing harvest delays due to extended rains, but quality and production are not expected to be impacted.

As of February 6, all 49 Mexican sugarcane mills have started production with total accumulated sugar produced estimated around 2.04 million MT, compared with 1.617 million at the same point last year. The pace of sugar production is slightly behind what had been anticipated by CONADESUCA, but roughly in line with the years 2017/18 and 2018/19 (figure 8). Area harvested to date is 293,592 hectares, up from 258,168 at the same point last year. Sugarcane yields are also up slightly from last year, but down compared to the previous 2 years (figure 9). Note that sugarcane yields tend to decline as the season progresses. The cumulative sugar extraction rate from the sugarcane is higher than at the same point in 2018/19 and 2019/20, but lower than 2017/18 (figure 10). In contrast to sugarcane yields, extraction rates tend to increase throughout the season.

Total exports in 2020/21 are unchanged at 1.490 million MT. Exports to the United States remain at 995,065 MT based on the calculation of U.S. Needs made by the Commerce Department derived from the sugar balance sheet in the December 2020 *WASDE*, while exports to other countries are unchanged at 494,442 MT as a residual. Mexico's ultimate Export Limit for 2020/21 will be set by the Commerce Department's calculation of U.S. Needs from the March *WASDE*. The limit will be set as the greater of the March calculation of U.S. Needs or 80 percent of the December calculation of U.S. Needs.

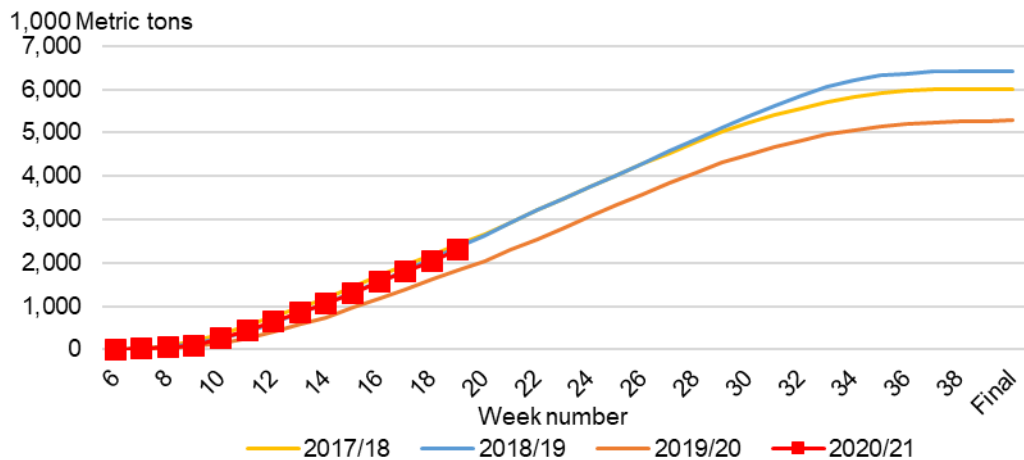
Table 5: Mexico sugar supply and use 2018/19 - 2019/20 and projected 2020/21, February 2021

Items	2018/19	2019/20	2020/21 (forecast) January	2020/21 (forecast) February	2020/21 (forecast) Change
	1,000 metric tons, actual weight				
Beginning stocks	1,395	1,169	858	858	0
Production	6,426	5,278	5,950	5,950	0
Imports	85	77	105	105	0
Imports for consumption	22	55	40	40	0
Imports for sugar-containing product exports, IMMEX 1/, other	63	23	65	65	0
Total supply	7,905	6,524	6,913	6,913	0
Disappearance					
Human consumption	4,092	4,101	4,073	4,073	0
For sugar-containing product exports (IMMEX)	460	352	415	415	0
Other deliveries and end-of-year statistical adjustment	-20	1	0	0	0
Total	4,532	4,455	4,488	4,488	0
Exports	2,204	1,212	1,490	1,490	0
Exports to the United States and Puerto Rico	856	1,177	995	995	0
Exports to other countries	1,348	35	494	494	0
Total use	6,737	5,667	5,978	5,978	0
Ending stocks	1,169	858	935	935	0
	1,000 metric tons, raw value				
Beginning stocks	1,478	1,239	909	909	0
Production	6,811	5,595	6,307	6,307	0
Imports	90	82	111	111	0
Imports for consumption	23	58	42	42	0
Imports for sugar-containing product exports (IMMEX)	67	24	69	69	0
Total supply	8,380	6,916	7,327	7,327	0
Disappearance					
Human consumption	4,337	4,347	4,317	4,317	0
For sugar-containing product exports (IMMEX)	488	373	440	440	0
Other deliveries and end-of-year statistical adjustment	-21	1	0	0	0
Total	4,804	4,722	4,757	4,757	0
Exports	2,337	1,285	1,579	1,579	0
Exports to the United States and Puerto Rico	908	1,248	1,055	1,055	0
Exports to other countries	1,429	37	524	524	0
Total use	7,141	6,007	6,336	6,336	0
Ending stocks	1,239	909	991	991	0
Stocks-to-human consumption (percent)	28.6	20.9	23.0	23.0	0.0
Stocks-to-use (percent)	17.3	15.1	15.6	15.6	0.0
High-fructose corn syrup (HFCS) consumption (dry weight)	1,528	1,388	1,377	1,377	0

1/ IMMEX = Industria Manufacturera, Maquiladora y de Servicios de Exportación.

