



MARKET SNAPSHOT DAIRY



Sept. 30, 2022

Executive Summary

Drivers for the dairy industry include softening milk prices, elevated feed costs and narrowing profit margins.

- The USDA milk price projection for 2022 and 2023 has been lowered to \$25.45 and \$22.30, respectively.
 While feed costs have softened, analysts expect milk prices to fall faster than production expenses, causing dairies to operate on tighter profit margins.
- U.S. dairy exports will remain globally competitive despite a strengthening U.S. dollar.



Northwest FCS' 12-month dairy outlook suggests slightly profitable returns. Record milk prices in 2022 have outweighed feed cost increases. Feed prices have been stable and hay prices have softened. Risk management tools can help producers protect profitability from production costs overtaking milk prices.

Northwest Situation

Dairies of all sizes in the Northwest benefited from record milk prices with larger milk checks exceeding increases in production and feed costs. In July, the Pacific Northwest Federal Milk Marketing Order uniform price averaged \$24.48 per cwt. Dairies need strong milk prices to support increases in production costs. August feed costs set a record of \$16.22 per cwt, up \$3.55 per cwt from last year. Record dairy prices are softening and July milk prices fell by \$0.91 while feed costs rose \$0.80 month over month.

Dairy quality hay experienced strong competition between Northwest dairies and exporters. This competitive pressure came to a stalemate in September as dairies and exporters assessed the market in hopes of lower prices. As exporters waited for lower prices, trade of export quality hay decreased and cooled hay prices. In Central Idaho, hay prices fell by \$20 per ton. While prices have started to soften, challenges with getting hay to meet dairy quality standards and limited local hay trade deals ensure that prices will remain elevated. Dairies that purchase hay will continue to pay over \$300 per ton for dairy quality hay or change feed rations to include less alfalfa (although finding affordable alternatives is difficult as prices are elevated for most forages).

Producers have been cautiously optimistic about dairy profitability, paying down operating lines and holding off expansion projects (largely due to significant surges in construction costs). Milk prices are expected to fall faster

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than production expenses in 2023, narrowing margins. Producers may consider risk management programs (like dairy revenue protection, dairy margin coverage, and/or hedging instruments) to cushion the impact of declining milk prices.

Rising inflation will test profitability while reducing the real value of milk checks. Profitability will be further tested by increases to the cost of borrowing on short-term variable-rate debt. The Federal Reserve has increased interest rates by 3% since the beginning of 2022 with further rate increases expected into 2023.

National Situation

National milk production has trended upwards, driven by greater milk production per cow. For 11 consecutive months, dairy herd numbers decreased year over year with 11,000 fewer head in August 2022 compared to a year ago. Despite moderate decreases in the national dairy herd, total milk production rose 1.6%. Daily milk production grew with cows averaging 66 lbs. of milk daily, a 1.8% annual increase. This trend is forecasted to last through 2023. Milk production is projected to continue to grow with improvements in milk productivity outweighing declines in the national herd.

Strong milk prices and elevated, but stable feed cost improved dairy margins through June. Dairy margin estimates for the last quarter of 2022 were \$8.08 per cwt. Dairy prices are expected to fall in 2023. The All-Milk price forecast is \$22.70 per cwt, \$2.75 per cwt lower than 2022 prices. As milk prices decline, dairy margins are forecasted to narrow into 2023. For the first quarter of 2023, dairy margins are forecasted to range from \$2.00 to \$4.40 per cwt with estimated to further narrow by the second quarter. Tighter profit margins combined with volatile input costs and limited processor growth may discourage expansion.

Historic and Forecast Milk Prices (annual, in U.S. dollars)

	2020	2021	2022*	2023*
All Milk (per cwt)	\$18.13	\$18.53	\$25.45	\$22.70
Class III (per cwt)	\$18.16	\$17.08	\$21.65	\$19.70
Class IV (per cwt)	\$16.49	\$16.09	\$24.45	\$20.85
Cheese (per lb.)	\$1.92	\$1.68	\$2.08	\$1.97
Butter (per lb.)	\$1.58	\$1.73	\$2.85	\$2.39
Nonfat Dry Milk lb.)	\$1.04	\$1.27	\$1.69	\$1.51
Whey (per lb.)	\$0.36	\$0.58	\$0.61	\$0.49

Source: USDA World Agricultural Supply and Demand Estimates. Sept. 12, 2022.

The USDA projects 2022 cheese, butter, nonfat dry milk (NDM) and whey prices will remain at historically high levels. Estimates for final 2022 butter and NDM have been raised from August estimates to reflect sustained price strength throughout the fall. Butter demand, and price, will continue to increase as demand heats up in the winter with greater needs for holiday cooking. Forecasts for 2023, butter and NDM prices have increased from August estimates due to tight supplies going into the new year. In response to increases in the 2023 butter price, 2023 Class IV prices (milk used to produce butter) were increased by \$0.50 to \$20.85 per cwt from August projections.

^{*}Forecast.

International Situation

Globally, rising production costs, labor challenges, poor pasture conditions and increasing environmental regulations have slowed dairy output in many of the major dairy exporting regions.

In the European Union, milk production fell in Germany, France and the Netherlands. The hottest European summer on record hurt production and milk components (butterfat, protein) have still not fully recovered. Milk production can be negatively affected when temperatures reach 80°F without humidity (or 68 on the temperature-humidity index). At this temperature, cows turn energy away from digesting feed towards cooling themselves down. When eating less feed, milk output drops. In addition, crops across the EU experienced significant harvest reductions including a 16% annual decrease in corn. European dairies will face even higher feed costs going into 2023 after heatwaves decimated feed yields and negatively impacted pasture conditions.

Australian and New Zealand milk production both decreased in the last year, declining 4.1% and 4.7%, respectively. In 2020, Australia adopted regulations requiring processors to report milk prices before milk is collected, in essence banning retrospective cuts to milk checks. On Sept. 15, a dairy processor was found guilty of breaching this regulation. This is the first case since the Dairy Code of Conduct was enacted two years ago. In New Zealand, unfavorable weather and poor pasture conditions were the driving factors reducing milk supply. However, higher prices and strong demand led New Zealand's largest dairy exporter to raise their projected earnings in 2023, with farmer returns raised by NZ\$0.38 per kilogram.

Reductions in global milk production boost U.S. export competitiveness and present opportunities for U.S. trade growth. Despite elevated dairy prices and a strengthening dollar, U.S. dairy exports remain competitive compared to other major exporting regions. Cheese, whey and butter export volumes increased in July despite record prices. U.S. dairy exports remain competitive compared to other major exporting regions despite elevated dairy prices and a strengthening dollar. While a strengthening U.S. dollar could pose risk for exports, dairy demand remains relatively inelastic for dairy exports, which are up 4.5% year over year. The U.S. dairy industry is positioning to remain a major global dairy exporter.

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