

# How Is the Margin Protection Program Performing for Tennessee Dairy Producers?



*Andrew P. Griffith, Assistant Professor  
David Bilderback, Extension Area Specialist  
Department of Agricultural and Resource Economics  
Liz Eckelkamp, Assistant Professor  
Department of Animal Science*

**T**he Margin Protection Program (MPP) for dairy producers was established by the Agricultural Act of 2014 (2014 Farm Bill) to reduce the market risk of dairy producers associated with the all-milk price and average feed costs. However, the MPP was amended in 2018. This article:

1. Summarizes key changes to the MPP program as a result of the 2018 amendments;
2. Summarizes the technical performance of the program, as originally established in the 2014 Farm Bill;
3. Summarizes, retrospectively, the technical performance of the program, as amended by the Bipartisan Budget Act of 2018; and
4. Summarizes feedback on the MPP provided to the authors by Tennessee dairy producers.

## Summary of Amendments to the MPP

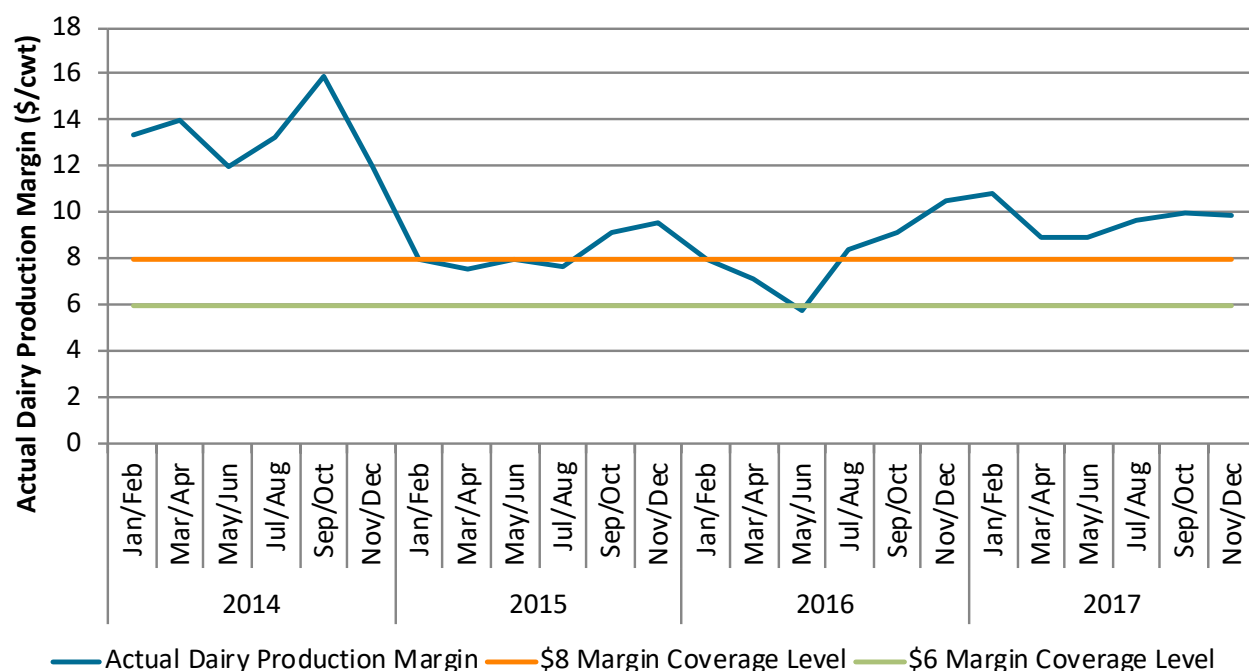
Key changes to the MPP are summarized in Table 1. Most importantly, the amendments require the actual dairy production margin (all-milk price minus average feed cost) to be calculated each month instead of every other month and a reduction in premium levels on the first 5 million pounds of milk production. Annual enrollment for 2018 was reopened to allow for new enrollments or changes to coverage level.

