

Overview of USDA's Dairy Producer Margin Protection Program

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Major Dairy Provisions of 2014 Farm Bill

- Creates a Dairy Producer Margin Protection Program (DPMPP)
- Creates a dairy product donation program
- Repeals MILC program after margin protection program operational
- Dairy product price support program repealed
- Dairy export incentive program repealed
- Dairy forward pricing program extended

Margin Protection Program

- Dairy Producer Margin Protection Program
 - ✓ *Voluntary program* with annual coverage decision
 - ✓ Protects dairymen from severe downturns in the milk price, rising livestock feed prices, or a combination of both.
 - ✓ Pays indemnity when average difference between USDA's national *All-Milk* price and a *fixed feed ration* valued at *U.S. average feed prices* falls below a user selected level for 6 two-month periods: Jan/Feb, Mar/Apr, May/June, Jul/Aug, Sep/Oct, Nov/Dec

Important Margin Elements

- **Actual Dairy Production Margin**
 - ✓ $\text{Margin} = \text{U.S. average All-milk price} - \text{fixed feed ration value}$
- **Actual Dairy Production History**
 - ✓ Maximum calendar year production over 2011-2013
 - ✓ Can be revised annually
 - ✓ Maximum production coverage can't increase more than national average
- **Coverage Percentage**
 - ✓ 25% to 90% of production history in 5% increments
- **Margin Coverage Level**
 - ✓ \$4.00/cwt to \$8.00/cwt in 50¢ increments

Important Margin Elements

- **Commodities and Commodity Prices Used in Assumed Ration**

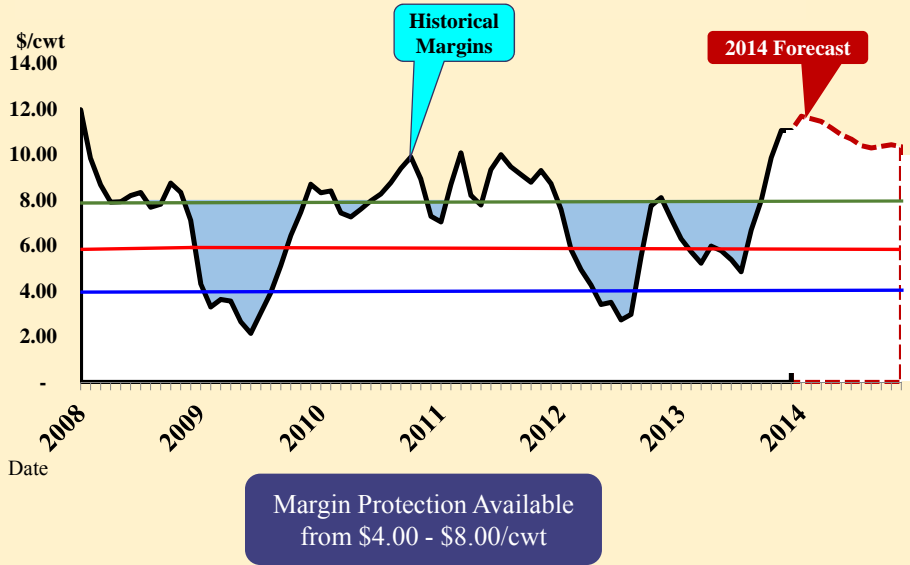
- ✓ *Corn*: Monthly Average U.S. price for corn received as reported in the Agricultural Prices report
- ✓ *Soybean Meal*: Central Illinois price as reported in the Market News-Monthly Soybean Meal Price USDA report
- ✓ *Alfalfa Hay*: Monthly Average U.S. price for baled alfalfa hay received as reported in the Agricultural Prices report

Important Margin Elements

Type of Animal	Percent of Herd (%)	Dry Matter Consumed (lbs/day)	Quantity Consumed			
			Shelled Corn (bu/day)	Corn Silage (ton/day)	Soybean Meal (ton/day)	Alfalfa Hay (ton/day)
Milk Cows	45.5	47.1	0.3198	0.0229	0.0032	0.0059
Hospital Cows	0.94	40.0	0.2716	0.0194	0.0028	0.0050
Dry Cows	9.11	24.0	0.0249	0.0172	0.0020	0.0042
Replacement Heifers						
To Calve Within 1 yr	21.89	23.0	0.0239	0.0020	0.0020	0.0041
500 lbs and Over	11.28	15.0	0.0311	0.0013	0.0013	0.0022
Less than 500 lbs	11.28	7.0	0.0363	0.0006	0.0006	0.0006
Total	100.0	35.1*	0.1632	0.0128	0.0023	0.0043
			lbs.	25.6	4.6	8.7

*Note: Weighted sum where weights are the percent of herd values
Assumed milk yield of 68.65 tons/day with 10% loss between amount of feed purchased and amount of feed fed.

