

## Overview

*U.S. Cheddar cheese prices hit a 10-month high in October, while butter prices softened but remained well above \$2 a pound. Nonfat dry milk and dry whey prices are showing extended weakness due to deteriorating prices in world markets, which are overhung by excessive stocks of skim milk powder in the European Union (EU). Against this backdrop of prices, there are some recent signs that overall supply has been gradually heading back toward balance with demand in U.S. domestic dairy markets. These include: (1) year-over-year growth in milk production well below 2 percent, (2) slower growth in cheese production, (3) further reduction in cheese stocks and (4) continued growth in cheese exports.*

## Commercial Use of Dairy Products

Bright spots for domestic consumption increases among the major dairy product categories during June–August include butter, American-type cheese, nonfat dry milk and total milk use on a milkfat basis. Gains in butter use have been mostly above 5 percent per year since early in 2017, while American-type cheese growth has slowed from a similar level during the spring. Domestic use of nonfat dry milk had been dropping by mostly double digits for the first half of this year as exports surged, but recent softening in export growth has freed up product to move into U.S. market channels. Growth in domestic use of other type cheese has been sluggish during the summer, and total fluid milk volume sales continued their long decline.

## U.S. Dairy Trade

Exports of all U.S. dairy products, measured by both total milk solids and the percent of U.S. milk solids production exported, dropped moderately during July–September, as they have done since May. This drop has been led by weaknesses in dry ingredient exports, which account for most of the milk solids exported from the United States. By contrast, milkfat and cheese exports have been up by almost triple digits during the period, but the smaller volume of milk solids they contain could not counterbalance the larger loss of dairy ingredient solids exports. However, total exports remain in the range of 14 percent of milk solids production, well above the level to which U.S. exports dropped in early 2016.

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Domestic Commercial Use	Jun–Aug 2017	Jun–Aug 2016	2016–2017 Change	Percent Change
	(million pounds)			
Total Fluid Milk Products	11,465	11,670	-205	-1.8%
Butter	443	420	23	5.4%
American-type Cheese	1,205	1,179	25	2.1%
All Other Cheese	1,759	1,776	-17	-0.9%
Nonfat Dry Milk / Skim Milk Powders	256	248	8	3.2%
All Products (milk equiv., milkfat basis)	53,720	52,739	981	1.9%
All Products (milk equiv., skim solids basis)	45,099	45,066	33	0.1%

### U.S. Dairy Trade *from page 1*

U.S. dairy imports retreated again during July–September in the major product categories, except for butter. With increased domestic supplies of cheese and dairy ingredients available, and U.S. prices on par with world prices, there was little incentive to import.

## Milk Production

Expansion of the U.S. milk cow herd has stabilized at an annual rate of 0.8 percent since last spring, and is showing signs of dropping from that level. Productivity gains have also been receding, with growth in U.S. average production per cow hovering around 1 percent annually since last spring, as well. During Fall 2016, average national production per cow was expanding at around 2 percent per year. Growth of U.S. milk production is slowing down to well below the almost 2.5-percent rates by which production

was expanding as the current year began. Following a brief return to annual growth of around 2 percent in July and August, September monthly production was up over a year earlier by about 1 percent. This was the outcome of almost every state slowing its own milk production growth, or accelerating its recent production declines, across the board. These trends are broadly favorable to re-establishing a greater supply-demand balance in the domestic market, particularly for cheese.

## Dairy Products

Production of both major types of cheese, as well as the most important variety within each of those types, all grew by less than 2 percent over a year ago during July–September. It was the first time this has occurred in at least two years, although total cheese production expanded by just over 2 percent during the period.

U.S. Dairy Exports	Jul–Sept 2017	Jul–Sept 2016	2016–2017 Change	Percent Change
		(metric tons)		
Butter	4,737	3,157	1,580	50%
Anhydrous Milk Fat/Butteroil	1,360	685	674	98%
Cheddar Cheese	11,285	6,135	5,150	84%
American-type Cheese	11,416	6,210	5,206	84%
Total Cheese	84,485	68,337	16,149	24%
Nonfat Dry Milk/Skim Milk Powder	131,533	157,469	-25,936	-16%
Whole Milk Powder	7,584	8,437	-853	-10%
Dry Whey	90,170	85,769	4,401	5%
Whey Protein Concentrate/Isolate	44,330	46,896	-2,567	-5%
Lactose	90,263	92,361	-2,098	-2%
Percent of Milk Solids Exported	14.2%	15.1%	-0.9%	-6%

  

U.S. Dairy Imports	Jul–Sept 2017	Jul–Sept 2016	2016–2017 Change	Percent Change
		(metric tons)		
Butter	8,300	5,206	3,095	59%
Cheese	42,080	47,257	-5,177	-11%
Nonfat Dry Milk/Skim Milk Powder	333	26	307	1186%
MPC (all protein levels)	10,519	12,496	-1,977	-16%
Casein	15,517	16,355	-838	-5%
Percent of Milk Solids Imported	3.3%	3.8%	-0.5%	-13%

## Dairy Product Inventories

Stocks of American-type cheese declined in September to just above their on-trend level of 55 days of total commercial use in stock. The same has occurred with stocks of other cheese, with a benchmark stocks-to-use ratio of 24 days. Butter stocks also dropped in September but remained about a week in excess of their seasonal trend level of 40 days. U.S. stocks of nonfat dry milk reached their highest level in at least 20 years in September, about three weeks more than a normal level of 40 days.

