The Current and Future Farm Policy Outlook for Corn and Soybeans

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Minnesota Crop Insurance Conference
Mankato, MN

September 12, 2013

Presentation Outline

• My Perspective
• Factors Influencing Farm Bill
• Where Are We in the Process?
• Future Farm Policy
• Conclusions
My Perspective

- Co-Director of the Agricultural and Food Policy Center
- Established in 1983 by the Texas A&M University System
- To conduct analyses of the impacts of government policy proposals and/or implementation procedures on:
  - Farmers
  - Agribusinesses
  - Taxpayers
  - Consumers

Primary constituency – agricultural committees of the U.S. Congress

Representative Farms and Ranches
Current Farm Policy

- Under current market conditions traditional farm policy tools are largely irrelevant as a safety net
- Crop insurance is key:
  - Sometimes to make large profits
  - Others to stay in business
- Depends on the relationship between marketing year price for crop and insurance prices determined by futures markets

Factors Influencing Farm Bill

- Perception among many in Congress that recent high prices for some commodities has lessened the need for a farmer safety net
- Moderates of both parties lost in recent elections. The influence of the extreme right of the Republican party and extreme left of Democratic party has made compromise almost impossible
  - Ex. Many new Republican house members voted against the House Bill because it only saved $30 Billion over 10 years – want more cuts
- Lack of agreement/backstabbing among commodity groups regarding commodity program
- Interest groups such as EWG, Heritage Foundation, Americans for Prosperity, American Enterprise Institute
- New Members on Ag Committees – especially in the House
Mandatory Spending Baseline for the 2008 Farm Bill Programs and Provisions, by Title, ($M), FY 2014-23

For Perspective – for all the excitement and press received, commodity programs account for only 0.15% of the U.S. Budget

Where Are We in Process?

- The Senate has passed their version of the bill
- The full House failed to pass its version. They split the Nutrition title out and passed the remaining titles in June
  - Working to find some way to move the Nutrition title before going to conference with the Senate
  - Eliminated the “permanent law” from 1938 & 1949 and replaced with 2013 as “permanent law”
Not a Question of Whether FB Will Provide Less Support than Previous – Just by How Much?

- The bills are very similar except for some elements of commodity programs
  - The Senate bill puts all crops other than cotton in:
    - Agriculture Risk Coverage (ARC) - a shallow loss type of safety net program with a choice of using their own yields or county yields and
    - Adverse Market Payment (AMP) which is a CCP type program to provide assistance in the event of price declines
    - A supplemental coverage option (SCO) area-wide insurance program is available for purchase to cover shallow losses on top of current buy-up insurance
  - The House bill allows producers to choose between a shallow loss or price based safety net that also has area based insurance option (SCO)

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Revenue guarantee</td>
<td>Starts at 88% of previous 5-year moving Olympic average revenue for the crop</td>
<td>Starts at 85% of previous 5-year moving Olympic average revenue for the crop</td>
</tr>
<tr>
<td>County Level or Individual Level Coverage</td>
<td>One time irrevocable selection of either county level or individual level</td>
<td>County level</td>
</tr>
<tr>
<td>Payment acres</td>
<td>65% of planted acres not to exceed the average total acres planted or prevented from being planted to covered commodities and upland cotton on the farm for the 2009 – 2012 crop years if individual level coverage is selected or 80% for county level coverage</td>
<td>85% of planted acres and 30% of prevented planted acres not to exceed base acres on the farm (upland cotton base acres are included in total farm base acres) (payment factor of 85% is applied to planted acres before checking whole farm base cap)</td>
</tr>
<tr>
<td>Payment band or range</td>
<td>10% (88% to 78%)</td>
<td>10% (85% to 75%)</td>
</tr>
</tbody>
</table>
## Provisions

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>Only applicable for rice and peanuts</td>
<td>Wheat - $5.50/bu</td>
</tr>
<tr>
<td></td>
<td>Long Grain Rice - $13.30/cwt</td>
<td>Corn - $3.70/bu</td>
</tr>
<tr>
<td></td>
<td>Medium Grain Rice - $13.30/cwt</td>
<td>Grain Sorghum - $3.95/bu</td>
</tr>
<tr>
<td></td>
<td>Peanuts - $523.77/ton</td>
<td>Barley - $4.95/bu</td>
</tr>
</tbody>
</table>

### Reference Prices

- Wheat - $4.17/bu
- Corn - $2.63/bu
- Grain Sorghum - $2.63/bu
- Barley - $2.63/bu
- Oats - $1.79/bu
- Long Grain Rice - $13.30/cwt
- Medium Grain Rice - $13.30/cwt
- Soybeans - $6.00/bu
- Cotton - $0.50/lb
- Cotton Floor - $22.68/ct
- peanuts - $253.77/ton
- Dry Peas - $8.32/ct
- lentils - $12.81/ct
- Small Chickpeas - $10.36/ct
- Large Chickpeas - $12.81/ct

