



WEEKLY DAIRY OUTLOOK

January 5th, 2025

This short weekly newsletter provides you with a summary of current dairy prices, translates product prices into component prices, and summarizes major dairy related news.

Table 1. Spot dairy products prices on Friday December 26th and Friday January 2nd, and their implied component prices.

	December 26 2025	January 2 2026	Change	Month to date
CME cheddar blocks (\$/lb)	1.3350	1.3900	+0.0550	1.3900
CME butter (\$/lb)	1.4025	1.3750	-0.0275	1.3750
CME Dry whey (\$/lb)	0.7300	0.7250	-0.0025	0.7250
CME Nonfat dry milk (\$/lb)	1.1800	1.1750	-0.0050	1.1750
-----	-----	Implied Prices	-----	-----
Butterfat (\$/lb)	1.42	1.39	-0.03	1.39
Protein (\$/lb)	2.00	2.21	+0.21	2.21
Other solids (\$/lb)	0.48	0.47	-0.01	0.47
Nonfat solids (\$/lb)	0.93	0.93	+0.00	0.93
Class III (\$/cwt)	14.10	14.64	+0.54	14.64
Class IV (\$/cwt)	13.34	13.18	-0.16	13.18

Comments

All things considered, dairy prices remained relatively steady on both the cash and futures markets last week, albeit that most prices went down. As of now, traders see little milk price recovery in the next 6 months. What we do know is that there is plenty of milk currently produced around the world. Early reports indicate that cumulative milk production across the 5 largest dairy exporters (Argentina, Australia, Europe, New Zealand and the United States) grew by ~ 3.5% from September to November. Traders on the CME are anticipating more difficult time ahead for U.S. dairy exports.

Table 2. Six-month strip of dairy futures at closing time last Friday, and changes in their 6-month averages from the prior Friday closings¹.

	Cheese (\$/lb)	Butter (\$/cwt)	Dry Whey (\$/cwt)	NFDM (\$/cwt)	Class III (\$/cwt)	Class IV (\$/cwt)
January	1.447	147.800	70.750	116.250	15.10	13.55
February	1.489	150.250	67.750	116.350	15.34	13.66
March	1.529	164.775	64.500	116.000	15.54	14.28
April	1.574	171.000	64.850	115.650	15.98	14.49
May	1.630	175.500	63.125	116.075	16.51	14.74
June	1.670	179.500	63.000	118.250	16.98	15.04
Average	1.557	164.804	65.663	116.429	15.91	14.29
Weekly Change	-0.019	-1.285	-0.905	-1.815	-0.34	-0.04

¹ Futures prices on the Chicago Mercantile Exchange

Based on the next 6-month of futures, the implied 6-month prices of milk components used in Class III and nonfat solids used in Class I, II, and IV pricings, and advanced Class I Base Skim Mover are reported in Table 3. Note that the January Class I Skim Mover was released on December 17th (the \$11.17/cwt in Table 3).

Table 3. Translation of futures dairy product prices into implied futures component prices and Class I Base Skim Mover.

	Butterfat (\$/lb)	Protein (\$/lb)	Other Solids (\$/lb)	Nonfat Solids (\$/lb)	Class I Skim Mover (\$/cwt)	Class I Skim Formula Change (\$/cwt) ¹
January	1.51	2.26	0.45	0.91	12.74	+0.10
February	1.54	2.37	0.42	0.91	10.19	+0.18
March	1.72	2.31	0.39	0.91	10.35	+0.00
April	1.80	2.37	0.39	0.91	9.96	+0.14
May	1.85	2.50	0.38	0.91	10.19	+0.27
June	1.90	2.58	0.37	0.93	10.50	+0.29
Average	1.72	2.40	0.40	0.92	10.65	+0.16
Weekly Change	-0.02	-0.05	-0.01	-0.02	+0.16	-0.02

¹ Beginning in June 2025, pricing of Class I skim milk changed from averaging the values of Class III and Class IV advanced skim prices plus \$0.74/cwt, to the higher of Class III and Class IV advanced skim prices. This column reports the resulting change in the calculated price of the Class I skim.

