Illinois Farm Income Outlook

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2008 Illinois Farm Economics Summit
The Profitability of Illinois Agriculture: Looking Ahead in Extraordinary Times

Today’s presentation...

- Some thoughts on the current status of the farm economy
- A look at a few trends on Illinois farms
- Income projections for 2008
- What about 2009?
- Summary and conclusions
Current status of the farm economy

- Extreme commodity price volatility
- Escalating input costs, but some have seem to peaked (fertilizer) and others declining (fuel)
- Continued pressure to raise cash rents when 2009 price and input cost projections do not support it
- More than the usual amount of uncertainty regarding 2009 planting intentions due to higher input costs and commodity price volatility
- The factors outlined above have led to changes in purchasing behavior and applications rates for certain inputs (fertilizer) by some producers

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Trends on Illinois Grain Farms

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tillable acres</td>
<td>923</td>
<td>959</td>
<td>977</td>
<td>1,005</td>
<td>1,019</td>
<td>14%</td>
</tr>
<tr>
<td>Percent owned</td>
<td>24</td>
<td>24</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>-4%</td>
</tr>
<tr>
<td>Percent crop share</td>
<td>43</td>
<td>41</td>
<td>40</td>
<td>40</td>
<td>38</td>
<td>-18%</td>
</tr>
<tr>
<td>Percent cash rent</td>
<td>34</td>
<td>36</td>
<td>37</td>
<td>37</td>
<td>39</td>
<td>21%</td>
</tr>
<tr>
<td>Crop returns</td>
<td>381.91</td>
<td>423.44</td>
<td>406.97</td>
<td>480.75</td>
<td>656.68</td>
<td>47%</td>
</tr>
<tr>
<td>Fertilizer</td>
<td>38.71</td>
<td>46.05</td>
<td>53.54</td>
<td>54.86</td>
<td>65.97</td>
<td>40%</td>
</tr>
<tr>
<td>Pesticides</td>
<td>32.94</td>
<td>32.49</td>
<td>36.08</td>
<td>31.16</td>
<td>32.72</td>
<td>6%</td>
</tr>
<tr>
<td>Seed</td>
<td>30.11</td>
<td>32.52</td>
<td>36.10</td>
<td>39.23</td>
<td>46.18</td>
<td>42%</td>
</tr>
<tr>
<td>Crop total</td>
<td>101.76</td>
<td>111.07</td>
<td>125.72</td>
<td>125.26</td>
<td>144.87</td>
<td>33%</td>
</tr>
<tr>
<td>Fuel and oil</td>
<td>10.47</td>
<td>12.80</td>
<td>16.50</td>
<td>18.37</td>
<td>21.03</td>
<td>49%</td>
</tr>
<tr>
<td>Insurance</td>
<td>12.68</td>
<td>14.59</td>
<td>15.09</td>
<td>19.22</td>
<td>25.21</td>
<td>53%</td>
</tr>
</tbody>
</table>

Source: Illinois FBFM Association
Projecting 2008 incomes

- Use a sample of Illinois FBFM grain farms with historical financial records.
- Use projections of yields and prices to determine revenue for each farm.
- Adjust historical expenses and financial data for each farm.
- Project net farm income and net worth change for each farm in the sample.

Sample Farms by Size

701 grain farms
Average farm: 1,002 total acres
786 operator acres
Good Corn and Soybean Yields

2008 corn yield second highest ever

Increasing/Decreasing Grain Prices*

* Marketing year average for Illinois
Key Assumptions

- Estimated prices received / year end inventory price
  - Corn: $3.50 / bu.
  - Soybeans: $8.50 / bu.
  - Wheat: $6.30 / bu.
- Only farm program payments are direct payments, no LDP’s or CC payments
- No estimate of crop insurance income included but there will be some payments

Key Assumptions – cont.