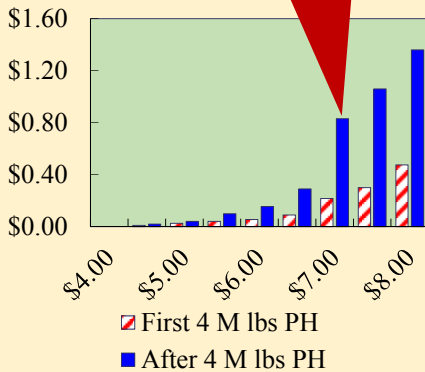
DPMPP Protects Against Margin Declines



Premiums Vary By Amount of Milk Insured

\$0.54 increase in rate for \$0.50 increase in coverage (\$6.50 to \$7.00)*

Premium Rates



*Average premium cost per cwt is a function of the amount of production history above 4 M lbs. Farms with production history well over 4M lbs will pay the higher premium tier on a larger percentage of their milk.

Premium Rates For Selected Margin Level Coverage *

Margin Level	First 4 million pounds (\$ per cwt.)	Above 4 million pounds
\$4.00	\$0.000	\$0.000
\$4.50	\$0.010	\$0.020
\$5.00	\$0.025	\$0.040
\$5.50	\$0.040	\$0.100
\$6.00	\$0.055	\$0.155
\$6.50	\$0.090	\$0.290
\$7.00	\$0.217	\$0.830
\$7.50	\$0.300	\$1.060
\$8.00	\$0.475	\$1.360

* - In 2014 and 2015 the premium rates for the first 4 million pounds will be reduced by 25 percent at all levels except at the \$8.00 level. A producer will also pay \$100 annually in administrative fees.

Premiums Vary By Amount of Milk Insured

Margin	< \$4 Million Lbs Insured			Margin	> \$4 Million Lbs Insured		
	Premium	Change	Net Margin		Premium	Change	Net Margin
\$4.00	\$0.000	-----	\$4.000	\$4.00	\$0.000	-----	\$4.000
\$4.50	\$0.010	\$0.010	\$4.490	\$4.50	\$0.020	\$0.020	\$4.480
\$5.00	\$0.025	\$0.015	\$4.975	\$5.00	\$0.040	\$0.020	\$4.960
\$5.50	\$0.040	\$0.015	\$5.460	\$5.50	\$0.100	\$0.060	\$5.400
\$6.00	\$0.055	\$0.015	\$5.945	\$6.00	\$0.155	\$0.055	\$5.845
\$6.50	\$0.090	\$0.035	\$6.410	\$6.50	\$0.290	\$0.135	\$6.210
\$7.00	\$0.217	\$0.127	\$6.783	\$7.00	\$0.830	\$0.540	\$6.170
\$7.50	\$0.300	\$0.083	\$7.200	\$7.50	\$1.060	\$0.230	\$6.440
\$8.00	\$0.475	\$0.175	\$7.525	\$8.00	\$1.360	\$0.300	\$6.640

Note: Net Margin = Margin guarantee — premium

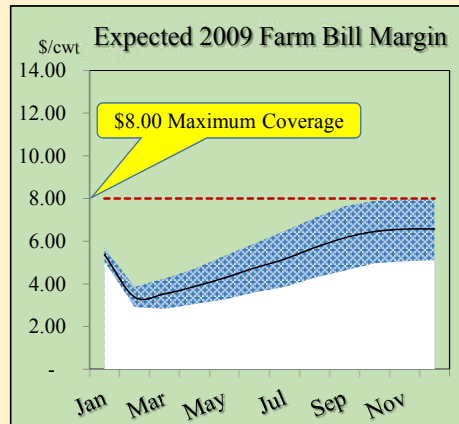
Maximize Benefits of Margin Protection

- Premium rates *fixed* for the life of the farm bill
- Farms may choose annually which coverage level to protect (\$4 to \$8)
- Milk and feed market prices are updated bimonthly to reflect new market conditions



