

## Overview

*Dairy prices continued to stay well above year-ago levels early in 2020, as forecasts indicated a sustained period of higher prices relative to recent years.*

*The U.S. average all-milk price for December was \$4.30 per cwt. higher than a year earlier – the biggest year-over-year increase in the all-milk price in over five years. Other positive indicators include domestic use of American-type cheese, which outpaced production, and U.S. dairy exports, where the pace of total milk solids volume is running 10 percent ahead of a year earlier while dairy import growth has stopped. Prices for several key dairy products began 2020 down from late 2019 highs, including butter, cheddar cheese, especially barrel cheese, and the Class III milk prices. Still, each of these products except butter were up significantly above year-earlier levels, getting 2020 off to a much better start than 2019.*

## Commercial Use of Dairy Products

U.S. domestic commercial use of butter and American-type cheese both rose by just under 2 percent during the fourth quarter of 2019. However, butter production outpaced this rate during that period while American-type cheese production was down slightly. Total domestic use of milk and dairy products rose slightly year-over-year, measured on the basis of total milk solids.

## U.S. Dairy Trade

U.S. dairy exports continue to show improvement. Major product categories showed positive growth over a year earlier during the fourth quarter of 2019 except for milkfat products and dry whey, which remains heavily dependent on China's imports. Exports of most of the other dry skim

ingredient products are up by double-digit percentages. Exports as a percentage of domestic milk solids production improved to 15.4 percent over the fourth quarter from just 14.0 percent a year earlier.

Meanwhile, imports stalled. U.S. butter imports fell year-over-year by more than one-third during the fourth quarter. Milk protein concentrate is the only major product category that showed significant import growth. Imports as a percent of domestic milk solids production was static at about 3.5 percent.

## Milk Production

Annual growth U.S. milk production passed through three stages during 2019. It was flat during February–August, jumped to 1.2% during September–October, then eased

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Domestic Commercial Use	Oct–Dec 2019	Oct–Dec 2018	2018–2019 Change	Percent Change
	(million pounds)			
Total Fluid Milk Products	NA	12,292	NA	NA
Yogurt	1,006	1,016	-10	-1.0%
Butter	594	583	11	1.9%
American-type Cheese	1,340	1,315	25	1.9%
All Other Cheese	1,972	1,991	-19	-1.0%
Total Cheese	3,312	3,307	6	0.2%
Nonfat Dry Milk/Skim Milk Powders	126	174	-48	-27.8%
All Products (milk equiv., milkfat basis)	56,539	55,870	669	1.2%
All Products (milk equiv., skim solids basis)	44,515	44,714	-199	-0.4%
All Products (milk equiv., total solids basis)	48,235	48,157	79	0.2%

### Milk Production *from page 1*

halfway back to 0.7% in November–December. A clearer idea of the direction of milk production 2020 can be found in last year’s national dairy cow numbers. U.S. herds had 100,000 fewer cows in March, but only 14,000 fewer in December. Should the gap continue to close at the same rate, the national milking cow herd will be growing again by February, making it almost certain that annual increases in milk and milk solids production will exceed one percent during at least the first half of 2020, given productivity growth.

## Dairy Products

Production of Cheddar and American-type cheese increased over a year earlier in December following several months of decline while Mozzarella and Italian-type cheese production went the other way, dropping in December following several months of increases. For the period October–December,

production was down for all cheese and in all major categories except Mozzarella. Butter production was robust.

## Dairy Product Inventories

Butter stocks at the end of last December were higher than usual for the month as measured by days of total use in stock. End of December stocks were slightly below recent trends for American-type cheese, effectively on trend for other-than-American type cheese and on the low side for nonfat dry milk/skim milk powder and for dry whey.

