



Dairy Outlook

August 2009

By Jim Dunn

Professor of Agricultural Economics, Penn State University

Market Psychology

The Secretary of Agriculture raised the dairy price support levels at the beginning of August. The change was equivalent to raising the Class III support price from \$9.40 per cwt. to \$11.14 and the Class IV support price from \$9.35 to \$10.38. These support prices are implied by the support prices for the products that USDA buys under the program. The program has really not been very supportive since 1988, but the increase is important psychologically.

Futures prices are higher for August, and unlike recent months, higher yet for the nearby months. The Class III futures price is \$13.00 for September and in the mid \$13 range for the remainder of the year, approaching \$14 in February. It looks like the terrible milk prices are behind us, although they will remain well below 2008 levels. By year end, the PA all milk price is expected to be at least \$3.00/cwt above its low in July.

With school starting, fluid plants are increasing output to cover school milk demand. Milk production is dropping, as is usual this time of the year. As a result the cheese market is seasonally higher. Cheese sold on the Chicago Mercantile Exchange has to be less than 30 days old and the only tightness in the cheese market is for fresh cheese, increasing the CME cash price. Mozzarella markets are tight. Inventories of aged Cheddar/American cheese remain high.

The increased support price for Nonfat Dry Milk has undercut butter prices. Since butter and NFDM are joint products, more NFDM means more butter and CME butter prices have fallen from \$1.26/lb. in July to \$1.1825. Inventories are near last year's record levels. The Dairy Export Incentive Program is helping somewhat, but other than Mexico we do not export much NFDM.

Whey prices have risen throughout the summer but whey powder seems to have stabilized, although whey protein concentrate continues to creep up.

While it is poor form to root against the dollar, the dollar has lost value against the Euro and other major currencies in the past few months, which makes our exports more competitive. In particular the Australian and New Zealand dollars are stronger, increasing their prices relative to ours. Milk production in New Zealand has grown only 1.3% per year in the past five years, well below previous



rates. Australia is expecting 2010 production to decrease and it is likely that an El Niño weather pattern will occur, which means drought in Australia. Together this means a better competitive position for U.S. producers in world markets, which helps our exports.

Corn and Soybean Markets

Corn futures continue to fall, hitting \$3.20 for the December 2009 contract. Soybean markets have been volatile, trading between \$9.00 and \$11.00 in a roller coaster fashion, and finishing at \$9.73 on August 21. Yield forecasts for both crops are at near record levels. The corn crop is expected to be the second largest ever, only below the 2007 crop with its enormous acreage. Following beans, soybean meal is cycling around \$300/ton, closing at \$290 on August 21. The soybean crop is expected to be a record, although usage has grown enough to absorb the extra production. At least these two components of feed costs are expected to remain at reasonable levels, unlike the wild prices of mid 2008. As always bio-fuels remain a wild card.

Income over feed costs

The decrease in corn and soybean meal prices in July meant that July producer margins were slightly higher than June, but still very low. Our index of Income Over Feed Costs (IOFC) reflects gross income less feed costs for an average cow producing 65 pounds of milk. As may be seen in Figure 1 and Table 2, the value is at \$4.37. The August value will be better with the higher milk prices and better yet in September.

The allocation of the revenue per hundred pounds of milk is shown in Table 3. This value, the milk margin, is the estimated amount from the Pennsylvania all milk price that remains after feed costs are paid. As with income over feed cost, this shows that July was somewhat better than June, although still at a level where no one made any money producing milk in July.

Milk Production

Monthly milk production numbers (Figure 2) continue to track last year, which is too much milk given the lower exports in 2009. The July production was exactly the same as July 2008, with 145,000 fewer cows than a year earlier. This is reflective of the increasing production per cow. This productivity increase is less than the long-term trend because of decreases in BST use. July temperatures were above normal and precipitation below normal in the major western milk producing areas. Milk production is starting to fall in California, Idaho, Arizona, New Mexico, and Washington, although the cool summer is keeping production up elsewhere.

