# Comparing Your Milk Checks

Mark Stephenson

Department of Applied Economics and Management, Cornell University

#### Introduction:

This is the ninth year we have conducted the analyses of producer milk checks. The purpose of this project has been to better help producers understand their own milk checks and how they might compare their checks with other producers. From the year 2000 through 2008, the one month milk check premiums have averaged: \$0.58, \$1.09, \$0.50, \$0.56, \$0.63, \$0.61, \$0.56, \$0.65 and \$0.65 respectively. The premiums plus the values paid for components and the producer price differential have varied quite a bit from one year to the next. This year the average gross pay averaged a very respectable \$19.38 compared to last year's amazing \$23.31.

The enclosed report page of your farm's results contains your payments and statistics from farms in the study which were "nearby". The "nearby" farms are 10 farms that are either within your zip code or nearest to your zip code area. Obviously, some participants are more tightly grouped than others. We used a measurement to let you know how far the nearby farms were dispersed. Let's say we had two farms for example and the average distance given on the report was 5 miles. We may have had 1 farm within the same zip code, that would be given a "0", and another farm 10 miles from the zip code area would be given a "10", for a total average of 5 miles.

Many farms receive more than one milk check. These were entered as bulk tank #1, #2, etc. For farms with multiple bulk tanks at the same location, the data were combined into a single report. The reason for this is that volume premiums or hauling deductions may have been paid on a single tank to the farm and would both overstate the payment on one tank and understate the value on the others.

Each line item in the report was calculated independently. That is, the three farms in the average of the highest nearby farms for butterfat test probably aren't the same three farms for high test for protein. Therefore you cannot add up the individual high or low premiums or deductions and expect that they will equal the total for the high or low premiums or deductions. The average for the categories under the total survey and nearby farms should sum to the total except for rounding error.

We are not revealing individual handlers at this time. We felt that we would not be able to reveal handlers in a nearby area that is most meaningful to you without possibly revealing individual farm information. If you have questions about your milk check and how it might compare with others, then you should contact your handler. They are in the best position to know why your milk payment is structured the way it is and how they compare with other handler programs.

The report breaks down the milk check into four basic categories: <u>Component Test and Values</u>, <u>PPD</u>, <u>Premiums</u>, <u>Deductions</u>. There are then subcategories within some of these primary categories. These categories are more specifically described below.

### Component Tests and Values:

The butterfat, true protein and other solids test percentages for your farm are compared with other farms. These tests are used to calculate the payments for butterfat, (true) protein and other solids. The September prices for the components per pound are the same for all producers under the Northeast and Mideast FMMO. The total and per hundredweight payments are not; because they are dependent on the individual farm's component tests. Thus it is relatively simple and straightforward to compare payments between farms.

## Producer Price Differential (PPD):

The PPD will vary across farms based on the zone of location of the plant of first receipt of the milk. For example, the PPD for milk received at a Boston, MA plant was \$2.62 for September while milk received a Syracuse, NY plant was \$1.87 (NYC was \$2.52). The PPD varies from month to month, but the relative location difference between the plant zones do not. In our example the \$.75 difference between the two plants would not change. Plant locations in Northern and Western New York typically have \$.20 lower location values than Syracuse and Central New York. Some producers in lower zone areas may have the option of shipping to handlers in higher city zone locations, but hauling costs will likely offset some or all of the difference. The PPD needs to be evaluated in light of current and expected alternative hauling costs.

Proprietary handlers who move a producer's milk to multiple locations for the month pay a weighted average PPD. Cooperative handlers who move a producer's milk between plants may not pay a weighted average PPD, but instead, may charge a hauling cost and a fixed PPD based on a consistent location value regardless of where the milk actually goes.

#### Premiums:

Premiums generally include any positive adjustment to prices over and above what the federal order prices would otherwise be. We categorized the premiums into what we called: Volume, Quality, and "Market" premiums.

<u>Volume</u> – These were generally noted as volume premiums on the milk check. Volume discounts on hauling were include as a hauling discount.

<u>Quality</u> – These premiums were also generally easy to designate as they were specifically usually called "quality" premium or bonus (also "cell premium" etc.).

Market – These premiums include just about every other possible positive adjustment to prices. While they were sometimes called "market" premiums, they also went by a variety of other names including "coop," "base," "competitive," "supply," "special," "market adjustment." In some cases a portion of the premiums may have been generated by pooling milk to achieve a higher value for the milk and then payment of some or all of this value to the producer (i.e. "pooling premium"). We did not attempt to determine in which cases this would apply.