## Dairy Product and Federal Order Class Prices

The USDA/AMS monthly survey price of butter dropped further in January, after breaking below the \$2 a pound mark for the first time in over two years the month before. The January cheddar cheese price was almost \$0.25 a pound lower than in December and more than \$0.36 a pound

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U.S. Dairy Exports	Oct–Dec 2019	Oct–Dec 2018	2018–2019 Change	Percent Change
		(metric tons)		
Butter	4,274	5,575	-1,301	-23%
Anhydrous Milk Fat / Butteroil	1,080	6,408	-5,329	-83%
Cheddar Cheese	9,052	8,676	377	4%
American–type Cheese	9,195	8,772	423	5%
All Other Cheese	73,804	73,504	299	0%
Total Cheese	82,999	82,277	722	1%
Nonfat Dry Milk / Skim Milk Powder	207,324	158,812	48,512	31%
Whole Milk Powder	10,829	9,947	883	9%
Dry Whey	34,602	46,048	-11,446	-25%
Whey Protein Concentrate / Isolate	48,378	37,906	10,472	28%
Lactose	94,270	82,222	12,048	15%
Percent of U.S. Milk Solids Exported	15.4%	14.0%	1.4%	10%

  

U.S. Dairy Imports	Oct–Dec 2019	Oct–Dec 2018	2018–2019 Change	Percent Change
		(metric tons)		
Butter	6,713	10,832	-4,120	-38%
Cheese	47,920	51,718	-3,798	-7%
Nonfat Dry Milk / Skim Milk Powder	67	50	17	34%
MPC (all protein levels)	12,149	10,644	1,505	14%
Casein	15,882	15,790	93	1%
Percent of U.S. Milk Solids Imported	3.6%	3.5%	0.0%	1%

### Dairy Product and Federal Order Class Prices *from page 2*

down from November's five-year high level. Renewed weakness in barrel cheese prices is the major cause. Barrels dropped by \$0.45 a pound from December to January. The difference between the prices of block and barrel cheddar cheese in the weekly National Dairy Product Sales Report (NDPSR) survey has fluctuated extensively over the past few months. Barrel prices went from more than \$0.31 a pound below blocks in early October, to almost that much over blocks in early December, then back to more than \$0.31 a pound below blocks again in early February. Only the dry skim ingredient prices, nonfat dry milk and dry whey, showed

some modest price improvement between December and January. The December to January drop in the monthly cheese price took the Class III milk price down with it, by \$2.32 per cwt. The U.S. average retail price for national cheddar cheese continued to drop in January, indicating yet more clearly a reversal in the trend that saw this price rise steadily from \$4.75 a pound in May 2017 to over \$5.40 a pound in August 2019.

### Milk and Feed Prices

The U.S. average all-milk price for December was \$0.30 per cwt. lower than a month before but \$4.30 per cwt. higher

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Milk and Dairy Products Production	Oct–Dec 2019	Oct–Dec 2018	2018–2019 Change	Percent Change
<b>Milk Production</b>				
Cows (1,000 head)	9,345	9,358	-13	-0.1%
Per Cow (pounds)	5,779	5,703	76	1.3%
Total Milk (million pounds)	54,006	53,372	634	1.2%
Total Milk Solids (million pounds)	7,013	6,949	63	0.9%
<b>Dairy Products Production</b>				
<b>Cheese</b>		(million pounds)		
American Types	1,338	1,340	-2	-0.2%
Cheddar	953	964	-11	-1.1%
Italian Types	1,430	1,432	-2	-0.1%
Mozzarella	1,133	1,128	5	0.4%
Total Cheese	3,353	3,363	-10	-0.3%
Butter	490	469	21	4.5%
<b>Dry Milk Products</b>				
Nonfat Dry Milk	441	399	43	10.7%
Skim Milk Powder	141	141	0	-0.3%
Dry Whey	246	231	15	6.5%
Whey Protein Concentrate	124	127	-3	-2.6%

Dairy Product Inventories	Dec 2019	Nov 2019	Dec 2018	2018–2019 Change
		(million pounds)		
Butter	190	181	179	6%
American Cheese	744	740	800	-7%
Other Cheese	572	582	544	5%
Nonfat Dry Milk	248	223	277	-10%
Dry Whey	72	79	71	2%

