National Dairy Producers Conference

Indianapolis

April 8, 2013

S.J. Miller
Managing Director, Group Head, Agriculture
BMO Harris Bank.
Organizational Footprint

- 693 US branches
- 913 Canadian branches
- Offices across five continents:
  - Beijing
  - Delhi
  - Dublin
  - Guangzhou
  - Hong Kong
  - London
  - Melbourne
  - Mexico City
  - Mumbai
  - Paris
  - Rio de Janeiro
  - Shanghai
  - Taipei
  - Zurich

Premier North American financial institution with local, national & global reach
Deep Institutional Commitment to Food & Consumer

Team Overview

- 42 professionals in the Food & Consumer Group
  - 21 corporate and 21 investment bankers in Chicago, Indianapolis, Madison, Minneapolis, New York, Phoenix, San Francisco and Atlanta
- Dedicated product partners in:
  - Mergers & Acquisitions
  - Leveraged Finance
  - Debt Capital Markets
  - Treasury Management
  - Financial Products
- Deep sub-sector expertise in:
  - Protein
  - Ag Inputs & Processing
  - Food
  - Debt Capital Markets
  - Treasury Management
  - Foodservice
  - Beverages and wine & spirits
  - Consumer products

Over $9 Billion in Capital Commitments

- Agronomy & Grain Handling: 32%
- Food & Beverage: 27%
- Ag Production: 12%
- Retail & Distribution: 10%
- Other: 2%
- Consumer Products: 5%
- Protein: 12%
- Debt Capital Markets: 5%
- Foodservice: 5%
- Beverages and wine & spirits: 5%

Deep Subsector Knowledge

Agribusiness

Protein & Dairy

Food & Beverage

Distribution & Retail

[List of logos for each subsector]
Financial Health of the Farm Sector

• Brief look back at 2012
• Sector Overviews
• Dairy Trends
• Outlook through a very cloudy crystal ball
Drought Monitor

U.S. Drought Monitor
August 21, 2012
Valid 7 a.m. EDT

Released Thursday, August 23, 2012
Author: Michael Brewer/Liz Love-Brook, NOAA/NESDIS/NCDC

http://droughtmonitor.unl.edu/

U.S. Drought Monitor
April 2, 2013
Valid 7 a.m. EDT

Released Thursday, April 4, 2013
Author: Rich Tinker, NOAA/NWS/NCEP/CPC

http://droughtmonitor.unl.edu/

Intensity:
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

Drought Impact Types:
- D: Dominates dominant impacts
- S: Short-Term, typically <6 months (e.g. agriculture, grasslands)
- L: Long-Term, typically >6 months (e.g. hydrology, ecology)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.
Thank God for Crop Insurance!
Sector Review - “Things that Grow”

**Corn**
- Growers covered by crop insurance
- Buyers searching for stocks
- Elevators – no carry, no drying, no blending
- New crop could be a bin buster

**Soybeans**
- Below average, above expectations for growers in 2012
- Crop insurance also played a role
- Bullish exports particularly China
- Record yield expected in Brazil

**Wheat**
- Summer harvest missed the worst of drought/heat
- Extremely poor winter wheat conditions in Plains
- Will have to wait for conditions this spring
Sector Review - “Things that Eat”

**Beef**
- Tough pasture conditions for cow/calf operations
- Feed lots drowning with high feed, high feeders, and dropping fat cattle prices
- Exports were at record highs in 2012
- Lower supplies ahead with fewer cattle on hand

**Hogs**
- Navigated 2012 with price risk management plans
- Have kept production steady
- Strong exports in this sector – storm clouds over ractopamine
- Will lower feed prices come before forward purchases and hedges run out?

**Chicken**
- Had a tough 2012 with pricing not keeping up with higher feed costs
- Importing corn in SE US from Brazil
- Starting to get margins in line

**Milk**
- Heat and drought turned 2012 from a milk price problem to a feed price problem
- Comparative advantage for dairy producers who grow their feed
- Exports at record levels – whey to China, cheese and milk to Mexico – 14% of dairy production
- Cull cows are “worth something” with higher beef prices
Farm Sector Has Deleveraged
Commercial Farms Hold Bulk of the Debt

Farm businesses represent almost 919,000 farms and account for 95 percent of production.
### Fictional Dairy (1,000 cows)

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leverage (debt/equity)</td>
<td>1.0</td>
<td>.95</td>
<td>1.4</td>
<td>1.25</td>
<td>1.15</td>
<td>1.0</td>
<td>.95</td>
</tr>
<tr>
<td>Current Ratio</td>
<td>1.5</td>
<td>1.7</td>
<td>1.1</td>
<td>1.5</td>
<td>1.6</td>
<td>1.6</td>
<td>1.7</td>
</tr>
<tr>
<td>Net Income/Cow</td>
<td>$1,200</td>
<td>$750</td>
<td>($720)</td>
<td>$300</td>
<td>$900</td>
<td>$700</td>
<td>$700</td>
</tr>
<tr>
<td>Debt/Cow</td>
<td>$4,800</td>
<td>$5,100</td>
<td>$5,820</td>
<td>$5,500</td>
<td>$5,450</td>
<td>$5,400</td>
<td>$5,350</td>
</tr>
<tr>
<td>Price Variation/cwt</td>
<td>$7.82</td>
<td>$4.97</td>
<td>$4.89</td>
<td>$4.16</td>
<td>$8.79</td>
<td>$5.79</td>
<td>$2.27</td>
</tr>
<tr>
<td>Loss Cost/cwt</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>$0.58-$0.74</td>
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## Cost of Production Increases

