Changes to the Margin Protection Program for Dairy Producers

Briefing Paper 18-1

9 February 2018

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The Legislative Changes to MPP-Dairy

Significant changes to the 2018 implementation of the Margin Protection Program for Dairy Farmers (MPP-Dairy) are included in The Bipartisan Budget Act of 2018 that was just passed. This briefing paper summarizes the legislative changes and begins to review the possible implications of the changes. As is common with any agricultural program legislation, USDA will need to review the law, make a few decisions about how to implement the changes and issue new or modified regulations that provide specific instructions about what farmers can do and when they can do it. It is anticipated that this process will happen fairly quickly. The paper concludes with some background about how Congressional budgeting, appropriations and authorizations processes were combined to allow these particular changes

2018 Program Sign-up is Reopened

The normal procedure has been for a dairy farmer to elect coverage levels under MPP-Dairy for the coming year in the month before the start of that year – a December sign-up deadline for a year that begins in January. As farmer dissatisfaction with MPP-Dairy became more apparent and grew, it was widely anticipated that few farmers would utilize the program in 2018. The new legislation instructs USDA to reopen the 2018 sign-up process

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and allow dairy farmers, including those who signed up and those who did not, to elect their choices anew. Specifically, the bill states:

> *The Secretary shall extend the election period for the 2018 calendar year by not less than 90 days after the date of enactment of the Bipartisan Budget Act of 2018 or such additional period as the Secretary determines is necessary for dairy operations to make new elections to participate for that calendar year, including dairy operations that elected to so participate before that date of enactment.*

This would seem to indicate that USDA can reopen the enrollment process in between February and April and allow farmers to make enrollment choices that apply to the entire calendar year. It seems logical that USDA would want to open the enrollment period sooner rather than later.

Monthly Election

MPP-Dairy pays dairy farmers the difference between the Actual Dairy Producer Margin (ADPM) and the coverage level elected by the farmer. Thus, if a farmer chooses coverage at $6.50 per cwt and the ADPM falls to $6.10, the farmer is paid 40¢ per cwt on the amount of milk covered. The original language of the program calculates the ADPM each month but payments are based on the average of successive two-month periods: Jan/Feb, Mar/Apr and so on. This resulted in a few instances where a month fell below a coverage level but the adjacent month was sufficiently high to put the two-month average outside of a payment level. The new MPP-Dairy is converted to a monthly payment. Thus, payments will be made on 1/12 of the production enrolled in any month that the ADPM falls below the producer's coverage level.

Changes in Premiums

Three changes were made in the premiums and fees producers are required to pay.

First, the $100 fee that everyone enrolled in the program was required to pay will be waived by farmers who meet USDA criteria as "beginning, limited resource, disadvantaged, or military veteran farmers".

Second, the dividing line between Tier 1 (lower) and Tier 2 (higher) premiums is raised from 4 million pounds of milk covered per year to 5 million pounds. Farm operations are subject to the same rules regarding their base production for 2018. This defines the maximum amount of milk the farm can cover.

Third, the premium rates in Tier 1 are substantially lowered, as illustrated in Table 1. Beyond making the $4.50 and $5.00 coverage free of any buy-up premiums, the rates at all other levels are lowered 40 to 70% (the $6.50 premium is lowered the least). Coverage levels of $7 and above are especially more attractive under the new pricing plan.

Table 1. Premia for MPP-Dairy, exclusive of $100 Administrative Fee (dollars per cwt.)

Coverage Level Threshold	**Tier 1 – 2014 to 2017**	**Tier 1 –2018**	**Tier 2**
	4 M lbs. or less	5 M lbs. or less	above 5 M lbs.
$4.00	0	0	0
$4.50	$0.008	0	$0.020
$5.00	$0.019	0	$0.040
$5.50	$0.030	$0.009	$0.100
$6.00	$0.041	$0.016	$0.155
$6.50	$0.068	$0.040	$0.290
$7.00	$0.163	$0.063	$0.830
$7.50	$0.225	$0.087	$1.030
$8.00	$0.475	$0.142	$1.360

What Will or Should Dairy Farmers Do?

