

OVERVIEW

Milk prices and the Dairy Margin Coverage program margin both kept rising in September, with continued gains expected. Constrained milk production and relatively robust overall domestic consumption have set the conditions for this recovery, despite continued weakness in total dairy exports. Declining stocks of the major milk price-influencing dairy products show a further tightening of industry market conditions.

COMMERCIAL USE OF DAIRY PRODUCTS

Domestic use of milk in all dairy products increased during the third quarter, surpassing growth in milk and milk solids production by all milk equivalent measures, particularly skim solids. Growth of milkfat use was down from prior months as recent high butter prices threatened the return of retail price inflation for higher-fat dairy products.

Lower consumption of other than American-type cheese continues to affect this product, for which food service is a major marketing channel. Total commercial use, both domestic and exports, was flat over a year ago during the quarter.

DOMESTIC COMMERCIAL USE	JUL-SEP 2023	JUL-SEP 2022	2022-2023 CHANGE	PERCENT CHANGE
(million pounds)				
Total Fluid Milk Products	10,361	10,509	-148	-1.4%
Yogurt	1,237	1,186	52	4.4%
Butter	531	491	39	8.0%
American-type Cheese	1,351	1,326	26	1.9%
All Other Cheese	1,988	2,027	-38	-1.9%
Total Cheese	3,340	3,352	-13	-0.4%
Dry Skim Milk	165	222	-56	-25.4%
All Products (milk equiv., milkfat basis)	56,924	56,495	429	0.8%
All Products (milk equiv., skim solids basis)	46,326	44,720	1,606	3.6%
All Products (milk equiv., total solids basis)	49,610	48,331	1,279	2.6%



U.S. DAIRY TRADE

Persistently lower exports this year have been equivalent to a market loss of 1.4 percent of total U.S. milk solids production during the first three quarters of 2023. Losses were concentrated in the larger export volume products, particularly whey products, milk powders, fats and cheese.

U.S. dairy imports increased slightly during the third quarter, to the equivalent of 3.5 percent of total U.S. milk solids production, the same as during the third quarter of 2022.

U.S. DAIRY EXPORTS	JUL-SEP 2023	JUL-SEP 2022	2022-2023 CHANGE	PERCENT CHANGE
(metric tons)				
Butter	6,801	17,289	-10,489	-61%
Anhydrous Milk Fat/Butteroil	1,728	3,644	-1,915	-53%
American-type Cheese	17,018	21,002	-3,984	-19%
Cheddar Cheese	16,885	20,785	-3,900	-19%
All Other Cheese	93,884	90,382	3,503	4%
Total Cheese	110,902	111,384	-482	0%
Dry Skim Milk	187,093	194,297	-7,205	-4%
Whole Milk Powder	7,898	8,660	-762	-9%
Dry Whey	41,134	64,848	-23,715	-37%
Whey Protein Concentrate/Isolate	54,663	61,528	-6,864	-11%
Lactose	120,329	120,509	-180	0%
Percent of U.S. Milk Solids Exported	16.5%	18.6%	-2.1%	-11%

U.S. DAIRY IMPORTS	JUL-SEP 2023	JUL-SEP 2022	2022-2023 CHANGE	PERCENT CHANGE
(metric tons)				
Butter	12,503	13,959	-1,456	-10%
Cheese	51,174	49,535	1,639	3%
Dry Skim Milk	204	58	146	250%
MPC (all protein levels)	16,768	10,199	6,568	64%
Casein	12,700	18,092	-5,392	-30%
Percent of U.S. Milk Solids Imported	3.5%	3.5%	0.0%	0%

MILK PRODUCTION

Total U.S. milk production was down over a year earlier during all three months of the this year's third quarter. Cow numbers and production per cow were both below a year ago during the quarter. USDA reported preliminary September

production just 0.2 percent below September 2022, indicating the likely end of this recent, three-month episode of annually-reduced production. Milk solids production was flat over a year earlier during the third quarter.



MILK PRODUCTION	JUL-SEP 2023	JUL-SEP 2022	2022-2023 CHANGE	PERCENT CHANGE
Cows (1,000 head)	9,375	9,408	-33	-0.4%
Per Cow (pounds)	5,980	5,999	-19	-0.3%
Total Milk (million pounds)	56,066	56,438	-372	-0.7%
Total Milk Solids (million pounds)	7,273	7,268	5	0.1%

DAIRY PRODUCTS

Lower milk production overall kept a damper on production of most dairy products, including total cheese and all dry

skim milk products, with the exception of whey products and butter, which benefited from lower cream use elsewhere.

DAIRY PRODUCTS PRODUCTION	JUL-SEP 2023	JUL-SEP 2022	2022-2023 CHANGE	PERCENT CHANGE
Cheese	(million pounds)			
American Types	1,393	1,379	14	1.0%
Cheddar	951	964	-12	-1.3%
Italian Types	1,446	1,472	-26	-1.7%
Mozzarella	1,146	1,162	-16	-1.4%
Total Cheese	3,465	3,478	-13	-0.4%
Butter	444	435	9	2.0%
Dry Milk Products				
Nonfat Dry Milk	347	422	-75	-17.8%
Skim Milk Powder	176	195	-19	-9.8%
Dry Whey	247	235	11	4.9%
Whey Protein Concentrate	123	110	13	11.5%

DAIRY PRODUCT INVENTORIES

September-ending butter stocks in cold storage were 92 million pounds below their level just four months earlier, at the end of June. Drops in butter inventories over four months have only been this large or larger over just 14 percent of

all months since 1995. Cheese and dry skim milk stocks have declined modestly, as lower milk production keeps production of these products in check.