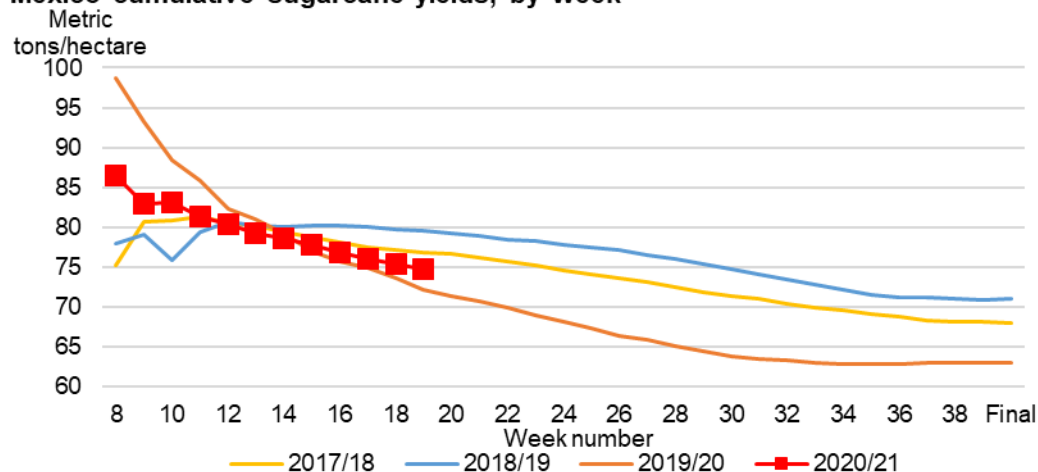
Sources: USDA, World Agricultural Outlook Board; USDA, Economic Research Service; CONADESUCA.

Figure 8
Mexico cumulative sugar production, by week



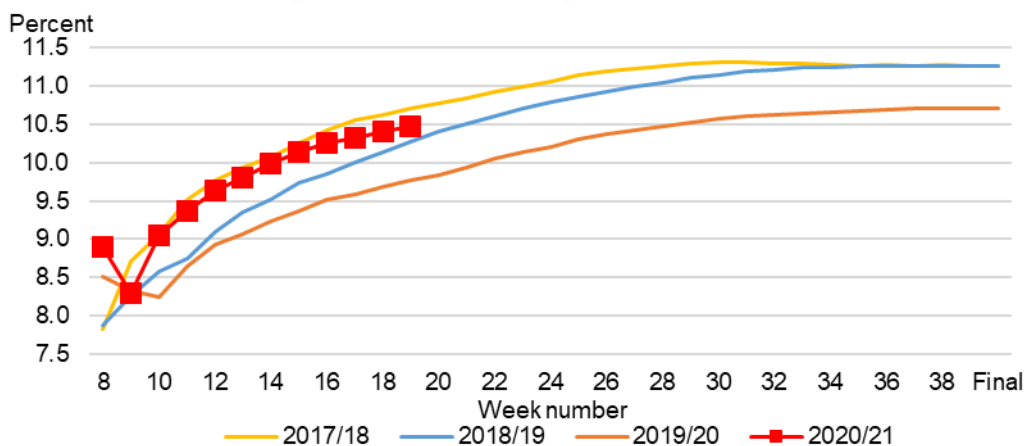
Source: CONADESUCA.

Figure 9
Mexico cumulative sugarcane yields, by week



Source: CONADESUCA.

Figure 10
Mexico cumulative sugar extraction rate, by week



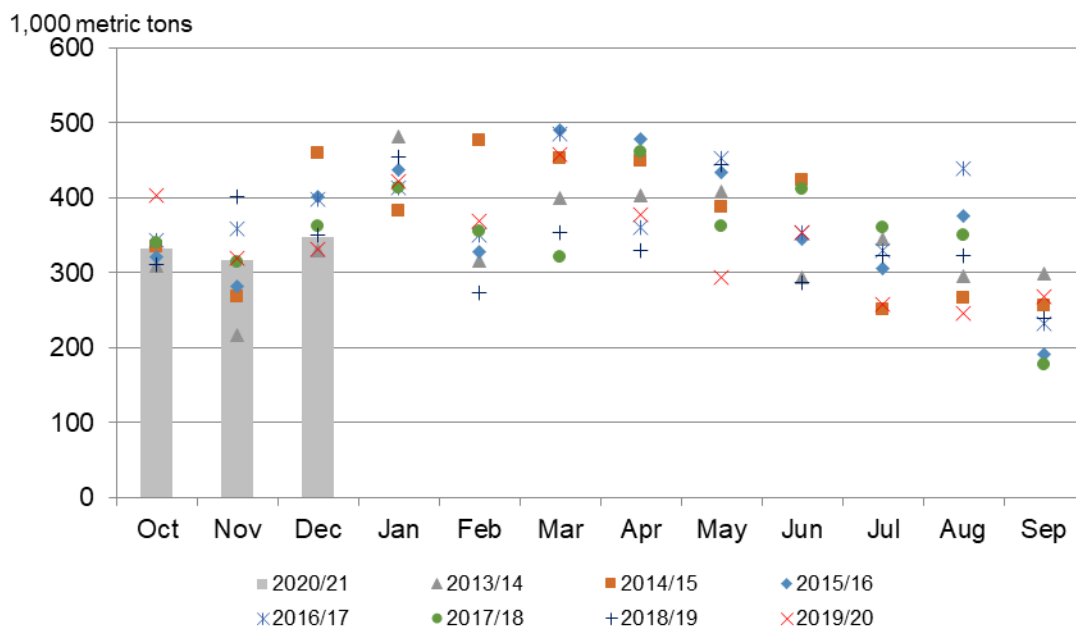
Source: CONADESUCA.