- Wheat - $5.50/bu
- Corn - $3.70/bu
- Grain Sorghum - $3.95/bu
- Barley - $4.95/bu
- Oats - $1.79/bu
- Long Grain Rice - $14.00/cwt
- Medium Grain Rice - $14.00/cwt
- Soybeans - $8.40/ct
- Cotton - $0.50/lb
- Cotton Floor - $35/ct
- peanuts - $535/ton
- Dry Peas - $11.00/ct
- lentils - $19.97/ct
- Small Chickpeas - $19.04/ct
- Large Chickpeas - $21.54/ct

### Payment Acres

- 85% of Base Acres
- 85% of planted acres and 30% of prevented planted acres not to exceed base acres on the farm (upland cotton base acres are included in total farm base acres) (payment factor of 85% is applied to planted acres before checking whole farm base cap)

### Price Trigger

- If the average marketing year price falls below the reference price for the commodity. Uses the higher of the average market price or national average loan rate.
- The average price during the first 5 months of the marketing year falls below the reference price for the commodity. Uses the higher of the first 5 months average market price or national average loan rate.

### Payment Yields

- CCP yields for all crops other than rice, peanuts, oilseed and pulse crops without a payment yield.
  - Rice allows updating of CCP yields for rice depending upon the percentage of the crops base acres planted over the 2009-2012 period.
  - If the 2009-2012 average planted acres were greater than 50% of base acres then the yield is 90% of the average yield from 2009-2012.
  - If the 2009-2012 average planted acres were less than 50% of base acres then the updated yield equals the CCP yield plus (percent of base acres planted times the difference between the 2009-2012 average yield and CCP yield).
- Peanuts allow for updating using the average of 2009-2012 planted acre yields, omitting years not planted and replacing low yields with 75% of county average.
- CCP yields from the 2008 Farm Bill or establishes a methodology for producers of oilseeds without a CCP yield. Farm owner option to update payment yields to 90% of the average of the yield per planted acre for the crop for the 2008 to 2012 crop years, excluding any crop year in which the acreage planted was zero. Can replace yields lower than 75% of the county average with 75% of the county average when calculating the average.

### Payment Limitation

- $50,000 for ARC and AMP combined, peanuts with a separate limit
- $50,000 for PLC and RLC combined, peanuts no longer with a separate limit
Distribution of Government Support
Example: Corn

- **Revenue per bu**
- **Target Price** – $2.63
- **Loan Rate** – $1.95
- **Market Price**

**CCP**
- **Fixed payment** – $0.28

**MLG/LDP**

**Market Receipts**

Reflects payments not on full production
(payment acres = .85 x base acres)

Decoupled (do not have to produce to receive payment)

Coupled (do have to produce to receive benefits from marketing loans gains or LDPs)

Distribution of Shallow Loss/Gap Revenue Coverage Example: Corn

- **Revenue per bu**
- **Loan Rate** – $1.95
- **Market Price**

**MLG**

**Market Receipts**

5 yr moving avg of revenues

This will be the centerpiece of the gov’t safety net
[paid on planted acres x .65 or .8]

Coupled (do have to produce to receive benefits from all components now)

Crop insurance coverage

Most are calling this the donut hole

89%
79%
House Price Loss Coverage
Example: Corn

Revenue per bu

Reference Price – $3.70
Loan Rate – $1.95
Market Price

Paid on planted acres (not to exceed base) \( \times .85 \)

<table>
<thead>
<tr>
<th>Provisions</th>
<th>Senate SCO and STAX</th>
<th>House SCO and STAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCO Coverage</td>
<td>Producer has the option of purchasing on an individual yield and loss basis or an area yield and loss basis, supplemented with coverage based on an area yield and loss basis to cover all or a part of the deductible under the individual yield and loss policy, or a margin basis alone or in combination with—individual yield and loss coverage; or area yield and loss coverage.</td>
<td>Producer has the option of purchasing additional coverage based on an individual yield and loss basis or an area yield and loss basis or an individual yield and loss basis, supplemented with coverage based on an area yield and loss basis to cover all or a part of the deductible under the individual yield and loss policy.</td>
</tr>
<tr>
<td>SCO Band</td>
<td>If an ARC participant, coverage from individual producer buyup insurance coverage level up to 79%. If producer opts out of ARC, then from individual producer insurance coverage level to 90%.</td>
<td>If in PLC, from individual producer insurance coverage level up to 90%. Not available if in RLC.</td>
</tr>
<tr>
<td>SCO Premium Subsidy</td>
<td>65%</td>
<td>65%</td>
</tr>
<tr>
<td>STAX Coverage Band</td>
<td>Producer elects coverage for revenue loss of not less than 10 percent and not more than 30 percent of expected county revenue, specified in increments of 5 percent.</td>
<td>Producer elects coverage for revenue loss of not less than 10 percent and not more than 30 percent of expected county revenue, specified in increments of 5 percent.</td>
</tr>
<tr>
<td>STAX Reference Price</td>
<td>None</td>
<td>$0.6861/lb</td>
</tr>
<tr>
<td>STAX Premium Subsidy</td>
<td>80%</td>
<td>80%</td>
</tr>
</tbody>
</table>
Distribution of Shallow Loss/Gap Revenue Coverage Example: Corn