As of this writing the decision aid tool for MPP-Dairy on the Program on Dairy Markets and Policy website:

https://dairymarkets.org/MPP/Tool/

has not yet been updated, but we anticipate revising the tool accordingly well in advance of the closing of the new enrollment period. The changes to the program for Tier 1 are sufficiently improved to more than justify giving the program a hard look. The expected results for the ADPM (margin) are illustrated in the decision tool. Although they are currently shown as two-month averages, the changes to the structure of the program do not impact the projection of the margins. As is indicated by the decision tool and obvious from any prospective market analysis in the press, it is widely expected that margins will be well below the $8 threshold and have a better than 50% probability of being below $7 through June. Expected margins show improvement in July and August and the probability of payments for the last four months of the year are 1 out of 4 or 5 at the highest, $8 level.

Every farmer must evaluate their own risk level and make their own decision, but the reductions in the Tier 1 premiums warrant a second look at an enrollment and coverage decision.

If a farmer has an LGM-Dairy contract for any months of 2018, he will not be able to enroll in MPP-Dairy for those months.

Changes to Livestock Gross Margin for Dairy

In addition to these changes to MPP-Dairy, which is an income support program operated by the USDA Farm Service Agency, the bill makes an important change that affects the availability and appeal of the older Livestock Gross Margin for Dairy risk insurance program (LGM-Dairy).

LGM-Dairy operates somewhat similarly to MPP-Dairy in that it gives farmers an opportunity to establish protection against a contracted level of income over feed cost. The calculation of the margin under LGM-Dairy is different but more importantly LGM-Dairy is designed as a conventional insurance product. It is approved by the Risk Management Agency of USDA but sold through private agents, like any other crop insurance program. Perhaps most significantly, LGM-Dairy coverage levels and premiums vary from month to month depending on market conditions, unlike MPP-Dairy which always offers the same choice of coverage options at the same price.

As a general rule, when margins are expected to be high, LGM-Dairy offers opportunities to "lock in" an attractive margin at an agreeable cost, but when margins are expected to be low, MPP-Dairy is likely to offer coverage that is both higher and less expensive.

Previously, a major limitation to the use of LGM-Dairy is that USDA could offer it at subsidized premium rates, relative to an actuarially fair premium, but it had a limited and relative small amount of money for subsidies. When that money ran out, the LGM-Dairy program had to be suspended until the beginning of the next fiscal year.

The Bipartisan Budget Act eliminates the previous and longstanding funding cap on premium subsidies for the livestock insurance products, including but not limited to LGM-Dairy. In and of itself this does not create new funding to support LGM premium subsidies but it creates an opportunity to expand funding for that purpose at a later date.

MPP-Dairy Selection Examples

We don't yet know what the rules of implementation will be for the newly modified MPP-Dairy program, but we can begin with the major changes that were prescribed by The Bipartisan Budget Act of 2018. Based on market price projections related to futures and options prices on the Chicago Mercantile Exchange as of February 14, 2018, the MPP Decision Tool showed forecasts of the ADPM for the months of 2018.

Table 2. Projected Actual Dairy Producer Margins for 2018, based on CME prices as of 14 February 2018, using the FSA decision tool.

