



# Dairy Outlook

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## Market Psychology

Milk prices are higher than last month, especially Class IV. The outlook for dairy prices in 2010 is much better than in 2009. As may be seen in Table 1, the futures market prices for the next 12 months for both Class III and Class IV milk are \$4.15 above the 2009 average. This suggests a Pennsylvania all-milk price of \$18.15 for all of 2010. At this time last year, we had declining exports and more milk production than the domestic market could absorb. As we enter 2010, many (most?) dairy farms are weaker financially than a year ago. This should mean that cow numbers will stay where they are or perhaps decrease a bit and milk production will not grow rapidly. This should help support prices.

The cheese market has been split, with blocks rising steadily to \$1.70 per pound, while barrels sit at \$1.44. The persistence of this spread is bewildering and unprecedented. Butter, which has been strong, is slipping, down now to \$1.32, 15 cents lower than last month. Non-fat dry milk is up by 11 cents from last month. Whey powder continues its steady climb for the year.

October dairy exports were up \$40 million over September, a 24% increase, although still below October of 2008. However, the US is a net exporter of dairy products again as the dollar has lost value and our prices are lower. Both exports and imports are well behind last year. American dairy product prices are cheaper than our competitors in Oceania, providing export opportunities. The biggest destinations for butter exports are the Middle East. The biggest destinations for cheese exports are Mexico, South Korea, and Canada. Our biggest powdered milk and cheese customer, by far, is Mexico. China is our biggest whey customer, followed by Japan, Canada, and Mexico. Like many other American products, nearby countries are our biggest customers for many dairy products. Whatever disagreements people have about NAFTA, our NAFTA partners buy dairy products from us. Like NAFTA, milk protein concentrates are the subject of considerable controversy. Their imports are 8% behind 2008 for the year to date, up through October. The dollar is somewhat stronger against most currencies, although not dramatically so. Compared to the price increases in our markets, recent currency changes are inconsequential.



## **Corn and Soybean Markets**

For the last two months corn prices have moved sideways in a 25 cent range, and as this is written, are right in the center of that range, with March corn just below \$4.00/bu. Soybeans had been trading higher, but now have slipped to about where they were last month, at \$10.17/bu. for the January contract. Soybean meal has been steadier, but is also down a bit to \$306/ton for the January contract.

## **Income over feed costs**

Penn State's measure of income over feed costs rose from \$6.49 in October to \$6.81 in November. This value reflects gross income less feed costs for an average cow producing 65 pounds of milk. The monthly increase is 5%. The value is now well above its summer lows and above the November 2006 level. Of course, other prices have changed since, so the same amount probably doesn't go as far. Figure 1 and table 2 show the monthly data are appended.

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 measure shows that November was better than October, and above the December 2009 level. This is the first time all year the value has been above any month last year. Of course, December 2008 was the lowest month for his measure last year. The improvement in the milk margin is entirely the result of a higher milk price. Feed prices were somewhat higher in November. The forecast higher milk prices will help this measure in coming months as well.

## **Milk Production**

Milk production in November was 15,060 mil. lbs., 1% less than last year and just above 2007 levels. Figure 2 shows the last few years' data. Cow numbers are down again this month, to 9,091,000 head, down 242,000 from last year. These two items, more than anything are the reason milk prices are higher. Since the demand for milk is very insensitive to price, a little more milk can really hurt the price, while a little less really helps the price. Since the population grows by about 1% each year, a decrease in milk production of 1% means about 2% less milk per capita. This helps raise prices.

## PA Dairy Income over Feed Costs

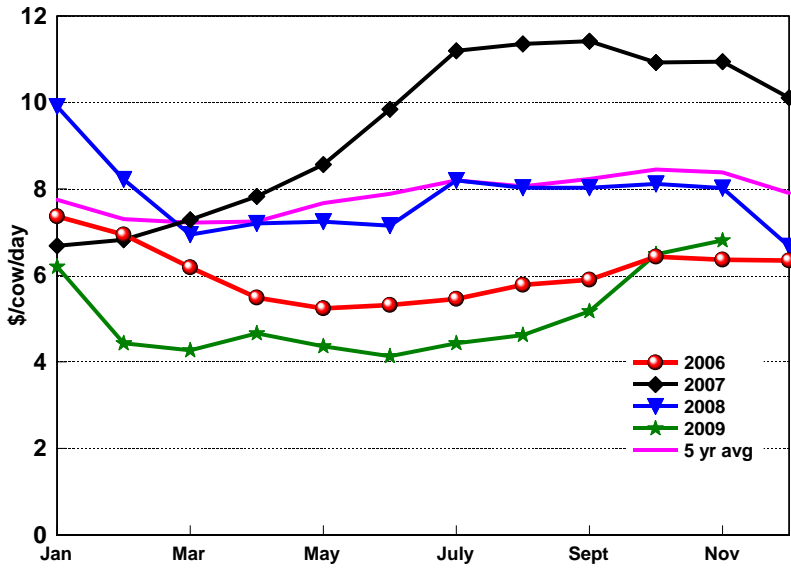


Figure 1. PSU's Income Over Feed Costs (IOFC)