#### **Deductions:**

We did not include any assignments or supply purchases that may have been deducted on the milk check. We also did not include equity deductions. The deductions are categorized as follows:

<u>Milk Promotion</u> – This would include the \$.10 local and \$.05 national fees deducted for the dairy promotion program and are paid by all producers.

 $\underline{\mathrm{CWT}}$  – Many cooperatives and some independent milk producers are contributing \$0.10 to Cooperatives Working Together. In our sample of farms, about 78 percent of farms had CWT payments.

<u>Hauling</u> – This would include all hauling costs including both stop charges and other costs and net of any hauling discounts. This year it was not uncommon to have a fuel surcharge.

Other Deductions – This includes coop dues if any paid by coop members and market order assessments that may be paid by independent producers for market administrator verification of weights and tests.

#### Other Issues:

Net Marketing Value - We calculate something that we are calling the "Net Marketing Value". This is the PPD plus total premiums minus total deductions. You, or your cooperative, can move milk to different plants, which may give you a higher PPD, but it will probably come at the cost of additional hauling. Of course, a hauling discount can be offered to partially offset that increase, or perhaps you warrant additional volume or market premiums. The Net Marketing Value incorporates all of those items.

<u>Forward contracting</u> - There were a few producers who had locked in prices for the month of September. A contract adjustment could be either positive or negative depending upon the contract and market prices. This adjustment was not included in the regular milk check comparison as this is a management decision made by the individual producer.

<u>Cooperative Retains or Payments</u> – We did not attempt to make any determination of what cooperative earnings were or how they might be allocated to member producers. Similarly we did not include equity deductions or retains in this analysis.

<u>Errors and Omissions</u> – It is possible that we may not have interpreted a premium or deduction correctly or values may have been incorrectly entered. We have tried hard to make sure that the reports are error free, but if you see an error or omission you should adjust this for comparing yourself to other farms. *If you can contact us regarding the problem, we will correct it and send you a new report.* 

# Deciles—Sorted Independently September 2008

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 14 lowest values (from butterfat tests to Net Marketing Value) while values in column 10 are the averages of the 14 highest values.

	1	2	3	4	5	6	7	8	9	10
Butterfat Test	3.46%	3.52%	3.59%	3.63%	3.66%	3.71%	3.74%	3.77%	3.84%	4.03%
True Protein Test	2.91%	2.97%	3.00%	3.03%	3.06%	3.08%	3.09%	3.12%	3.16%	3.27%
Other Solids Test	5.54%	5.63%	5.65%	5.67%	5.68%	5.69%	5.71%	5.72%	5.74%	5.81%
Component Value						0.0070	0.7 1 70	0.7270	5.7476	5.01%
Butterfat	\$6.29	\$6.40	\$6.53	\$6.60	\$6.66	\$6.74	\$6.80	\$6.86	\$6.99	\$7.34
Protein	\$9.51	\$9.70	\$9.79	\$9.91	\$9.99	\$10.06	\$10.10	\$10.19	\$10.32	\$10.69
Other Solids	\$0.13	\$0.13	\$0.13	\$0.13	\$0.13	\$0.13	\$0.13	\$0.13	\$0.13	\$10.69
Somatic Cell	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.14 \$0.00
Total^	\$16.08	\$16.36	\$16.56	\$16.68	\$16.77	\$16.83	\$16.95	\$17.17	\$0.00 \$17.39	
Producer Price Diff.	\$1.53	\$1.60	\$1.65	\$1.70	\$1.77	\$1.86	\$1.87	\$2.01	\$2.13	\$18.02
Premium Values		*	7	<b>4</b> 0	Ψ1	Ψ1.00	φ1.07	\$2.01	<b>⊅∠.13</b>	\$2.44
Volume	\$0.00	\$0.00	\$0.05	\$0.11	\$0.15	\$0.19	\$0.26	\$0.34	\$0.46	\$0.64
Quality	-\$0.03	\$0.00	\$0.00	\$0.08	\$0.15	\$0.15	\$0.17	\$0.25	\$0.48	
Market	\$0.00	\$0.00	\$0.09	\$0.18	\$0.25	\$0.25	\$0.32	\$0.40	\$0.28 \$0.51	\$0.47
Total^	\$0.09	\$0.26	\$0.38	\$0.48	\$0.58	\$0.68	\$0.77	\$0.40	\$0.51 \$1.06	\$0.79
Gross Pay <sup>^</sup>	\$18.29	\$18.61	\$18.85	\$19.07	\$19.23	\$19.43	\$19.63	\$19.85	\$20.08	\$1.31
Deductions*		,	4.5.50	Ψ.σ.σ.	Ψ10.20	Ψ13.43	Ψ13.03	φ19.00	\$20.08	\$20.80
Promotion	\$0.14	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15
CWT	\$0.00	\$0.00	\$0.04	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10	\$0.13
Hauling	\$0.27	\$0.40	\$0.53	\$0.59	\$0.63	\$0.68	\$0.77	\$0.85	\$1.04	\$1.55
Coop & Other	\$0.00	\$0.00	\$0.03	\$0.05	\$0.05	\$0.05	\$0.07	\$0.07	\$0.08	\$0.12
Total^	\$0.52	\$0.68	\$0.81	\$0.87	\$0.92	\$0.96	\$1.06	\$1.15	\$1.35	\$1.80
Net Pay^	\$17.41	\$17.66	\$17.87	\$18.09	\$18.23	\$18.44	\$18.61	\$18.79	\$18.98	
Net Marketing Value®	\$0.73	\$1.09	\$1.24	\$1.36	\$1.43	\$1.53	\$1.62	\$10.79	\$18.98 \$1.96	\$19.67 \$2.20
						<del>+1.00</del>	Ψ1,0Z	Ψ1.11	Ψ1.50	ΨΖ.ΖU