PA Dairy Income over Feed Costs

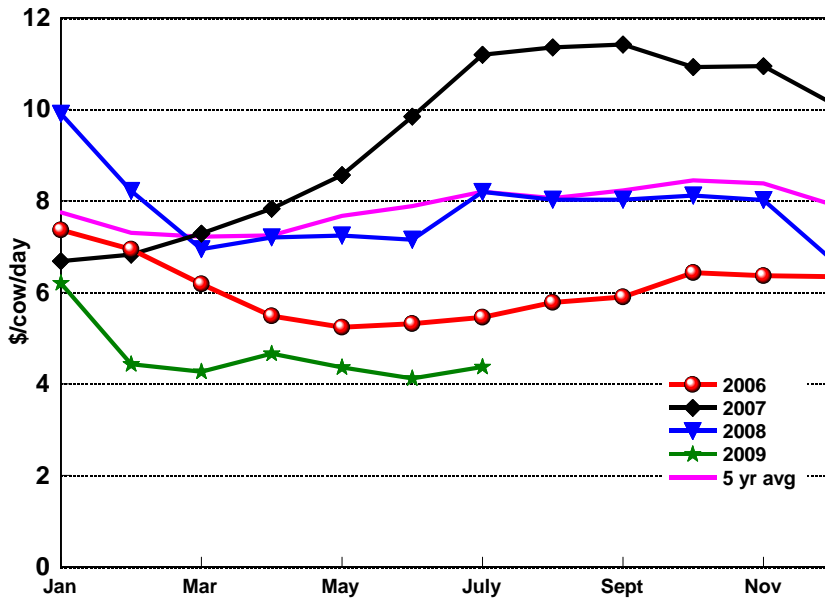


Figure 1. PSU's Income Over Feed Costs (IOFC)

Milk Production

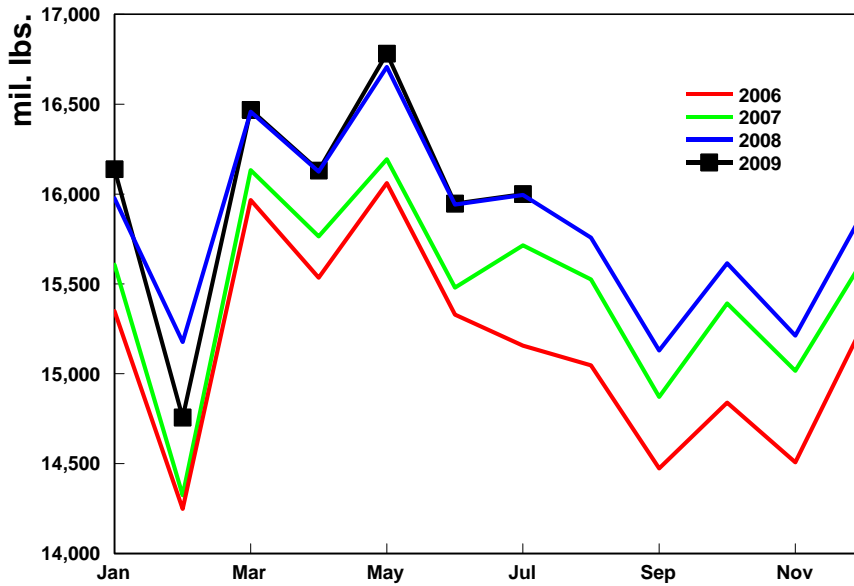


Figure 2: U.S. Milk Production (source USDA)



Table 1. Implied Milk Prices and Futures Prices for 2009

(Based on futures prices of August 21, 2009)

