

Overview

The U.S. dairy economy entered 2023 notably affected by milk production growth and sharply higher dairy-product retail price inflation. But with total U.S. dairy exports well over year-ago levels during November–January, export growth was able to more than make up for the loss in total domestic use and keep total commercial use, domestic and exports, positive during the period.

Milk and dairy product prices have receded from their often record levels last year, with the U.S. average all-milk price falling from its all-time record high of \$27.30/cwt last July to \$23.10/cwt in January. But feed costs under the Dairy Margin Coverage program have stayed mostly in the high-\$14/cwt to low-\$15/cwt range during this period, squeezing producer margins, which are currently expected to remain below the maximum \$9.50/cwt DMC coverage level until the fourth quarter of this year.

Commercial Use of Dairy Products

Total domestic use of milk in all dairy is still falling below year-earlier levels, as retail price inflation continues to affect sales. The drop was particularly notable for milkfat, reflecting inflation’s impact on butter and other consumer dairy products. American-type cheese consumption continues to show positive domestic growth, as does yogurt, but other cheese continues to struggle, while fluid milk has resumed its long-term decline following a brief surge in the first year of the pandemic.

U.S. Dairy Trade

U.S. dairy exports were equivalent to 15.6 percent of U.S. milk solids production during January, typically a slower month

for exports. During the past ten years, December, January and February have had the lowest exports by this measure, averaging 14.3 percent of solids production, while April, May and June have been the highest months, averaging 16.3 percent. The broad mix of products exported during January was typical, with 83 percent of the total milk solids exported in the form of dry skim ingredient products and 11 percent as cheese.

Dairy product imports into the United States dropped back below the equivalent of 4 percent of U.S. milk solids production during January, after having exceeded that level, for the first time in more than six years, in December. Butter import growth has slowed in recent months, but that of MPC and casein continues at a significant pace.

Domestic Commercial Use	Nov 2022–Jan 2023	Nov 2021–Jan 2022	2022–2023 Change	Percent Change
	(million pounds)			
Total Fluid Milk Products	11,246	11,519	-273	-2.4%
Yogurt	1,122	1,102	20	1.8%
Butter	523	592	-69	-11.6%
American-type Cheese	1,374	1,353	20	1.5%
All Other Cheese	1,993	2,005	-12	-0.6%
Total Cheese	3,367	3,358	9	0.3%
Dry Skim Milk	168	194	-25	-13.1%
All Products (milk equiv., milkfat basis)	54,915	56,274	-1,360	-2.4%
All Products (milk equiv., skim solids basis)	45,379	45,563	-185	-0.4%
All Products (milk equiv., total solids basis)	48,406	48,933	-528	-1.1%

Milk Production

Following several months of declining year-over-year U.S. milk production growth, from 1.6 percent last August to 0.6 percent in December, the rate perked up to 1.3 percent in January. This continues to make it difficult to discern a clear trajectory for production this year, especially since a corresponding uptick was not apparent in January milk solids production. On the other hand, a similar upturn, both faster expansion as well as slower contraction, is apparent in the January numbers for most of the 24 larger milk-producing states for which USDA reports milk production monthly, indicating that factors stimulating additional production may be widespread among the country's milk producing regions. The annual growth rate in cow numbers also ticked up in January. Continued increases in average component composition of U.S. milk production keep the expansion rate for total milk solids production well ahead of that for liquid milk. Similarly, milkfat growth has outpaced increases in total milk solids production in recent years.

Dairy Products

Production of all cheese grew annually by more than two percent during November–January. This growth, fueled by recovering milk production, exceeded the inflation-impacted change in domestic commercial use of the major types of cheese, keeping downward pressure on wholesale prices. Production and domestic use of butter showed a similar imbalance, but had a less pronounced impact on February wholesale prices. By contrast, overall production of dry skim products, both dry skim milk and whey products, was down from a year earlier during the period.