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

<sup>\*</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 revelant to the study.

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

### Deciles—Sorted by Net Pay September 2008

Each variable in the milk checks were sorted from low to high by the Net Pay value Each column below represents the average value of ten percent of the farms (deciles). For example, column 1 are the average values of the 14 lowest net pay prices (from butterfat tests to Net Marketing Value) while values in column 10 are the averages of the 14 highest net pay prices.

-	1	2	3	4	5	6	7	8	99	10
Butterfat Test	3.58%	3.55%	3.66%	3.69%	3.59%	3.75%	3.73%	3.74%	3.77%	3.89%
True Protein Test	2.97%	3.00%	3.01%	3.04%	3.04%	3.08%	3.05%	3.13%	3.12%	3.23%
Other Solids Test	5.64%	5.69%	5.68%	5.70%	5.68%	5.70%	5.68%	5.69%	5.70%	5.67%
Component Value										
Butterfat	\$6.52	\$6.46	\$6.66	\$6.71	\$6.53	\$6.82	\$6.78	\$6.80	\$6.87	\$7.07
Protein	\$9.70	\$9.80	\$9.85	\$9.93	\$9.93	\$10.08	\$9.98	\$10.22	\$10.20	\$10.56
Other Solids	\$0.13	\$0.13	\$0.13	\$0.13	\$0.13	\$0.13	\$0.13	\$0.13	\$0.13	\$0.13
Somatic Cell	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total^	\$16.35	\$16.40	\$16.65	\$16.77	\$16.59	\$17.03	\$16.89	\$17.16	\$17.20	\$17.77
Producer Price Diff.	\$1.92	\$1.75	\$1.79	\$1.74	\$1.90	\$1.81	\$1.83	\$1.94	\$1.92	\$1.96
Premium Values										
Volume	\$0.12	\$0.13	\$0.10	\$0.17	\$0.39	\$0.27	\$0.23	\$0.17	\$0.34	\$0.29
Quality	\$0.07	\$0.10	\$0.07	\$0.14	\$0.19	\$0.09	\$0.20	\$0.18	\$0.19	\$0.27
Market	\$0.17	\$0.20	\$0.23	\$0.23	\$0.30	\$0.21	\$0.35	\$0.40	\$0.31	\$0.37
Total <sup>^</sup>	\$0.37	\$0.43	\$0.40	\$0.54	\$0.88	\$0.57	\$0.78	\$0.75	\$0.84	\$0.94
Gross Pay <sup>^</sup>	\$18.63	\$18.58	\$18.84	\$19.06	\$19.38	\$19.41	\$19.50	\$19.84	\$19.95	\$20.67
Deductions*										
Promotion	\$0.14	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15
CWT	\$0.05	\$0.08	\$0.08	\$0.09	\$0.08	\$0.09	\$0.06	\$0.12	\$0.07	\$0.06
Hauling	\$0.99	\$0.64	\$0.66	\$0.69	\$0.86	\$0.68	\$0.64	\$0.72	\$0.70	\$0.73
Coop & Other	\$0.04	\$0.04	\$0.08	\$0.04	\$0.06	\$0.05	\$0.04	\$0.07	\$0.05	\$0.04
Total <sup>^</sup>	\$1.23	\$0.91	\$0.97	\$0.97	\$1.15	\$0.97	\$0.89	\$1.05	\$0.98	\$0.99
Net Pay^	\$17.41	\$17.66	\$17.87	\$18.09	\$18.23	\$18.44	\$18.61	\$18.79	\$18.98	\$19.67
Net Marketing Value®	\$1.05	\$1.27	\$1.21	\$1.32	\$1.64	\$1.41	\$1.72	<b>\$1.64</b>	\$1.78	\$1.91

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

<sup>\*</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 revelant to the study.

