

**ISSUES AND PERSPECTIVES***By Mark Stephenson and Jason Karszes*

**PRO-DAIRY**  
and the Center  
for Dairy  
Profitability at  
the University  
of Wisconsin  
analyzed dairy  
farm milk checks  
from across  
New York State

# Variations in Milk Prices Across New York State

Milk price is the single largest contributor to income on dairy farms. While minimum milk prices paid to dairy farms across New York is regulated under federal and state orders prices received by New York dairy farmers continues to vary widely.

Continuing a project that was started in 2001, for the tenth time, PRO-DAIRY at Cornell University in conjunction with Center for Dairy Profitability at the University of Wisconsin, analyzed the milk checks of dairy farms from across New York State. 119 dairy farms provided their actual milk checks for milk produced in the month of March, 2013. These checks were then entered into a database to standardize how the milk price was derived for each farm, breaking the check down into four areas: component value, PPD, premiums, and deductions and calculating the net marketing margin for each farm. Participating farms received a report with a print-out of their milk check in this standardized format, along with comparison reports to similar farms by location and size. The following tables highlight the results from these 119 farms across New York State.

The focus of this study was the milk income and deductions before any fees or gains/losses associated with risk management programs for milk prices were factored in.

**Table 1** reports the data with each row sorted independently. The decile values (average of each ranked 10 percent of farms) is shown from low to high.

## Component Value

The component value of the milk checks ranged from \$17.10 per cwt to \$19.62 per cwt, a spread of \$2.52 per cwt. Component value represent 91.4 percent of the net pay received for the month. With all farms receiving the same price per lb. of butterfat, protein, and other solids, the difference between farms is strictly associated with the difference in percent components. From the lowest to the highest 10 percent of farms, the percent butterfat ranged from 3.52 to 4.25, percent protein ranged from 2.96 to 3.42, and other solids ranged from 5.49 to 5.84 percent.

**Management Question:** What things under your management control can you do to improve the percent components, while not adversely impacting milk volume? Can you achieve higher levels of component production, pounds per cow per day, from either increased milk production or increased percent components?

## Net Marketing Value

Component production represents 91.4% of the milk check received on farm. All remaining areas represent the remaining part of the milk check. The relationship between PPD, Premiums, and Deductions impact what is received by a producer in any particular category. Recognizing this relationship, the net marketing value is calculated for each farm. Net marketing value is determined by adding PPD to premium values, and subtracting milk deductions. This is the non-component value of the milk check and represents your returns to marketing. If the component value of the milk check is added to the net marketing value, the net pay price is determined.

Net marketing margin ranged from \$0.82 for the lowest 10 percent of farms to \$2.56 for the highest group, a spread of \$1.74 per cwt. With net marketing margin being calculated from the PPD, Premiums, and Deductions, below is a description of the averages and ranges for each of these areas.

## PPD Value

The Producer Price Differential (PPD) ranged from \$1.32 to \$2.19 for the participating farms. The announced PPD for Boston for March 2013 = \$2.39 per cwt. While PPD is generally tied specifically to location in New York State, where your milk is

## FYI

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## THE MANAGER

shipped can impact the specific PPD received.

*Management Question: Do you understand how your PPD compares to the Boston PPD that is announced each month?*

### Premium Value

Premiums are the third area separated in the milk check analysis format. Premiums associated with quality, volume, and market (all other premiums) are entered individually. Quality premiums ranged from 0 to \$0.65 per cwt. Volume premiums ranged from 0 to \$0.70 per cwt and all other premiums ranged from \$0.01 to \$1.15 per cwt. For the total premiums, the range from the lowest 10 percent of farms to the highest 10 percent of farms was \$0.30 to \$1.78 per cwt.

*Management Question: Are you capturing all the quality premiums that are available from your handler? What other premiums may be available and what do you need to do to qualify for them?*

### Deductions

The fourth area analyzed was the deductions on the milk check associated with the marketing and transporting of milk. Deductions for hauling, promotion, the CWT program, and coop fees and dues were entered separately. Equity deductions were treated as a capital purchased and were included as a milk check deduction for this comparison. Hauling costs ranged from \$0.16 per cwt. to \$1.45 per

cwt. Total deductions ranged from \$0.32 to \$1.68 per cwt.

*Management Question: What can be done to lower hauling costs? Numbers of pick-ups, where milk is being hauled, and size of pick-up can all impact hauling costs.*

### Net Pay

The range in the net pay price received, or the component value + PPD + premiums – deductions was \$2.88 per cwt., with the lowest 10 percent of farms averaging \$18.38 and the top 10 percent of farms averaging \$21.26. The average price received was \$19.71.

