

Producer Experiences With Managing Milk Price Risk

Over the last few years, dairy producers have experienced unprecedented milk price volatility, making it very difficult to manage their businesses.

Many producers have chosen to manage this price risk using futures and options from the Chicago Mercantile Exchange (CME), or forward contracts offered by their milk buyer. The benefit of using these tools successfully is improved price stability. Producers using risk management tools over the past few years may not have received all of the profits of record high milk prices in 1998 and 1999, but most of them successfully protected themselves from the devastatingly low prices in 2000.

Earlier this year, futures markets again started to offer more attractive prices for most of 2001, which have continued through the summer. These more favorable prices have boosted trading of both Class III and IV futures to new record highs (Figure 1). For example, on July 20 this year, the number of open contracts was 15,712, up over 880% since 1998. A total of 418 contracts were traded, 350% more than were traded on the same day in 1998. Forward contracts offered by cooperatives and processors are often over-subscribed.

Tools of the Trade

Typically, forward contracts are the simplest form of risk management tool available. With most forward contracts, the milk buyer offers the dairy producer a fixed price for a designated portion of his/her milk for a period of months. The producer only has to evaluate the price being offered and decide if that price is satisfactory.

A second tool available to producers is the CME futures market. Producers can evaluate the futures prices that are offered for the coming months (usually the next 12). If the prices offer an opportunity to cover the cost of production and make a profit, the producer can lock-in those prices by contacting a broker and selling the futures contracts.

The other tool commonly used to manage price risk in dairy is options. With options, producers determine a level where they would like to floor their price, then they check the options markets at the Chicago Mercantile Exchange to see what the options premium (i.e., the price they have

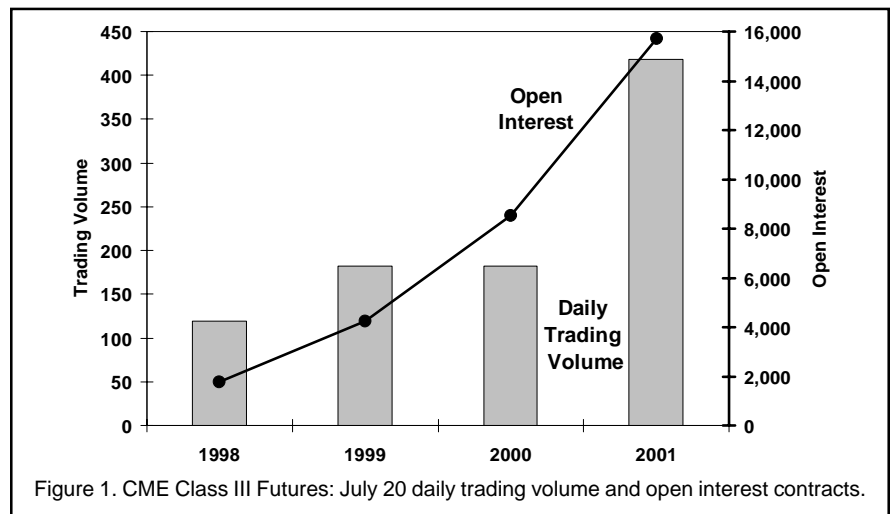


Figure 1. CME Class III Futures: July 20 daily trading volume and open interest contracts.

to pay to floor their price at that level) for their chosen price level is. If the price is reasonable, producers simply contact a broker and pay the premium and have the option to sell their milk for the chosen price. If they buy the option and the announced price is above the floor price he/she set, the producer isn't obligated to take the floor price but is free to take the higher announced price.

Options are popular with some dairy producers who want to floor their price, but still have the opportunity to capitalize on higher prices if the market were to go up significantly. However, options premiums on very attractive floor prices are usually quite expensive.

Which tool a producer chooses, and why, depends on individual preference and their specific milk market. Just ask Californians Butch Katen and Vernon and Timothy Wickstrom; Jerry Spielman of Kansas; and Wisconsin producers Bruce Vander Veen, Marvin Amundson, and William, Marion and Brian Barlass.

Getting Ready To Manage Risk

Across the board, the volatility of the milk market encouraged these six Jersey herd owners to invest in risk management procedures. Each had experienced extremes of high and low for several years, and was looking for a way to stabilize profits and cover the costs of production.

Understanding the costs of production is the essential first step. "We put together our costs of production," says Marvin Amundson, Westby, Wis., "and arrived at a price we needed to turn a good profit on

the farm."

"We thought it would be helpful to lock-in good profits when available," says Bruce Vander Veen, partner in Van Dell Farms, Inc., Sharon, Wis. "We established our cost of production, and Alto Dairy Cooperative offered an excellent program that is easy for beginners to use."

Expansion plans at two other dairies were facilitated by the use of futures, options and forward contracts. "I needed to find a way to stabilize the price while expanding the herd," says Jerry Spielman of Heartland Jerseys, Seneca, Kans. "We developed a total business plan . . . having a detailed understanding of our cost of production and family living needs. When we follow our market plan, the positions we take should be profitable ones."

The Barlass Family from Janesville, Wis., knew they were going to need more income to expand their operation than what the market was predicting. The forward contracts available to them "though not great, looked better than the prices we would probably get otherwise," recalls Marion Barlass.

Butch and Sue Katen, Diamond K Jerseys, Orland, Calif., initially viewed risk management as a tool to earn the highest prices available, but were advised differently.