Deliveries Unchanged and On Target

At 4.073 million MT, deliveries for human use are unchanged from the previous month's projection. Deliveries of high-fructose corn syrup (HFCS) are also unchanged at 1.377 million MT. During October through December, the pace of deliveries for both sugar and HFCS is slightly down from the same period last year but still strong enough to realize the current demand forecasts given that first quarter deliveries of both sweeteners tends to account for less than 25 percent of the full year deliveries (table 7). Over the past several years, deliveries of both products have trended lower, driven partly by Government initiatives aimed at reducing sweetener consumption (figure 12).

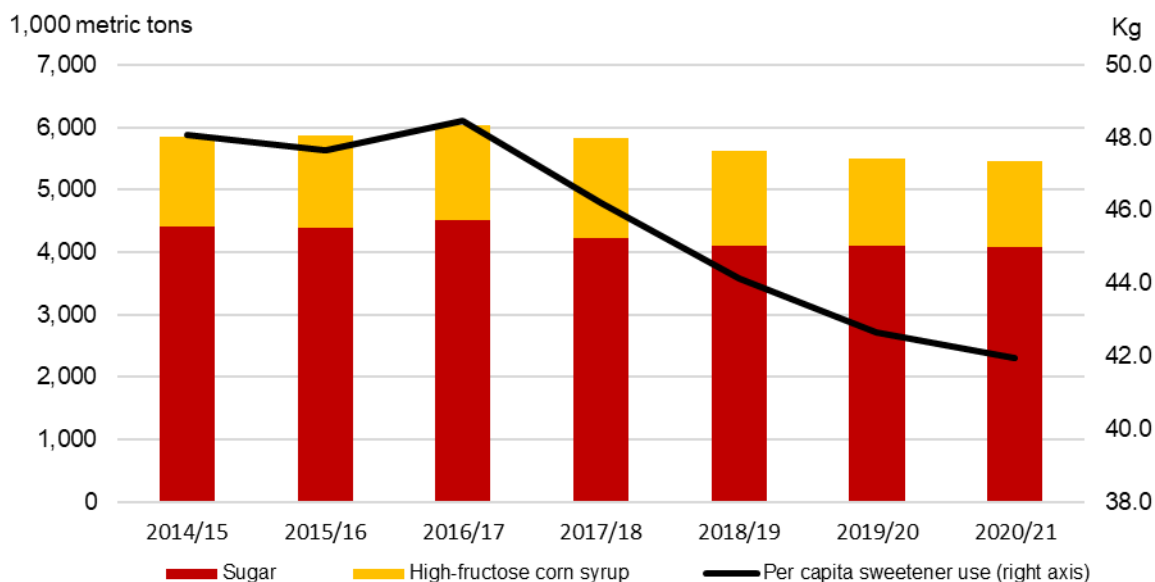
Mexico's 2020/21 ending stocks are unchanged at 935,000 MT based on the calculated stock level needed to arrive at 2.5 months of consumption, the target that domestic authorities use to monitor and manage the domestic program.

Figure 11
Mexican sugar deliveries for consumption, monthly, 2013/14 to 2020/21



Source: CONADESUCA.

Figure 12
Mexico sweetener consumption by year



Source: USDA, World Agricultural Outlook Board.

Table 7: Pace of Mexico sweetener deliveries through first quarter of fiscal year

	<i>Sugar, metric tons</i>			<i>High-fructose corn syrup, metric tons dry weight</i>		
	<i>Oct-Dec</i>	<i>Fiscal year</i>	<i>Percent of total</i>	<i>Oct-Dec</i>	<i>Fiscal year</i>	<i>Percent of total</i>
FY11	943,070	3,949,983	23.9	375,334	1,635,114	23.0
FY12	918,304	4,135,434	22.2	407,435	1,720,655	23.7
FY13	896,286	4,286,867	20.9	410,693	1,567,199	26.2
FY14	855,555	4,098,073	20.9	353,798	1,372,266	25.8
FY15	1,061,696	4,408,312	24.1	345,016	1,444,035	23.9
FY16	1,004,863	4,386,937	22.9	348,111	1,481,846	23.5
FY17	1,100,053	4,515,242	24.4	347,730	1,521,676	22.9
FY18	1,015,934	4,228,369	24.0	394,651	1,593,040	24.8
FY19	1,063,493	4,091,920	26.0	355,068	1,528,397	23.2
FY20	1,055,323	4,101,128	25.7	346,158	1,387,744	24.9
FY21 (forecast)	995,050	4,073,000	24.4	337,739	1,377,000	24.5
10-year average	991,784	4,206,842	23.6	365,612	1,511,725	24.2

