

Overview

U.S. dairy exports were up substantially over a year earlier during February–April, from 13 percent of U.S. milk solids production last year to 14.5 percent in 2017.

The monthly Farm Bill Margin Protection Program (MPP) milk price–feed cost margin for April was \$8.55 per hundredweight, compared with \$6.94 per hundredweight in April 2016. The bimonthly margin for March–April was \$8.95 per hundredweight. Domestic commercial use of milk was down over a year earlier during January–March for both milkfat and skim solids, as well as for the major dairy product groups. The U.S. average all-milk price dropped \$0.80 per hundredweight from a month earlier in April. Average retail prices in the United States have been slowly declining for fluid whole milk and natural Cheddar cheese for the past few months.

Commercial Use of Dairy Products

Domestic commercial use of all dairy products during the first quarter of 2017 was below year-ago levels on both milkfat and skim solids bases. For this to occur in recent years is unusual, even for an individual month, let alone for an entire quarter. Lower total cheese use was a particular contributor to this decline, which was mirrored by all other major dairy product categories. Fluid milk sales dropped 1 percent, but milkfat in all fluid sales increased 1 percent. Whole milk sales were up 4 percent over a year ago during the first quarter.

U.S. Dairy Trade

U.S. exports of Cheddar and American-type cheese were up by about one-third over a year ago during the February–April period. This was a significant increase for such exports, which had been trending down for much of the past year and had begun to show modest gains in more recent months. The change was driven largely by recent increased Cheddar exports to Australia and Japan. Butter export growth has been moderating from the triple-digit levels of a few months ago, while skim milk powder and whey product exports have shown growth at the solid two-digit

continued on page 2

| Domestic Commercial Use | Jan–Mar 2017 | Jan–Mar 2016 | 2016–2017 Change | Percent Change* |
|---|-------------------------|--------------|------------------|-----------------|
| | (million pounds) | | | |
| Total Fluid Milk Products | 12,280 | 12,545 | -265 | -1.0% |
| Butter | 411 | 437 | -25 | -4.7% |
| American-type Cheese | 1,111 | 1,132 | -21 | -0.8% |
| All Other Cheese | 1,739 | 1,765 | -26 | -0.4% |
| Nonfat Dry Milk / Skim Milk Powders | 255 | 281 | -26 | -8.3% |
| All Products (milk equiv., milkfat basis) | 49,279 | 50,106 | -827 | -0.6% |
| All Products (milk equiv., skim solids basis) | 44,198 | 44,854 | -656 | -0.4% |
| | *Adjusted for leap year | | | |

U.S. Dairy Trade *from page 1*

level for many months. During the February–April period, 14.5 percent of U.S. milk solids were exported, a significant increase over the 13 percent of milk solids exported a year previously.

The United States imported the equivalent of 3.5 percent of its domestic milk solids production during February–April, compared with 3.7 percent during the same period a year earlier. Declining butter and cheese imports more than outweighed increased imports of concentrated milk protein products in terms of milk solids content.

Milk Production

The number of dairy cows in the United States is increasing over year-ago levels at an average rate of about 4,000 cows per month. In early 2016, the national dairy cow herd was about the same

as it had been a year earlier. During February–April this year, cow numbers were up more than 60,000 head from a year ago. However, since last fall, the annual gain in production per cow has fallen at a slightly faster rate, resulting in a gradual slowing of milk production growth in the country. U.S. milk production was 2 percent higher in the February–April period than it was during the same months a year before, adjusted for leap year.

Dairy Products

The imbalance between the growth of American-type cheese, particularly Cheddar, and that of other types of cheese, particularly Mozzarella, is a key indicator that milk production growth in the United States continues to outpace total commercial use. American-type cheese is the major form in which excess milk production can be commercially stored in the United States. Other types of cheese tend to be produced for more current

