DOING THE MATH:
The Agricultural Act of 2014

You may be questioning whether the government's new Margin Protection Program as part of the new Farm Bill is a worthwhile program for you and your dairy operation. Here are the facts about the program and analysis from the Stewart-Peterson team regarding its value for you as a dairy producer.

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Analysis. Advice. Action.

About the Program

On February 7, President Obama signed the new Farm Bill into law, called the Agricultural Act of 2014. This bill is a significant departure from previous legislation in that it moves away from direct payments and more toward insurance-type products to help farms manage risk.

The dairy title will transition producers from the old Milk Income Loss Contract (MILC) program to either the LGM-Dairy program that has been available to dairy producers, or to a new Margin Protection Program (MPP). Dairy producers may choose either LGM or MPP, not both.

The MPP will allow producers to annually choose the level of protection desired between a $4.00 and $8.00 milk-feed margin on a percentage of a farm's production history. Dairy producers will be paid a margin protection payment when actual dairy production margins are less than the threshold levels set to trigger a margin protection payment.

The new MPP is slated to begin no later than September 1, 2014.

Production History Component:

When a producer first registers for the Margin Protection Program, their production history is equal to the highest annual milk marketings of the dairy operation during any one of the 2011, 2012, or 2013 calendar years. In subsequent years this history can be adjusted up or down *at the discretion of the Secretary of Agriculture* to reflect changes in the national average milk production.

NOTE: For new operations the production will be determined by the producer's choice of taking the number of months they have been in operation and extrapolating an annual figure, or creating and estimate based upon herd size relative to the national rolling herd average data published by the USDA.

Program Cost:

Producers will pay an administration fee of $100 to join the program. Premium levels are listed in the table below. For calendar years 2014 and 2015 there will be a 25% discount on these levels.

The table below shows the coverage threshold options in which a producer can elect to participate. These are all income-over-feed dollar amounts. Producers also can choose what percentage of their production to cover, from a minimum of 25% to a maximum of 90%, in 5% increments.

How Payment is Triggered:

A producer will receive an indemnity payment any time the production margin for a two-month period is less than the coverage level threshold selected by a producer. The payment will be multiplied by the coverage level and the production history of the operation divided by six. (It is divided by six because, in the course of a year, the production margins are calculated in two-month increments.)

How Production Margins are Calculated:

The margin is calculated using the All Milk Price, which is the average price received per hundredweight of milk by dairy operations for all milk sold to plants and dealers in the United States. Note that the Board of Trade price is not used – only USDA prices.

The Average Feed Cost is the formula used to calculate the average cost of feed used by a dairy operation to produce a hundredweight of milk. The multiplication will be done on the USDA numbers released in the USDA's monthly report, not by Board of Trade prices. Multipliers used in the Average Feed Cost determination are:

- Multiply the price of corn per bushel by 1.0728
- Multiply the price of soybean meal per ton by 0.00735
- Multiply the price of alfalfa hay per ton by 0.0137

Production margin for a dairy will be calculated by taking a consecutive two-month period average feed cost and subtracting that from a consecutive two-month period all milk price. Consecutive two-month periods are as follows:

- January and February
- March and April
- May and June
- July and August
- September and October
- November and December

Premium levels for first 4,000,000 of production

	$4.00	$4.50	$5.00	$5.50	$6.00	$6.50	$7.00	$7.50	$8.00
Premium Per CWT	None	$0.010	$0.025	$0.040	$0.055	$0.090	$0.217	$0.300	$0.475

Premium levels for production above 4,000,000 pounds

	$4.00	$4.50	$5.00	$5.50	$6.00	$6.50	$7.00	$7.50	$8.00
Premium Per CWT	None	$0.020	$0.040	$0.100	$0.155	$0.290	$0.830	$1.060	$1.360

Our Analysis

In our holistic approach to price risk management, we evaluate all the government programs as potential pieces of a dairy farm's risk management approach. Our evaluation of whether producers should participate in these programs is rooted in the math. Here is our summation of the newest offering, the Margin Protection Program:

Up to 4 million pounds of production, take the insurance.