- Marketing margins on old crop
  - Corn: Gain of $0.96/bu. – 67% of crop ($4.71)
  - Soybeans: Gain of $1.73/ bu. – 63% of crop ($11.73)
- Pricing opportunities on new crop
  - Corn – 25% sold at $4.50 ($1.00 over inv.)
  - Soybeans – 25% sold at $10.25 ($1.75 over inv.)
- Use NASS November report of district projections of yields
Estimated Yields

<table>
<thead>
<tr>
<th>Crop Reporting District</th>
<th>Soybean Yield</th>
<th>Corn Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>2008</td>
<td>2007</td>
</tr>
<tr>
<td>Northwest</td>
<td>52</td>
<td>50</td>
</tr>
<tr>
<td>Northeast</td>
<td>51</td>
<td>48</td>
</tr>
<tr>
<td>West</td>
<td>48</td>
<td>51</td>
</tr>
<tr>
<td>Central</td>
<td>54</td>
<td>53</td>
</tr>
<tr>
<td>East</td>
<td>55</td>
<td>51</td>
</tr>
<tr>
<td>West Southwest</td>
<td>49</td>
<td>51</td>
</tr>
<tr>
<td>East Southeast</td>
<td>49</td>
<td>45</td>
</tr>
<tr>
<td>Southwest</td>
<td>33</td>
<td>50</td>
</tr>
<tr>
<td>Southeast</td>
<td>37</td>
<td>44</td>
</tr>
<tr>
<td>NASS Weighted Average</td>
<td>49</td>
<td>49</td>
</tr>
</tbody>
</table>

November 2008 NASS projections. Yields adjusted to represent differences between NASS and FBFM.

Other Key Assumptions

- Average increase in farm size -- 3.0%
- Operating expenses adjustments from 2007
  - Crop expenses -- 25% increase
  - Fuel and oil -- 30% increase
  - Other machinery expenses -- 10% increase
  - All other expenses -- 15% increase
- Machinery economic depreciation -- 10% increase
- Land values -- 15% increase
- Interest expense – no change
Net Farm Income

<table>
<thead>
<tr>
<th>Year</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>$92,614</td>
</tr>
<tr>
<td>2005</td>
<td>58,204</td>
</tr>
<tr>
<td>2006</td>
<td>94,617</td>
</tr>
<tr>
<td>2007</td>
<td>197,736</td>
</tr>
</tbody>
</table>

2008: $180,000 – $200,000 Estimate

About $66,600 of income due to marketing gain from 2007 crop sold in 2008.

Net farm income does not include:
- Payments for operator labor/family withdrawals
- Nonfarm income
- Income and SE taxes

Figure 1. Average Net Farm Income on 701 Grain Farms Enrolled in FBFM, 2001 - 2008

* 2008 Estimated

2001 – 2008 average net farm income = $95,987!!
Sensitivity of Estimate

<table>
<thead>
<tr>
<th>One bushel change in</th>
<th>Change in Average Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn yields</td>
<td>$ 1,800</td>
</tr>
<tr>
<td>Soybean yields</td>
<td>2,500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Change in effective price</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn price - $.10</td>
<td>$ 8,500</td>
</tr>
<tr>
<td>Soybean price - $.25</td>
<td>3,500</td>
</tr>
</tbody>
</table>

Impact of Grain Prices

- Corn-$2.50  Soybeans-$6.25  NFI-$76,390
- Corn-$3.00  Soybeans-$7.50  NFI-$136,800
- Corn-$3.50  Soybeans-$8.50  NFI-$193,600
- Corn-$4.00  Soybeans-$10.00  NFI-$257,500
### Net Farm Income by Region

**Crop Reporting District** | **2004 Actual** | **2005 Projected** | **2006 Actual** | **2007 Projected** | **2008 Actual** | **2008 Projected**
--- | --- | --- | --- | --- | --- | ---
Northwest | 82,346 | 42,473 | 87,713 | 204,997 | 223,235 | 223,235 |
Northeast | 81,551 | 35,078 | 126,333 | 216,501 | 179,432 | 179,432 |
Central & West | 84,872 | 48,973 | 92,557 | 205,547 | 215,217 | 215,217 |
East | 92,871 | 71,320 | 97,176 | 208,670 | 193,015 | 193,015 |
West Southwest | 114,462 | 68,675 | 109,196 | 212,677 | 239,966 | 239,966 |
East Southeast | 105,515 | 76,022 | 96,866 | 215,991 | 146,769 | 146,769 |
Southwest | 79,940 | 52,054 | 46,403 | 120,614 | 146,660 | 146,660 |
Southeast | 93,621 | 65,607 | 87,974 | 121,860 | 133,054 | 133,054 |
NASS Weighted Average | 92,614 | 58,204 | 94,617 | 197,736 | 193,613 | 193,613 |

