Forward Contracting, Hedging, Negative PPDs and Depooling
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Some recent publications have suggested that dairy farmers who have forward contracted milk or sold futures will be financially hurt by negative PPDs compared to those who did not. The explanations that we have seen and heard for this alleged difference are obscure, confusing, misleading, illogical, and flat-out wrong. They often seem to be an attempt to discourage risk management rather than to explain how negative PPDs affect farmers' milk checks.

The fact is, negative PPDs affect dairy farmers exactly the same, whether or not they have locked in a base Class III price. That's because negative PPDs affect ***basis***, not the base Class III price. *And hedging or forward contracting has absolutely no effect on basis.*

Let's look at an example. Suppose you sold a March '04 Class III futures contract at $13.50 in February. Your average March basis since 2000 was $1.50, so you were looking to lock in a $15.00 mailbox price. The March Class III price was announced at $14.49. So if you had not hedged, your expected mailbox price would have been $15.99, $0.99 higher.

Now suppose the March '04 PPD turns out to be -$0.50 per hundredweight and your handler does not depool. The average March PPD that you used to estimate your basis was +$0.50. So your actual basis is $1.00 less than what you expected, or $0.50 instead of $1.50. You get a mailbox price of $14.00. If you had not hedged, your mailbox price would have been $14.99, $0.99 higher.

The difference between what you receive when hedge and what you would have received if you had not hedged is $0.99. That is the difference between the announced Class III price and the Class III price you locked in by hedging. The basis is the same whether or not you hedged. If you hedge, you receive your locked-in price plus the basis. If you don't, you receive the announced Class III price plus the basis.

Your basis – the difference between your mailbox price and the Class III price – has several components: milk composition and quality different from the standards used to calculate the Class III price; plant premiums for quality, volume or other factors; hauling charges; promotion checkoff and other deductions; and the PPD. The PPD is the most unpredictable element of basis, and that increases the basis risk associated with hedging or forward contracting – you can't precisely calculate a mailbox price associated with a Class III futures price. But basis is unpredictable whether or not you hedge.

Some other observations on negative PPDs and depooling:

The principal cause of negative PPDs is a rapid rise in commodity prices during the roughly six weeks between the time the Class I price is announced (around the middle of the preceding month) and the Class III price is announced (around the first of the following month). This lag in price announcements can result in the Class III price ending up higher than the Class I price, yielding a negative PPD. But remember that what comes up must come down. And when Class III prices are falling, the difference between Class I and Class III prices increases, yielding very large positive PPDs. So things tend to balance out in the long run, but not completely because of depooling and repooling by regulated manufacturing plants.

Depooling mitigates the impact of negative PPDs on some producers, but worsens the impact on other producers. Depooling means that a handler partially or completely disassociates from its marketing order in a given month. By doing so, the handler can avoid making a payment to the order producer settlement fund when the PPD is negative. Note that fluid milk processors are not permitted to depool, but manufacturing plants regulated by the Upper Midwest federal milk marketing order can depool and repool almost at will.

Some manufacturing plants with no regular sales of milk to fluid milk processors can completely depool when the PPD is negative. Producers shipping to these plants effectively have a zero PPD when the plant depools. Other manufacturers with sales commitments to fluid milk handlers may only partially depool; removing some plants of a multi-plant firm and keeping some on. The "blended" PPD for these manufacturers will still be negative, but smaller than if they remained completely pooled. Some manufacturers with significant commitments to fluid buyers and all Class I handlers cannot depool. The PPD for shippers to these handlers could be as large as the announced order PPD. But handlers may elect to "eat" part or all of the negative PPD in order to keep their pay prices competitive with partially or wholly depooled handlers. We expect that to be the case in the next couple of months.

Simplistically, the PPD is the difference between the weighted average value of milk pooled based on federal order minimum prices and the Class III price. Therefore, depooling increases the magnitude of negative PPDs. That's because when Class III milk is removed from the pool, a larger percentage of the milk remaining is relatively low-priced Class I milk. So the weighted average value of milk decreases relative to the Class III value and the PPD becomes (negatively) larger. Accordingly, plants unable to depool face a larger PPD than they would if all milk were pooled.

Depending on how much depooling occurs, we predict the Upper Midwest PPD to be in the range of negative $0.25 to negative $0.55 per hundredweight (base Zone) for March. The April PPD will be a much larger negative value. We predict the April base zone PPD for the Upper Midwest order could be as large as negative $3.50 given the current Class III and Class IV futures prices (April 8).