The math shows that dairy producers should take the insurance, typically at the highest level of protection, up to the 4 million pound mark, because the premiums are advantageous. Plus, there is a 25% discount the first year you enroll (2014-15), so why not take it?

A special note for dairy producers with 4 million pounds or less of production: If you plan to use the insurance as your only risk management tool, remember that payouts are calculated based on national averages, not your own individual farm's margin. The risks associated with this feature of the program are further explained in the paragraphs ahead.

After 4 million pounds, do the math.

The pricing in the tier above 4 million pounds of production is not necessarily advantageous. Producers should evaluate the protection available in the program at that level compared to what is available in the marketplace to provide equivalent levels of protection. For example, you may be able to protect similar margin levels using calls on feed and puts on milk, for less money. Do this evaluation for any milk production beyond 4 million pounds, especially if you are growing or expanding. In addition, if you choose to protect your production beyond 4 million pounds using hedging tools available in the marketplace, why not manage your price risk for your entire production of milk and feed needs? There is no reason why you cannot do both. (We explain this in the paragraphs ahead.)

The "free" option is the most expensive option.

Note that, if you do the math, the highest level of protection ($8 margin protection) is typically the best option because the premium pricing is so advantageous at that level. The most expensive option is actually the free option, because it lulls a producer into thinking you have done something to protect yourself when in effect you have not protected yourself adequately. That is an expensive mistake. As you can see from the chart below, the "free" option would have paid out only twice in the last five years. The first time in 2009 it stayed below the $4 level for a total of eight months, and in 2012 it stayed there for four months. There is a lot of risk and opportunity in the remaining months.

If you are growing or expanding, there's not much here for you.

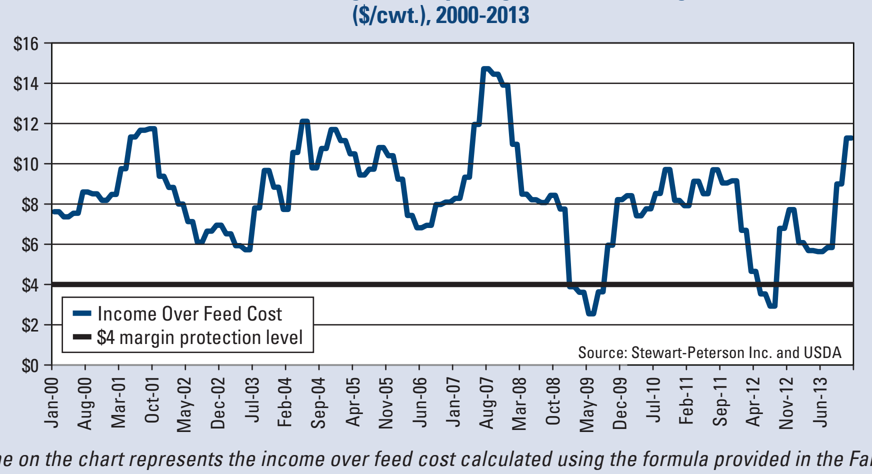
Because of the way the MPP is set up, if you are growing or expanding, you leave much of your production unprotected. That means you will have to seek some sort of protection for milk produced beyond the initial amount you are eligible to insure.

The math shows that you should also continue commodity price risk management for all your feed and milk.

As described above, this is especially true if you are growing/increasing production: If the insurance is your only form of price risk management, so much of your milk would be left unpriced and open to market volatility.

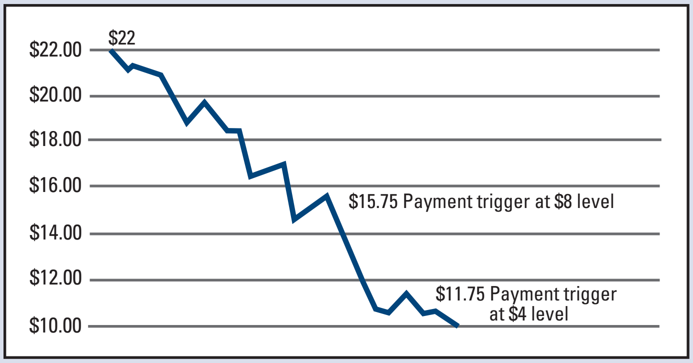
For all dairy producers, expanding or not, insurance under MPP is really catastrophic in nature. In the middle ground between a catastrophic price drop and today's prices, producers could benefit from actively pricing their milk and hedging feed.

