A regulator’s perspective

- FCA regulates the Farm Credit System
- A nationwide network of borrower-owned lending institutions serving all 50 States and Puerto Rico
- Provides credit to Ag producers and farmer-owned coops. It also makes loans for the following:

  - Ag processing & marketing activities
  - Rural housing
  - Farm-related businesses
  - Ag and aquatic coops
  - Rural utilities
  - International agricultural trade
Farm sector risk: Are the tides turning?

- The farm sector is in good financial shape
- But, the risk profile is shifting
- Profit margins in crop sector compressing
- Seeing profits in protein/dairy
- Farmland values correction in process
- Another big crop combined with higher interest rates will lower land values
Farm sector debt is not at burdensome levels

Farm Debt/Net Cash Income (3-year moving average)

Source: USDA
Loan repayment rates are lower; renewal and extensions are higher

Diffusion Index*

* Bankers responded to each item by indicating whether conditions during the current quarter were higher than, lower than, or the same as in the year-earlier period. The index numbers are computed by subtracting the percentage of bankers who responded “lower” from the percentage who responded “higher” and adding 100.

Source: Federal Reserve Bank of Kansas City
Risk management is key to how much red ink flows on corn farms

Iowa Season-average Corn Profit Margin Estimates
Iowa State University Cost of Production Estimates

<table>
<thead>
<tr>
<th>Year</th>
<th>Margin w/ Gov. Payments</th>
<th>Iowa Price</th>
<th>Total Cost per Bushel</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>3.03</td>
<td>2.66</td>
<td>3.45</td>
</tr>
<tr>
<td>2007</td>
<td>4.29</td>
<td>1.63</td>
<td>5.92</td>
</tr>
<tr>
<td>2008</td>
<td>4.10</td>
<td>3.32</td>
<td>7.42</td>
</tr>
<tr>
<td>2009</td>
<td>3.84</td>
<td>3.59</td>
<td>7.43</td>
</tr>
<tr>
<td>2010</td>
<td>5.23</td>
<td>3.74</td>
<td>8.97</td>
</tr>
<tr>
<td>2011</td>
<td>6.20</td>
<td>2.23</td>
<td>8.43</td>
</tr>
<tr>
<td>2012</td>
<td>6.92</td>
<td>1.45</td>
<td>8.37</td>
</tr>
<tr>
<td>2013</td>
<td>4.82</td>
<td>4.49</td>
<td>9.31</td>
</tr>
<tr>
<td>2014F</td>
<td>4.39</td>
<td>3.70</td>
<td>8.09</td>
</tr>
<tr>
<td>2015F</td>
<td>4.23</td>
<td>3.45</td>
<td>7.68</td>
</tr>
</tbody>
</table>

1 2006-2013 prices are season average prices received by Iowa farmers. The 2014 price is the USDA WASDE forecast (adjusted to Iowa), and the 2015 price reflects USDA’s baseline estimate. Margins reflect total production costs and actual state average yields, except for 2015, which reflects the 180 bushel per acre cost budget yield estimate. Cost estimates are preliminary. Government payments for 2014 and 2015 assume the Agriculture Revenue Coverage County (ARC-CO) program is selected, prior years include direct farm program payments made under expired legislation. As of 02/11/15.
Soybean producers may face losses next crop year

As of 2/11/15

Iowa Season-average Soybean Profit Margin Estimates

- Margin w/ Gov. Payments
- Iowa Price
- Total Cost per Bushel

Iowa State University Cost of Production Estimates

1 2006-2013 prices are season averages received by Iowa farmers. The 2014 price is the USDA WASDE forecast (adjusted to Iowa), and the 2015 price reflects USDA's baseline estimate. Margins reflect total production costs and actual state average yields, except for 2015, which reflects the 50 bushel per acre cost budget yield estimate. Cost estimates are preliminary. Government payments for 2014 and 2015 assume the Agriculture Revenue Coverage County (ARC-CO) program is selected, prior years include direct farm program payments made under expired legislation.
Cow-calf returns reaching unprecedented levels

Source: Informa Economics
Strong broiler margins will taper off as production grows

Source: Informa Economics
Hog producers’ profits to decline in 2015, but remain positive

Source: Informa Economics
Dairy margins face rough patch due to strong global production

Source: Informa Economics
Midwest farmland market weaker in 2014

Source: Federal Reserve Bank of Kansas City

Source: Federal Reserve Bank of Chicago
How big will the farmland price correction be?