### Net Marketing Value Plus Patronage

This study was focusing on the milk produced in the month of March and paid for in April, 2013. A number of cooperatives provided patronage check for the milk produced during the calendar year. As of this time, the value of this patronage for the milk produced in March is not known, but there may be an amount received in 2014 associated with this production. The average of the last four years for those cooperatives providing patronage checks along with the rules for leaving the cooperative were utilized to provide an estimate of what this value may be for 2013. This is added to the net marketing margin to reflect the total non-component value for the farms associated with those cooperatives. □

Table 1. Deciles Sorted Independently  
March 2013, 119 Farms, New York

Each variable in the milk checks were sorted from low to high independent of individual farms. Each column below represents the average value of ten percent of the farms (deciles) for each value. For example, column 1 are the average values of the 12 lowest values (from butterfat tests to Net Marketing Value) while values in column 10 are the averages of the 12 highest values.

	1	2	3	4	5	6	7	8	9	10
Butterfat Test	3.52%	3.67%	3.72%	3.75%	3.80%	3.86%	3.93%	3.97%	4.01%	4.35%
Protein Test	2.96%	3.04%	3.08%	3.11%	3.13%	3.15%	3.17%	3.20%	3.23%	3.42%
Other Test	5.49%	5.72%	5.74%	5.75%	5.76%	5.77%	5.78%	5.79%	5.80%	5.84%
SCC	59.42	92.42	109.67	120.25	129.92	141.75	159.58	180.92	219.50	317.00
<b>Component Value</b>										
Butterfat Value	\$6.16	\$6.41	\$6.51	\$6.56	\$6.64	\$6.74	\$6.86	\$6.93	\$7.01	\$7.60
Protein Value	\$8.36	\$8.57	\$8.69	\$8.77	\$8.84	\$8.88	\$8.93	\$9.02	\$9.12	\$9.65
Other Value	\$2.30	\$2.39	\$2.40	\$2.40	\$2.41	\$2.41	\$2.42	\$2.42	\$2.42	\$2.44
Total Value <sup>1</sup>	\$17.10	\$17.42	\$17.60	\$17.72	\$17.85	\$17.96	\$18.13	\$18.33	\$18.49	\$19.62
<b>PPD Value</b>	\$1.32	\$1.34	\$1.38	\$1.44	\$1.46	\$1.53	\$1.62	\$1.69	\$1.93	\$2.19
<b>Premium Values</b>										
Volume Premium	\$0.00	\$0.01	\$0.09	\$0.15	\$0.21	\$0.29	\$0.39	\$0.50	\$0.53	\$0.70
Quality Premium	\$0.00	\$0.11	\$0.16	\$0.25	\$0.27	\$0.33	\$0.40	\$0.41	\$0.59	\$0.65
Market Premium	\$0.01	\$0.04	\$0.16	\$0.26	\$0.32	\$0.36	\$0.42	\$0.49	\$0.71	\$1.15
Total Premium <sup>1</sup>	\$0.30	\$0.54	\$0.65	\$0.77	\$0.90	\$1.03	\$1.13	\$1.31	\$1.49	\$1.78
Gross Pay <sup>1</sup>	\$19.22	\$19.70	\$19.97	\$20.17	\$20.28	\$20.49	\$20.86	\$21.22	\$21.57	\$22.47
<b>Deductions<sup>2</sup></b>										
Promotion Deduction	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15
CWT	\$0.00	\$0.00	\$0.01	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02
Hauling Deduction	\$0.16	\$0.37	\$0.44	\$0.50	\$0.57	\$0.64	\$0.78	\$0.90	\$1.08	\$1.45
Coop & Other Deduction	\$0.00	\$0.00	\$0.00	\$0.01	\$0.02	\$0.04	\$0.05	\$0.06	\$0.07	\$0.09
Total Deduction <sup>1</sup>	\$0.32	\$0.54	\$0.63	\$0.69	\$0.75	\$0.84	\$0.98	\$1.11	\$1.29	\$1.66
Net Pay <sup>1</sup>	\$18.38	\$18.97	\$19.18	\$19.35	\$19.58	\$19.78	\$19.94	\$20.19	\$20.56	\$21.26
Net Marketing Value <sup>3</sup>	\$0.82	\$1.22	\$1.34	\$1.54	\$1.65	\$1.80	\$1.90	\$2.03	\$2.18	\$2.56
Patronage Dividend	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.09	\$0.64	\$0.93
Net Marketing & Patronage	\$0.90	\$1.34	\$1.56	\$1.72	\$1.85	\$1.95	\$2.07	\$2.18	\$2.35	\$2.71

<sup>1</sup>. Totals may not add due to rounding

<sup>2</sup>. Some of the deductions in the milk checks may not have been included. For example, supplies that may have been purchased through a cooperative or retirement investments are not relevant to the study.

<sup>3</sup>. The Net Marketing Value is PPD + Total Premiums - Total Deductions