	Class III \$/cwt	Class IV \$/cwt	PA All Milk \$/cwt		Class III \$/cwt	Class IV \$/cwt	PA All Milk \$/cwt
2008				2010			
Jan	19.32	16.29	22.60	Jan	13.79	12.33	16.42
Feb	17.03	14.67	21.00	Feb	13.98	12.37	16.54
Mar	18.00	14.17	19.10	Mar	13.95	12.47	16.56
Apr	16.76	14.56	19.90	Apr	14.28	12.47	16.75
May	18.18	15.26	19.50	May	14.42	12.57	16.87
Jun	20.24	15.92	20.30	Jun	14.88	12.82	17.23
Jul	18.25	16.60	21.40	Jul	15.14	13.57	17.65
Aug	17.32	16.64	20.50	Aug	15.44	13.62	17.85
Sep	16.28	15.45	20.50	Sep	15.45	13.62	17.85
Oct	17.06	13.62	19.40	Oct	15.56	13.87	18.01
Nov	15.51	12.25	19.20	Nov	15.61	13.87	18.04
Dec	15.28	10.35	17.10	Dec	15.70	13.97	18.13
Annual	17.44	14.65	20.04	Annual	14.85	13.13	17.32
				Annual change	3.53	2.63	2.84
2009				% change	31.2%	25.0%	19.6%
Jan	10.78	9.59	16.20				
Feb	9.31	9.45	13.50				
Mar	10.44	9.64	13.00				
Apr	10.78	9.82	13.40				
May	9.84	10.14	13.40				
Jun	9.97	10.22	13.00				
Jul	9.97	10.15	13.40				
Aug	11.21	10.51	14.25				
Sep	13.00	11.06	15.49				
Oct	13.45	11.31	15.84				
Nov	13.44	11.81	16.02				
Dec	13.64	12.33	16.33				
Annual	11.32	10.50	14.49				
Annual change	-6.12	-4.15	-5.56				
% change	-35.1%	-28.3%	-27.7%				

Table 2: Determinants of PA income over feed cost

	all milk price	feed cost/65 lbs milk	Income over feed cost
Jan-08	\$22.60	\$4.79	\$9.90
Feb-08	\$21.00	\$5.43	\$8.22
Mar-08	\$19.10	\$5.47	\$6.94
Apr-08	\$19.90	\$5.73	\$7.20
May-08	\$19.50	\$5.43	\$7.24
Jun-08	\$20.30	\$6.04	\$7.15
Jul-08	\$21.40	\$5.71	\$8.20
Aug-08	\$20.50	\$5.30	\$8.03
Sep-08	\$20.50	\$5.30	\$8.03
Oct-08	\$19.40	\$4.49	\$8.12
Nov-08	\$19.20	\$4.46	\$8.02
Dec-08	\$17.10	\$4.44	\$6.67
Jan-09	\$16.20	\$4.33	\$6.20
Feb-09	\$13.50	\$4.35	\$4.43
Mar-09	\$13.00	\$4.18	\$4.27
Apr-09	\$13.40	\$4.05	\$4.66
May-09	\$13.40	\$4.35	\$4.36
Jun-09	\$12.90	\$4.25	\$4.13
Jul-09	\$13.00	\$4.08	\$4.37



