



Dairy Outlook

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Market Psychology

December milk prices were higher than November, with the PA All Milk price up \$1.40/cwt. to 17.80. The outlook for dairy prices in 2010 is essentially the same as last month, which will be much better than in 2009, should these prices occur. 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 \$4.00 above the 2009 average. This suggests a Pennsylvania all-milk price of \$18.31 for all of 2010.

The cheese market has returned to a more normal relationship between barrels and blocks, with blocks falling to where barrels were and still are, in the low to mid \$1.40s. Butter has recovered to \$1.42, up from \$1.32 last month. Non-fat dry milk dropped 7 cents/lb. on January 14, after a month of stability. Whey powder has flattened out, after a year of increases, and future months are lower, so this market may be topping out.

November dairy exports were up \$4 million over October, a 2% increase, although still below November of 2008. The US is a net exporter of dairy products. Both exports and imports are well behind last year. Whey exports in particular are strong, and the weak dollar is helping. New Zealand dry milk powder production is off, providing additional opportunities. The US dollar continues to be weak. World production of butter and skim milk powder was less in 2009 than 2008 around the world, as is world milk production.

Corn and Soybean Markets

The final crop report came out last week and both corn and soybeans had record crops. For corn this was a surprise, since acreage was well below the record acreage of 2007. As a result, corn dropped 50 cents/bu. to \$3.69 for the March contract. The bigger crop estimate is not matched by a proportional increase in usage, so the greater expected ending stocks are accompanied by a lower price. USDA is forecasting higher feed usage of corn, despite the struggles of meat producers. Soybeans also fell on the increased crop estimate, and are about



90 cents/bu. below their level 2 weeks ago, at \$9.74 for the March contract. Soybean meal followed beans down to \$291/ton for the March contract.

Income over feed costs

Penn State's measure of income over feed costs rose from \$6.84 in November to \$7.78 in December. This value reflects gross income less feed costs for an average cow producing 65 pounds of milk. The monthly increase is 13.7%. The value is the highest since November 2008, and above any level in 2006. The increase is almost entirely the result of a higher milk price, although feed cost did drop slightly in December. Figure 1 and table 2 showing 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 December was much better than November, and above the December 2008 level. This is the first time all year the value has been near the five year average.

Milk Production

Milk production in November was 15,756 mil. lbs., down 1% from last year. Figure 2 shows the last few years' data. Cow numbers are down again this month, to 9,091,000 head, down 252,000 from last year. If one looks at figure 3, it is obvious that 2009 is different in that in the prior two years cow numbers rose, while in 2009 they declined steadily. This is evidence that farmers will respond to lower prices by reducing cow numbers (if the prices are low enough). Of course, the milk production chart reflects the same behavior, although it is masked somewhat by the steady increase in milk per cow. One of the real questions facing the industry is how farmers will respond to sexed semen. The number of heifers born is growing rapidly and the market cannot absorb them and still have reasonable milk prices.

PA Dairy Income over Feed Costs

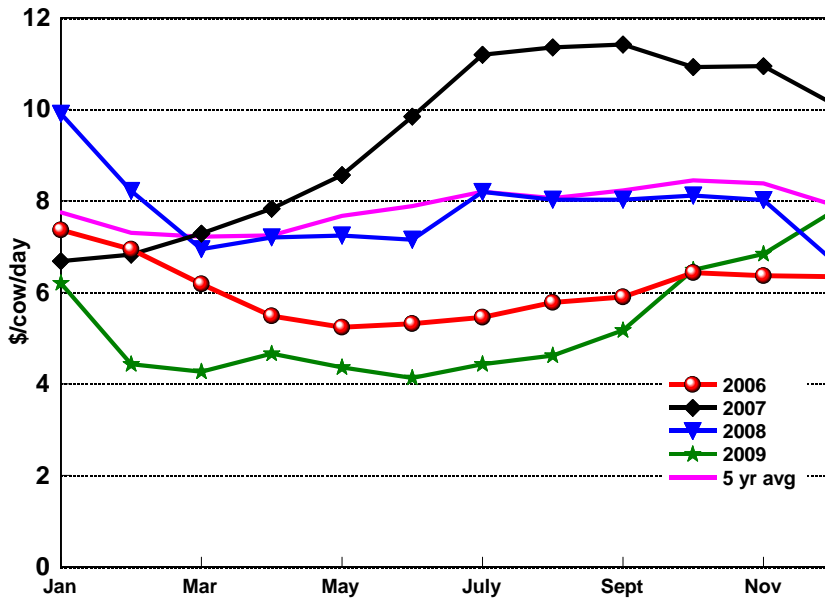


Figure 1. PSU's Income Over Feed Costs (IOFC)

