Dairy Outlook

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Market Psychology

Milk and dairy product prices are all up once again, and the prices for 2010 look much better than they have been in 2009. The price for cheese blocks on the Chicago Mercantile Exchange are at $1.58, up from $1.45 last month. Butter is up sharply from $1.31 to $1.52 and nonfat dry milk is up another $0.10 per pound. These changes will add to the increases in the PA all-milk price in October. The all-milk price in October was up $1.20/cwt. over September and November looks like it will be up another $1.70, to $17.00 (Table 1). The biggest factor here is the effect on the Class IV price, which has been lagging Class III all year.

The futures market prices for the next 14 months show a class III price averaging almost $15.50 and a Class IV average of $14.25. This translates to an all-milk price for 2010 of $18.13, which is $3.75 over the 2009 average and $5.00 over the 2009 low.

World cheese prices are above U.S. prices for the first time in a year. Reported export statistics are a couple months behind, so the export statistics don't reflect this price change, but an export price advantage is certain to help U.S. dairy prices. Butter exports in September were well above earlier levels. Nonfat dry milk exports have been steady, but as with cheese our prices are more competitive than earlier in the year, so they also should rise. Dry whey prices are also priced more competitively than earlier this year, so whey also should see increased exports. Although export numbers for the year are well behind last year, the month to month comparison is looking better.

Corn and Soybean Markets

In the last month corn futures have moved a lot, but ended almost exactly where they began, with the December 2009 contract just below $4.00. The harvest is running very late for corn, with corn harvest a month behind the five year average. The soybean harvest is also behind, but much further along. Soybean meal is about $10/ton above last month at $318 for the December 2009 contract. Soybeans are up about $0.30 above last month.

Income over feed costs

The higher milk prices and a bit lower feed prices together raised our October income over feed costs measure by almost $1.00 per cow per day above September the level. 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 October value is at $6.21. The November value will be higher with the higher milk prices, although the higher feed prices will erode this value somewhat

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 October was better than September. The improvement was mostly the result of a higher milk price. The forecast higher milk prices will help this measure in coming months as well.

Milk Production

Monthly milk production numbers (Figure 2) have fallen further behind last year once again in October, which is helping fuel the price recovery. There are 226,000 fewer cows than a year earlier, 25,000 fewer than a month ago. California, Arizona, and Colorado in particular are culling and decreasing milk production. The western states seem to be particularly hard hit by the events in the industry this year, while the traditional dairy states in the Midwest and Northeast are keeping production up better. Pennsylvania's milk production is exactly where it was in October 2008.

PA Dairy Income over Feed Costs

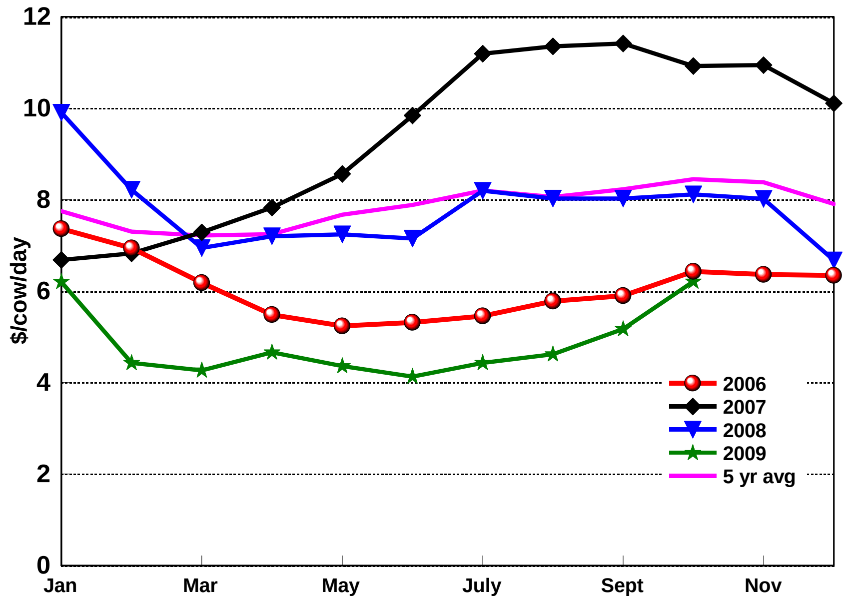

Figure 1. PSU's Income Over Feed Costs (IOFC)