Income Over Feed Cost Using the Dairy Margin Protection Program Formula ($/cwt.), 2000-2013



The blue line on the chart represents the income over feed cost calculated using the formula provided in the Farm Bill: The All Milk Price minus the feed ration price determined by the Farm Bill formula and the USDA reports for that time in history.

An example of the middle ground:



If a producer buys the highest level of insurance on all his or her milk up to 4 million pounds, at the $8 margin protection level, milk would have to go from its current price of around $22 all the way down to $15.75 before the producer would see a penny of benefit. That's the kind of crash we would need to see for MPP to trigger a payment, and that assumes no change in feed price, and no basis (PPD) changes.

Furthermore, if you had purchased the bottom tier – the $4 margin protection level with no cost other than the $100 administrative fee – the milk price would need to crash to $11.75 before any payment would be triggered. There is a lot of room in there for a producer to actively manage their milk and feed prices for better results than the market average.

There are two additional reasons why dairy producers should be actively engaged in commodity price risk management on their own, in addition to this program:

>> Payouts are triggered by national averages, not your own individual situation. Unlike crop insurance, which insures your own farm's production, the MPP protects a producer against industry-wide losses. It does *not* protect your individual operation or your region. If you are in an area of the country that is impacted by high feed prices and the rest of the country isn't, you won't see a dime in terms of a payout. It is still in your best interest, therefore, to capture as much price opportunity as you can beyond the basic insurance.

>> Participating in the MPP *and* maintaining a comprehensive price risk management approach on your own will put you in the best possible position to weather price volatility. Consider this: If you are in an area of the country that is better off than the national average, and you've actively managed your risk using tools beyond this program, and the national average triggers a payment, *you receive the benefit of both your market positions and your insurance payment.*

A concrete example of this is our clients' experience during the 2012 drought. Our clients had corn prices locked in at an average of $5.50 in 2012 and were able to keep a healthy margin during the drought. Had this program been in place, it would have triggered a payment, and our clients would have benefited from both their own price risk management decisions and the government's MPP.

So, the savvy producer will use the government program up to its financially advantageous point, and then continue to use all available tools to protect prices and create opportunity.

As we mentioned before, the most expensive option is doing only a little, because you are paying for false security. The combination of this insurance and actively managing risk and opportunity is very powerful.

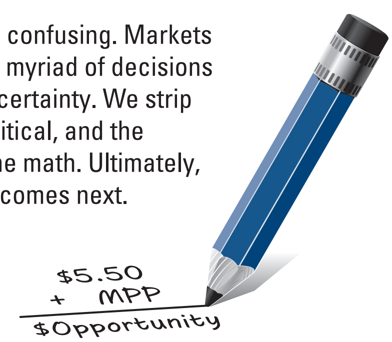
The industry is heading toward a hybrid of government and private price protection programs.

We are indeed headed toward a hybrid. We recommend that every dairy producer takes the insurance on the first 4 million pounds at the highest ($8) margin protection level. It is heavily subsidized, especially with the 25% discount for year one.

Beyond that, producers should create their own protection and opportunities. On the grain side of our business, most of our clients have crop insurance as well as market their production and hedge inputs. So while a hybrid approach is new to dairy, there is precedence in grain. You simply need to understand what the program can and can't do for you, focusing on the math.

Let us show you the math. Call us, and we'll walk you through it.

Government programs can be confusing. Markets can be difficult to track, and a myriad of decisions can cause you to freeze in uncertainty. We strip away the unimportant, the political, and the emotional, and we focus on the math. Ultimately, we prepare you for whatever comes next.



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