Dairy Product Inventories

The tight supply-demand situation during 2021-22 for milk, and for butter specifically, has noticeably diverted monthly butter stocks from their gradual long-term rise. Average monthly ending stocks during 2022 were back to about their levels during 2018 and 2019, and down 20 percent

continued on page 3

U.S. Dairy Exports	Nov 2022–Jan 2023	Nov 2021–Dec 2022	2022–2023 Change	Percent Change
		(metric tons)		
Butter	15,251	10,307	4,944	48%
Anhydrous Milk Fat / Butteroil	3,071	4,104	-1,034	-25%
American-type Cheese	21,958	15,756	6,202	39%
Cheddar Cheese	21,823	15,459	6,365	41%
All Other Cheese	85,339	78,218	7,121	9%
Total Cheese	107,297	93,974	13,323	14%
Dry Skim Milk	201,995	193,428	8,567	4%
Whole Milk Powder	7,341	8,350	-1,009	-12%
Dry Whey	50,871	44,520	6,351	14%
Whey Protein Concentrate/Isolate	53,330	41,024	12,306	30%
Lactose	114,967	94,763	20,204	21%
Percent of U.S. Milk Solids Exported	16.7%	15.1%	1.6%	10%

U.S. Dairy Imports	Nov 2022–Jan 2023	Nov 2021–Jan 2022	2022–2023 Change	Percent Change
		(metric tons)		
Butter	12,157	11,363	795	7%
Cheese	46,648	46,721	-73	0%
Dry Skim Milk	89	124	-35	-28%
MPC (all protein levels)	26,067	12,311	13,756	112%
Casein	25,015	18,654	6,361	34%
Percent of U.S. Milk Solids Imported	3.9%	3.3%	0.6%	18%

Dairy Product Inventories *from page 2*

from 2021 average stocks. January's increase from December was a relatively typical early year rise in the normally very cyclical yearly pattern of butter inventories.

American-type cheese stocks at the end of January, together with those at the end of last November, were the lowest since last July. January ending stocks of all reported cheese types were close to their respective averages since the start of the COVID pandemic, as were those of dry whey, while those of dry skim milk were below their corresponding average.

Dairy Product and Federal Order Class Prices

The February survey price for cheddar cheese was more than \$0.15/pound lower than the January price. Barrels dropped more than blocks. Nonfat dry milk survey prices were down by \$0.11/pound during February, butter by less than \$0.05/lb, and dry whey by even less. This combination moved Class III prices down by more than Class IV, \$1.65/cwt and \$1.15/cwt lower, respectively.

The lower dairy product wholesale prices are beginning to be passed on at retail. Retail price inflation remained in the double-digit range for almost all dairy products during the

continued on page 4

Milk and Dairy Products Production	Nov 2022–Jan 2023	Nov 2021–Jan 2022	2022–2023 Change	Percent Change
Milk Production				
Cows (1,000 head)	9,402	9,376	26	0.3%
Per Cow (pounds)	5,999	5,958	41	0.7%
Total Milk (million pounds)	56,393	55,859	534	1.0%
Total Milk Solids (million pounds)	7,533	7,424	109	1.5%
Dairy Products Production				
		(million pounds)		
Cheese				
American Types	1,447	1,391	56	4.0%
Cheddar	1,016	980	37	3.7%
Italian Types	1,498	1,482	16	1.1%
Mozzarella	1,180	1,159	21	1.8%
Total Cheese	3,557	3,479	78	2.3%
Butter	560	530	30	5.7%
Dry Milk Products				
Nonfat Dry Milk	503	499	4	0.7%
Skim Milk Powder	138	152	-13	-8.8%
Dry Whey	225	232	-8	-3.3%
Whey Protein Concentrate	125	138	-12	-8.9%

Dairy Product Inventories	Jan 2023	Dec 2022	Jan 2022	2022–2023 Change
				(million pounds)
Butter	263	216	219	20%
American Cheese	819	825	838	-2%
Other Cheese	622	620	607	2%
Dry Skim Milk	279	263	267	5%
Dry Whey	70	70	57	24%

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

second half of 2022, as measured by annual percentage change in their respective consumer price indices (CPIs). But those rates mostly dropped throughout last fall and had fallen back into the single digits by February for fluid

milk and cheese. Butter price inflation, which peaked at 31.4 percent last December, was down sharply to 20.7 percent in February. Much of this effect was due to the respective CPIs' slowing their rise relative to that from a year earlier, but the CPIs themselves, pegged to a base in the early 1980s, have more recently begun to drop as well.