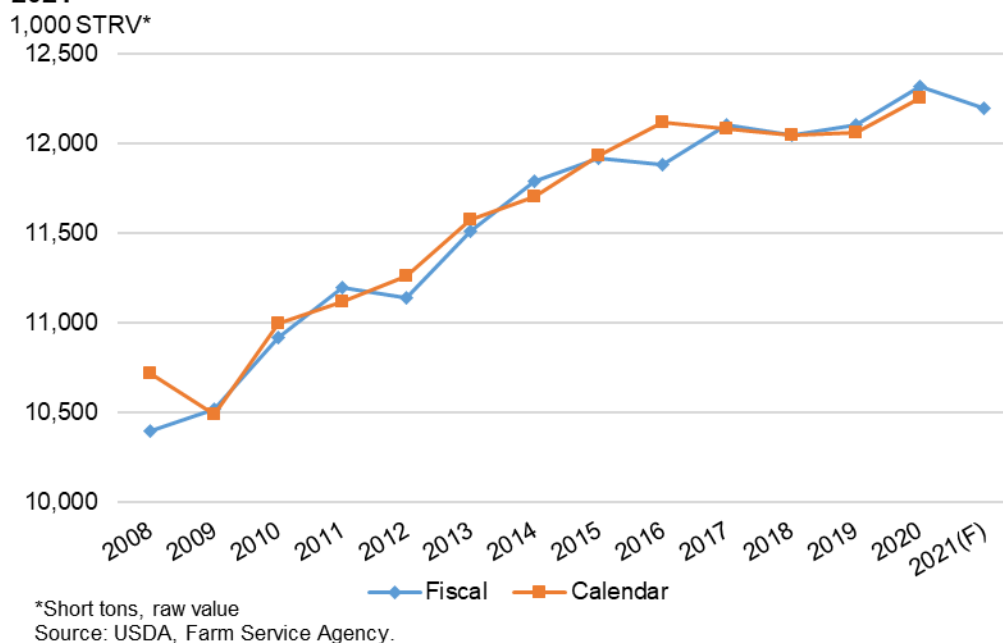
Source: CONADESUCA.

Special Article: Uptick in U.S. Domestic Sugar Deliveries

U.S. Sugar Deliveries Strong in 2020 in Spite of COVID-19

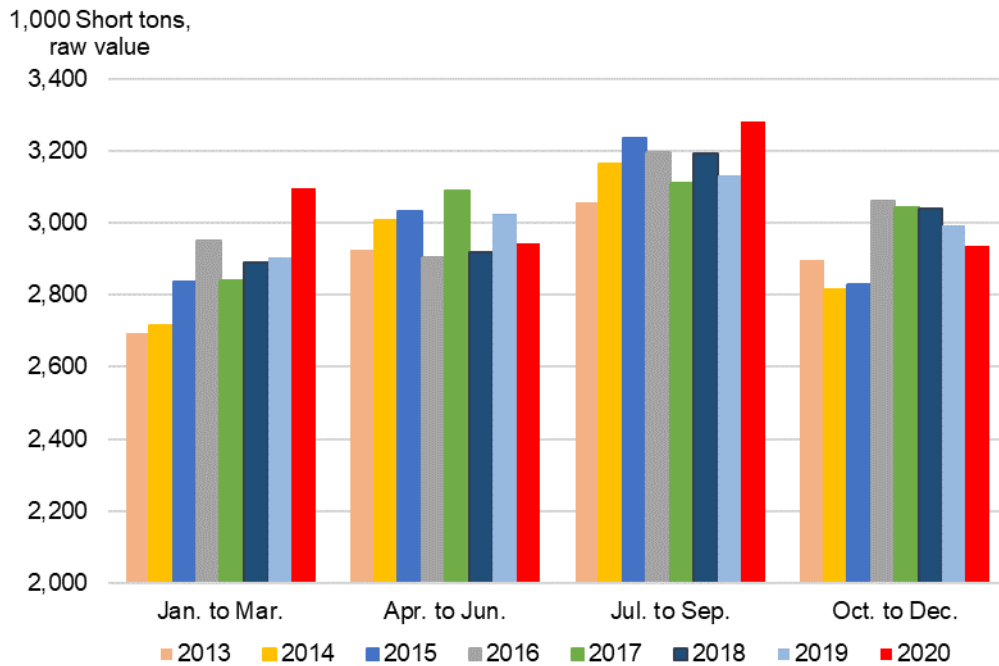
U.S. food and beverage sugar deliveries reached record levels for both calendar and fiscal 2020, as shown in Figure 13. This uptick in deliveries follows 3 years when deliveries had been relatively flat. Although overall deliveries were strong, COVID-19 and the reduced availability of beet sugar due to damage to the sugar beet crop had significant effects on the timing and categories of deliveries.