### 2008 Net Farm Income by Region

- **Northwest**: $223,200
- **Northeast**: $179,400
- **Central & West**: $167,300
- **East**: $255,900
- **West Southwest**: $240,000
- **East Southeast**: $146,800
- **Southwest**: $146,700
- **Southeast**: $133,000

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*2008 Illinois Farm Economics Summit*
Change in Net Farm Income 2007 to 2008

<table>
<thead>
<tr>
<th>Change in Net Farm Income</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Change</td>
<td>$18,200</td>
<td>$-37,100</td>
</tr>
<tr>
<td>WEST</td>
<td>$-16,400</td>
<td>$-15,700</td>
</tr>
<tr>
<td>EAST</td>
<td>$31,800</td>
<td>$-69,200</td>
</tr>
<tr>
<td>SOUTHWEST</td>
<td>$27,300</td>
<td>$11,200</td>
</tr>
</tbody>
</table>

Changes to Net Worth

Net Income: $193,613
- Family Living: 71,725
+ Nonfarm Income: 33,690
- Income Taxes: 31,539
-/+ Valuation Change: 104,329

Total Change in Net Worth
2007 to 2008: $228,368

Assumptions:
- 15.0% increase in land values
- no change in machinery values
Significance of Government Payments

<table>
<thead>
<tr>
<th></th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Farm Income</td>
<td>$ 193,613</td>
</tr>
<tr>
<td>Government Payments</td>
<td>16,930</td>
</tr>
<tr>
<td>Direct payments</td>
<td>16,930</td>
</tr>
<tr>
<td>Counter-cyclical payments</td>
<td>0</td>
</tr>
<tr>
<td>Loan deficiency payments</td>
<td>0</td>
</tr>
</tbody>
</table>

Direct Payment | Counter Cyclical Payment | LDP Assumptions
----------------|-------------------------|------------------
Corn            | 0.28                    | Corn 0.00        |
Soybeans        | 0.44                    | Soybeans 0.00    |
Wheat           | 0.52                    | Wheat 0.00       |

What about 2009??

- **Disclaimer** - high probability of error in projections due to more than the usual amount of variability in input costs and grain prices, let alone yield estimations, but……
- Five year average trend yield for corn and soybeans, 180 bu./acre corn yield and 52 bu./acre soybean yield – Illinois
- Price projections from Darrel – 2009/10 marketing year price for corn = $4.50 and soybeans = $10.00
- Input cost changes from **2007**, crop costs up 98%, fuel down 20%, other machinery up 17%, other operating and overhead expenses up 35% (cash rent, insurance, etc.)
What about 2009?? - results

- Corn-$4.50  Soybeans-$10.00  NFI=$116,118  
  (Darrel’s presentation)

- Corn-$3.50  Soybeans-$8.50  NFI=$6,579  
  (2008 end of year prices used in study)

- Corn-$3.00  Soybeans-$7.25  NFI=($55,786)  
  (Let’s not think about this!!)

- Corn-$4.00  Soybeans-$9.75  NFI=$69,000  
  (To cover farm operating costs and family living expense)

Conclusions and Summary

- Grain farms only, limited livestock returns
- Excellent corn yields, good soybean yields. Although declining, relatively good expected average prices received for corn and soybeans results in good incomes for 2008 for many producers
- Positive marketing margin from 2007 crop sold in 2008 a significant contribution to 2008 income (about one third)
- Government payments only 9% of net farm income
- Significant increase in some input costs in 2008
Conclusions and Summary – cont.

- Good incomes across most areas of the state, some regions higher and some lower than 2007
- Financial positions remains strong due to good incomes and strong asset values (land), but have we hit the peak for now
- Projections for 2009 look less optimistic due to higher input costs and lower grain prices
- Much more potential for larger income variability in 2009 due to marketing decisions, pricing of inputs and farmland leasing arrangements, give thought and implement plans for controlling risk

Thank you and have a Happy Holiday Season