Jan-18	$ 8.1715	Jul-18	$ 7.5314
Feb-18	$ 7.3327	Aug-18	$ 8.0268
Mar-18	$ 6.9330	Sep-18	$ 8.4635
Apr-18	$ 6.8638	Oct-18	$ 8.8541
May-18	$ 6.9398	Nov-18	$ 8.9788
Jun-18	$ 7.1852	Dec-18	$ 8.9880

Given these projected margins, consider the following four examples for farms of different sizes and making different participation decisions. Keep in mind that the premium payments are simple and exact calculations, but the indemnity and, therefore, net benefit payments are estimates based on the varying probabilities that underlie the probability table shown in the decision tool. Consider an example of rolling dice. I can charge you an exact number to roll a die, but I can only tell you the probability of getting a 1, 2, 3, and so on. I can estimate the probability of giving you a payment if the number is smaller than 1, smaller than 2, smaller than 3, and so on, but this is not the same as predicting it will be smaller than 2 or what have you. The examples below are not a prediction of an exact net benefit but rather a kind of summary or average of all the probabilities embedded in the prices shown in the decision tool. If we just used the exact numbers in Table 2, we could easily calculate exact indemnity payments, but what we are trying to do is say something like: the market's best guess of a margin for October 2018 is $8.85 but there is a small probability that it will end up below $8, in which case you have a small probability of getting a payment.

Example 1: 80 cow dairy with 23,000 pounds of milk production per cow, coverage at 90%

Level	Premium	Indemnity	Net Benefit	Net Benefit per cwt on all production
$4.00	$0	$0	($100)	($0.01)
$4.50	$0	$0	($100)	($0.01)
$5.00	$0	$0	($100)	($0.01)
$5.50	$149	$0	($249)	($0.01)
$6.00	$265	$0	($365)	($0.02)
$6.50	$662	$0	($762)	($0.04)
$7.00	$1,043	$363	($780)	($0.04)
$7.50	$1,441	$3,099	$1,558	$0.08
$8.00	$2,352	$7,195	$4,744	$0.26

This is a modest sized farm with production at about the national average. For simplicity, we assume that the total amount of milk produced (1.84 million pounds) is within its adjusted base production. Thus, it is able to enroll the maximum amount of its milk production allowed by law (90% of its adjusted based production, applicable to 2018). Under the conditions represented by Table 2, a farm with this production would achieve a net benefit by obtaining coverage in one of the two highest "buy-up" levels.

Example 2: 220 cow dairy with 23,000 pounds of milk production per cow, coverage at 90%

Level	Premium	Indemnity	Net Benefit	Net Benefit per cwt on all production
$4.00	$0	$0	($100)	$0.00
$4.50	$0	$0	($100)	$0.00
$5.00	$0	$0	($100)	$0.00
$5.50	$410	$0	($510)	($0.01)
$6.00	$729	$0	($829)	($0.02)
$6.50	$1,822	$0	($1,922)	($0.04)
$7.00	$2,869	$1,000	($1,969)	($0.04)
$7.50	$3,962	$8,522	$4,460	$0.09
$8.00	$6,467	$19,788	$13,221	$0.26

This farm, which is near the US average in numbers of cow and yield, can also cover the maximum 90% of its production, assuming that this hypothetical production amount is at or below its adjusted base production for 2018. The outcome for the larger farm is identical per hundredweight, but of course greater in total net benefit.

Example 3: 500 cow dairy with 25,000 pounds of milk production per cow, coverage at 90%

Level	Premium	Indemnity	Net Benefit	Net Benefit per cwt on all production
$4.00	$0	$0	($100)	$0.00
$4.50	$1,250	$0	($1,350)	($0.01)
$5.00	$2,500	$0	($2,600)	($0.02)
$5.50	$6,700	$0	($6,800)	($0.05)
$6.00	$10,488	$0	($10,588)	($0.08)
$6.50	$20,125	$0	($20,225)	($0.16)
$7.00	$55,025	$2,469	($52,656)	($0.42)
$7.50	$70,600	$21,052	($49,648)	($0.40)
$8.00	$92,100	$48,882	($43,318)	($0.35)

Although within the middle range of US farms, this farm is more than twice the size of the average US farm and produces above the national average yield. Assuming again that its production is within the adjusted base production for 2018, this farm can qualify 5 million pounds of milk at Tier 1 premiums and has 6.25 million pounds assigned to Tier 2. The latter results in this farm not able to generate a net benefit, based on the numbers in Table 2.