Figure 13
Total U.S. sugar deliveries, fiscal and calendar year, 2008 to 2021



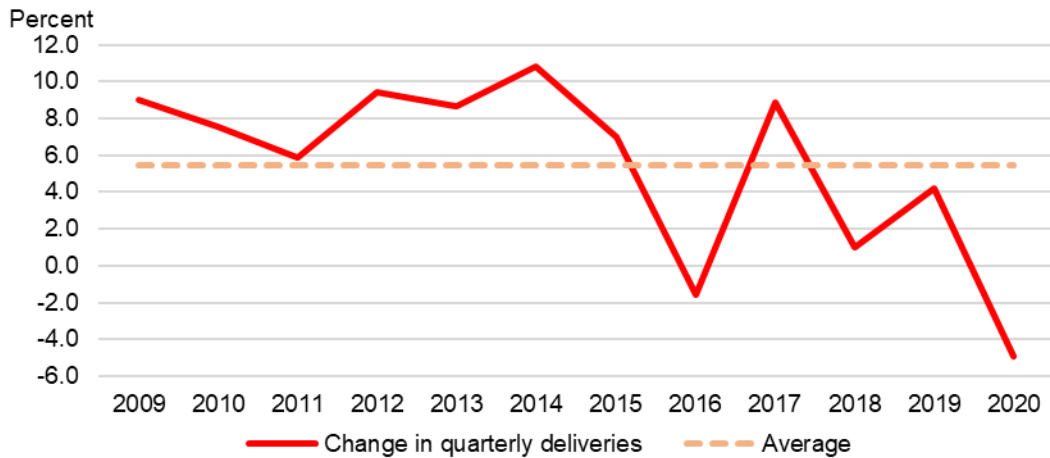
As seen in figure 14 below, deliveries during the first quarter of 2020 were the highest on record, but this was followed by a huge drop in the second quarter, which was down 5 percent from the first quarter and 3 percent lower than the second quarter of the previous year. Figure 15 demonstrates that this is a clear aberration from the typical pattern of deliveries as second quarter deliveries have usually been larger than first quarter. Lockdowns related to COVID-19 appear to have pressured deliveries lower in the second quarter. That said, the contraction in demand was short lived as third quarter deliveries surged to the highest on record.

Figure 14
Total U.S. sugar deliveries, quarterly, calendar years 2013-20



Source: USDA, Farm Service Agency.

Figure 15
Second quarter change in deliveries, relative to first quarter



Source: USDA, Farm Service Agency.

Consumer-Sized Package Deliveries Surged in March

Table 8 shows crystalline refined sugar delivered in consumer-sized packages and in packages of 50 pounds or greater, excluding bulk and liquid sugar and sugar delivered by non-reporters. For consumer-sized packages there was a COVID-induced surge in March 2020 to a record

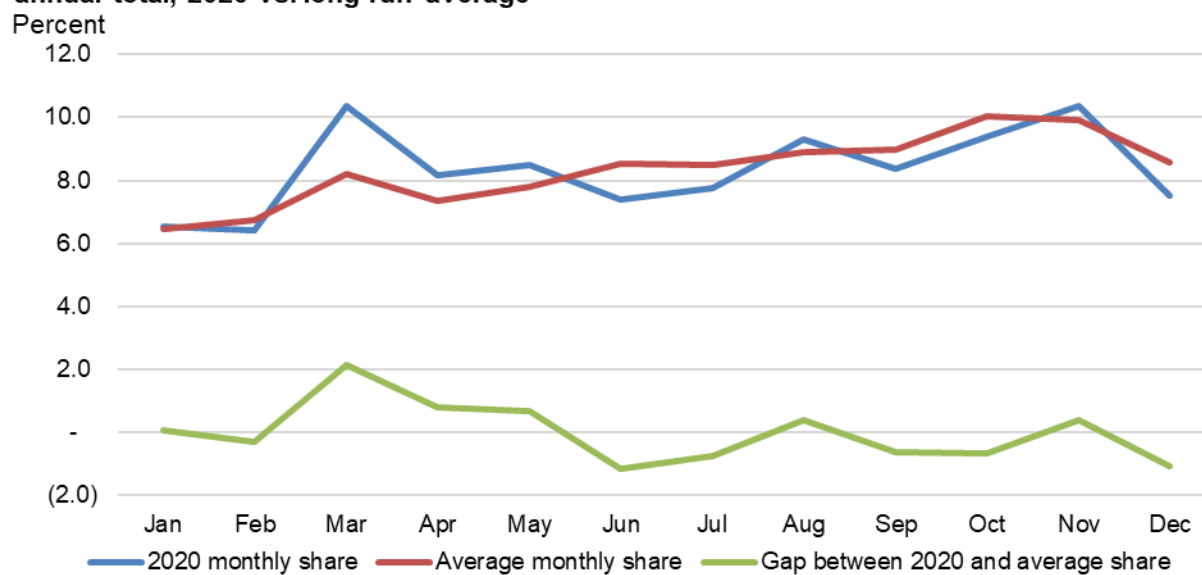
239,356 short tons, raw value (STRV), over 50,000 STRV above the 5-year March average. But the surge dissipated quickly, with April deliveries below the previous year, and the remaining months not far from their averages. Full-year 2020 consumer-sized package deliveries of 2.3 million STRV were about 101,000 above 2019, bucking the declining trend of the previous 3 years. The March 2020 share of the full-year 2020 was over 10 percent, about 2 percent higher than the 5-year average of 8 percent (figure 16). Also shown in table 8, deliveries in packages of 50 pounds and greater dropped tremendously in April 2020 as industrial demand weakened with consumers avoiding dining out. This category of deliveries recovered throughout the year and ended up at 2.8 million STRV, down 6 percent from the previous year and 2 percent lower than the 5-year average.