Milk Production

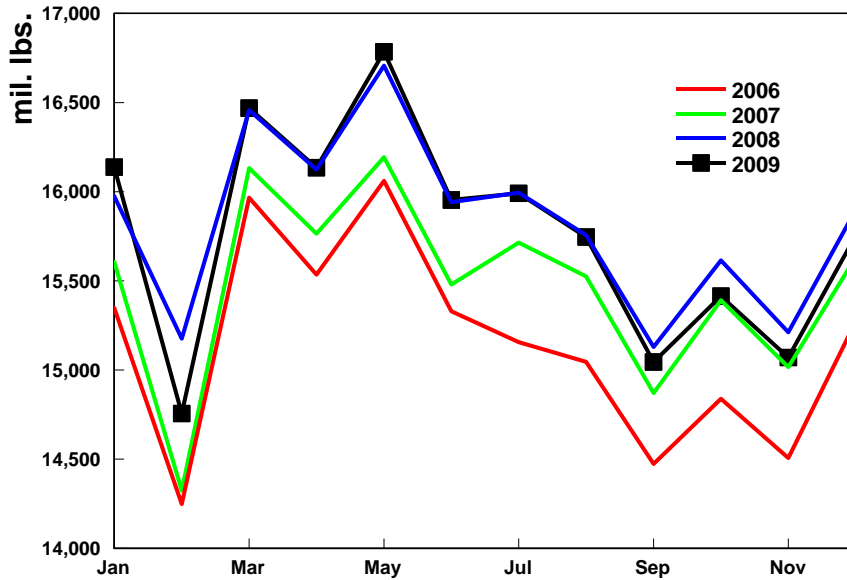


Figure 2: U.S. Milk Production (source USDA)



Table 1. Implied Milk Prices and Futures Prices for 2009

(Based on futures prices of January 15, 2010)

| | Class III \$/cwt | Class IV \$/cwt | PA All Milk \$/cwt | | Class III \$/cwt | Class IV \$/cwt | PA All Milk \$/cwt |
|-----------------------|---------------------|--------------------|--------------------------|-----------------------|---------------------|--------------------|--------------------------|
| 2009 | | | | 2010 | | | |
| Jan | 10.78 | 9.59 | 16.20 | Jan | 14.43 | 14.49 | 17.56 |
| Feb | 9.31 | 9.45 | 13.50 | Feb | 14.25 | 14.51 | 17.47 |
| Mar | 10.44 | 9.64 | 13.00 | Mar | 14.62 | 14.70 | 17.75 |
| Apr | 10.78 | 9.82 | 13.40 | Apr | 14.75 | 14.72 | 17.84 |
| May | 9.84 | 10.14 | 13.40 | May | 15.18 | 14.88 | 18.14 |
| Jun | 9.97 | 10.22 | 12.90 | Jun | 15.65 | 14.89 | 18.42 |
| Jul | 9.97 | 10.15 | 13.00 | Jul | 15.97 | 15.06 | 18.67 |
| Aug | 11.20 | 10.38 | 13.30 | Aug | 16.15 | 15.29 | 18.86 |
| Sep | 12.11 | 11.15 | 14.20 | Sep | 16.26 | 15.44 | 18.98 |
| Oct | 12.82 | 11.86 | 15.40 | Oct | 16.26 | 15.23 | 18.90 |
| Nov | 14.08 | 13.25 | 16.40 | Nov | 15.99 | 14.74 | 18.56 |
| Dec | 14.98 | 15.01 | 17.80 | Dec | 15.93 | 14.86 | 18.57 |
| Annual | 11.36 | 10.89 | 14.38 | Annual | 15.45 | 14.90 | 18.31 |
| Annual change % | -6.08 -34.9% | -3.76 -25.7% | -5.67 -28.3% | Annual change % | 4.10 36.1% | 4.01 36.9% | 3.94 27.4% |

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 | \$3.82 | \$6.84 |
| Dec-09 | \$17.80 | \$3.79 | \$7.78 |

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 | \$5.88 | \$10.52 |
| Dec-09 | \$17.80 | \$5.83 | \$11.97 |

Number of Cows

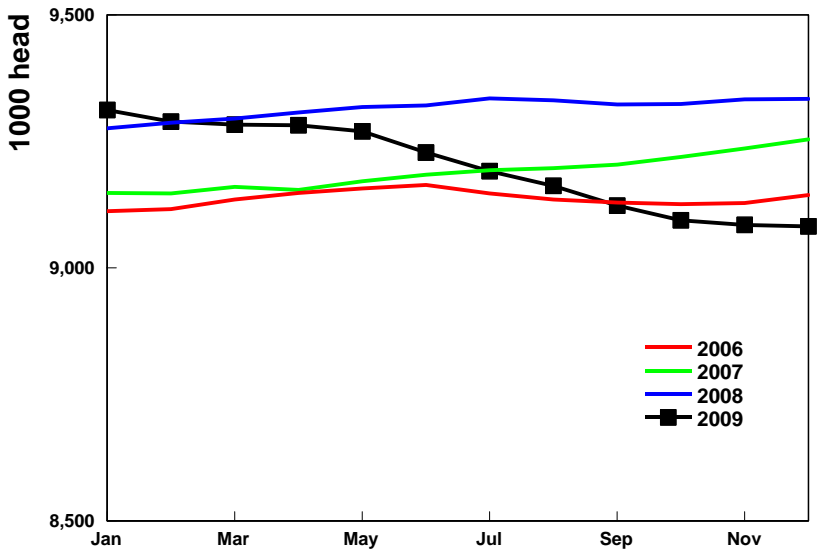


Figure 3. Estimated US Milk Cows (source USDA)