**Table 1.** Summary of changes to Margin Protection Program

Original MPP (2014 Farm Bill)	Changes to MPP (Bipartisan Budget Act of 2018)																																								
Calculation of actual dairy production margin is for “consecutive two-month period.”	Calculation of actual dairy production margin is for each month, resulting in 12 individual periods per year. Annual milk production history equally divided across 12 months.																																								
Imposes a \$100-per-year administrative fee on each participating dairy operation.	Exempts limited resource, beginning, veteran and socially disadvantaged farmers, as defined in the regulations from the administrative fee.																																								
Tier I premium level for first 4 million pounds of production.	Tier I premium level for first 5 million pounds of production.																																								
<p>Producer Premium, first 4 million pounds</p> <table border="1" style="width: 100%;"> <thead> <tr> <th style="background-color: #f4a460;">Coverage Level</th> <th style="background-color: #f4a460;">Premium Per CWT</th> </tr> </thead> <tbody> <tr><td>\$4.00</td><td>None</td></tr> <tr><td>\$4.50</td><td>\$0.010</td></tr> <tr><td>\$5.00</td><td>\$0.025</td></tr> <tr><td>\$5.50</td><td>\$0.040</td></tr> <tr><td>\$6.00</td><td>\$0.055</td></tr> <tr><td>\$6.50</td><td>\$0.090</td></tr> <tr><td>\$7.00</td><td>\$0.217</td></tr> <tr><td>\$7.50</td><td>\$0.300</td></tr> <tr><td>\$8.00</td><td>\$0.475</td></tr> </tbody> </table>	Coverage Level	Premium Per CWT	\$4.00	None	\$4.50	\$0.010	\$5.00	\$0.025	\$5.50	\$0.040	\$6.00	\$0.055	\$6.50	\$0.090	\$7.00	\$0.217	\$7.50	\$0.300	\$8.00	\$0.475	<p>Producer Premium, first 5 million pounds</p> <table border="1" style="width: 100%;"> <thead> <tr> <th style="background-color: #f4a460;">Coverage Level</th> <th style="background-color: #f4a460;">Premium Per CWT</th> </tr> </thead> <tbody> <tr><td>\$4.00</td><td>None</td></tr> <tr><td>\$4.50</td><td>None</td></tr> <tr><td>\$5.00</td><td>None</td></tr> <tr><td>\$5.50</td><td>\$0.009</td></tr> <tr><td>\$6.00</td><td>\$0.016</td></tr> <tr><td>\$6.50</td><td>\$0.040</td></tr> <tr><td>\$7.00</td><td>\$0.063</td></tr> <tr><td>\$7.50</td><td>\$0.087</td></tr> <tr><td>\$8.00</td><td>\$0.142</td></tr> </tbody> </table>	Coverage Level	Premium Per CWT	\$4.00	None	\$4.50	None	\$5.00	None	\$5.50	\$0.009	\$6.00	\$0.016	\$6.50	\$0.040	\$7.00	\$0.063	\$7.50	\$0.087	\$8.00	\$0.142
Coverage Level	Premium Per CWT																																								
\$4.00	None																																								
\$4.50	\$0.010																																								
\$5.00	\$0.025																																								
\$5.50	\$0.040																																								
\$6.00	\$0.055																																								
\$6.50	\$0.090																																								
\$7.00	\$0.217																																								
\$7.50	\$0.300																																								
\$8.00	\$0.475																																								
Coverage Level	Premium Per CWT																																								
\$4.00	None																																								
\$4.50	None																																								
\$5.00	None																																								
\$5.50	\$0.009																																								
\$6.00	\$0.016																																								
\$6.50	\$0.040																																								
\$7.00	\$0.063																																								
\$7.50	\$0.087																																								
\$8.00	\$0.142																																								

### Performance of MPP – Dairy, as Originally Established by the 2014 Farm Bill

The MPP for dairy producers became available in 2014. The actual dairy production margin for January 2014 through December 2017 is shown in Figure 1. The actual dairy production margin fell below the highest MPP coverage level (\$8.00 per hundredweight [\$/cwt]) six out of 24 periods and only fell below the \$6.00/cwt threshold once in the 24 periods.



**Figure 1.** Actual dairy production margin from 2014-2017 for the MPP as originally established by the 2014 Farm Bill.

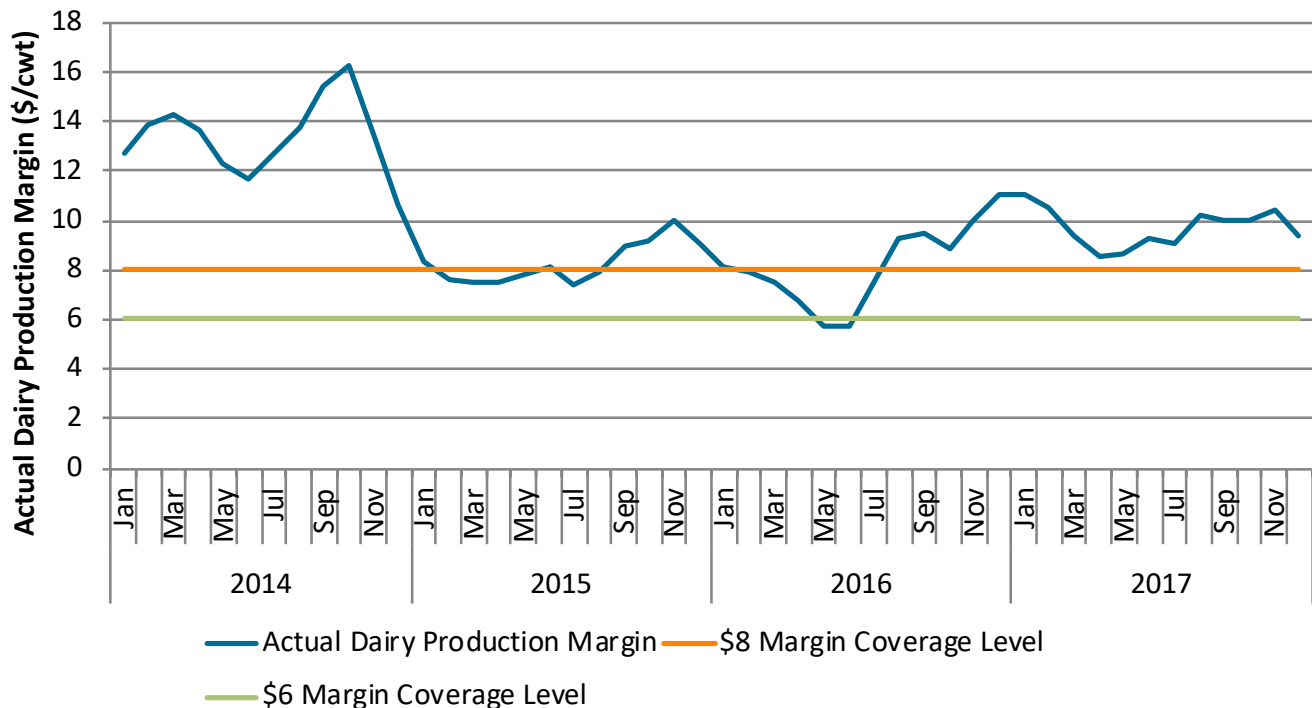
The annual returns from the 90 percent coverage level (the highest coverage level available) of 4 million and 10 million pounds of milk at the \$8 and \$6/cwt margin coverage from 2014 to 2017 are reported in Table 2. Of the scenarios evaluated, only one scenario had a positive return and only for one of the four years. If annual returns are summed across all four years, it is evident that participating dairy producers are losing significant monetary value through participation in MPP. Simply put, the MPP has not been actuarially sound over its first four years of existence.

