Using ACRE and Crop Insurance to Manage Risk

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2009 Illinois Farm Economics Summit
The Profitability of Illinois Agriculture: Profitability at a Crossroads
The 2009 Crop Year

There seems to be some question as to who is in charge here.

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USDA 2009/10 MYA Corn Price Projections
May - November 2009

- Low
- Midpoint
- High
- ACRE Trigger

2009/10 MYA Price

May  | June | July | August | September | October | November

$5.00  |
$4.75  |
$4.50  |
$4.25  |
$4.00  |
$3.75  |
$3.50  |
$3.25  |
$3.00  |
$2.75  |
## ACRE Payment Scenarios - Corn

<table>
<thead>
<tr>
<th>2009 IL Yield (bu. per acre)</th>
<th>2009 Season Average Price ($ per bu.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$3.25</td>
</tr>
</tbody>
</table>

### $ per acre

| 165 | $103 | $54 | $4  |
| 170 | $87  | $36 | $0  |
| **175** | **$71** | **$18** | **$0** |
| 180 | $54  | $0  | $0  |
MYA Soybean Price Projections

USDA 2009/10 MYA Soybean Price Projections
May - November 2009
## ACRE Payment Scenarios - Soybean

<table>
<thead>
<tr>
<th>2009 IL Yield (bu. per acre)</th>
<th>2009 Season Average Price ($ per bu.)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>$8.20</strong></td>
<td><strong>$9.20</strong></td>
<td><strong>$10.20</strong></td>
</tr>
<tr>
<td>41</td>
<td>$88</td>
<td>$47</td>
<td>$6</td>
</tr>
<tr>
<td>43</td>
<td>$72</td>
<td>$29</td>
<td>$0</td>
</tr>
<tr>
<td><strong>45</strong></td>
<td><strong>$56</strong></td>
<td><strong>$11</strong></td>
<td>$</td>
</tr>
<tr>
<td>47</td>
<td>$39</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>
## 2009 Crop Insurance Payments

<table>
<thead>
<tr>
<th>Crop</th>
<th>Base Price</th>
<th>Harvest Price</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn (CRC, GRIP)</td>
<td>$4.04</td>
<td>$3.72</td>
<td>($0.32) (7.9%)</td>
</tr>
<tr>
<td>Corn (RA)</td>
<td>$4.04</td>
<td>$3.90</td>
<td>($0.14) (3.5%)</td>
</tr>
<tr>
<td>Soybeans</td>
<td>$8.80</td>
<td>$9.66</td>
<td>$0.86 9.8%</td>
</tr>
<tr>
<td>Wheat</td>
<td>$8.58</td>
<td>$5.17</td>
<td>($3.41) (39.7%)</td>
</tr>
</tbody>
</table>
2009 Crop Insurance Payments

- **Individual plans**
  - Yield losses required for corn and soybeans

- **Area plans**
  - Most likely for corn and soybeans in the Southwest region of IL
  - Large payments on wheat acres, especially in Western region counties

- Effects of delayed harvest
- Future crop years
ACRE and Crop Insurance

- ACRE not a complete substitute for crop insurance
  - Historical revenue index vs. “expected” yield/revenue in a given crop year
  - State vs. county vs. farm yields
  - U.S. season average price vs. futures
  - Insurance units vs. FSA farm id’s

- Farm trigger rules provide incentive to purchase crop insurance
  - Reduces chance of being ineligible when ACRE payments occur
ACRE and Crop Insurance

- **ACRE**
  - state average yields
  - national average prices
  - averages based on last 3-5 years

- **GRIP and GRP**
  - county yields
  - futures prices
  - price changes over growing season
ACRE and Crop Insurance

- Individual insurance plans cover risk at the farm level
  - availability of yield and revenue protection
  - farm-level yields
  - futures prices
  - price changes over growing season

- In any given year
  - ACRE AND insurance may pay
  - ACRE OR insurance may pay
  - neither may pay
### Percentage of farms receiving payments

<table>
<thead>
<tr>
<th>Year</th>
<th>ACRE</th>
<th>85% CRC</th>
<th>85% APH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>0%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>1981</td>
<td>0%</td>
<td>30%</td>
<td>3%</td>
</tr>
<tr>
<td>1982</td>
<td>0%</td>
<td>48%</td>
<td>2%</td>
</tr>
<tr>
<td>1995</td>
<td>0%</td>
<td>49%</td>
<td>49%</td>
</tr>
<tr>
<td>2002</td>
<td>0%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>2004</td>
<td>0%</td>
<td>57%</td>
<td>1%</td>
</tr>
</tbody>
</table>
### Percentage of farms receiving payments

<table>
<thead>
<tr>
<th>Year</th>
<th>ACRE</th>
<th>85% CRC</th>
<th>85% APH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>0%</td>
<td>53%</td>
<td>6%</td>
</tr>
<tr>
<td>1983</td>
<td>0%</td>
<td>61%</td>
<td>61%</td>
</tr>
<tr>
<td>1988</td>
<td>0%</td>
<td>73%</td>
<td>73%</td>
</tr>
<tr>
<td>1991</td>
<td>0%</td>
<td>30%</td>
<td>20%</td>
</tr>
<tr>
<td>1995</td>
<td>0%</td>
<td>22%</td>
<td>22%</td>
</tr>
<tr>
<td>1996</td>
<td>0%</td>
<td>20%</td>
<td>16%</td>
</tr>
<tr>
<td>2003</td>
<td>0%</td>
<td>66%</td>
<td>66%</td>
</tr>
</tbody>
</table>
McLean County

- High productivity/low risk, highly correlated with IL yield
- GRIP payments
  - 9 of 31 years
  - 6 out of the 10 ACRE payment years
- GRP payments
  - 5 of 31 years
  - 3 out of the 10 ACRE payment years
Williamson County

- Lower productivity/higher risk, less correlated with IL yields
- GRIP payments
  - 7 of 31 years
  - 3 out of the 10 ACRE payment years
- GRP payments
  - 6 of 31 years
  - none of the 10 ACRE payment years
McLean County

- GRIP payments
  - 7 of 31 years
  - 3 out of the 5 ACRE payment years

- GRP payments
  - 3 of 31 years
  - 1 out of the 5 ACRE payment years
Williamson County

- **GRIP payments**
  - 7 of 31 years
  - 3 out of the 5 ACRE payment years

- **GRP payments**
  - 6 of 31 years
  - *none* of the 5 ACRE payment years
Coupling ACRE with yield insurance may offer similar risk reduction at a lower cost than with revenue insurance.

Substitutability considerations:
- Farm-state yield correlation
- Insurance (futures) vs. MYA prices
- Timing of marketing
- Farm yield risk
- Current preferred coverage level
If ACRE is elected - may be able to reduce coverage level within farm-level insurance plans to achieve similar levels of risk reduction

- Premium savings will, in general, offset reduction in direct payments
- Depends on
  - Level of correlation between farm and state yields
  - Farm yield volatility (risk)
  - Current coverage level
ACRE and Area Plans

- ACRE, GRP, and GRIP
  - State vs. county yields
  - Futures vs. MYA prices
  - Amount of overlap depends on correlation between county and state yields
  - Lack of overlap illustrates the price-driven nature of ACRE/GRIP
Questions?

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