

Overview

Annual growth in U.S. milk production slowed to less than half a percent during September-October. American-type cheese, dry whey and butter production increased faster than overall milk output, but milk production grew faster than the output of some other major dairy products. The U.S. average all-milk price peaked for the year in November at \$18.20 per hundredweight. Substantial differences in supply-demand conditions in the domestic versus world markets caused milk component values to test the extremes of their historical ranges in the latter part of 2015. Milkfat was at the high end, with the various skim milk components at the low ends. The milkfat portion is estimated to have made up about two-thirds of the average milk check in November, twice as much as usual prior to last year. The monthly MPP margin was \$10.01 per hundredweight in November, making any payments unlikely for the November-December period.

Commercial Use of Dairy Products

Commercial use of milk in all products during August-October continued to show strong growth, measured on a milk equivalent, milkfat basis. However, growth was much slower measured on a skim solids basis. This reflects increasing domestic consumption of milkfat in all products, compared with the other components of milk. Contributing to the growth in milkfat consumption was more than 12-percent growth in butter consumption, while a more-than-20-percent drop in nonfat dry milk use held down gains in skim solids consumption. Fluid milk sales declined by 1.4 percent during the period. American-type cheese consumption was almost flat, but all other cheese was up by almost 5 percent.

U.S. Dairy Trade

U.S. exports of skim milk powder, nonfat dry milk, whey protein concentrate and lactose increased during September-November from a year earlier. But exports of the other major dairy products were significantly lower. Milk solids exported were approximately the same as a percentage of total domestic production. The largest losses in exports – measured in terms of total milk solids – were dry whey, modified whey, total cheese and butter, in that order. The largest gains, by the same measure, were combined skim milk powder and nonfat dry milk, whey protein concentrate and lactose. Among cheese categories, the largest losses were in fresh cheese, followed

continued on page 2

Domestic Commercial Use	Aug–Oct 2015	Aug–Oct 2014	2014–2015 Change	Percent Change
	(million pounds)			
Total Fluid Milk Products	12,491	12,672	-181	-1.4%
Butter	491	438	54	12.2%
American-type Cheese	1,136	1,132	4	0.3%
All Other Cheese	1,747	1,665	82	4.9%
Nonfat Dry Milk / Skim Milk Powders	246	310	-63	-20.5%
All Products (milk equiv., milkfat basis)	52,289	50,486	1,803	3.6%
All Products (milk equiv., skim solids basis)	44,521	44,282	239	0.5%

U.S. Dairy Trade *from page 1*

closely by Cheddar cheese. Almost one-third of the combined loss in these two cheese categories was offset by gains in grated and powdered cheese.

Imports during September-November were down significantly for milk protein concentrate, up for cheese and butter, and essentially unchanged for milk solids in all products. On a milk solids basis, the largest drops in U.S. dairy imports were milk protein concentrate, whey protein isolate and casein. The largest import gains on the same basis were for total cheese and butter.

Milk Production

The average U.S. milking cow produced approximately the same milk volume during September-November as during the same period in 2014, according to data from USDA's National Agricultural Statistics Service (NASS). NASS data also show

average cow numbers, as well as total milk production, up just under a half percent over the same period. NASS state-level data show that the annual rates of change in milk production have been trending down throughout this year. This suggests that growth in milk production across the nation will continue to decline, approaching a standstill and potentially become negative over the next few months.

Dairy Product Production

The growth rates for production of the major dairy products slowed during the second half of 2015, reflecting the trend for milk production. Production of total Italian-type cheese – and Mozzarella in particular – increased at a slower annual rate during September-November than milk production. The same was true for nonfat dry milk, skim milk powder and whey protein concentrate. American-type cheese production,

continued on page 3

U.S. Dairy Exports	Sept– Nov 2015	Sept– Nov 2014	2014–2015 Change	Percent Change
		(metric tons)		
Butter	2,113	5,984	-3,871	-65%
Anhydrous Milk Fat/Butteroil	529	1,120	-592	-53%
Cheddar Cheese	7,031	11,602	-4,571	-39%
American-type Cheese	7,425	12,330	-4,905	-40%
Total Cheese	68,703	78,677	-9,973	-13%
Nonfat Dry Milk / Skim Milk Powder	139,896	113,202	26,694	24%
Whole Milk Powder	6,942	10,563	-3,621	-34%
Dry Whey	61,647	86,565	-24,918	-29%
Whey Protein Concentrate/Isolate	37,258	29,405	7,853	27%
Lactose	90,340	85,585	4,756	6%
Percent of Milk Solids Exported	13.7%	13.8%	-0.1%	-1%

U.S. Dairy Imports	Sept– Nov 2015	Sept– Nov 2014	2014–2015 Change	Percent Change
		(metric tons)		
Butter	6,048	3,562	2,486	70%
Cheese	58,494	50,511	7,984	16%
Nonfat Dry Milk/Skim Milk Powder	656	356	300	84%
MPC (all protein levels)	9,510	13,586	-4,076	-30%
Casein	15,327	15,609	-282	-2%
Percent of Milk Solids Imported	3.5%	3.5%	0.1%	2%

Dairy Product Production *from page 2*

particularly Cheddar, increased at a greater annual rate than milk production, as did butter and dry whey.

