PERDUE Animal Nutrition

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WEEKLY DAIRY OUTLOOK

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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 September 12th and Friday September 19th and their implied component prices.

	September 12 2025	September 19 2025	Change	Month to date
CME cheddar blocks ($/lb)	1.6150	1.6500	+0.0330	1.6517
CME butter ($/lb)	1.8600	1.7500	-0.1100	1.8775
CME Dry whey ($/lb)	0.5925	0.6400	+0.0475	0.5992
CME Nonfat dry milk ($/lb)	1.1650	1.1475	-0.0175	1.1775
-------	--------	Implied Prices	--------	-------
Butterfat ($/lb)	1.98	1.84	-0.14	2.00
Protein ($/lb)	2.31	2.57	+0.26	2.41
Other solids ($/lb)	0.34	0.38	+0.04	0.34
Nonfat solids ($/lb)	0.92	0.90	-0.02	0.93
Class III ($/cwt)	15.75	16.33	+0.58	16.15
Class IV ($/cwt)	14.88	14.26	-0.62	15.06

Comments

Will we see cash butter price below cash cheddar blocks on the CME? Based on the past, this is highly unlikely, but right now it seems that markets are completely oblivious of the past. In fact, traders seem to be discounting the 'present' and are focusing on their perception of what the future will bring, albeit that this perception is clearly not aligning with current data. Based on USDA reports, the U.S. produced 9.8% more butter in July '25 than in July '24', but butter stocks at the end of the month were 6.1% less in '25 than in '24. Traders seem to believe that the uncertainty regarding tariffs will lead to a substantial drop in butterfat exports, although U.S. butter is selling at a 39% discount to New Zealand butter.

Table 2. Six-month strip of dairy futures at closing time last Friday, and changes in their 6-month averages from the prior Friday closings[1].

	Cheese ($/lb)	Butter ($/cwt)	Dry Whey ($/cwt)	NFDM ($/cwt)	Class III ($/cwt)	Class IV ($/cwt)
September	1.810	211.100	57.550	125.025	17.64	16.74
October	1.742	194.525	61.000	116.575	17.17	15.35
November	1.703	200.325	60.200	116.000	16.71	15.47
December	1.701	206.000	57.000	115.950	17.00	15.92
January	1.702	208.500	55.725	116.000	16.90	16.10
February	1.728	211.725	54.000	116.375	17.03	16.24
Average	1.731	205.363	57.579	117.654	17.08	15.97
Weekly Change	+0.017	+1.237	+1.758	+0.125	+0.31	-0.22

[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 are reported in Table 3.

Table 3. Translation of futures dairy product prices into implied futures component prices.

	Butterfat ($/lb)	Protein ($/lb)	Other Solids ($/lb)	Nonfat Solids ($/lb)	Class I Skim Formula Change ($/cwt)[1]
September	2.28	2.62	0.32	1.00	-0.24
October	2.08	2.62	0.35	0.92	+0.23
November	2.15	2.41	0.35	0.91	-0.08
December	2.22	2.34	0.31	0.91	-0.19
January	2.25	2.31	0.30	0.91	-0.28
February	2.29	2.35	0.28	0.92	-0.28
Average	2.21	2.44	0.32	0.93	-0.14
Weekly Change	+0.01	+0.04	+0.02	+0.00	+0.10

[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 mid-September, and their relative biweekly price changes.

Table 4. World price quotations of 4 major dairy commodities as of September 14, 2025.

	US$/lb			Biweekly Change (%)		
	E.U.	Oceania	U.S.	E.U.	Oceania	U.S.
Butter	3.52	3.22	1.96	-5.9	-1.4	-7.8
SMP/NDM	1.26	1.21	1.19	-0.9	-7.0	-5.4
WMP	2.25	1.75	2.02	+0.6	-3.1	-3.8
Cheddar	2.36	2.15	1.65	-1.5	+3.3	-7.3

Source: DG Agri

- Overseas, the Global Dairy Trade index was **down 0.8%** at the GDT auction held September 16th. This was the third consecutive drop in the auction's index. Whole milk powder price, which account for approximately half of the index, dropped 2.2% after having dropped by more than 5% at the previous auction.
    - Anhydrous milkfat: US$ 3.09/lb - 1.5%
    - Butter: US$ 3.13/lb - 0.8%
    - Cheddar: US$ 2.18/lb +2.2%
    - Lactose - -
    - Mozzarella: US$ 1.75/lb - 9.6%
    - Skim milk powder: US$ 1.19/lb - 0.3%
    - Whole milk powder: US$ 1.72/lb - 2.2%

- How good are dairy futures at predicting prices? Based on many comments found in various dairy publications, one would think that futures markets are quite good predictors. Sometimes they might be – perhaps similarly to weather forecasters predicting a warm day in July – but other times they clearly are lost in the forecasting wilderness. Data from the CME dairy futures

in the last 2 weeks will be used to *illustrate* the point. The 6-month strips of futures will be used to avoid perhaps one month being a single oddity.

Table 5 compares the 6-month strips (i.e., the September 2025 to February 2026 averages) of futures on September 5th and September 19th, 2025.

Table 3. Six-month strips of Class III and Class IV prices, and implied 6-month strips of component prices on Friday September 5 and Friday September 19, 2025 at the CME.

	Butterfat ($/lb)	Protein ($/lb)	Other Solids ($/lb)	Nonfat Solids ($/lb)	Class III ($/cwt)	Class IV ($/cwt)
9/5/2025	2.46	2.26	0.29	0.97	17.14	17.32
9/19/2025	2.21	2.44	0.32	0.93	17.08	15.97
Difference	-0.25	+0.18	+0.03	-0.04	-0.06	-1.35
% Difference	-10.2	+8.0	+10.3	+4.1	-0.3	-7.8

Clearly both forecasts cannot be right. Maybe both will end up being incorrect, but only one could possibly be close to what will end up as realized prices. These are the forecasts for the *average prices over the next 6 months*. If the September 19th strips end up much closer to realized prices, it would mean that the 6-month strips *just 2 weeks earlier* were quite inaccurate. This example should stand as a reminder that futures markets reflect the consensus from many 'imperfect' traders. And their 'imperfection' also spills into their apparent inability to do simple algebra. Look carefully at the data reported in Table 2. How could it be that the 6-month strips of futures of all dairy products used to calculate Class prices were up, yet the 6-month strip of Class IV futures were down. This is explained by futures Class prices not being quite the same as what is algebraically implied by product prices. I will use the October futures as of last Friday to illustrate this. When the market closed last Friday, October futures were as follows:

Class IV: **$15.35/cwt**
Butter: $194.525/cwt
Nonfat Dry Milk: $116.575/cwt

Using these prices, and the same formulas used to calculate component and Class prices in the Federal Milk Marketing Orders (simple algebra), one gets the followings:

Butterfat: $2.0806/lb
Nonfat solids: $0.9172/lb
Class IV skim: $8.2547/cwt
Implied Class IV: **$15.25/cwt**

This is a bit puzzling: from the prices of the dairy commodities, the Class IV futures should be trading at $15.25/cwt. Yet, the October futures traded at $15.35. The October Class IV futures last Friday was incoherent to the tune of $0.10/cwt. Over the millions of pounds of milk that will be pooled in Class IV in October, this apparently small algebraic departure translates to millions of dollars. Some smart speculators might be making a bundle…

The point is this: take the futures markets for what they are: imperfect forecasters of future prices.