LGM-Dairy: Livestock Gross Margin for Dairy

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12th Annual Arlington Dairy Day
Wednesday, December 10, 2008
LGM-Dairy: What is it?

• New Livestock Gross Margin for Dairy Insurance
  o Federally reinsured dairy insurance program
  o Purchased from crop insurance providers
  o Approved July 2007, available August 2008

• Protects Dairy Business against Unexpected declines in Gross Margins
  o Gross Margin = Milk Revenue – Feed Costs

• Revenue neutral (No subsidies)
  o Premium = Expected Indemnity
LGM-Dairy: What impacts the premium?

- Insured milk and insured feed (selected)
- Deductible level (selected)
- Average futures prices and their volatility (market determined)
LGM-Dairy: Who is eligible?

Milk producers of 32 states
LGM-Dairy: What it covers?

Prices of:

• Any milk volume of producer’s target marketing for a 10-month period (up to 240,000 cwt)

• Amount of corn and soybean meal equivalents to be fed during insurance period restricted to be in range:
  - 0.00364 – 0.02912 tons corn/cwt milk
    - 0.13 – 1.04 bu corn/cwt milk
  - 0.000805 – 0.006425 tons SBM/cwt milk
    - 1.61 – 12.85 lb SBM/cwt milk
LGM-Dairy: What it does not cover/protect?

- Production losses
- Risk of dairy cattle death
- Unexpected decrease in milk production or increase in feed use
- Multiple years of declines in milk prices or increases in feed costs
- Anticipated declines in milk prices or increases in feed costs
LGM-Dairy: What farmer needs to decide?

Three main things to consider:

- Percentage (%) of target marketings to be insured (0% to 100%)
- Level of Gross Margin Deductible or risk assumed
  - $0 to $1.50/cwt in $0.1 increments
- Months to insure
Estimates of:

- Target milk marketing per insured month
- Expected feed per insured month
  - Corn and corn equivalents
  - Soybean meal and soybean meal equivalents
  - Feed Conversion software downloadable from our website
- Verifiable records should be available
LGM-Dairy: What is the insurance Period?

<table>
<thead>
<tr>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
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**LGM-Dairy**

- **No Coverage**

**Insurance Coverage**

| Selected Covered Months | 100% | 0% | 50% | 50% | 0% | 0% | 75% | 100% | 0% | 50% |

→ From 4 pm on 3rd to last business day to 9 am following day (17-hour period)
LGM-Dairy: What is the premium?

Premium is the average of expected indemnities in the long-run:

• Proportional to the insured milk and insured feed
• Increases with price volatility
• Decreases with elected deductible ($0 to $1.5/cwt in $0.1 increments
• Decreases when all months insured together
• Estimates available in RMA website
LGM-Dairy: Overview

Advantages:
- Unique bundled insurance protects the margin: milk price less feed cost
- Very flexible and customizable
- Offered every month of the year

Drawbacks:
- Very short enrollment period
- Total premium due at sign-up
- No farmer subsidies available
- Limited capacity
Livestock Gross Margin Insurance for Dairy

This section of our website provides information concerning the \textit{LGM-Dairy} offered by the Risk Management Agency of USDA. The site is maintained and updated on a regular basis as new information becomes available and related new materials are added.

As with other sections of this website by clicking on an active link, you may generate an expanded menu. To make this menu disappear, click on the link again. If you have material that you think you would find useful please contact Professor Brian W. Gould with your suggestions.

The material contained within this site is for informational and research purposes only. The official website concerning the material related to the Livestock Gross Margin for Dairy program is the USDA Risk Management Agency website (http://www.rma.usda.gov).

- \textbf{Background Material Made Available by the RMA}
  This is a collection of information provided by USDA as to introduce the LGM-Dairy program
- \textbf{Supporting Software}
  This is a collection of software and other material used to exemplify the use of LGM-Dairy
- \textbf{Underlying Data}
  This is a collection of data used in the implementation of LGM-Dairy
- \textbf{Additional Material Explaining LGM-Dairy}
  Background Material Related to LGM-Dairy

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Contract

- Purchased Nov 26\textsuperscript{th} 08
- Coverage period: Jan-Oct 09
- Feed expected to be used:
  - 39.2 lb corn/cwt milk (68% max allowable)
  - 5.05 lb of SBM/cwt milk (39% max allowable)
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## LGM-Dairy: A Wisconsin Example (Nov 06)

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<th>Premium ($)</th>
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Simulated Indemnities (Nov 08)

- DL ($/cwt): 0.86
- Premium ($/cwt): 0.61, 0.42, 0.27
- GMG ($/cwt): 13.1, 12.6, 12.1, 11.6
LGM-Dairy: Aug 08 (Oct 08 – Jul 09)

LGM-Dairy Gross Margin Guarantee (September 2008, No Deductible)

GMG ($/cwt) vs. SBM Equivalents (ton/cwt) vs. Corn Equivalents (ton/cwt)

- 16-18
- 14-16
- 12-14
- 10-12
LGM-Dairy: Aug 08 (Oct 08 – Jul 09)

Feed Insured
CE - SBME

- min-min
- min-max
- med-med
- max-min
- max-max

LGM-Dairy: GMG and Premium (Sep 2008)
LGM-Dairy: GMG and Premium (Oct 2008)
LGM-Dairy: GMG and Premium (Jan 2008)

Feed Insured
CE - SBME
- min-min
- min-max
- med-med
- max-min
- max-max

GMG ($/cwt)

DL=0.0

DL=1.5

Premium ($/cwt)
Wisconsin Expected and Actual (Jan 2008)

Milk

$/cwt

Expected
Actual
Not Yet Available

Mar-08 Apr-08 May-08 Jun-08 Jul-08 Aug-08 Sep-08 Oct-08 Nov-08 Dec-08
Wisconsin Expected and Actual (Jan 2008)

Corn

$/bu

Mar-08  Apr-08  May-08  Jun-08  Jul-08  Aug-08  Sep-08  Oct-08  Nov-08  Dec-08

Not Yet Available

Expected
Actual
Wisconsin Expected and Actual (Jan 2008)
Wisconsin Expected and Actual (Jan 2008)

Would have paid: $0.00/cwt in indemnities

Would have cost: $0.87/cwt in premium
LGM-Dairy: Livestock Gross Margin for Dairy

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Ag and Applied Economics

http://www.uwex.edu/ces/dairymgt/dairy.cfm
http://future.aae.wisc.edu/
http://future.aae.wisc.edu/lgm_dairy.html#5