When to Purchase *More*

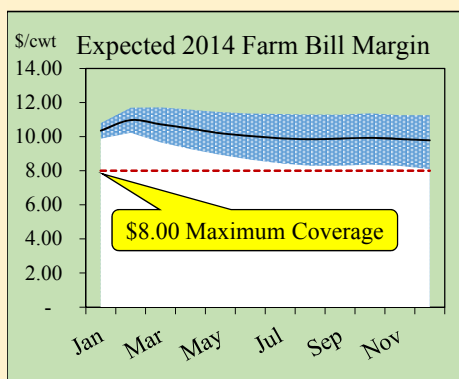
- When coverage level above expected margins → plan is *in-the-money*
- Buy maximum coverage and coverage percentage?
 - ✓ Could be expensive
 - ✓ Expected 2009 margin forecast using CME futures
- Forecasted average 2009 Farm Bill margin was \$5.15



\$8.00 coverage was \$2.85 greater than average margin implied by milk and feed futures

When to Purchase *Less*

- When coverage level is below expected margins plan is *out-of-the-money*
- Buy minimum coverage and coverage percentage?
 - ✓ Risky
 - ✓ Expected 2014 margin forecast using CME futures
- Forecasted average 2014 Farm Bill margin is \$8.86



Currently \$8.00 coverage is below the average margin implied by milk and feed futures

Margin Protection Facts

- Can provide revenue support during multi-year losses in farm equity
- No payment limitations
- *In-the-money* Coverage
 - ✓ May provide margin protection at levels greater than CME futures would provide
- *Out-of-the-money* Coverage
 - ✓ Will not provide margin protection at levels greater than \$8.00 per cwt

Margin Protection Facts

- Indemnities calculated every *2 months*
 - One month could offset the other
- Coverage options may be cheaper than
 - ✓ LGM-Dairy
 - ✓ Futures
 - ✓ Options
- Is not actuarially fair as premiums are not based on milk and feed market prices

Downside of Margin Program

- Cannot lock-in margins above \$8.00 during good years
 - ✓ With LGM-Dairy, based on CME futures and options, you can
- Based on national average prices
 - ✓ May not reflect farm level risk in milk and feed markets
 - ✓ What does the USDA margin mean in terms of your farm's margin → basis risk
- We are developing a system for **DPMPP IOFC – local farm mailbox** basis estimation

Downside of Margin Program

- Feed ration is fixed
 - ✓ LGM-Dairy allows for custom ration and may only need to cover market risk
- Offers protection only on up to 90% of production history
- If participating in DPMPP, can not participate in both DPMPP and LGM-Dairy
 - ✓ Regardless if a low percentage of milk is covered
 - ✓ Questions remain as to current LGM-Dairy contracts

USDA Risk Management Options for Dairy

Philosophically Different Approaches

Target Deficiency Payment Program

Dairy Margin Protection Program

1. Provides protection against multi-year losses from \$4 to \$8 cwt
2. Is not actuarially fair and premiums not based on current milk and feed market prices
3. Indemnity payments only when margin falls below user selected coverage level
4. No payment limitations or AGI caps on eligibility

Futures & Options Based

LGM-Dairy

1. Protects average gross margin at prevailing market prices, price floor moves up or down
2. Is designed to be actuarially fair pre-subsidy
3. Indemnity payments when actual margins are below guarantee at end of coverage period
4. Inadequate funding

Important Questions Yet to be Answered

1. Will registration for Dairy Producer Margin Protection Program be for 5 years or one year?
 - Can producers opt in and out on an annual basis?
 - If one year, when would producers make decision to enroll in LGM-Dairy vs. DPMPP?



Important Questions Yet to be Answered

2. How will USDA grandfather in producers who are currently enrolled in LGM-Dairy contracts that cover months after Aug. 2014?
- Contracts purchased prior to January, 2014
 - Contracts purchased prior to Sept., 2014



Important Questions Yet to be Answered

3. How are *dairy operations* defined?
- Same definitions as used under the MILC program?
 - General description in Farm Bill
4. What version of price data will be used?
- Preliminary vs. Revised?
 - Substantial revisions to corn and soybean prices
 - Alfalfa hay prices typically not revised



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