<sup>°</sup> The Net Marketing Value is the PPD + Total Premiums – Total Deductions.

# Deciles—Sorted by Net Marketing Value September 2008

Each variable in the milk checks were sorted from low to high by the Net Pay value Each column below represents the average value of ten percent of the farms (deciles). For example, column 1 are the average values of the 14 lowest net pay prices (from butterfat tests to Net Marketing Value) while values in column 10 are the averages of the 14 highest net pay prices.

	11	2	3	4	5	6	7	8	9	10
Butterfat Test	3.76%	3.69%	3.71%	3.75%	3.73%	3.70%	3.64%	3.65%	3.67%	3.66%
True Protein Test	3.10%	3.06%	3.03%	3.07%	3.08%	3.06%	3.03%	3.04%	3.15%	3.06%
Other Solids Test	5.64%	5.67%	5.69%	5.70%	5.68%	5.69%	5.68%	5.70%	5.68%	5.70%
Component Value									0.007.	0.1.070
Butterfat	\$6.84	\$6.72	\$6.76	\$6.82	\$6.78	\$6.73	\$6.62	\$6.63	\$6.67	\$6.66
Protein	\$10.13	\$10.00	\$9.91	\$10.03	\$10.06	\$10.00	\$9.89	\$9.93	\$10.29	\$10.02
Other Solids	\$0.13	\$0.13	\$0.13	\$0.13	\$0.13	\$0.13	\$0.13	\$0.13	\$0.13	\$0.13
Somatic Cell	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total^	\$17.10	\$16.85	\$16.80	\$16.98	\$16.97	\$16.87	\$16.65	\$16.69	\$17.10	\$16.81
Producer Price Diff.	\$1.79	\$1.94	\$1.83	\$1.78	\$1.81	\$1.86	\$1.88	\$1.74	\$1.96	\$1.97
Premium Values						*****	7	<b>4</b> .	Ψ1.00	Ψ1.01
Volume	\$0.05	\$0.11	\$0.12	\$0.15	\$0.23	\$0.18	\$0.35	\$0.30	\$0.34	\$0.37
Quality	\$0.01	\$0.06	\$0.11	\$0.15	\$0.16	\$0.17	\$0.17	\$0.20	\$0.24	\$0.24
Market	\$0.11	\$0.17	\$0.19	\$0.23	\$0.24	\$0.22	\$0.24	\$0.41	\$0.43	\$0.53
Total^	\$0.17	\$0.35	\$0.42	\$0.53	\$0.63	\$0.57	\$0.75	\$0.91	\$1.01	\$1.14
Gross Pay <sup>^</sup>	\$19.06	<b>\$1</b> 9.14	\$19.05	\$19.29	\$19.41	\$19.29	\$19.28	\$19.35	\$20.07	\$19.92
Deductions*							********	4.5.55	Ψ20.01	Ψ10.02
Promotion	\$0.15	\$0.15	\$0.15	\$0.15	\$0.14	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15
CWT	\$0.07	\$0.08	\$0.07	\$0.12	\$0.07	\$0.07	\$0.08	\$0.09	\$0.07	\$0.07
Hauling	\$0.96	\$0.89	\$0.74	\$0.63	\$0.75	\$0.63	\$0.71	\$0.60	\$0.74	\$0.66
Coop & Other	\$0.06	\$0.07	\$0.05	\$0.05	\$0.05	\$0.05	\$0.06	\$0.05	\$0.05	\$0.03
Total <sup>^</sup>	\$1.23	\$1.19	\$1.01	\$0.95	\$1.01	\$0.90	\$1.01	\$0.88	\$1.01	\$0.91
Net Pay^	\$17.83	\$17.94	\$18.04	\$18.34	\$18.40	\$18.40	\$18.27	\$18.47	\$19.05	\$19.01
Net Marketing Value°	\$0.73	\$1.09	\$1.24	\$1.36	\$1.43	\$1.53	\$1.62	\$1.77	\$1.96	\$2.20
	<del>, '' ''' '</del>				<u> </u>		<del> </del>	¥ 1.1.1	· • • • • • • • • • • • • • • • • • • •	Ψ4.20

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

<sup>\*</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 revelant to the study.

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