

Why is the Producer Price Differential Negative on my August Milk Check

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As dairy producers have begun to receive their August 2003 milk checks, they have been pleased to notice that prices are nearly a dollar higher than payments received in August for milk produced in July. Yet, it is hard to ignore the negative value that shows up for the Producer Price Differential or the PPD. Why is the producer price differential negative? The short answer is because cheese prices for August milk were higher than fluid milk prices, which is a sign that prices are going up. Let's look at the answer in more detail.

Keep in mind that milk prices are driven by four Classes of use--Class I (fluid milk), Class II (ice cream and soft products), Class III (cheese), and Class IV (Butter and Powder). Essentially, prices for all classes of milk except Class I are based on products marketed during the month and announced by the fifth of the following month. That is, the Class II, III, and IV prices for August were announced during the first week of September. The Class I price is announced in advance of the month, so that bottlers and retailers have more time to respond to price changes. The August Class I price was announced on July 18th and was based on prices of products marketed in the first 2 weeks of July. Therefore, the August Class I price was based on products marketed when the cheese prices were still much lower than they were by the end of August.

Under federal milk market order pricing, dairy producers are paid for milk in two parts—they are paid for the Class III value of the milk sold and a producer price differential for the remaining value of milk in the marketing pool. The Class III value is paid for the total pounds of butterfat, protein, and other solids that producers actually sell. The prices of those components are based on USDA surveyed cheese prices and determine the final Class III price. The producer price differential is an adjustment made to those prices for the additional value of milk used in other classes of milk use. A location differential is added to a price mover that represents the manufacturing value of the milk. In Indiana, that differential ranges from \$1.80 in the north to \$2.20 in the south for Class I, and is a constant \$.70 for Class II. Class IV price is derived independently from the prices of butter and non-fat dry milk. The higher of the advanced Class III or Class IV price is the price mover for Class I.

What happened in August is that the cheese, or Class III, prices were on their way up. In fact, the August Class III price of \$13.80 was \$2.02 higher than the July price of \$11.78, and overall uniform milk price (blend price) rose from \$11.68 to \$12.60. However, nearly all of that price increase was driven by cheese price, not butter or powder prices and the Class II and IV prices could not offset the large difference between the Class III price and previously announced Class I price. As a rule of thumb, the producer price

differential is negative any time the Class III price is greater than the Class I mover by more than the Class I location differential.

The situation gets even more complex in that cheese plants may choose to “depool” their milk when the Class III milk is worth more than Class I or Class II milk so that they do not need to pay into the producer settlement fund. What results is that the remaining pool in the federal marketing order has a larger percentage of Class I, II, and IV milk at a lower price, which, in turn, reduces the producer price differential even further. Some cooperatives around the country do not directly report the producer price differential on milk checks, electing to wrap that payment into quality or component incentives. This is perfectly legal, since the federal order pricing systems only establish minimum prices that producers must be paid.

The good news is that negative producer price differentials occur when milk prices (especially cheese prices) are on their way up. The lag in time between the announcement of the Class I price and the actual payments also keeps the overall milk price higher for longer when the cheese prices fall. What matters more on the milk check is the bottom line not the relative portions from the Class III price and the producer price differential.