"Our advisors and consultants helped us to understand that we shouldn't be so focused on the highest prices but rather on stabilizing our prices. We are currently using risk management to protect ourselves from devastatingly low prices," says Butch Katen.

The Decision To Protect Milk Prices

The prospect of stability was the foremost consideration in making the ultimate decision in risk management.

"We have managed feed price risk by contracting our feed at least a year in advance to protect us from a sharp increase in a potentially rising market," notes Tim Wickstrom, partner with father Vern in the 1,300-cow VerMar Jerseys, Hilmar, Calif. "So why not do the same on the revenue side and protect ourselves from a falling milk market?"

Several co-ops, like the Minnesota-based Land O'Lakes, have been very effective in educating producers on risk management tools. Butch Katen, who contracted 50% of his milk in 2000 and 65% this year, knows exactly what price is being locked in, thanks to a formula Land O'Lakes provides to convert cheese price to a milk price equivalent.

Van Dell Farms was able to use forward contracting in 1999, just at the time their hog business was suffering substantial losses. With the opportunity to contract milk in the \$16 to \$17 range, the Vander Veens felt they needed to lock in profits where they could, in the end protecting the entire farming enterprise.

In 2000, the market outlook was dim, so when their co-op offered another contract, the Vander Veens knew they could again secure a dependable income. As Bruce comments, "Many times you need to rely on your instincts as well as market information."

The key point, Jerry Spielman believes, is to "try not to let your emotions affect your market plan. Always remember that the positions you take should be profitable ones."

Tools Used To Protect Milk Prices

"Options are insurance to protect your income," says Marvin Amundson. "Buying options is no different than buying insurance to protect your buildings, cattle and farm equipment."

Tim Wickstrom agrees. Unable to use forward contracts, they chose options because they were "similar to buying insurance" and easy to understand. "I wanted to start slow and learn with less risk about what I was getting into."

The Vander Veens use forward contracting "most because of its simplicity." With put options, they have seen large fees at high price levels, so they only use those if

there is an "upside potential."

For the Spielmans, a heavier use of the futures market has worked, with a combination of options. "If we have sold futures and the market price goes above our futures price, we buy put options and sell lower-priced call options to help pay for them," Jerry explains.

Expectations vs. Reality

They didn't always receive the top prices, but these producers were able to create stable cash flow as expected, operate at a profit, and protect their businesses in times of low milk prices.

"When the milk price dropped dramatically at the end of 1999," Wickstrom comments, "I was able to maintain my income because, using put options, I had put a guaranteed floor under our milk price."

The first contract entered in by the Barlasses was especially rewarding, earning an additional \$34,000 over the cash market. Since then they have experienced mixed results, but "it certainly makes budgeting easier."

On the downside, producers may not have as much control over price as would be desired. In Butch Katen's case, the co-op sets the price and pro-rates the contract quantity based on the total number of pounds of milk bid by producers. This allows all members an equal chance to forward contract. If there is great interest in a contract offering, the amount that any one member can contract is small.

Understanding that milk price risk management is just a single piece of a farm business management program is also important. Says Bruce Vander Veen, "It is a tool that everyone uses differently. We do not want to produce in a contract situation 100% of the time. We do not want to become a contract grower."

20/20 Hindsight

Each of these producers has learned from individual experience. "The markets can change quickly," as the Vander Veens discovered during a period they had contracted up to 80% of their milk. Now they are contracting 50% and riding the cash market a bit more. "Dairying is a risky business," says Bruce, "and everyone's risk is different."

The flip side is not being aggressive enough.

"I probably would have been more aggressive in my marketing plan," says Tim Wickstrom, "and bought higher price

floors." Echoes Jerry Spielman, "I wish I would have been more ready for 2000. There were opportunities to strengthen my price. I missed some of them by 15¢ to 20¢."

"I wish that we hadn't waited in 1999 and missed the peak prices," comments Butch Katen. But like Bruce Vander Veen, he's also prepared to ride the market a bit. When the offer price is lower, "I would hedge no more than 50% of my milk."

All have learned to live with their decisions. As Vander Veen says, "The hardest decision is deciding when to pull the trigger (and contract milk) and then trying not second-guess yourself."

For The Future . . .

Modifying management tools can, literally, take an act of Congress to complete. Under California law, the Wickstoms are unable to forward contract their milk due to the fact that they ship to a private company instead of a cooperative. This limits their options when it comes to risk management, which is something they would like to change.

Others see more benefits from contracting as the futures and options markets grow. Jerry Spielman, for one, would like to see smaller, more liquid contracts developed that would give operators of smaller dairies more opportunities, including hedging in smaller increments.

Time will only tell what changes are in store for forward contracts, options and futures for dairy markets.

Get The Facts

While dairy producers are protecting their milk prices in record numbers, the decision to lock-in milk prices is still a complicated and intimidating one to make.

The Chicago Mercantile Exchange offers a series of correspondence courses in futures trading via the Internet. "Introduction to Futures" and "Understanding Forward Pricing—Agricultural Products" are the starting points, covering the basics of the futures industry and commodity marketing, respectively. The first course is a prerequisite to two other courses, "Before You Trade" and "Options for Beginners." Call the CME at 800/331-3332 for details.

National All-Jersey Inc. staff are ready to provide information on milk price risk management. Call Mike Brown, NAJ General Manager, at 614/861/3636, extension 326; or Bill Curley, NAJ Manager of Market Analysis at 570/934-0947.