DAIRY PRODUCT INVENTORIES	SEP 2023	AUG 2023	SEP 2022	2022-2023 CHANGE
	(million pounds)			
Butter	275	292	267	3%
American Cheese	851	853	843	1%
Other Cheese	622	642	627	-1%
Dry Skim Milk	253	278	282	-10%
Dry Whey	83	88	67	25%



DAIRY PRODUCT AND FEDERAL ORDER CLASS PRICES

October NDPSR prices for cheese were down materially from the prior month and from a year ago. Nonfat dry milk and dry whey prices both rose modestly from lows of a month or two ago but still remained below year ago levels. The October butter price, by contrast, continued on a tear this year, even managing to top its year-earlier level, which at the time was the highest monthly price since the NDPSR began in January 2000. The combination of product price changes drove the October Class IV and Class II prices substantially higher during the month but did the opposite for the Class III price, while all class prices remained well below year-ago levels.

At the same time, price pressures on dairy products sold to consumers have been abating faster than for other items, including food items. The consumer price index (CPI) for all items, also commonly referenced as the overall rate of inflation, dropped slightly in October from its all-time high a month earlier but was 3.2 percent higher than it was in October 2022. The CPI for all food and beverages reached a new all-time high in October that was 3.3 percent above a year ago. By contrast, the CPI for all dairy products has been dropping most months this year and was down by 0.4 percent from a year ago in October.

DAIRY PRODUCT AND FEDERAL ORDER PRICES	OCT 2023	SEP 2023	OCT 2022	2022-2023 CHANGE
NDPSR Dairy Product Prices (per pound)				
Butter	\$3.239	\$2.753	\$3.191	\$0.048
Cheddar Cheese	\$1.739	\$1.937	\$2.156	-\$0.417
40-Pound Blocks	\$1.804	\$1.990	\$2.045	-\$0.241
500-Pound Barrels	\$1.650	\$1.862	\$2.221	-\$0.571
Nonfat Dry Milk	\$1.156	\$1.116	\$1.582	-\$0.426
Dry Whey	\$0.320	\$0.295	\$0.486	-\$0.166
Federal Order Class Prices for Milk (per hundredweight)				
Class I Base	\$19.47	\$18.90	\$22.71	-\$3.24
Class II	\$21.95	\$19.98	\$25.73	-\$3.78
Class III	\$16.84	\$18.39	\$21.81	-\$4.97
Class IV	\$21.49	\$19.09	\$24.96	-\$3.47
Retail Dairy Product Prices				
Fluid Whole Milk (per gallon)	\$3.927	\$3.965	\$4.184	-\$0.257
Lowfat Fluid Milk (per gallon)	\$3.673	\$3.639	\$3.836	-\$0.163
Cheddar Cheese (per pound)	\$5.846	\$5.846	\$5.960	-\$0.114
Butter (per pound)	\$4.550	\$4.407	\$4.847	-\$0.297

MILK AND FEED PRICES

The September Dairy Margin Coverage (DMC) margin again followed the script long foreseen by the dairy and grain futures markets for a rapid increase during late summer and early fall. It gained \$1.98/cwt over August, which itself was up almost \$3 from July's record low of \$3.52/cwt, to reach \$8.44/cwt. As with the August increase, September's DMC margin rise was driven primarily by a higher all-milk

price, which rose by \$1.30/cwt over August to hit \$21.00/cwt. The September DMC feed cost formula shed \$0.68/cwt, due mostly to a lower corn price, with a smaller drop in the September soybean meal price partially offset by a small rebound in the price of premium alfalfa hay. The September margin will generate \$1.06/cwt payments to \$9.50/cwt DMC Tier 1 coverage.



MILK AND FEED PRICES	SEP 2023	AUG 2023	SEP 2022	2022-2023 CHANGE
Producer Prices				
All Milk (per cwt.)	\$21.00	\$19.70	\$24.10	-\$3.10
Feed Prices				
Corn (per bushel)	\$5.21	\$5.73	\$7.09	-\$1.88
Soybean Meal (per ton)	\$411	\$439	\$474	-\$63
Premium Alfalfa Hay (per ton)	\$288	\$282	\$342	-\$54
Feed Prices (per cwt of milk)				
Corn	\$5.59	\$6.15	\$7.61	-\$2.02
Soybean Meal	\$3.02	\$3.23	\$3.48	-\$0.46
Premium Alfalfa Hay	\$3.95	\$3.86	\$4.69	-\$0.74
DMC Feed Cost* (per cwt.)	\$12.56	\$13.24	\$15.78	-\$3.22
DMC Margin* (per cwt.)	\$8.44	\$6.46	\$8.62	-\$0.18

*DMC calculations are not revised

LOOKING AHEAD

Over the past year, USDA's monthly World Agricultural Supply and Demand (WASDE) report has fairly steadily reduced its forecasts of U.S. milk production for this year and for 2024. The Department's November report made a particularly large reduction in both forecasts and currently projects 2023 milk production will top 2022's by just 0.3 percent, with 2024 production up over this year's by 1.3 percent.

The November WASDE forecasts for 2023 average dairy product, Class III and IV and all-milk prices are fairly consistent with contemporary forecasts based on CME futures prices, as would be expected by this time of the year. However, its

forecasts for most of these during 2024 are more bearish than the CME's, despite WASDE increasing them this month "as lower milk production constrains production of those products." It now projects the 2024 annual average U.S. all-milk price at \$20.80/cwt, while the CME at the time indicated a 2024 average of around \$21.50/cwt.

At the same time, the futures markets were also expecting the DMC margin to stay slightly below the \$9.50/cwt maximum Tier 1 coverage level during the fourth quarter of this year and to average about \$8.95/cwt during 2024, which would be \$2.20/cwt higher than this year's projected average margin.



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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.