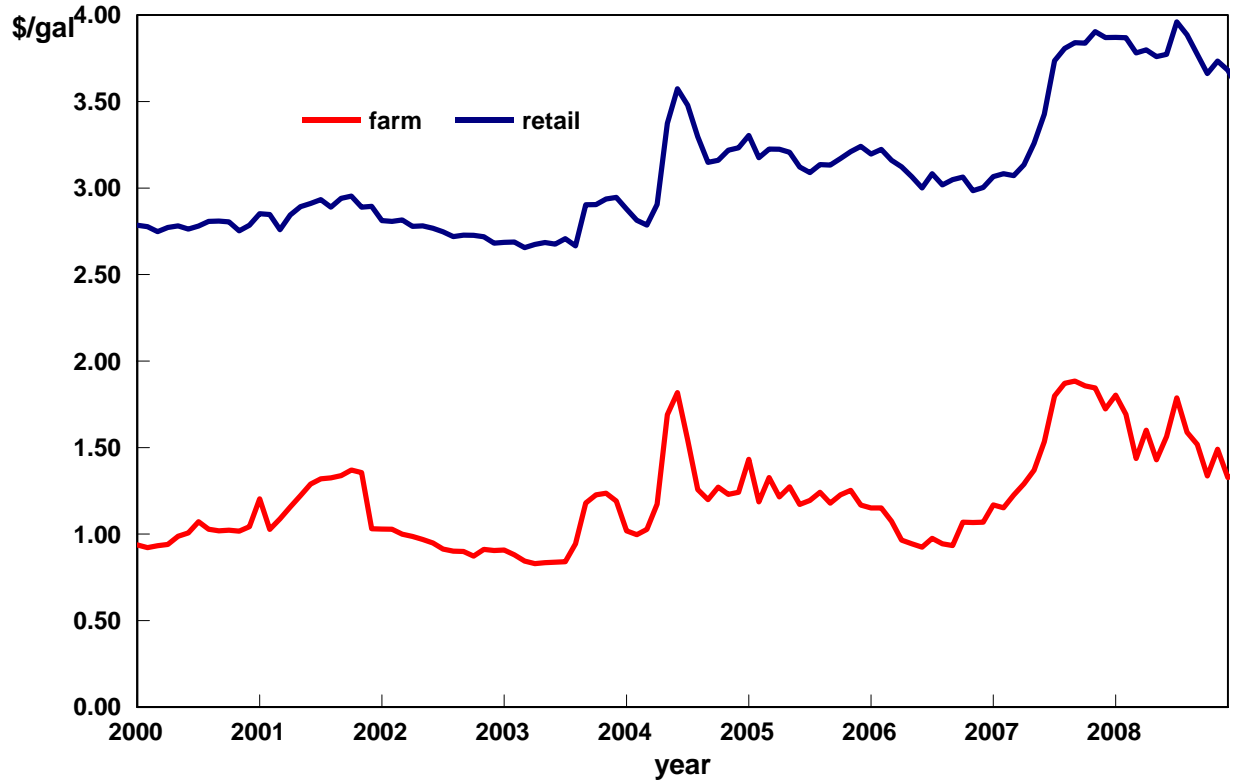
Table 3: Milk Margin (Portion of milk price going to feed and remaining for other expenses)

	all milk price/100 lbs	feed cost/100 lbs milk	Milk Margin/100 lbs
Jan-08	\$22.60	\$7.36	\$15.24
Feb-08	\$21.00	\$8.36	\$12.64
Mar-08	\$19.10	\$8.42	\$10.68
Apr-08	\$19.90	\$8.82	\$11.08
May-08	\$19.50	\$8.36	\$11.14
Jun-08	\$20.30	\$9.30	\$11.00
Jul-08	\$21.40	\$8.79	\$12.61
Aug-08	\$20.50	\$8.15	\$12.35
Sep-08	\$20.50	\$8.15	\$12.35
Oct-08	\$19.40	\$6.92	\$12.48
Nov-08	\$19.20	\$6.87	\$12.33
Dec-08	\$17.10	\$6.83	\$10.27
Jan-09	\$16.20	\$6.66	\$9.54
Feb-09	\$13.50	\$6.69	\$6.81
Mar-09	\$13.00	\$6.44	\$6.56
Apr-09	\$13.40	\$6.23	\$7.17
May-09	\$13.40	\$6.70	\$6.70
Jun-09	\$12.90	\$6.54	\$6.36
Jul-09	\$13.00	\$6.28	\$6.72

A Longer Run View – Farm and Retail Milk Prices

The Figure below shows the national farm (as measured by the base Class I price) and retail milk price from January 2000 until June 2009. Farmers often say that retail milk prices rise when farm prices go up but when farm prices fall, retail prices stay up. The figure and the underlying data help understand this issue better. As the graph shows, in fact the prices largely move together. I have denominated both prices in \$/gal. The highest retail price was in July 2008 at \$3.96/gal. Since then the retail price has fallen by \$0.95/gal. and the farm price has fallen by \$0.92/gal. However, in January, 2000 the retail price minus the farm price was \$1.85/gal. and now it is \$2.14/gal, so the spread has widened. Thus the farmer’s observation that the middlemen keep part of the increase is true, despite prices moving together by and large. This is partially because productivity increases on the farm have outstripped productivity gains in processing and retailing. Of course, both bottlers and supermarkets have more control over the price than farmers. Regardless of the reason, consumers aren’t seeing quite the bargain in milk prices that the farm price would imply, at least compared to 2000.

Farm and Retail Milk Price



Data: USDA