Table 8: U.S. sugar deliveries by reporters, crystalline, by package size

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total	Change from prior year
<i>Short tons raw value</i>														
<i>Consumer-sized packages</i>														
2015	152,670	157,359	196,357	170,659	184,588	208,230	203,839	208,597	222,802	226,663	214,356	199,114	2,345,234	
2016	162,481	176,281	198,634	175,204	190,947	199,847	187,701	223,469	215,241	218,160	228,144	180,545	2,356,654	11,420
2017	153,158	145,034	185,568	163,022	195,757	198,616	186,078	221,812	216,698	235,037	228,700	172,405	2,301,885	(54,769)
2018	162,642	157,167	190,607	162,324	195,195	192,959	195,683	214,059	187,779	235,771	215,832	168,556	2,278,574	(23,311)
2019	164,211	148,729	173,638	172,570	171,233	193,385	180,247	184,746	214,596	206,689	209,509	186,860	2,206,413	(72,161)
2020	150,962	148,327	239,356	188,318	195,659	170,350	179,027	214,410	193,198	216,305	238,847	173,201	2,307,960	101,547
<i>Packages 50 lbs and greater</i>														
2015	209,990	194,684	236,962	220,967	220,257	236,233	230,296	224,822	233,008	236,875	221,534	222,881	2,688,509	
2016	201,459	218,148	241,443	229,206	245,472	260,720	239,902	265,753	263,105	256,611	252,085	228,138	2,902,042	213,533
2017	236,668	216,852	262,542	230,515	251,352	267,525	240,224	260,304	229,023	257,005	244,243	225,990	2,922,243	20,201
2018	237,755	218,896	245,519	234,009	253,961	253,615	251,872	268,590	238,813	272,638	243,639	212,745	2,932,052	9,809
2019	242,583	222,248	253,199	248,227	247,920	257,457	247,870	256,161	273,485	275,224	249,494	250,732	3,024,600	92,548
2020	229,904	224,341	279,081	195,324	220,762	239,026	235,894	251,667	240,372	249,543	254,109	219,920	2,839,943	(184,657)

Source: USDA, Farm Service Agency, *Sweetener Market Data*.

Figure 16
U.S. sugar deliveries in consumer-size packages, monthly shares of annual total, 2020 vs. long-run average



USDA, Farm Service Agency, *Sweetener Market Data*.

Lower Beet Sugar Deliveries a Key Feature of 2020

While COVID-related lockdowns were a major contributor to reduced second quarter demand, the catastrophic sugar beet crop of the previous year also had a clear impact on the market. Deliveries of sugar by beet processors were down to the lowest level for any quarter in more than 20 years. Some beet processors, unable to access sufficient sugar supplies, had declared force majeure on some contracts. With a much larger 2020 sugar beet crop and good early harvest conditions, processors set out to compensate for reduced deliveries with an early start to processing the new crop. Consequently, third quarter deliveries by sugar beet processors recovered back to nearly normal levels, albeit still below the levels of recent years.

