FCA Board Meeting
February 2018

Cost of Production Trends for Grain and Soybean Producers

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Office of Regulatory Policy
Iowa corn producers to earn thin profits in 2017 and 2018

As of 1/12/2018

Iowa Season-average Corn Profit Margin Estimates

Source: FCA-ORP using data from USDA and Iowa State University. 2018 forecast assumes USDA baseline price and trendline yields.
Good yields helped boost Soybean producers’ profits

Iowa Season-average Soybean Profit Margin Estimates

As of 1/12/2018

Source: FCA-ORP using data from USDA and Iowa State University. 2018 forecast uses USDA Baseline prices and trendline yields.
Wheat producers face another year of red ink

As of 1/22/18

Kansas Season-average Wheat Profit Margin Estimates

Source: FCA-ORP using data from USDA and Kansas State University.

Notes: For 2014-2018F, government payment is Agriculture Risk Coverage and excludes loan deficiency payments. For 2017 and 2018, ARC payment is expected to be zero, compared with about 60 cents for Price Loss Coverage.
Illinois corn producers’ expenses concentrated in rent, fertilizer, seed

Expense Item for corn-after-soybeans production as a percent of the total

- Cash Rent: 32%
- Fertilizers: 16%
- Seed: 15%
- Pesticides: 8%
- Mach. depreciation: 8%
- Crop insurance: 3%
- Machine repair: 3%
- Hired labor: 2%
- Interest (non-land): 2%
- Fuel and oil: 2%
- Building depreciation: 2%
- Machine hire/lease: 2%
- Insurance: 1%
- Drying: 1%
- Storage: 1%
- Misc: 1%
- Utilities: 1%
- Building repair and rent: 1%
- Light vehicle: 1%

Assumes 100% of land is cash rented.

Illinois soybean farmers’ expenses concentrated in rent, seed, machinery

Expense Item for soybeans-after-corn production as a percent of the total

Cash Rent: 43%
Seed: 12%
Mach. depreciation: 9%
Pesticides: 7%
Fertilizers: 6%
Machine repair: 3%
Hired labor: 3%
Crop insurance: 2%
Interest (non-land): 2%
Fuel and oil: 2%
Machine hire/lease: 2%
Insurance: 2%
Building depreciation: 2%
Storage: 1%
Misc: 1%
Utilities: 1%
Building repair and rent: 1%
Drying: 1%
Light vehicle: 0%

Assumes 100% of land is cash rented.

Kansas wheat farmers’ top costs are custom field work, rent, fertilizer

Expense item for continuous wheat production as a percent of the total

- Custom Field Operations: 46%
- Cash rent: 18%
- Fertilizers: 12%
- Labor (ex. custom field operations): 6%
- Crop insurance: 5%
- Seeds: 5%
- Fungicides: 3%
- Interest on operating capital: 2%
- Miscellaneous: 2%
- Herbicides: 2%

Source: 2018 Continuous Wheat Cost and Returns Budget, South Central Kansas, Kansas State University.
Crop sector input prices paid seem impervious to declining crop prices

Crop prices, $/bu.  

Prices paid index (2011 = 100)

Source: USDA, NASS.
Cash rent and seed prices have declined recently, but still high

Index of Prices Paid (2011 = 100)

- FERTILIZER
- CASH RENT
- SEEDS & PLANTS

Source: USDA, NASS.
Most input prices continued to rise despite collapse in grain prices

<table>
<thead>
<tr>
<th>Crop Sector</th>
<th>% Change in Prices (2005 - 2012)</th>
<th>% Change in Prices (2012 - 2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>-42%</td>
<td></td>
</tr>
<tr>
<td>Soybeans</td>
<td>-33%</td>
<td></td>
</tr>
<tr>
<td>Corn</td>
<td>-49%</td>
<td></td>
</tr>
<tr>
<td>Crop Sector Totals</td>
<td>126%</td>
<td></td>
</tr>
<tr>
<td>Cash Rent</td>
<td>50%</td>
<td>68%</td>
</tr>
<tr>
<td>Labor, Wage Rates</td>
<td>20%</td>
<td>29%</td>
</tr>
<tr>
<td>Interest</td>
<td>16%</td>
<td>12%</td>
</tr>
<tr>
<td>Machinery Totals</td>
<td>49%</td>
<td>31%</td>
</tr>
<tr>
<td>Seeds &amp; Plants</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Insecticides</td>
<td>5%</td>
<td>4%</td>
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<tr>
<td>Chemical Totals</td>
<td>109%</td>
<td>22%</td>
</tr>
<tr>
<td>Fertilizer</td>
<td>103%</td>
<td>24%</td>
</tr>
<tr>
<td>Fuels</td>
<td>66%</td>
<td>31%</td>
</tr>
</tbody>
</table>

Source: USDA, NASS.

Percent change in crop prices measured in dollars/bu. Percent change in input prices based on index for prices paid, 2011.
Iowa corn farmers’ cost per acre is down just 14% since 2012

Source: Iowa State University.
Cash rents peaked in 2014 in some Midwest states; still rising in others.
Lower cash rent can be critical to the survival of some farmers.

Source: Iowa State University.
Why Have Cash Rents Not Declined More?

- Landlords didn’t share in the high returns during “fat” years – now catching up
- Many expect that commodity prices will increase in coming years
- Intense competition to rent farmland

Long-term interest rates have been rising since September 2017.

Source: Board of Governors of the Federal Reserve System.
Short-term interest rates have been rising since October 2015

Source: Board of Governors of the Federal Reserve System, IBA.
Interest rates are forecast to continue to rise

Source: Federal Reserve Board, Forecasts are from Wells Fargo Securities.
Summary

- The reduction in costs/acre have lagged the decline in crop prices
- Strong yields in recent years helped support incomes
- Cash rents have been declining in some Midwestern states, but, they are declining slowly
- Fertilizer and cash rents account for most of the decline in costs per acre in several Midwestern states
- Interest rates are rising, posing a risk to land values and cash flow
Questions

THANK YOU