continued on page 3

| U.S. Dairy Exports | Feb–Apr 2017 | Feb–Apr 2016 | 2016–2017 Change | Percent Change* |
|----------------------------------|-------------------------|---------------|------------------|-----------------|
| | | (metric tons) | | |
| Butter | 3,934 | 3,267 | 667 | 22% |
| Anhydrous Milk Fat/Butteroil | 899 | 5,289 | -4,390 | -83% |
| Cheddar Cheese | 9,826 | 7,420 | 2,406 | 34% |
| American-type Cheese | 9,927 | 7,575 | 2,353 | 33% |
| Total Cheese | 84,369 | 71,048 | 13,321 | 20% |
| Nonfat Dry Milk/Skim Milk Powder | 155,940 | 128,742 | 27,198 | 22% |
| Whole Milk Powder | 6,198 | 11,715 | -5,517 | -46% |
| Dry Whey | 88,461 | 69,734 | 18,727 | 28% |
| Whey Protein Concentrate/Isolate | 42,567 | 37,725 | 4,843 | 14% |
| Lactose | 89,168 | 84,715 | 4,453 | 6% |
| Percent of Milk Solids Exported | 14.5% | 13.0% | 1.5% | 13% |
| | *Adjusted for leap year | | | |

| U.S. Dairy Imports | Feb–Apr 2017 | Feb–Apr 2016 | 2016–2017 Change | Percent Change* |
|----------------------------------|-------------------------|---------------|------------------|-----------------|
| | | (metric tons) | | |
| Butter | 5,915 | 6,575 | -661 | -9% |
| Cheese | 43,309 | 50,750 | -7,441 | -14% |
| Nonfat Dry Milk/Skim Milk Powder | 132 | 467 | -335 | -71% |
| MPC (all protein levels) | 15,566 | 15,206 | 360 | 4% |
| Casein | 15,564 | 14,560 | 1,004 | 8% |
| Percent of Milk Solids Imported | 3.5% | 3.7% | -0.2% | -5% |
| | *Adjusted for leap year | | | |

Dairy Products *from page 2*

demand. Year-over-year butter production growth, on a moving three-month average basis, has varied between plus and minus 5 percent over the past 12 months.

Dairy Product Inventories

Another 33 million pounds of American-type cheese were added to domestic stocks in April, keeping supplies at levels previously experienced only in 1985. Stocks at the end of the month were equivalent to almost 65 days of total commercial use, about 10 days higher than what trends would indicate

should be average for the month. End-of-April stocks of other type cheese were under 25 days of total commercial use, just about at trend average. Domestic butter stocks, which follow a highly seasonal pattern, increased to almost 59 days of commercial use, about nine days more than the average for the month of April.

Dairy Product and Federal Order Class Prices

Monthly prices reported by USDA's Agricultural Marketing Service rebounded modestly in May from a month earlier for butter, Cheddar cheese and nonfat dry milk when all three

continued on page 4

| Milk and Dairy Products Production | Feb–Apr 2017 | Feb–Apr 2016 | 2016–2017 Change | Percent Change* |
|------------------------------------|--------------|------------------|------------------|-----------------|
| Milk Production | | | | |
| Cows (1,000 head) | 9,380 | 9,320 | 61 | 0.7% |
| Per Cow (pounds) | 5,728 | 5,714 | 14 | 1.4% |
| Total Milk (million pounds) | 53,730 | 53,252 | 478 | 2.0% |
| Dairy Products Production | | (million pounds) | | |
| Cheese | | | | |
| American Types | 1,209 | 1,167 | 42 | 4.7% |
| Cheddar | 900 | 844 | 56 | 7.8% |
| Italian Types | 1,324 | 1,314 | 10 | 1.9% |
| Mozzarella | 1,024 | 1,024 | 1 | 1.2% |
| Total Cheese | 3,043 | 2,979 | 64 | 3.3% |
| Butter | 501 | 514 | -13 | -1.5% |
| Dry Milk Products | | | | |
| Nonfat Dry Milk | 472 | 486 | -14 | -1.8% |
| Skim Milk Powder | 143 | 124 | 19 | 16.6% |
| Dry Whey | 249 | 240 | 9 | 4.9% |
| Whey Protein Concentrate | 121 | 121 | 1 | 1.7% |

*Adjusted for leap year

| Dairy Product Inventories | Apr 2017 | Mar 2017 | Apr 2016 | 2016–2017 Change |
|---------------------------|----------|------------------|----------|------------------|
| | | (million pounds) | | |
| Butter | 292 | 273 | 296 | -1% |
| American Cheese | 835 | 802 | 734 | 14% |
| Other Cheese | 499 | 490 | 475 | 5% |
| Nonfat Dry Milk | 266 | 247 | 252 | 6% |

Dairy Product and Federal Order Class Prices *from page 3*

prices were at their lowest levels since late summer 2016. Dry whey prices did the opposite, easing off slightly in May after more than doubling over the previous year. These price movements generated modest improvements in the May Class III and Class IV prices, while the lagged May Class I Mover continued to fall due to an earlier drop in the Class III skim milk price.

