



Dairy Outlook

June 2017

By Jim Dunn

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Market Psychology

Cheese prices were up 15.9% in April over their values at the beginning of the month, despite very high cheese inventories. This is partially the result of lower milk production by our dairy-exporting competitors, New Zealand, the European Union, and Australia. Table 1 shows recent class milk prices, plus the futures prices for most of 2017. Class III futures prices for the second half of 2017 are about \$1.00/cwt. over the first half of 2017. A longer-term issue facing the markets is the expansion of the U.S. milking herd. In addition to cheese prices, butter and powder prices are also up since early May, butter by 16.5% and powder by 12.6%. In contrast dry whey prices are down 10% since last month. The CME corn price is up 3.9% and the soybean meal price is down 4.35%.

The New Zealand dollar and the Euro are up by a bit more than 3%, while the Australian dollar is down by 0.8%. New Zealand milk production is expected to be up by 3.5%, as recent weather has been particularly good for grass production. The latest USDA World Supply and Demand Estimates forecast milk prices for 2018 to be about \$0.20 to \$0.70/cwt higher than 2017, which they forecast to be \$1.00 more than 2016.

Corn and Soybean Markets

The CME corn price is up 3.9% and the soybean meal price is down 4.3% from last month. Overall these prices are about at their 2016 averages. Since the 2017 milk price is running about \$2.40 above 2016, this means that the profitability of milk production should be higher in 2017.



Income over Feed Costs (IOFC)

Penn State's measure of income over feed costs rose by 10.6% in May from its April value. Figure 1 shows how these values compare to recent years. The change in May's value is because the milk price has risen (by 4.9%), while feed cost has fallen. Income over feed cost reflects daily gross milk income less feed costs for an average cow producing 65 pounds of milk per day. Table 2 shows the monthly data for the past two years.

The net revenue per hundred pounds of milk (milk margin) is shown in Table 3. The milk margin is the estimated amount of the Pennsylvania all milk price that remains after the feed costs per hundredweight of milk production are paid. Like income over feed cost, this measure shows that the May PA milk margin was 10.6% higher than in April.

The latest Drought Monitor shows very little drought in the U.S. There is slight drought in the lower Susquehanna valley of Pennsylvania and a few other places and extreme drought in Central Florida. None of the current drought will impact dairy markets significantly.

Milk Production

The latest U.S. milk production report showed April milk production up 1.9% from a year earlier on a 30-day month basis (Figure 2). This milk production increase is about twice the U.S. population growth rate. Unfortunately the other dairy exporters are increasing milk production as well, especially New Zealand, the biggest dairy product exporter. Milk production in Pennsylvania in April was 2.4% more than its 2016 level, when adjusted for 30 day months. Finding markets for all this milk will be a challenge. As is seen in Figure 3, cow numbers grew by 0.59% from March of 2017 and increased by 0.68% over April of 2016. Although this increase in cows is relatively small, when combined with the strong dollar, the growth in milk production may undermine milk prices since milk consumption is not particularly price sensitive and selling the extra milk on domestic markets may hurt prices.



Final Comment

This will be my final dairy marketing newsletter. I am retiring at the end of June after nearly 40 years at Penn State. It is unclear if my replacement will continue it.

Best wishes,
Jim Dunn

Table 1. Milk Prices and Milk Futures Prices for 2016 and 2017

(Based on futures prices of May 31, 2017)

2016	Class III \$/cwt	Class IV \$/cwt	PA All Milk \$/cwt	2017	Class III \$/cwt	Class IV \$/cwt	PA All Milk \$/cwt
Jan	\$13.72	\$13.31	\$17.40	Jan	\$16.77	\$16.19	\$20.00
Feb	\$13.80	\$13.49	\$17.10	Feb	\$16.88	\$15.59	\$19.60
Mar	\$13.74	\$12.74	\$16.30	Mar	\$15.81	\$14.32	\$18.80
Apr	\$13.63	\$12.68	\$16.20	Apr	\$15.22	\$14.01	\$17.60
May	\$12.76	\$13.09	\$15.90	May	\$15.61	\$14.59	\$18.46
Jun	\$13.22	\$13.77	\$15.80	Jun	\$16.70	\$16.02	\$19.69
Jul	\$15.24	\$14.84	\$16.90	Jul	\$17.26	\$16.70	\$20.29
Aug	\$16.91	\$14.65	\$18.76	Aug	\$17.52	\$16.88	\$20.51
Sep	\$16.39	\$14.25	\$17.90	Sep	\$17.55	\$17.10	\$20.63
Oct	\$14.82	\$13.66	\$17.70	Oct	\$17.38	\$17.23	\$20.60
Nov	\$16.76	\$13.76	\$18.65	Nov	\$17.15	\$17.25	\$20.50
Dec	\$17.40	\$14.97	\$19.40	Dec	\$16.88	\$17.10	\$20.29
Annual	\$14.87	\$13.77	\$17.33	Annual	\$16.73	\$16.08	\$19.75
Annual change	-\$ 0.90	-\$ 0.52	-\$ 1.14	Annual change	\$ 1.86	\$ 2.31	\$ 2.41
% change	-5.7%	-3.6%	-6.2%	% change	12.5%	16.8%	13.9%