- 2014 Capitalized Value - 100 bp rise in interest rates and 5% drop in rent (-18%)
- 2014 Capitalized Value - 150 bp rise in interest rates and 5% drop in rent (-29%)
- 2014 Capitalized Value - 200 bp rise in interest rates and 5% drop in rent (-36%)

Source: USDA, NASS; Gary Schnitkey, University of Illinois; Federal Reserve Board; FCA
Long-term interest rates are influenced by inflation expectations

Source: Bureau of Economic Analysis, Federal Reserve Board
Long-term rates could rise as the economy strengthens

- The Fed’s target PCE inflation rate is 2%; its been averaging about 1% through 2014.
- If the economy continues to improve, inflation expectations may rise—but, lower oil prices and a strong dollar are deflationary forces.
- Higher inflation expectations will push long-term interest rates higher — 100 or 150 basis point rise would be possible.
Future farmland prices depend on interest rates and profitability

### Capitalized Illinois Cropland Value ($/acre)

| 2014 Value | 7,700 |
| Capitalized Value | 9,213 |

### Change in Average Illinois Cash Rent

<table>
<thead>
<tr>
<th>Change in interest rates (BP)</th>
<th>0</th>
<th>-5%</th>
<th>-10%</th>
<th>-15%</th>
<th>-20%</th>
<th>-25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>9,213</td>
<td>8,752</td>
<td>8,291</td>
<td>7,831</td>
<td>7,370</td>
<td>6,909</td>
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<td>25</td>
<td>8,387</td>
<td>7,968</td>
<td>7,548</td>
<td>7,129</td>
<td>6,710</td>
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<tr>
<td>50</td>
<td>7,697</td>
<td>7,313</td>
<td>6,928</td>
<td>6,543</td>
<td>6,158</td>
<td>5,773</td>
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<td>75</td>
<td>7,112</td>
<td>6,757</td>
<td>6,401</td>
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<td>100</td>
<td>6,610</td>
<td>6,280</td>
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<td>5,619</td>
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<td>125</td>
<td>6,174</td>
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<td>5,557</td>
<td>5,248</td>
<td>4,939</td>
<td>4,631</td>
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<tr>
<td>150</td>
<td>5,792</td>
<td>5,502</td>
<td>5,213</td>
<td>4,923</td>
<td>4,634</td>
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<tr>
<td>175</td>
<td>5,455</td>
<td>5,182</td>
<td>4,909</td>
<td>4,636</td>
<td>4,364</td>
<td>4,091</td>
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<tr>
<td>200</td>
<td>5,154</td>
<td>4,896</td>
<td>4,639</td>
<td>4,381</td>
<td>4,123</td>
<td>3,866</td>
</tr>
</tbody>
</table>

% change from 2014 value:

-18%  -23%  -27%
-24%  -28%  -32%
-29%  -32%  -36%
Concluding comments

- Although the farm sector is in strong financial shape, there is the potential for a rough patch.
- Crop margins are compressing and protein/dairy supplies are growing.
- A strong dollar is hurting exports.
- Higher long-term interest rates will depress land values — keep an eye on inflation.
Concluding comments (continued)

➢ Expect a farmland price correction—not a bust.
  ▪ Farm mortgage underwriting has been conservative.
  ▪ A low interest rate environment is beneficial.
Questions

THANK YOU