<table>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Corn (180/bu)</strong></td>
<td>$2.77/bu</td>
<td>$2.93/bu</td>
<td>$3.25/bu</td>
<td>$3.85/bu</td>
<td>$3.50/bu</td>
<td>$4.50/bu</td>
<td>$4.95/bu</td>
<td>$5.25/bu</td>
</tr>
<tr>
<td>- Increase</td>
<td>5.8%</td>
<td>10.9%</td>
<td>18.5%</td>
<td>(9.1%)</td>
<td>28.5%</td>
<td>11.1%</td>
<td>6.1%</td>
<td></td>
</tr>
<tr>
<td><strong>Soybeans (55/bu)</strong></td>
<td>$6.58/bu</td>
<td>$7.00/bu</td>
<td>$8.26/bu</td>
<td>$8.75/bu</td>
<td>$8.50/bu</td>
<td>$10.30/bu</td>
<td>$10.96/bu</td>
<td>$11.25/bu</td>
</tr>
<tr>
<td>- Increase</td>
<td>6.4%</td>
<td>10.7%</td>
<td>5.9%</td>
<td>(2.9%)</td>
<td>21.2%</td>
<td>4.8%</td>
<td>2.6%</td>
<td></td>
</tr>
<tr>
<td><strong>Dairy Class III B/E</strong></td>
<td>$12.48/cwt</td>
<td>$15.35/cwt</td>
<td>$16.01/cwt</td>
<td>$15.50/cwt</td>
<td>$15.25/cwt</td>
<td>$16.35/cwt</td>
<td>$16.93/cwt</td>
<td>$17.25/cwt</td>
</tr>
<tr>
<td>- Increase</td>
<td>23.0%</td>
<td>4.3%</td>
<td>(3.1%)</td>
<td>(1.6%)</td>
<td>7.2%</td>
<td>3.5%</td>
<td>1.9%</td>
<td></td>
</tr>
</tbody>
</table>
Wisconsin vs California Class III Income

Figure 1: Class III versus California 4b prices

Figure 2: Income over feed costs

Source: University of Wisconsin’s Understanding Dairy Markets website (http://future.aae.wisc.edu/tab/prices.html)
It’s a Global Market!

Dairy prices are higher, with more convergence and volatility

Farm Gate Milk Price - Standardized to USA Milk Composition (USD/cwt)

Source: Fonterra analysis
Risk Management - Milk and Input Marketing Strategies

- Put option
- Hedge
- Forward contract
  - Call options
  - Hedge
- Fence
- Do nothing
- Crop Insurance
- LGM – Dairy Insurance
Regions Matter

Feed – Buy vs. Grow
Markets – fluid, commodity vs. specialty cheese
Exports –
New Products – (can you say Chobani?)

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A Very Cloudy Crystal Ball

- Exports drive the Ag bus
- Crops will get planted – rain must be just-in-time
- Corn could have a 4 or 7 in price by fall
- Scenario planning and risk management are requirements to navigate market volatility
- Ag lenders are interested in well capitalized operations with solid liquidity and ability to manage price risk
- Consolidation continues in the Ag space – producers, suppliers, buyers, retailers
- Growing world population and caloric intake bullish for U.S. agriculture including the dairy sector
Agriculture

Farm Bill Negotiations Highlight Need for Price Risk Management
PUBLISHED: March 27, 2013 | AUTHOR: Sam Miller

The threat of going over the fiscal cliff was particularly daunting for agricultural producers. On the brink of running out to 60-year-old permanent legislation, farmers were scared by Congress—for the first time—when they extended provisions from the previous Farm Bill as part of New Year’s negotiations.

In these negotiations, Congress extended the 2008 bill through September 30, 2013. However, because a new Farm Bill was not ratified for another two years, industry programs could be a part of the debate over widespread reductions in government spending.

Price Risk Management: Strategies and Tools to Mitigate Volatility
PUBLISHED: March 20, 2013 | AUTHOR: Sam Miller

The drought of 2012 put stress on nearly every sector in the agriculture industry. As a result, producers are developing a greater understanding of the value of risk mitigation tools. In this white paper, Sam Miller, Managing Director of Agriculture Banking with BMO Harris Bank, discusses risk management within the agriculture industry. He outlines the key benefits of an effective risk mitigation plan that focuses on the implementation of available tools, education, and advice from trusted third parties and advisors.