Table 9: U.S. deliveries of cane and beet sugar, and direct consumption imports

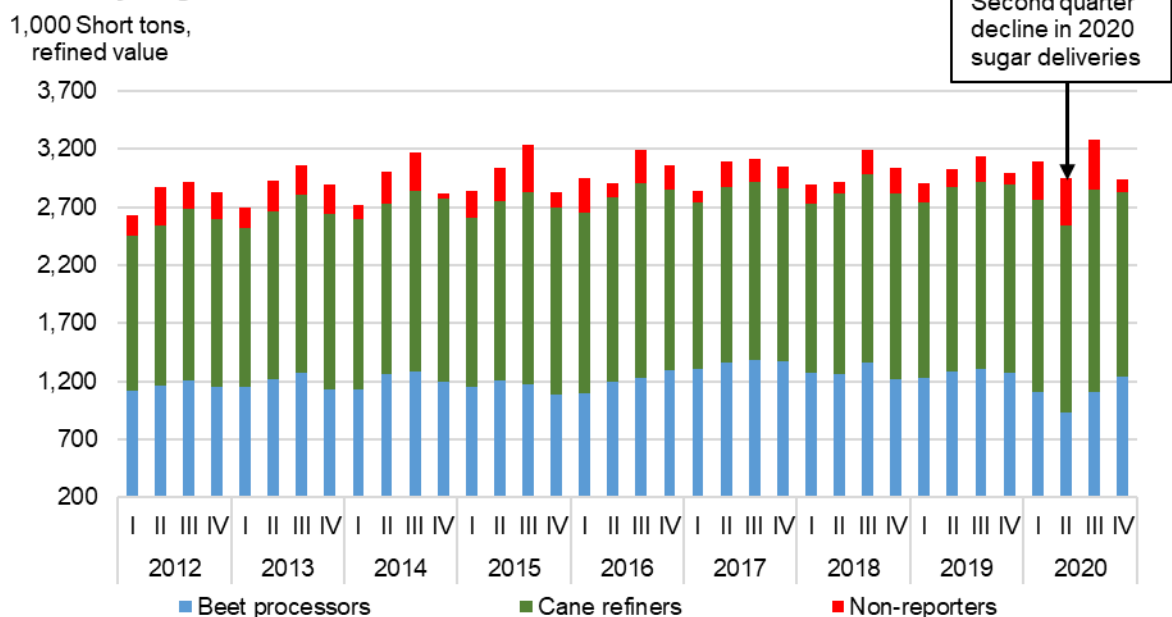
	1st Q.	2nd Q.	3rd Q.	4th Q.	Calendar Year	Change from previous year
<i>Short tons raw value</i>						
U.S. beet sugar for domestic consumption:						
2015	1,152	1,208	1,171	1,084	4,614	na
2016	1,096	1,192	1,226	1,295	4,809	196
2017	1,305	1,362	1,386	1,372	5,425	615
2018	1,273	1,264	1,362	1,222	5,121	-304
2019	1,233	1,284	1,306	1,277	5,099	-21
2020	1,105	931	1,108	1,242	4,387	-712
Cane sugar for domestic consumption:						
2015	1,460	1,547	1,662	1,617	6,285	na
2016	1,558	1,592	1,678	1,558	6,386	100
2017	1,440	1,511	1,535	1,491	5,976	-409
2018	1,456	1,549	1,617	1,597	6,219	242
2019	1,509	1,585	1,612	1,612	6,317	98
2020	1,656	1,611	1,737	1,590	6,593	276
Imports by non-reporters						
2015	225	281	402	127	1,034	na
2016	298	121	293	208	921	-113
2017	94	217	191	180	682	-239
2018	163	107	215	221	705	24
2019	163	158	217	107	645	-60
2020	334	402	436	105	1,277	632
Total sugar for domestic consumption:						
2015	2,837	3,035	3,235	2,827	11,933	na
2016	2,952	2,905	3,196	3,062	12,115	182
2017	2,838	3,090	3,112	3,043	12,083	-33
2018	2,891	2,920	3,194	3,039	12,045	-38
2019	2,905	3,027	3,135	2,995	12,062	17
2020	3,096	2,944	3,281	2,937	12,258	196

Source: USDA, Farm Service Agency, *Sweetener Market Data*.

The sharp decline in the availability of beet sugar tightened U.S. sugar supplies in the early months of 2020. Figure 17 shows the quarterly breakdown of deliveries since 2015 by beet processors, cane refiners, and non-reporting companies. The second and third quarters were the third-highest and highest quarters in history for imports by non-reporters, respectively. This rapid pace was due in part to action by USDA to increase the refined sugar TRQ in April, but also due to significant high-tier imports. A historically large gap between U.S. and world prices facilitated some of these imports.

Imports by non-reporting companies are recorded as being delivered immediately, since there is no information about their stocks. If some of these second- and third-quarter imports were held as stocks into FY 2021 (i.e., past September 30), then the recorded level of total U.S. deliveries for FY 2020 might be inaccurately skewed upwards. But calendar year 2020 total U.S. deliveries are also at a record, and any short-run stocks buildup from the surge in non-reporter imports during April-September would likely have been dissipated by December.

Figure 17
Quarterly sugar deliveries

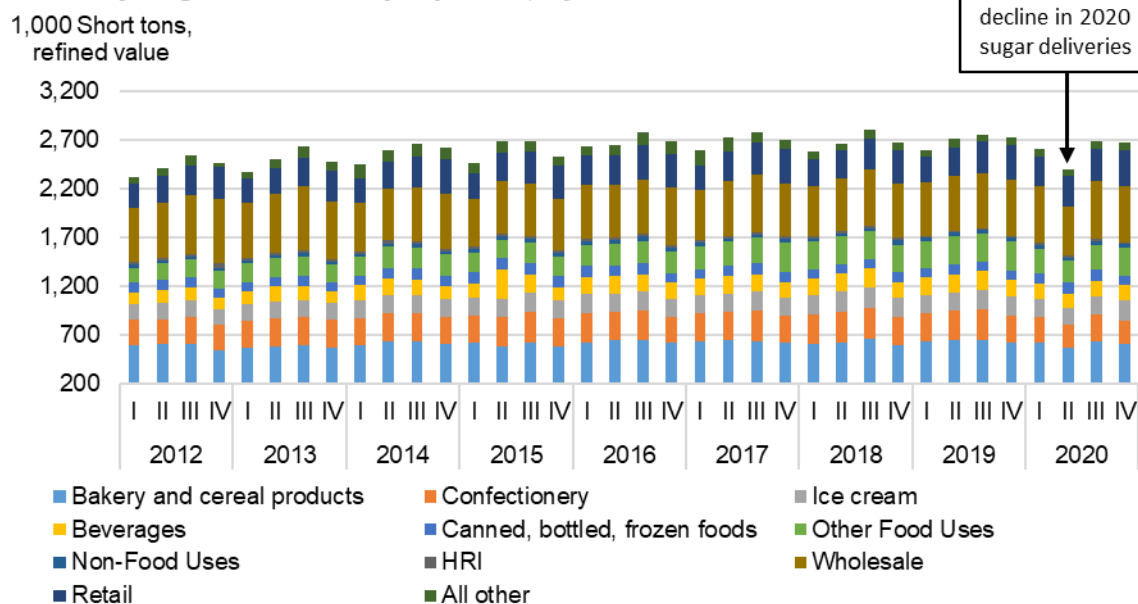


Source: USDA, Farm Service Agency, Sweetener Market Data (SMD).

