

Overview

The rate of milk production growth began to moderate during the first quarter, but additional milk production continues to generate American cheese at a faster rate than total consumption, driving up inventories and putting some pressure on cheese prices. Still, exports of most products showed strong year-over-year growth during the first quarter of 2017. Federal order class prices have dropped month-to-month during most of 2017, and the March all-milk price was \$1.60 per hundredweight under January. The March Margin Protection Program (MPP) margin was down \$1.75 per hundredweight from last December. However, a mid-May rally in cash and futures prices for butter and Cheddar cheese provided a strong indication that the milk price erosion during the first months of this year may have run its course.

Commercial Use of Dairy Products

Sales of all fluid products were down by 1.3 percent from a year earlier during December 2016–February 2017, on a leap year-adjusted basis. Despite monthly variations, total fluid sales volumes have trended down by just under 1 percent per year on a fairly steady basis over the past year. Commercial use of most products was down from a year earlier during December 2016–February 2017. February 2017 was the first time since August 2014 that domestic use of all cheese was lower than a year ago. This drop has been attributed to weak sales at retail during the first few months of this year.

U.S. Dairy Trade

The annual growth rate of U.S. cheese exports has been increasing steadily since early in 2016, reaching 13 percent during the first quarter of 2017. Both American-type and other cheese have shown constant acceleration of export growth. Dry milk and dry whey products were up over a year ago by more than 50,000 tons. The percent of domestic milk solids production exported has increased steadily since the summer of 2016.

Butter and cheese imports continue to drop as world prices for these products recover relative to domestic prices. Imports of

continued on page 2

Domestic Commercial Use	Dec 2016–Feb 2017	Dec 2015–Feb 2016	2016–2017 Change	Percent Change*
	(million pounds)			
Total Fluid Milk Products	12,358	12,656	-298	-1.3%
Butter	398	419	-22	-4.1%
American-type Cheese	1,135	1,140	-5	0.7%
All Other Cheese	1,753	1,780	-28	-0.5%
Nonfat Dry Milk / Skim Milk Powders	230	261	-31	-10.9%
All Products (milk equiv., milkfat basis)	48,961	49,136	-175	0.8%
All Products (milk equiv., skim solids basis)	43,390	43,905	-515	-0.1%
	*Adjusted for leap year			

U.S. Dairy Trade *from page 1*

concentrated milk protein products remain on a growth track, driven by increases in domestic sales of the products in which they are used.

Milk Production

U.S. milk production during the first quarter of 2017 was 2.1 percent higher than during 2016's first quarter, on a leap year-adjusted basis. On a monthly basis, production was up by 2.6 percent in January, the highest since December 2014. Year-over-year growth dropped to a leap year-adjusted 2.2 percent in February, and then to 1.7 percent in March. This marked slowing of milk production growth in the United States is caused by changes in state milk production. Based on USDA revisions in data for the past several years, the rate of production growth is increasing in several of

the smaller milk producing states but only in very few of the larger ones. Growth in milk production per cow is also dropping. Partly but not fully offsetting this is a very gradual increase in dairy cow numbers at the national level. These are all indicators that financial conditions on dairy farms over the past several years, from the standpoint of margins, are not at a level that will stimulate sustained expansion of milk production at the national level.

Dairy Products

Additional milk production continued to move mostly into production of American-type cheese, particularly Cheddar, which increased by almost 8 percent in the first quarter of 2017 from a year ago. Butter production increased from a year ago during the quarter, after being down on a rolling three-month basis since late last summer. Increased production of nonfat

continued on page 3

U.S. Dairy Exports	Jan–Mar 2017	Jan–Mar 2016	2016–2017 Change	Percent Change*
		(metric tons)		
Butter	3,901	2,688	1,213	47%
Anhydrous Milk Fat/Butteroil	1,075	7,067	-5,992	-85%
Cheddar Cheese	9,341	8,701	640	9%
American-type Cheese	9,433	8,874	559	7%
Total Cheese	80,163	71,829	8,334	13%
Nonfat Dry Milk/Skim Milk Powder	148,124	125,425	22,699	19%
Whole Milk Powder	6,563	6,589	-26	1%
Dry Whey	83,807	67,973	15,834	25%
Whey Protein Concentrate/Isolate	45,147	33,599	11,548	36%
Lactose	87,061	84,930	2,131	4%
Percent of Milk Solids Exported	14.0%	12.6%	1.4%	12%
	*Adjusted for leap year			

U.S. Dairy Imports	Jan–Mar 2017	Jan–Mar 2016	2016–2017 Change	Percent Change*
		(metric tons)		
Butter	5,498	7,662	-2,163	-27%
Cheese	42,331	54,127	-11,797	-21%
Nonfat Dry Milk/Skim Milk Powder	30	84	-54	-64%
MPC (all protein levels)	17,336	16,336	1,000	7%
Casein	17,883	17,119	764	6%
Percent of Milk Solids Imported	3.6%	4.0%	-0.4%	-9%
	*Adjusted for leap year			

Dairy Products from page 2

dry milk and skim milk powder matches closely the difference between increased exports and reduced domestic use of these two products.

