ACRE

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Average Crop Revenue Election (ACRE)

- Gives producers a one-time option to choose a revenue-based counter-cyclical payment program, starting in 2009.

- Producers choose between the current stable of programs or ACRE.

- Producers choosing ACRE agree to 20% decline in direct payments and 30% decline in loan rates.
ACRE Settings

- Total acres eligible for ACRE payments limited to total number of base acres on the farm

- Farmers may choose which planted acres are enrolled in ACRE when total base area is exceeded
## Loan Rates under ACRE

<table>
<thead>
<tr>
<th>Crop</th>
<th>Unit</th>
<th>2009</th>
<th>2010-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>$/bu.</td>
<td>1.365</td>
<td>1.365</td>
</tr>
<tr>
<td>Soybeans</td>
<td>$/bu.</td>
<td>3.50</td>
<td>3.50</td>
</tr>
<tr>
<td>Barley</td>
<td>$/bu.</td>
<td>1.295</td>
<td>1.295</td>
</tr>
<tr>
<td>Wheat</td>
<td>$/bu.</td>
<td>1.925</td>
<td>2.058</td>
</tr>
<tr>
<td>Oats</td>
<td>$/bu.</td>
<td>0.931</td>
<td>0.973</td>
</tr>
<tr>
<td>Cotton</td>
<td>$/lb.</td>
<td>0.364</td>
<td>0.364</td>
</tr>
<tr>
<td>Sorghum</td>
<td>$/bu.</td>
<td>1.365</td>
<td>1.365</td>
</tr>
</tbody>
</table>
### Average Direct Payments Per Payment Acre

<table>
<thead>
<tr>
<th>Crop</th>
<th>Current Program</th>
<th>ACRE</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>28.67</td>
<td>22.94</td>
<td>5.73</td>
</tr>
<tr>
<td>Soybeans</td>
<td>13.55</td>
<td>10.84</td>
<td>2.71</td>
</tr>
<tr>
<td>Barley</td>
<td>11.42</td>
<td>9.14</td>
<td>2.28</td>
</tr>
<tr>
<td>Wheat</td>
<td>17.94</td>
<td>14.35</td>
<td>3.59</td>
</tr>
<tr>
<td>Oats</td>
<td>1.16</td>
<td>0.93</td>
<td>0.23</td>
</tr>
<tr>
<td>Cotton</td>
<td>40.27</td>
<td>32.21</td>
<td>8.05</td>
</tr>
<tr>
<td>Sorghum</td>
<td>19.78</td>
<td>15.82</td>
<td>3.96</td>
</tr>
</tbody>
</table>
ACRE

- Program has state and farm trigger levels, both must be met before payments are made

- Expected state and farm yield based on 5 year Olympic average yields per planted acre

- ACRE price guarantee is the 2 year average of the national season-average price
## ACRE Set-up for Iowa Corn

<table>
<thead>
<tr>
<th>Year</th>
<th>Yield per Planted Acre (bu./acre)</th>
<th>Year</th>
<th>Season-average Price ($/bu.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>176.7</td>
<td>2007</td>
<td>4.25</td>
</tr>
<tr>
<td>2005</td>
<td>169.0</td>
<td>2008</td>
<td>5.50</td>
</tr>
<tr>
<td>2006</td>
<td>162.7</td>
<td>Average</td>
<td>4.875</td>
</tr>
<tr>
<td>2007</td>
<td>166.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>165.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Olympic Average</td>
<td>167.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


So the expected state yield would be 167.2 bushels per acre and the ACRE price guarantee would be $4.87 per bushel.
ACRE Structure

- ACRE revenue guarantee = 90% of ACRE price guarantee * Expected state yield
  - For our example, the ACRE revenue guarantee is 90% * 167.2 bu./acre * $4.87/bu.
  - $732.84/acre

- ACRE actual revenue = Max(Season-average price, Loan rate) * Actual state yield per planted acre
ACRE Structure

- ACRE Farm revenue trigger = Expected farm yield * ACRE price guarantee + Producer-paid crop insurance premium
- Let’s assume farm yields equal to state yields and use the average producer-paid crop insurance premium for 2008 (so far)

- 167.2 bu./acre * $4.87/bu. + $21.70/acre

- $814.26/acre
ACRE Payment Triggers

- ACRE actual farm revenue = \( \text{Max(Season-average price, Loan rate)} \times \text{Actual farm yield per planted acre} \)

- Given our example, ACRE payments are triggered when ACRE actual revenue is below $732.84/acre and ACRE actual farm revenue is below $814.26/acre
ACRE Payments

- Payment rate = \( \text{Min}(\text{ACRE revenue guarantee} - \text{ACRE actual revenue}, 25\% \times \text{ACRE revenue guarantee}) \)

- Payments made on 83.3\% of planted/base acres in 2009-11, 85\% in 2012

- ACRE payment adjustment: Payment multiplied by ratio of Expected farm yield to Expected state yield
ACRE Payments

- Payment rate = Min($732.84 – ACRE actual revenue, $183.21)

- So the maximum per acre payment is $183.21 in our example
ACRE Payment Timing

- Payments can begin as soon as practicable possible after the end of the marketing year
- So 2009 ACRE payments could start to be paid out in October 2010
- There are no provisions for advance payments
ACRE vs. CCP

- ACRE pays out
- No ACRE payments
- CCP pays out
- No CCP payments

Plot showing the comparison between ACRE and CCP payments based on $ per bushel and bushels per planted acre.
Looking Beyond 2009

- The ACRE revenue guarantee is updated each year using the same rules.
  - 5 year Olympic average for yields.
  - 2 year average for prices.

- But the ACRE revenue guarantee can not change by more than 10 percent (up or down) from year to year.
  - So if the 2009 ACRE revenue guarantee is $732.84, then the 2010 ACRE revenue guarantee must be between $659.56 and $806.12.
Farmer’s Choice

In deciding about ACRE, farmers must weigh:

- The loss of 20% of their direct payments, a 30% drop in the marketing loan rate, and no access to CCP payments versus

- The potential for payments under ACRE
Comparing Program Parameters

For Iowa Corn

- Under the current CCP program
  - CCP Yield Average = 122.1 bushels per acre
  - CCP Effective Target Price = $2.35/bushel

In our example, for ACRE

- ACRE Yield Guarantee = 167.2 bushels per acre
- ACRE Price Guarantee = $4.87/bushel

- 20% of average Iowa corn direct payment = $6.50 per acre
Preliminary ACRE Analysis

- Currently running forward-looking ACRE analysis

- Based on lognormal price distribution and uptrended historical yields

- Comparing farm support under current set of programs versus ACRE
Historical Yields Uptrended to 2009
Preliminary Results

- ACRE looks more attractive given:
  - Relatively lower 2009 expected prices
  - Below 2008 projected prices, but above the current effective target price
  - Higher price volatilities
Preliminary Results

- Current programs look more attractive given:
  - Ever increasing prices
  - Potentially no ACRE payments combined with cut in direct payments
  - Much lower expected prices
    - Prices below the current effective target price
    - Here, it’s a horse race as both ACRE and the current programs will provide support
Payment Limitations

- Direct payments: $40,000 (w/o ACRE)  
  $32,000 (w/ ACRE)
- Counter-cyclical payments: $65,000
- ACRE: $73,000 ($65,000 + $8,000)
- Marketing loans: No limits
- Direct attribution of payments
- Elimination of the 3-entity rule
Thanks for your time!

Any questions?