- Table 4 reports price quotations for butter, skim milk powder/nonfat dry milk (SMP/NFDM), whole milk powder (WMP), and cheddar from the top three exporting blocks of countries (the European Union taken as a whole) in early-December, and their relative biweekly price changes.

Table 4. World price quotations of 4 major dairy commodities as of December 7, 2025.

	US\$/lb			Biweekly Change (%)		
	E.U.	Oceania	U.S.	E.U.	Oceania	U.S.
Butter	2.63	2.55	1.46	-13.0	-9.5	-2.6
SMP/NDM	1.10	1.15	1.16	-3.0	-1.5	-2.5
WMP	1.67	1.53	1.81	-8.1	-2.2	-1.1
Cheddar	2.21	2.10	1.41	-3.6	+3.9	-9.5

Source: DG Agri

- Last Wednesday, the USDA released average national dairy product prices, component prices and minimum Class prices in effect in the Federal Milk Marketing Orders (FMMOs) for the month of December.

The December butterfat price of \$1.53/lb was well below its long-term time-detrended range (\$2.58 to \$2.78/lb) and stood near the 3rd percentile of butterfat prices between January 2021 and December 2025.

The December protein price of \$2.46/lb stood slightly below its time de-trended range (\$2.53 to \$2.93/lb) and near the 53rd percentile of protein prices between January 2021 and December 2025.

The December other solids price of \$0.44/lb was near the 83rd percentile of other solids prices between January 2021 and December 2025.

The December nonfat solids price of \$0.91/lb was near the 3rd percentile of nonfat solids prices between January 2021 and December 2025.

At \$15.86/cwt, Class III price was well below its time-detrended price range (\$18.55 to \$20.20/cwt) and near the 10th percentile of Class III prices between January 2021 and December 2025.

The Class IV price (\$13.64/cwt) was well below its long-term time detrended range (\$18.00 to \$19.60/cwt) and near the 3rd percentile of Class IV prices between January 2021 and December 2025.

Take note that the label 'time-detrended' is simply the linear time effect on prices over the last 15 years. They do not imply that prices should be in these ranges for economic reasons.

Table 5. Minimum Class and component prices in the Federal Milk Marketing Orders during the month of December 2025, and changes from November 2025 and December 2024.

	December 2025	November 2025	Change (Dec vs. Nov)	December 2024	Change (D '25 vs. D '24)
Cheese Blocks(\$/lb)	1.527	1.742	-0.215	1.761	-0.234
Butter (\$/lb)	1.529	1.636	-0.107	2.575	-1.046
Nonfat Dry Milk (\$/lb)	1.154	1.161	-0.007	1.395	-0.241
Dry Whey (\$/lb)	0.689	0.642	+0.048	0.635	+0.054
Butterfat (\$/lb)	1.58	1.71	-0.13	2.91	-1.33
Protein (\$/lb)	2.46	3.01	-0.56	1.96	+0.49
Other Solids (\$/lb)	0.44	0.39	+0.05	0.45	-0.01
Nonfat Solids (\$/lb)	0.91	0.91	-0.01	1.22	-0.31
Class III (\$/cwt)	15.86	17.18	-1.32	18.62	-2.76
Class IV (\$/cwt)	13.64	13.89	-0.25	20.74	-7.10

- As we start this new year, there are 2 mistakes that people make (and I have made them) that I wish they would stop making: I have labeled these (1) The omnipotent Class III fallacy, and (2) The futures markets adulation.

The omnipotent Class III fallacy. Too often, the Class III price is being looked as if it reflected an absolute, a price that some milk producers received or that some handlers paid for the milk they used. The fact is that nobody is paid Class III price, and no one pays Class III price unless the milk contains exactly 3.5% butterfat, 3.1856% protein, and 5.79% other solids, that the milk was used for cheesemaking, and the milk was actually pooled in the FMMO. One could argue that the milk used for cheesemaking and pooled in a FMMO is paid for its components and, thus, is paid at Class III price. However, Class III price compounds the price of 3 components. There is an infinite combination of component prices that yield the same Class III price. This is illustrated in Table 6.

Table 6. Three sets of component prices (\$/lb) that all yield the same Class III price of \$15/cwt at standard Class III milk composition.