The reduced beet sugar deliveries in early 2020 impacted many sectors. Figure 18 below indicates the quarterly deliveries by reporting companies to several different types of end users. Nearly every type of end user experienced some level of decline in second quarter deliveries. The only exception was deliveries to canned, bottled, and frozen foods, which were nearly unchanged in that quarter. It appears that sugar demand for at-home use was relatively resilient during the lockdown period. It should be noted that deliveries by non-reporting

companies are not reflected in this data, and that it is not known to which sectors that sugar was ultimately delivered.

Figure 18
Quarterly sugar deliveries by reporters, by end use



Source: USDA, Farm Service Agency, Sweetener Market Data (SMD).

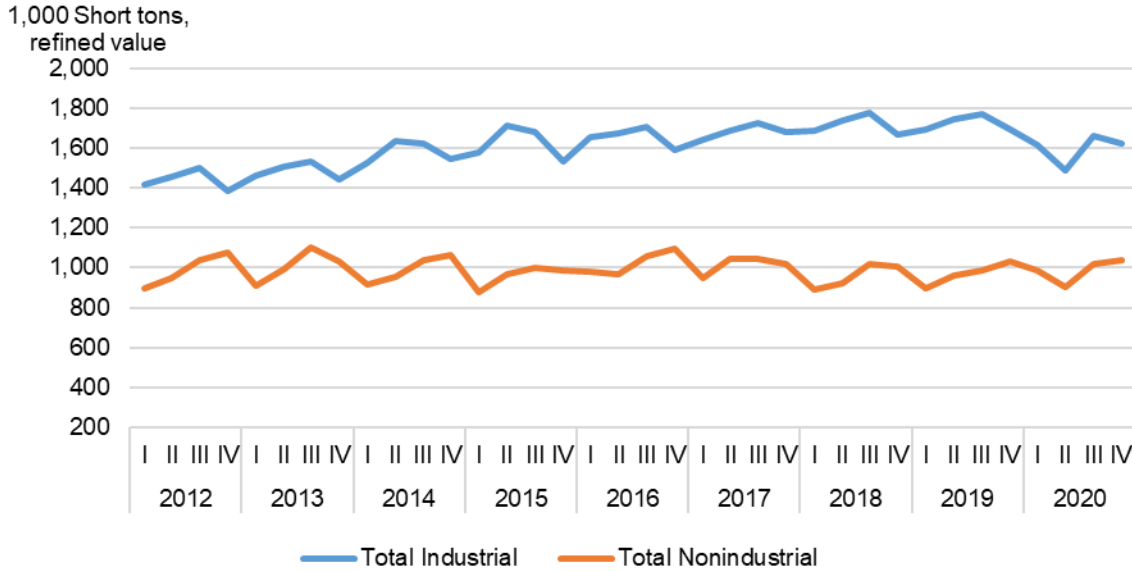
The sectors can also be grouped into industrial and nonindustrial users¹ as shown in figure 19. While deliveries to both types of users declined during the second quarter, the sharpest decline is observed for industrial users, consistent with the large reduction in away-from-home dining during that period. Deliveries appear to have largely rebounded in the following months, although the full extent of recovery is somewhat masked by the exclusion of non-reporter deliveries in this particular analysis.

In this context, it is relevant to point out that deliveries are a rough approximation of consumption, but not exact. This is because sugar is delivered to a user, who typically manufactures a product that is later consumed. Consumption itself would naturally lag somewhat from deliveries of sugar to the industrial or nonindustrial user. Furthermore, the timing of sugar deliveries could vary from the underlying consumption based on the nature of the end user. In some instances, if the user maintained large stocks of sugar but had a period of reduced deliveries, these stocks could be drawn down as needed. In such situations, production of goods and actual sugar consumption would continue even as deliveries had apparently

¹ For this purpose, industrial uses include the following categories: bakery, cereal, and allied products; confectionery and related products; ice cream and dairy products; beverages; canned, bottled, and frozen foods; all other food uses; and nonfood uses. Nonindustrial users include hotels, restaurants, and institutions (HRI); retail grocers, chain stores; government deliveries; and all other deliveries.

paused. Therefore, the sectoral and quarterly analysis of 2020 deliveries comes with this additional caveat that actual consumption patterns may vary somewhat from that which is observed in deliveries data.

Figure 19
Quarterly sugar deliveries by reporters by type of end user



Source: USDA, Farm Service Agency, *Sweetener Market Data (SMD)*.

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