Example 4: 500 cow dairy with 25,000 pounds of milk production per cow, coverage at 40%

Level	Premium	Indemnity	Net Benefit	Net Benefit per cwt on all production
$4.00	$0	$0	($100)	$0.00
$4.50	$0	$0	($100)	$0.00
$5.00	$0	$0	($100)	$0.00
$5.50	$450	$0	($550)	$0.00
$6.00	$800	$0	($900)	($0.01)
$6.50	$2,000	$0	($2,100)	($0.02)
$7.00	$3,150	$1,098	($2,153)	($0.02)
$7.50	$4,350	$9,356	$4,906	$0.04
$8.00	$7,100	$21,725	$14,525	$0.12

The fourth example takes the same farm as the third example but reduces its volume of milk covered from 90% to 40%. In so doing it maximizes its use of Tier 1 coverage but avoids covering any milk at Tier 2 prices. As is true for all four examples, the per hundredweight benefit is calculate against total milk production, not just the milk production selected in the program. In this case, the lower cost of MPP-Dairy coverage results in an expected net benefit at the two highest coverage levels. Although they are small when measured against all milk production, they are nevertheless positive.

Background

The U.S. Congress passed The Bipartisan Budget Act of 2018 as the culmination of a particularly difficult set of negotiations to provide ongoing authority for the federal government to pay its bills. This legislation primarily provides a budget framework that will subsequently allow Congress to approve a specific set of appropriations that will enable the federal government to pay its bills. The actual appropriations legislation still needs to be drafted, but the budget plan provides the blueprint for the specific spending approvals.

Beginning with the start of the Federal fiscal year on 1 October 2017, every member of Congress wanted to provide the legislative authority that is required for the government to spend money in support of its employees and programs, but there was considerable disagreement about how much to spend and on what. This created a political environment in which policies that really don't have much to do with a spending plan became part of the negotiation. Funding for military programs and immigration related issues were at the forefront of these negotiations, for example.

The Appropriations Committees of the Senate and the House of Representatives are the starting points for establishing spending approvals for government programs, outside of the so-called mandatory programs, like Social Security, where payments are made based on eligibility not a fixed spending allowance. These spending approvals are essential for "discretionary" spending, including paying the salaries of federal employees. Although the authority of the Appropriations Committees is limited to establishing amounts of money that can be spent by government agencies for various programs and purposes, it is fairly common for members of Appropriations Committees to essentially modify or even create programs by assigning funding to do a certain thing in a certain way. This is sometimes referred to, in a not so complimentary way, as legislation by appropriation.

The Agricultural Act of 2014 created the Margin Protection Program for Dairy Producers. While it was certainly well intended, MPP-Dairy has not proven to be a particularly helpful or effective support for dairy farmers, who have suffered below average returns since 2015. In its first two years of operation, farmers paid $96 million in fees and premiums but only $12 million was paid in "indemnities". Risk management experts would quickly point out that most people don't take out insurance with the hopes of getting paid – you don't want your house to burn or your car to be wrecked, but critics of the program would say, my house did burn and I didn't get a payment. In the face of this rampant criticism, industry advocates and sympathetic legislators sought ways to make the program more helpful to dairy farmers. Unfortunately, this has proven very difficult in the normal course of generating a farm bill in the agriculture committees of the House and Senate simply because any changes that make the program more helpful necessarily make the program more expensive. Without specific approval to spend more money on MPP-Dairy, the agriculture committees had no room to improve the program. A similar situation emerged with the cotton program that was established under the 2014 Agricultural Act.

Senator Patrick Leahy (VT-D) and Senator Thad Cochran (MS-R) are the Vice Chair and Chair of the Senate Appropriations Committee. Last Spring, they worked out a fix for the dairy and cotton programs that they could include in their committee's appropriation legislation. This legislative language was included in the Bipartisan Budget Act that was just passed.