Milk and Feed Prices

The April U.S. average all-milk price was down \$0.80 per hundredweight from March, driven by reductions in all four classified prices. The monthly Farm Bill Margin Protection Program feed cost was basically unchanged in April, with rising

alfalfa hay prices just offsetting lower-trending grain prices.

The monthly MPP margin for April, accordingly, was reduced only by the milk price drop from a month earlier. The bimonthly margin for March–April was \$8.95 per hundredweight.

The U.S. average retail price of whole milk has resumed a gradual decline from its recent high in late 2014, as reported by the Bureau of Labor Statistics (BLS). The BLS retail whole milk price series is closely correlated (correlation coefficient = .88) with the Federal Order Class I price at a 3.25 percent milkfat test, the standard fat content for whole milk. The BLS-reported average retail price of Cheddar cheese continues to drop further below \$5 per pound after remaining mostly well above that level for almost six years, up until November 2016.

| Dairy Product and Federal Order Prices | May 2017 | Apr 2017 | May 2016 | 2016–2017 Change |
|--|----------|---------------------|----------|------------------|
| AMS Commodity Prices | | (per pound) | | |
| Butter | \$2.164 | \$2.116 | \$2.058 | \$0.106 |
| Cheese | \$1.539 | \$1.496 | \$1.410 | \$0.129 |
| Nonfat Dry Milk | \$0.870 | \$0.839 | \$0.761 | \$0.110 |
| Dry Whey | \$0.509 | \$0.524 | \$0.251 | \$0.259 |
| Class Prices for Milk | | (per hundredweight) | | |
| Class I Mover | \$15.20 | \$16.05 | \$13.70 | \$1.50 |
| Class III | \$15.57 | \$15.22 | \$12.76 | \$2.81 |
| Class IV | \$14.49 | \$14.01 | \$13.09 | \$1.40 |

| Milk and Feed Prices | Apr 2017 | Mar 2017 | Apr 2016 | 2016–2017 Change |
|-------------------------------------|----------|----------|----------|------------------|
| Producer Prices | | | | |
| All Milk (per cwt.) | \$16.50 | \$17.30 | \$15.10 | \$1.40 |
| Feed Prices | | | | |
| Corn (per bushel) | \$3.43 | \$3.49 | \$3.56 | -\$0.13 |
| Soybean Meal (per ton) | \$306 | \$320 | \$304 | \$2 |
| Alfalfa Hay (per ton) | \$148 | \$135 | \$154 | -\$6 |
| 2014 Farm Bill Feed Cost (per cwt.) | \$7.95 | \$7.95 | \$8.16 | -\$0.21 |
| 2014 Farm Bill Margin (per cwt.) | \$8.55 | \$9.35 | \$6.94 | \$1.61 |
| Retail Dairy Product Prices | | | | |
| Fluid Milk (per gallon) | \$3.259 | \$3.315 | \$3.155 | \$0.104 |
| Cheddar Cheese (per pound) | \$4.794 | \$4.799 | \$5.399 | -\$0.605 |

Looking Ahead

The CME dairy futures currently indicate that April and May will represent the low point for milk prices during 2017, with the U.S. average all-milk price returning by the end of the year

to where it started at just under \$19 per hundredweight. USDA's MPP decision tool continues to show very little likelihood of payments under the program at any coverage level this year.

Peter Vitaliano
National Milk
Producers Federation
pvitaliano@nmpf.org
www.nmpf.org



Dairy Management Inc.TM and state, regional, and international organizations work together to drive demand for dairy products on behalf of America's dairy farmers, through the programs of the American Dairy Association[®], the National Dairy Council[®], and the U.S. Dairy Export Council[®].

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