**Table 2.** Annual returns to producers from the Margin Protection Program (2014-2017), 2014 Farm Bill provisions

Year	4,000,000 Pound Milk Production, 90% Production Coverage		10,000,000 Pound Milk Production, 90% Production Coverage	
	\$8/cwt Margin Coverage	\$6/cwt Margin Coverage	\$8/cwt Margin Coverage	\$6/cwt Margin Coverage
2014	\$(17,200)	\$(2,080)	\$(90,640)	\$(10,450)
2015	\$(12,341)	\$(2,080)	\$(78,492)	\$(10,450)
2016	\$1,331	\$(657)	\$(44,312)	\$(6,892)
2017	\$(17,200)	\$(2,080)	\$(90,640)	\$(10,450)

### Performance of MPP – Dairy, as Amended by the Bipartisan Budget Act of 2018

Given that it does not appear that the MPP, as originally structured, was beneficial to producers, it is imperative to evaluate whether Tennessee dairy producers would benefit from the changes to the MPP. Figure 2 displays the actual dairy production margin that was experienced from January 2014 through December 2017. The margin fell below the highest MPP coverage level (\$8.00/cwt) 12 out of 48 months but only fell below the \$6.00/cwt threshold twice in 48 months.



**Figure 2.** Actual dairy production margin from 2014-2017 for the MPP as amended by the Bipartisan Budget Act of 2018.

Table 3 reports the annual returns from the 90 percent coverage level of 4 million and 10 million pounds of milk at the \$8 and \$6/cwt margin coverages from 2014 to 2017. The revisions do not appear to benefit producers who exceed the 5 million-pound threshold at which point the premium levels increase. However, the revised MPP does appear to offer some protection for smaller producers (5 million pounds or less of production) using the highest coverage margin. Alternatively, a coverage level of \$6/cwt provides negligible support to industry participants as it relates to returns to the producer.

**Table 3.** Annual returns to producers from the Margin Protection Program (2014-2017), as amended by the Bipartisan Budget Act of 2018

Year	4,000,000 Pound Milk Production, 90% Production Coverage		10,000,000 Pound Milk Production, 90% Production Coverage	
	\$8/cwt Margin Coverage	\$6/cwt Margin Coverage	\$8/cwt Margin Coverage	\$6/cwt Margin Coverage
2014	\$(5,212)	\$(676)	\$(67,690)	\$(7,795)
2015	\$7,470	\$(676)	\$(35,984)	\$(7,795)
2016	\$34,832	\$2,171	\$32,419	\$(678)
2017	\$(5,212)	\$(676)	\$(67,690)	\$(7,795)

### Tennessee Dairy Producer Input

Based on a focus group discussion with approximately 30 Tennessee dairy producers, the consensus was that Tennessee family dairies have not found MPP to be beneficial. Their total variable costs per hundredweight of production in recent years have been comparable to the milk price per hundredweight received, leading to cash-flow issues. Additionally, feed prices tend to be \$1 to \$3 higher on average than what is represented in the MPP feed cost calculation. Thus, Tennessee producers are facing tighter milk-price-to-feed cost margins than what is represented in the dairy margin calculation. Producers also do not expect the proposed changes to benefit Tennessee producers. Producers in Tennessee could benefit more from the risk management structure provided by Livestock Gross Margin (LGM-Dairy). However, this program has been frequently underfunded, which inhibited producers from managing risk adequately.



AG.TENNESSEE.EDU