Milk Production

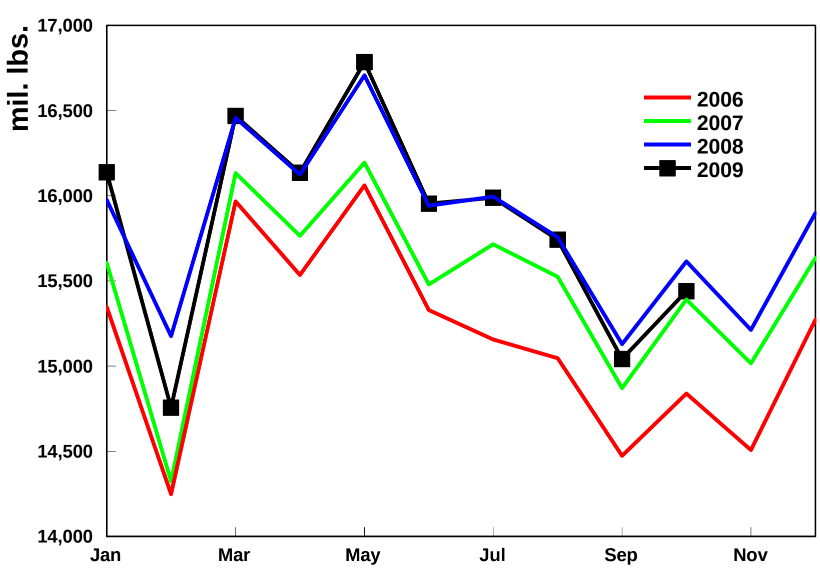

Figure 2: U.S. Milk Production (source USDA)

Table 1. Implied Milk Prices and Futures Prices for 2009

(Based on futures prices of November 17, 2009)

	Class III $/cwt	Class IV $/cwt	PA All Milk $/cwt
2008			
Jan	19.32	16.29	22.60
Feb	17.03	14.67	21.00
Mar	18.00	14.17	19.10
Apr	16.76	14.56	19.90
May	18.18	15.26	19.50
Jun	20.24	15.92	20.30
Jul	18.25	16.60	21.40
Aug	17.32	16.64	20.50
Sep	16.28	15.45	20.50
Oct	17.06	13.62	19.40
Nov	15.51	12.25	19.20
Dec	15.28	10.35	17.10
Annual	17.44	14.65	20.04

	Class III $/cwt	Class IV $/cwt	PA All Milk $/cwt
2009			
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	14.07	13.49	17.01
Dec	14.53	13.74	17.36
Annual	11.32	10.80	14.39
Annual change	-6.12	-3.85	-5.65
% change	-35.1%	-26.3%	-28.2%

	Class III $/cwt	Class IV $/cwt	PA All Milk $/cwt
2010			
Jan	14.60	13.85	17.44
Feb	14.74	13.98	17.57
Mar	15.05	13.86	17.71
Apr	15.24	14.11	17.91
May	15.45	14.40	18.14
Jun	15.65	14.45	18.27
Jul	15.80	14.40	18.34
Aug	15.89	14.45	18.41
Sep	15.90	14.45	18.42
Oct	15.79	14.70	18.45
Nov	15.75	14.70	18.42
Dec	15.70	14.80	18.43
Annual	15.46	14.35	18.13
Annual change	4.14	3.54	3.74
% change	36.6%	32.8%	26.0%

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	$15.40	$3.80	$6.21

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	$15.40	$5.85	$9.55

A Longer-Run View – Per Capita Butter Consumption

The figure below shows per capita butter consumption for 1987 to 2008. It shows butter consumption has increased recently after 15 years of going nowhere. At one time butter consumption was in serious decline, but some adverse news about the health benefits of margarine halted the drop and then led to a reversal of the trend. Apparently consumers felt that if neither were great for you, then the one that tastes good is the best choice. Annual butter consumption went over 5 pounds per capita in 2008, up from 4.1 lbs. in 1997. Since butterfat is an especially valuable part of milk, a vibrant butter market helps farm prices. The butter market has seen some big price differences in the last decade, creating a bit of chaos for ice cream makers and others when it was high.