### Milk and Feed Prices *from page 3*

than a year earlier – the biggest year-over-year increase in the all-milk price in over five years. The December DMC margin was also both down a bit from a month before, by \$0.26 per cwt, while up by a record amount, \$4.10 per cwt., from a year earlier. This was the largest annual increase in the monthly margin since the government began to offer margin protection to producers in 2014 as the federal safety net program for dairy. This difference would have been \$4.28 per cwt., absent the inclusion last year of dairy

quality alfalfa hay in the margin calculation. During this entire time, the feed cost has varied within a relatively narrow range of just over \$2 per cwt. while the all-milk price has varied by more than \$10 per cwt. This makes the milk price by far the most volatile component of the margin calculation in recent years.

## Looking Ahead

USDA’s February dairy outlook projected that the U.S. milk supply would grow by 1.7 percent from a year ago during

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Dairy Product and Federal Order Prices	Jan 2020	Dec 2019	Jan 2019	2019–2020 Change
<b>AMS Commodity Prices</b>		(per pound)		
Butter	\$1.915	\$1.984	\$2.234	-\$0.319
Cheddar Cheese	\$1.809	\$2.051	\$1.387	\$0.422
40-Pound Blocks	\$1.900	\$1.936	\$1.428	\$0.471
500-Pound Barrels	\$1.687	\$2.140	\$1.315	\$0.372
Nonfat Dry Milk	\$1.245	\$1.216	\$0.951	\$0.294
Dry Whey	\$0.337	\$0.329	\$0.481	-\$0.144
<b>Class Prices for Milk</b>		(per hundredweight)		
Class I Mover	\$19.01	\$19.33	\$15.12	\$3.89
Class III	\$17.05	\$19.37	\$13.96	\$3.09
Class IV	\$16.65	\$16.70	\$15.48	\$1.17
<b>Retail Dairy Product Prices</b>				
Fluid Whole Milk (per gallon)	\$3.253	\$3.188	\$2.913	\$0.340
Lowfat Fluid Milk (per gallon)	\$2.953	\$2.872	\$2.631	\$0.322
Cheddar Cheese (per pound)	\$5.204	\$5.302	\$5.372	-\$0.168
Butter (per pound)	\$3.864	\$3.624	\$4.055	-\$0.191

Milk and Feed Prices	Dec 2019	Nov 2019	Dec 2018	2018–2019 Change
<b>Producer Prices</b>				
All Milk (per cwt.)	\$20.70	\$21.00	\$16.40	\$4.30
<b>Feed Prices</b>				
Corn (per bushel)	\$3.71	\$3.68	\$3.54	\$0.17
Soybean Meal (per ton)	\$300	\$303	\$312	-\$12
Alfalfa Hay (per ton)	\$188	\$191	\$180	\$8
DMC Feed Cost (per cwt.)	\$8.75	\$8.79	\$8.55	\$0.20
DMC Margin (per cwt.)	\$11.95	\$12.21	\$7.85	\$4.10

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### Looking Ahead from page 4

2020, while total commercial use of milk, domestic and export, would increase by just over 1.3 percent. It also predicted, somewhat incongruously, that total commercial stocks would be essentially unchanged at the end of 2020 from where they were at the beginning of it. The USDA outlook estimated the U.S. all-milk price would average \$18.85 per

cwt. for the year, which about \$0.30 a cwt. lower than the futures were then indicating. The USDA DMC Decision Tool was also predicting that the DMC feed cost calculation would vary during this year within a narrow range of \$0.20 per cwt. around an average of just over \$8.55 per cwt. of milk and that the margin would remain above \$9.50 per cwt. all year.

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The **National Milk Producers Federation (NMPF)** is a farm commodity organization representing most of the dairy marketing cooperatives serving the U.S.