Dairy Product Inventories

Butter and cheese stocks were greater than year-ago levels again at the end of November, while nonfat dry milk stocks decreased. Compared with a month earlier, cheese stocks were basically unchanged, butter stocks were down sharply and stocks of nonfat dry milk were up about 10 percent. November butter stocks represented about 26 days of the moving average of total commercial use, well below the 36 days this measure has averaged during 2014

and 2015. This is an indicator of strength for butter market prices. Stocks of American- and of other-than-American type cheese were both slightly above their 2014-15 average stocks-to-use ratios at the end of November, while nonfat dry milk stocks were slightly below.

Dairy Product and Federal Order Class Prices

Butter, Cheddar cheese and nonfat dry milk prices in USDA's Agricultural Marketing Service survey were all down in December from a month earlier, while dry whey prices stayed the same. Butter prices dropped the most, but were still about 67 cents a

continued on page 4

Milk & Dairy Products Production	Sept–Nov 2015	Sept–Nov 2014	2014–2015 Change	Percent Change
Milk Production				
Cows (1000 head)	9,311	9,278	34	0.4%
Per Cow (pounds)	5,408	5,404	4	0.1%
Total Milk (million pounds)	50,356	50,136	220	0.4%
Dairy Products Production				
Cheese		(million pounds)		
American Types	1,144	1,132	12	1.1%
Cheddar	814	792	22	2.8%
Italian Types	1,241	1,238	3	0.3%
Mozzarella	967	973	-6	-0.6%
Total Cheese	2,928	2,880	47	1.6%
Butter	433	427	6	1.4%
Dry Milk Products				
Nonfat Dry Milk	364	399	-35	-9%
Skim Milk Powder	111	115	-4	-4%
Dry Whey	236	209	27	12.8%
Whey Protein Concentrate	119	134	-15	-11.4%

Dairy Product Inventories	Nov 2015	Oct 2015	Nov 2014	2014–2015 Change
		(million pounds)		
Butter	133	179	108	23%
American Cheese	698	697	636	10%
Other Cheese	448	449	381	17%
Nonfat Dry Milk	201	180	219	-8%

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

pound above a year earlier, and were the fourth-highest monthly price since the survey began in 2000. By contrast, the December survey price for nonfat dry milk was the second lowest ever, and the dry whey price was the second lowest since early 2009. These extremes in survey prices produced corresponding extremes in the federal order prices. The December price for butterfat was among the highest ever, while nonfat solids, protein, Class III and Class IV skim milk prices were among the lowest ever. The butterfat price exceeded both the protein and nonfat solids prices by record amounts in November and by the second highest amounts in December. The other solids price was the second lowest since early 2009.

Milk and Feed Prices

The all-milk price reported by NASS for November was \$18.20 per hundredweight, 50 cents higher than the October price. Analysis indicates that, with the U.S. average milkfat test at 3.87 percent, about two-thirds of the value of the November all-milk price was due just to the value of milkfat. This makes the average U.S. milk check particularly sensitive to changes in the price of a single product: butter. The change in federal order class prices between November-December indicates that the December all-milk price will be 80 cents to \$1 lower than November. The monthly Margin Protection Program feed cost formula dropped by almost 30 cents a hundredweight from October-November as prices for all three feed components moved lower. As a result,

continued on page 5

Dairy Product and Federal Order Prices	Dec 2015	Nov 2015	Dec 2014	2014–2015 Change
AMS Commodity Prices		(per pound)		
Butter	\$2.571	\$2.800	\$1.905	\$0.666
Cheese	\$1.572	\$1.650	\$1.736	-\$0.164
Nonfat Dry Milk	\$0.789	\$0.837	\$1.255	-\$0.466
Dry Whey	\$0.234	\$0.234	\$0.587	-\$0.354
Class Prices for Milk		(per hundredweight)		
Class I Mover	\$16.71	\$16.48	\$22.53	-\$5.82
Class III	\$14.44	\$15.30	\$17.82	-\$3.38
Class IV	\$15.52	\$16.89	\$16.70	-\$1.18

Milk and Feed Prices	Nov 2015	Oct 2015	Nov 2014	2014–2015 Change
Producer Prices				
All Milk (per cwt.)	\$18.20	\$17.70	\$23.00	-\$4.80
Feed Prices				
Corn (per bushel)	\$3.60	\$3.67	\$3.60	\$0.00
Soybean Meal (per ton)	\$309	\$328	\$441	-\$133
Alfalfa Hay (per ton)	\$150	\$156	\$182	-\$32
2014 Farm Bill Feed Cost (per cwt.)	\$8.19	\$8.48	\$9.60	-\$1.41
2014 Farm Bill Margin (per cwt.)	\$10.01	\$9.22	\$13.40	-\$3.39
Retail Dairy Product Prices				
Fluid Milk (per gallon)	\$3.299	\$3.338	\$3.858	-\$0.559
Cheddar Cheese (per pound)	\$5.433	\$5.478	\$5.419	\$0.014

Milk and Feed Prices *from page 4*

the monthly MPP margin for November rose almost 80 cents from its October level to \$10.01 per hundredweight. That makes it unlikely that the November-December bimonthly margin will trigger payments.

The Bureau of Labor Statistics reported that average retail prices for both whole milk and Cheddar cheese decreased from October to November. The whole milk retail price was 56 cents a gallon below November 2014, while the Cheddar cheese price was basically unchanged.

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.