## Dairy Product and Federal Order Class Prices

Butter prices reported by USDA's Agricultural Marketing Service (AMS) for October were the lowest since last May. Nonfat dry milk prices were last below October's \$0.81 per pound in June 2016, and the October dry whey price was the lowest since November 2016. Cheddar cheese, by contrast, hit a 10-month high level in October. Nonfat dry milk prices will continue to stay at the low end of their historic range for the foreseeable future as long as almost 840 million pounds of aged stocks remain in EU government inventories. EU authorities are extremely anxious to dispose of those stocks in the least

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Milk and Dairy Products Production	Jul–Sept 2017	Jul–Sept 2016	2016–2017 Change	Percent Change
<b>Milk Production</b>				
Cows (1,000 head)	9,402	9,331	70	0.8%
Per Cow (pounds)	5,690	5,636	54	1.0%
Total Milk (million pounds)	53,495	52,590	905	1.7%
<b>Dairy Products Production</b>		(million pounds)		
<b>Cheese</b>				
American Types	1,193	1,172	21	1.8%
Cheddar	852	836	16	1.9%
Italian Types	1,323	1,299	24	1.9%
Mozzarella	1,022	1,010	12	1.2%
Total Cheese	3,077	3,009	67	2.2%
Butter	402	394	8	2.0%
<b>Dry Milk Products</b>				
Nonfat Dry Milk	417	394	23	5.8%
Skim Milk Powder	128	134	-6	-4.3%
Dry Whey	286	234	51	21.9%
Whey Protein Concentrate	119	111	8	7.2%
<b>Dairy Product Inventories</b>	Sept 2017	Aug 2017	Sept 2016	2016–2017 Change
		(million pounds)		
Butter	257	280	269	-5%
American Cheese	778	801	743	5%
Other Cheese	528	533	493	7%
Nonfat Dry Milk	321	313	216	49%

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

market-distorting manner, but there's effectively no way this can be done without further depressing market prices. Adding further pressure on prices, the quantity of product eligible for the full EU intervention price, currently equivalent to about \$0.91 per pound, may well be reduced to zero next spring. Class III prices were last above October's \$16.69/cwt in February.

## Milk and Feed Prices

The monthly Margin Protection Program (MPP) margin dropped by \$0.28/cwt in September from a month earlier. Twenty cents of this was due to a pull-back in the September

U.S. average all-milk price, and the remaining \$0.08 stemmed from a modest increase in the MPP feed cost formula. Five of this \$0.08 was, in turn, from a higher soybean meal price and the remaining \$0.03 was from an increase in the alfalfa hay price.

The U.S. average retail price of whole milk paused again in September in its general decline from its recent high of \$3.32 per gallon in January 2017. Average retail prices of natural Cheddar cheese were back above \$5 per pound in September for the first time since November 2016.

## Looking Ahead

The outlook for the MPP margin in 2018 continues to fall further into the top level of the payment range under the program. USDA's

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Dairy Product and Federal Order Prices	Oct 2017	Sept 2017	Oct 2016	2016–2017 Change
<b>AMS Commodity Prices</b>		(per pound)		
Butter	\$2.372	\$2.530	\$1.864	\$0.508
Cheese	\$1.725	\$1.661	\$1.583	\$0.142
Nonfat Dry Milk	\$0.810	\$0.850	\$0.922	-\$0.112
Dry Whey	\$0.379	\$0.417	\$0.330	\$0.049
<b>Class Prices for Milk</b>		(per hundredweight)		
Class I Mover	\$16.44	\$16.71	\$16.60	-\$0.16
Class III	\$16.69	\$16.36	\$14.82	\$1.87
Class IV	\$14.85	\$15.86	\$13.66	\$1.19

Milk and Feed Prices	Sept 2017	Aug 2017	Sept 2016	2016–2017 Change
<b>Producer Prices</b>				
All Milk (per cwt.)	\$17.80	\$18.00	\$17.30	\$0.50
<b>Feed Prices</b>				
Corn (per bushel)	\$3.27	\$3.27	\$3.22	\$0.05
Soybean Meal (per ton)	\$308	\$301	\$338	-\$30
Alfalfa Hay (per ton)	\$149	\$147	\$137	\$12
2014 Farm Bill Feed Cost (per cwt.)	\$7.81	\$7.73	\$7.82	\$0.00
2014 Farm Bill Margin (per cwt.)	\$9.99	\$10.27	\$9.48	\$0.50
<b>Retail Dairy Product Prices</b>				
Fluid Milk (per gallon)	\$3.209	\$3.168	\$3.229	-\$0.020
Cheddar Cheese (per pound)	\$5.010	\$4.862	\$5.023	-\$0.013

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**Looking Ahead** *from page 4*

online MPP decision tool has begun to show the margin dipping just under \$8/cwt during March–April and May–June next year. Other forecasts show it moving closer to \$7.50/cwt during these two periods and during July–August. USDA reversed itself again and dropped its monthly forecasts of 2017 and 2018 U.S. milk

production in November, after raising them a month earlier. The department’s November forecast also cut significantly its 2018 forecasts of all major dairy product prices, federal order class prices and the all-milk price (this later by \$0.55/cwt) from their October projections. Overall, most sources of U.S. dairy outlook information continue to point to a combination of easing overproduction but weakening prices and margins for next 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.