Dairy Product Inventories

Butter stocks were little changed from a month earlier at the end of March. Stocks of nonfat dry milk dropped by about 6 percent from February to March, while American cheese stocks grew by about 4 percent month-to-month to their highest level since May 1985. March ending stocks of both butter and nonfat

dry milk were close to trend averages of days of commercial use in stock. End of March stocks of American cheese were almost 10 days of commercial use above their trend average.

Dairy Product and Federal Order Class Prices

Monthly prices reported by USDA's Agricultural Marketing Service have dropped steadily since January for both butter and nonfat dry milk, and therefore for Class IV milk, as well. Higher domestic inventories have pressured butter prices, although they have remained over \$2.10 a pound, and a global oversupply of skim milk powder has held down domestic nonfat dry milk prices.

continued on page 4

Milk and Dairy Products Production	Jan–Mar 2017	Jan–Mar 2016	2016–2017 Change	Percent Change*
Milk Production				
Cows (1,000 head)	9,370	9,312	58	0.6%
Per Cow (pounds)	5,715	5,691	24	1.5%
Total Milk (million pounds)	53,540	52,998	542	2.1%
Dairy Products Production				
		(million pounds)		
Cheese				
American Types	1,207	1,171	36	4.2%
Cheddar	897	841	56	7.8%
Italian Types	1,329	1,326	3	1.3%
Mozzarella	1,028	1,036	-8	0.4%
Total Cheese	3,050	3,002	48	2.7%
Butter	514	514	0	1.2%
Dry Milk Products				
Nonfat Dry Milk	455	453	2	1.5%
Skim Milk Powder	148	132	16	13.4%
Dry Whey	248	241	7	4.1%
Whey Protein Concentrate	118	124	-6	-3.7%

*Adjusted for leap year

Dairy Product Inventories	Mar 2017	Feb 2017	Mar 2016	2016–2017 Change
		(million pounds)		
Butter	273	270	243	12%
American Cheese	803	773	726	11%
Other Cheese	490	482	466	5%
Nonfat Dry Milk	247	262	232	6%

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

The Class IV price has lost over \$2 per hundredweight from January through April, while the Class III price has dropped by almost \$2.20 per hundredweight since December. AMS-reported cheese prices have lost ground since last December, as production and inventories have grown. The price of dry whey remained the same in April as the month before, but it has more than doubled over the past year.

Milk and Feed Prices

The U.S. average all-milk price in March was \$17.30 per hundredweight. This was \$1.60 below the level of December 2016 and January 2017, which were the highest all-milk prices since December

2015. The MPP formula feed cost has risen slowly but steadily since late last fall, driven by corresponding increases in corn and alfalfa hay prices. The MPP margin has lost \$1.75 per hundredweight since last December.

The U.S. average retail price of whole milk has remained at about \$3.30 per gallon since last October, according to data reported by the Bureau of Labor Statistics. It was last above this level in January 2016, and in recent years had dropped from a high of \$3.86 per gallon in November 2014 to a low of \$3.06 in July 2016. The U.S. average retail price of Cheddar cheese was \$4.80 per pound in March. This was the lowest retail price for Cheddar cheese since October 2010, and was \$1.14 below the all-time high price of \$5.94 per pound on February 2013.

Dairy Product and Federal Order Prices	Apr 2017	Mar 2017	Apr 2016	2016–2017 Change
AMS Commodity Prices		(per pound)		
Butter	\$2.116	\$2.168	\$2.019	\$0.097
Cheese	\$1.496	\$1.555	\$1.504	-\$0.008
Nonfat Dry Milk	\$0.839	\$0.849	\$0.731	\$0.108
Dry Whey	\$0.524	\$0.524	\$0.247	\$0.278
Class Prices for Milk		(per hundredweight)		
Class I Mover	\$16.05	\$16.90	\$13.74	\$2.31
Class III	\$15.22	\$15.81	\$13.63	\$1.59
Class IV	\$14.01	\$14.32	\$12.68	\$1.33

Milk and Feed Prices	Mar 2017	Feb 2017	Mar 2016	2016–2017 Change
Producer Prices				
All Milk (per cwt.)	\$17.30	\$18.50	\$15.30	\$2.00
Feed Prices				
Corn (per bushel)	\$3.49	\$3.44	\$3.56	-\$0.07
Soybean Meal (per ton)	\$320	\$334	\$276	\$44
Alfalfa Hay (per ton)	\$135	\$129	\$139	-\$4
2014 Farm Bill Feed Cost (per cwt.)	\$7.95	\$7.92	\$7.75	\$0.19
2014 Farm Bill Margin (per cwt.)	\$9.35	\$10.58	\$7.55	\$1.81
Retail Dairy Product Prices				
Fluid Milk (per gallon)	\$3.315	\$3.300	\$3.187	\$0.128
Cheddar Cheese (per pound)	\$4.799	\$4.967	\$5.364	-\$0.565

Looking Ahead

The mid-May rally in cash and futures prices for butter and Cheddar cheese has brightened considerably the outlook for milk prices over the next few months, even allowing for some potential erosion. Immediately following this rally, CME butter futures remained above \$2.40 per pound from June through the end of 2017, while the cheese futures show an increase to

above \$1.70 per pound by August. The CME dairy futures collectively indicated that May would be the bottom for the monthly all-milk price, after giving up less than \$1 per hundredweight from March. Despite the usual springtime increase in grain prices, which is considerably muted this year, USDA's MPP decision tool shows very little likelihood of MPP payments 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.