Dairy Product and Federal Order Prices	Feb 2023	Jan 2023	Feb 2022	2022–2023 Change
NDPSR Dairy Product Prices				
				(per pound)
Butter	\$2.416	\$2.460	\$2.667	-\$0.251
Cheddar Cheese	\$1.822	\$1.977	\$1.907	-\$0.084
40-Pound Blocks	\$1.987	\$2.115	\$1.909	\$0.078
500-Pound Barrels	\$1.660	\$1.823	\$1.875	-\$0.214
Nonfat Dry Milk	\$1.255	\$1.366	\$1.728	-\$0.473
Dry Whey	\$0.403	\$0.427	\$0.780	-\$0.377
Federal Order Class Prices for Milk				
				(per hundredweight)
Class I Mover	\$20.78	\$22.41	\$21.64	-\$0.86
Class II	\$20.83	\$21.61	\$23.79	-\$2.96
Class III	\$17.78	\$19.43	\$20.91	-\$3.13
Class IV	\$18.86	\$20.01	\$24.00	-\$5.14
Retail Dairy Product Prices				
Fluid Whole Milk (per gallon)	\$4.163	\$4.204	\$3.875	\$0.288
Lowfat Fluid Milk (per gallon)	\$3.819	\$3.817	\$3.514	\$0.305
Cheddar Cheese (per pound)	\$5.850	\$5.946	\$5.447	\$0.403
Butter (per pound)	\$4.869	\$4.882	\$3.774	\$1.095

Milk and Feed Prices	Jan 2023	Dec 2022	Jan 2022	2022–2023 Change
Producer Prices				
All Milk (per cwt.)	\$23.10	\$24.70	\$24.20	-\$1.10
Feed Prices				
Corn (per bushel)	\$6.64	\$6.58	\$5.58	\$1.06
Soybean Meal (per ton)	\$482	\$463	\$421	\$61
Premium Alfalfa Hay (per ton)	\$328	\$327	\$273	\$55
Feed Prices (per cwt of milk)				
Corn	\$7.12	\$7.06	\$5.99	\$1.14
Soybean Meal	\$3.55	\$3.40	\$3.10	\$0.45
Premium Alfalfa Hay	\$4.49	\$4.48	\$3.74	\$0.75
DMC Feed Cost* (per cwt.)	\$15.16	\$14.94	\$12.66	\$2.50
DMC Margin* (per cwt.)	\$7.94	\$9.76	\$11.54	-\$3.60
<i>*DMC calculations are not revised</i>				

Milk and Feed Prices

The Dairy Margin Coverage (DMC) program made payments for only two of the twelve months last year, but it will pay \$1.56/cwt for \$9.50/cwt coverage for January. The January margin was \$7.94/cwt, \$1.82 lower than December's. A one month drop of \$1.60/cwt in the U.S. average all-milk price, to \$23.10/cwt, accounted for most of the margin drop. This was tied for tenth largest out of 117 such monthly price drops since January 2000. A monthly rise in the soybean meal price accounted for about two-thirds of the remaining margin fall, but higher corn and premium alfalfa prices contributed lesser amounts as well.

Looking Ahead

In its World Agricultural Supply and Demand Estimates (WASDE) report for March, USDA raised its forecast for calendar year 2023 milk production up slightly, following two months of lowering it, to currently predict a 0.9 percent increase over

2022's 226.5 billion pounds. The reason cited for this change was "a larger cow inventory." The department is also predicting a slight drop in the total volume of dairy exports this year, on a milk equivalent basis, following 2022's record-setting export volume. USDA's March forecast of the annual average U.S. all-milk price was \$20.45/cwt, following several months of steadily lowered forecasts. The dairy futures markets were indicating a 2023 average milk price of \$21.50/cwt at the time of the USDA March forecast.

Available forecasts as of mid-March indicate monthly DMC margins will remain below \$9.50/cwt until this coming October, and average about \$8.00/cwt for this entire calendar year. Signing up at the \$9.50/cwt coverage level for the first five million pounds is always recommended as a cost-effective risk management strategy. This year will almost certainly return many times the cost of this very affordable means of managing margin risk.

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.