Table 2: PA Income over Feed Costs

Month	All Milk Price	Feed Cost per 65 lbs. Milk	Income over feed cost
Jan-16	\$17.40	\$4.53	\$6.68
Feb-16	\$17.10	\$4.57	\$6.55
Mar-16	\$16.30	\$4.55	\$6.05
Apr-16	\$16.20	\$4.39	\$6.14



May-16	\$15.90	\$4.65	\$5.69
Jun-16	\$15.80	\$4.28	\$5.99
Jul-16	\$16.90	\$4.23	\$6.75
Aug-16	\$17.50	\$4.34	\$7.04
Sep-16	\$17.90	\$4.38	\$7.26
Oct-16	\$17.70	\$4.50	\$7.00
Nov-16	\$18.65	\$4.59	\$7.53
Dec-16	\$19.57	\$4.18	\$8.54
Jan-17	\$20.00	\$4.48	\$8.52
Feb-17	\$19.60	\$4.22	\$8.52
Mar-17	\$18.80	\$4.24	\$7.98
Apr-17	\$17.60	\$4.25	\$7.19
May-17	\$18.46	\$4.04	\$7.96

Table 3: PA Milk Margin

	All milk price per cwt.	Feed cost per cwt.	Milk margin per cwt.
Jan-16	\$17.40	\$7.12	\$10.28
Feb-16	\$17.10	\$7.03	\$10.07
Mar-16	\$16.30	\$7.00	\$9.30
Apr-16	\$16.20	\$6.76	\$9.44
May-16	\$15.90	\$7.15	\$8.75
Jun-16	\$15.80	\$6.58	\$9.22
Jul-16	\$16.90	\$6.51	\$10.39
Aug-16	\$17.50	\$6.67	\$10.83
Sep-16	\$17.90	\$6.73	\$11.17
Oct-16	\$17.70	\$6.38	\$11.24
Nov-16	\$18.65	\$7.07	\$11.58
Dec-16	\$19.40	\$6.92	\$12.48
Jan-17	\$20.00	\$6.90	\$13.10
Feb-17	\$19.60	\$6.50	\$13.10
Mar-17	\$18.80	\$6.53	\$12.27
Apr-17	\$17.60	\$6.53	\$11.07
May-17	\$18.46	\$6.21	\$12.25

Figure 1: PA Dairy Income over feed cost

PA Dairy Income over Feed Cost

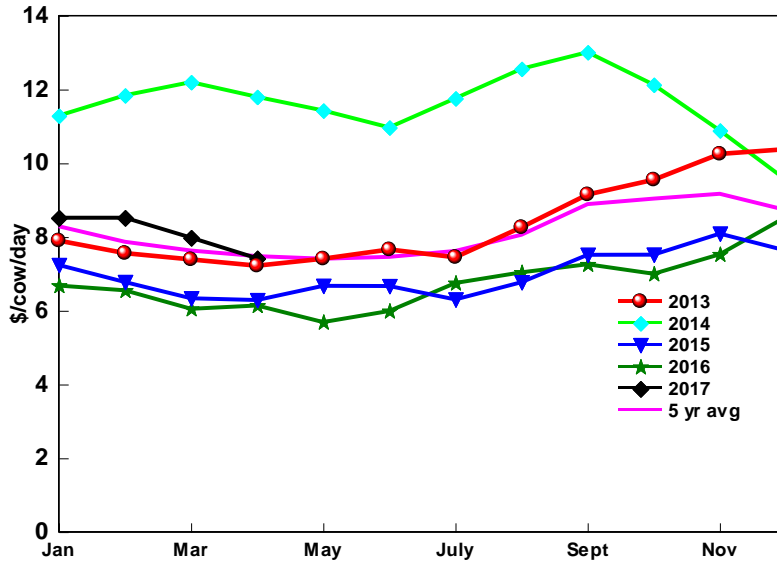
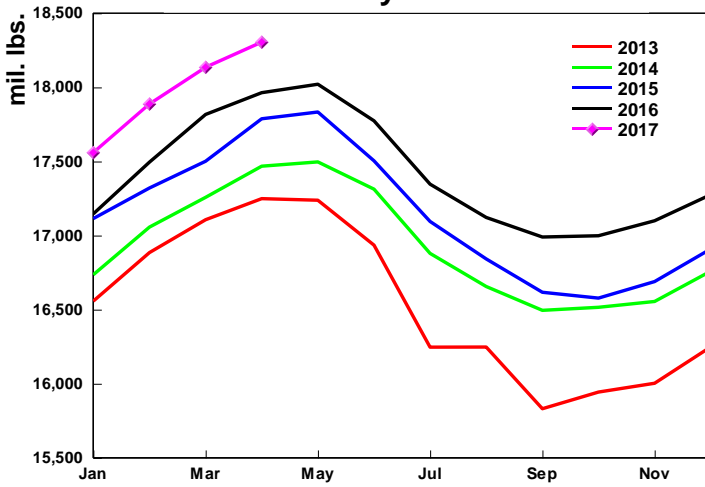


Figure 2: Milk Production

Monthly Milk Production 30 Day months



Source: USDA

Figure 3: Dairy Cows

Number of Dairy Cows

