

The Frustrating PPDs

by Normand St-Pierre, Ph.D., P.A.S.

Negative PPDs... what's going on? All dairy producers must have noticed negative Producer Price Differentials (PPDs) lately. Conceptually, PPDs should represent the portion of the added value of Class I milk (i.e., fluid milk) being apportioned



across all the milk in a given Federal Milk Marketing Order (FMMO). Hence, PPDs should be positive. But starting in late spring they have been negative. Why is that?

How are Class prices calculated?

'Calculated' is the key word here. The USDA simply calculates the prices of the 4 milk classes using the national prices of 4 dairy commodities as determined through surveys by its NASS agency. These 4 commodities are: cheddar cheese, butter, dry whey, and nonfat dry milk. All milk prices are simply calculated from these 4 prices using different formulas.

Different timing

To understand one factor causing negative PPDs, one has to understand that the different milk Classes are not priced at the same time. For example, the Class I and the Class II skim milk during the month of July were based on the average NASS prices during the weeks of June 8 and 15. Class I milk and the skim used in Class II (i.e., soft dairy products such as yogurt) are thus priced forward. Hence, right now we know exactly what these prices will be in November. Butterfat in Class II, components in Class III (hard cheese), and skim and butterfat in Class IV (butter and nonfat dry milk) are priced backward. For example, component prices in July were calculated from the average NASS prices in effect during the weeks of July 4, 11, 18, and 25 and released in early August.

The first factor causing negative PPDs

If dairy product prices remained steady, Class I milk would carry a greater price than milk used in other Classes due to the Class I differentials applied to the milk used in this Class. The Class I differentials vary by location. In FMMO 1, they range from \$2.10/ cwt in Erie, PA, to \$3.25 in Boston, MA. During times of steady prices, the PPDs should be positive. But if prices of dairy products are rapidly surging upwards, the Class I milk price can become less than the prices of milk used in other Classes simply because Class I price is determined from product prices in the prior month. When this happens, PPDs can become negative. If milk usage didn't change, these losses experienced by dairy Agri-Basics **WILL NOT** be having a Dairy Meeting in 2020 given the Covid-19 situation.

We will, however, be hosting smaller localized meetings April 5-8, 2021.

Please reserve these dates, with more details to follow shortly!



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producers would be recovered when product prices are falling. But usage changes, and this in fact will be the third factor responsible for negative PPDs.

Component pricing

Because the protein content in milk is a prime determinant of cheese yields, an important change to milk pricing was made in most FMMOs about 20 years ago. As opposed to be simply priced on butterfat and solids-nonfat, milk pricing in component-based FMMOs (which include Order 1) is based on butterfat, protein and other solids (basically lactose and minerals). In those Orders, a dairy producer is paid for the pounds of butterfat, protein, and other solids shipped during the month regardless of where the farm's milk



was shipped. But a plant receiving milk to make butter and powder does not pay its milk based on protein and other solids because the protein content of the milk doesn't affects the yield of butter and powder. The same is true for Class I and Class II handlers. Hence, when the value of the skim used in Class I, II, and IV is less than the value of the skim (calculated from the component values) used in Class III, the pool must recover the difference using the PPDs. In FMMOs with large Class III utilization

(e.g., Upper Midwest), this makes little difference. But in FMMOs with much smaller Class III utilization such as FMMO 1, this can result in much larger negative PPDs. Such has been the case since springtime.

To pool or not to pool... that's the question!

In FMMOs, all milk used in Class I and II MUST be pooled, but NOT the milk used in Class III and IV. Generally, it is to everyone's advantage to pool all milk, but when Class III price is greater than Class I price, it is advantageous to cheese makers not to pool their milk because a cheese plant can get its milk supply at a lower price than if the milk was pooled. There are rules governing how milk can be depooled (and repooled) and these rules vary across the FMMOs. But if large amounts of the highest priced milk are not pooled (like Class III milk in many months since June), then the pool must recover this lost money through... negative PPDs.

Higher of vs. average of...

In May 2019, FMMOs changed how the Class I skim milk is priced from a formula using the higher of Class III and Class IV skim milk prices to a formula using the average of Class III and Class IV skim milk prices plus \$0.74/cwt. Because of the very large differences in current Class III and Class IV skim milk prices, the new formula has resulted in substantially lower Class I prices than what they would have been using the prior formula... hence contributing to larger negative PPDs.

What can a producer do?

There are many questions that producers should be asking to their cooperatives. These will not be discussed here. However, all should remember that in component-based FMMOs milk is paid based on the pounds of butterfat, protein and other solids shipped during a month. Protein price was above \$5/lb in October... Currently, there is money to be made by shipping more components.

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To see the calculation for the Northeast order each month, visit <u>www.FMMone.com</u> and look for the Statistical Uniform Price report to see how your PPD was calculated each month.



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