## Milk Production

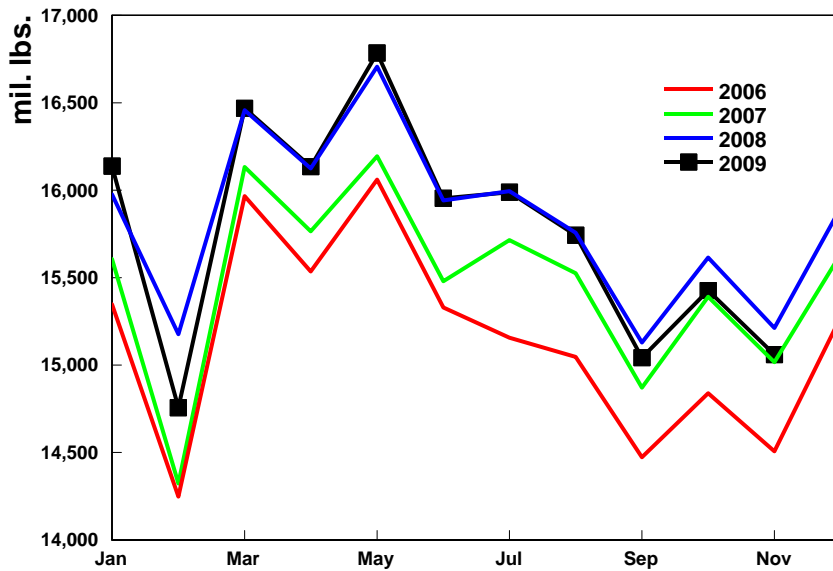


Figure 2: U.S. Milk Production (source USDA)



Table 1. Implied Milk Prices and Futures Prices for 2009

(Based on futures prices of December 17, 2009)

	Class III \$/cwt	Class IV \$/cwt	PA All Milk \$/cwt		2010 \$/cwt	\$/cwt	PA All Milk \$/cwt
2008				2010			
Jan	19.32	16.29	22.60	Jan	14.80	15.27	18.08
Feb	17.03	14.67	21.00	Feb	14.71	15.24	18.02
Mar	18.00	14.17	19.10	Mar	15.06	15.39	18.28
Apr	16.76	14.56	19.90	Apr	15.25	15.39	18.39
May	18.18	15.26	19.50	May	15.38	15.16	18.38
Jun	20.24	15.92	20.30	Jun	14.73	15.20	18.02
Jul	18.25	16.60	21.40	Jul	16.04	15.37	18.84
Aug	17.32	16.64	20.50	Aug	16.11	14.76	18.65
Sep	16.28	15.45	20.50	Sep	16.14	15.15	18.81
Oct	17.06	13.62	19.40	Oct	16.04	14.81	18.63
Nov	15.51	12.25	19.20	Nov	15.90	14.46	18.42
Dec	15.28	10.35	17.10	Dec	15.99	14.38	18.44
Annual	17.44	14.65	20.04	Annual	15.51	15.05	18.41
	Class III \$/cwt	Class IV \$/cwt	PA All Milk \$/cwt	Annual change %	4.17	4.15	4.02
2009				change	36.7%	38.1%	27.9%
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	12.90				
Jul	9.97	10.15	13.00				
Aug	11.20	10.38	13.30				
Sep	12.11	11.15	14.20				
Oct	12.82	11.86	15.40				
Nov	14.08	13.25	16.40				
Dec	14.86	15.14	18.07				
Annual	11.35	10.90	14.40				
Annual change %	-6.09 -34.9%	-3.75 -25.6%	-5.64 -28.2%				



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	\$4.02	\$4.43
Aug-09	\$13.30	\$4.01	\$4.63
Sep-09	\$14.20	\$3.99	\$5.24
Oct-09	\$15.80	\$3.78	\$6.49
Nov-09	\$16.40	\$3.85	\$6.81

Table 3: Milk Margin (Portion of milk price going to feed and portion 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	\$6.18	\$6.82
Aug-09	\$13.30	\$6.17	\$7.13
Sep-09	\$14.20	\$6.14	\$8.06
Oct-09	\$15.80	\$5.82	\$9.98
Nov-09	\$16.40	\$5.93	\$10.47