Class III Price (\$/cwt)	Butterfat Price (\$/lb)	Protein Price (\$/lb)	Other Solids Price (\$/lb)
15.00	4.29	0.00	0.00
15.00	0.00	4.71	0.00
15.00	0.00	0.00	2.59

Each line in Table 6 represents an apex of a triangle in the 3-dimensional pricing space. In this respect, milk is quite different from most other farm commodities simply because the ‘standard Class III milk’ simply doesn’t exist, which is not the case for other commodities. Take Number 2 yellow corn as an example. All corn classified as Number 2 yellow corn have the same characteristics. One can find and buy Number 2 yellow corn: it does exist. But one cannot buy milk with the composition assumed for Class III milk. In short, Class III price is at best an index, a fuzzy point of reference. Class III price can go down while the all-milk price, the net price received by producers, goes up.

The futures markets adulation. Dairy futures are simply the consensus of prices provided by a set of gamblers. Dairy futures are cash settled: one doesn’t even have to actually buy cheese, or butter, or Class III milk (which doesn’t exist). Traders are a hodge podge of people with an interest in the price of the commodity itself (say milk producers) and who use futures for risk management, and speculators, those who think that they know something that the rest of traders don’t know and are literally gambling on this so-called ‘knowledge’. All of these traders use some sort of crystal ball to judge whether a futures, say the Class III price for next June, is a ‘good’ price or not. The problem is that none of them have an absolute accurate crystal ball. At one point in my career, I teamed up with Dr. Thraen at Ohio State to develop a crystal ball that would improve the accuracy of price forecasts. We literally threw everything but the kitchen sink into a complex statistical model. The result: pretty good 2 months ahead, questionable 6 months ahead, and worthless 12 months ahead. The only good outcome was that the graduate student received his doctorate degree. The point is that futures can be (and often are) very bad at forecasting milk prices. Table 7 reports Class III and Class IV futures for the following 6 months at closing time of Friday April 11th, and the actual Class III and Class IV prices in FMMOs released later on by the USDA.

Table 7. Class III and Class IV futures for the months of April to September at closing time on April 11th 2025 and their actual (realized) prices announced later by the USDA.

	Futures Class III (\$/cwt)	Futures Class IV (\$/cwt)	Realized Class III (\$/cwt)	Realized Class IV (\$/cwt)
April	17.48	17.92	17.22	17.91
May	18.57	18.13	17.21	17.99
June	18.82	18.30	16.83	17.54
July	17.32	18.89	17.45	17.92
August	17.24	18.50	17.96	18.23
September	17.59	16.17	18.36	18.49

So how good were the futures at forecasting actual Class prices in mid-April? First the actual Class III in April turned out to be \$0.26/cwt below the April futures. So even halfway through the month of April, the futures ended up still a quarter of a dollar off the actual Class III price. Two, the futures in April were forecasting price increases from May to June (+\$0.25/cwt and +\$0.17/cwt for Class III and Class IV, respectively). Both Class prices actually went down (-\$0.38/cwt and -\$0.45 for Class III and Class IV, respectively). Futures were predicting peak prices for both Classes in June. Realized prices actually bottomed out in June. Futures were forecasting greater Class IV than

Class III prices for April, July, and August. They ended up greater in April, May, June, July, August and September – all 6 months ahead (not too good for forecasting which of the 2 Classes would drive the Class I base skim price under the incoming ‘greater of’ system put in place by the USDA in June 2025). The point is simply that futures are guesses, maybe educated guesses, by guesses nevertheless and like all such guesses their accuracy decline with their time horizon. This is why I report only futures for the next 6 months in this newsletter. I have found that for longer time horizons, futures are barely better than random guesses. This is why I also (almost) always state that “if futures are realized” when I use futures markets in some form of forecasting. This is also why I refrain to issue my own price forecasts in this newsletter. If I had any confidence in my own forecasts, I would be an active speculator in the futures markets. But I don’t like to lose hard earned money...

So, in 2026, we shall all promise to (1) use the Class III price as a fuzzy market indicator, and (2) take dairy futures as uncertain predictors of milk prices.