Revenue per bu

89%
79%
Loan Rate – $1.95
Market Price

MLG
MLG/LDP

5 yr moving avg of revenues

This will be the centerpiece of the gov’t safety net [paid on planted acres x .65 or .8]
Coupled (do have to produce to receive benefits from all components now)
Crop insurance coverage

House Price Loss Coverage Example: Wheat

Revenue per bu

Reference Price – $5.50
Loan Rate – $2.94
Market Price

MLG/LDP

Paid on planted acres (not to exceed base) x .85)
Projected Wheat Outcomes

Current TPs and Senate Bill Reference Prices Used to Determine Adverse Market Payments for 2013
Future Farm Policy

- How could anyone paying attention to the farm bill process not think it will be much less important going forward – not a lot of safety in the safety net
  - Groups clamoring to reduce safety net must want agriculture left with nothing because there isn’t much there now
- IF crop insurance is not severely cut in the Farm Bill process then it will be the centerpiece in the very near future
Summary

• They will add Nutrition programs back into farm bill in conference
• I believe there to be a 50/50 chance the farm bill will be finished before the end of the calendar year
  – If not there will be pressure to do another extension and
  – There will be pressure to not do anything to assist agriculture
  – Dairy will be a problem
• To deal with less support, producers will need to understand the relationship and interaction between the commodity programs and insurance programs

Baseline ... But More Importantly Philosophical Shifts

• The reduction in Title I funding with expected increases in Title XI with SCO
• With High Participation in Insurance (and a major push to cut spending by Republicans) Title I Programs Will Provide Less of a Safety Net – Regardless of Whether the House or Senate Get Their Way
• Producers – And More Importantly Lenders Will Need to Understand the Shift in How the Government Will Deal With Risks
How to Sift Through the Options?

- Our long-term focus on farm level analysis pushes us to think more about the repercussions of policy changes on producers
- We have been successful at developing decision aids to assist with past producer decisions
- This is the most difficult yet...
  - Likely Title I choices, SCO addition, coupled with a host of options under insurance
    - Revenue, yield, trend-adjusted yields, enterprise units, optional units, etc

Overview

- Decision aid will characterize an individual producer’s net revenue distribution considering:
  - Market receipts
  - Individual Buy-up insurance – premiums and indemnities
  - Title I Option
  - Supplemental Coverage Option (SCO) – all except cotton
  - Stacked Income Protection Plan (STAX) – cotton only
Auto-generation of Scenarios and Premiums

- Each of: YP, RP, and RP-HPE...
- Each of: use SCO/STAX or not
- Each of: coverage = 0.50, 0.55, ..., 0.85
- Each of: use TA APH = yes, no (where applicable)
- Each of: unit structure = Optional, Enterprise (where applicable)
- \( \rightarrow \) at least 48 scenarios, up to ... it depends on Title I choices??

Output

- Currently just rough characterization of net revenue distributions for each scenario
  - Mean, std dev, min, max, \( E(\log(\text{net revenue})) \)
- Stochastic dominance?
- CDFs?
- Elimination of election combinations based on mean-variance criteria? Semi-variance?
- Present one “best” combination based on highest expected utility?
- Will Refine with Industry Input
Webster County, Iowa Data

<table>
<thead>
<tr>
<th>Year</th>
<th>Unit 1 Corn</th>
<th>Unit 1 Soybeans</th>
<th>Unit 2 Corn</th>
<th>Unit 2 Soybeans</th>
<th>Unit 3 Corn</th>
<th>Unit 3 Soybeans</th>
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<tbody>
<tr>
<td>2012</td>
<td>130</td>
<td>23</td>
<td>136</td>
<td>20</td>
<td>117</td>
<td>21</td>
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<tr>
<td>2011</td>
<td>185</td>
<td>51</td>
<td>187</td>
<td>44</td>
<td>187</td>
<td>46</td>
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<tr>
<td>2010</td>
<td>180</td>
<td>43</td>
<td>182</td>
<td>37</td>
<td>191</td>
<td>38</td>
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<tr>
<td>2009</td>
<td>186</td>
<td>53</td>
<td>188</td>
<td>45</td>
<td>197</td>
<td>48</td>
</tr>
<tr>
<td>2008</td>
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<td>51</td>
<td>180</td>
<td>44</td>
<td>188</td>
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<tr>
<td>2007</td>
<td>171</td>
<td>46</td>
<td>173</td>
<td>40</td>
<td>182</td>
<td>41</td>
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<tr>
<td>2006</td>
<td>176</td>
<td>47</td>
<td>178</td>
<td>41</td>
<td>187</td>
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<tr>
<td>2005</td>
<td>194</td>
<td>49</td>
<td>196</td>
<td>43</td>
<td>206</td>
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<td>2004</td>
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<tr>
<td>2003</td>
<td>176</td>
<td>46</td>
<td>178</td>
<td>40</td>
<td>187</td>
<td>41</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CCP Yield Planted Acres</th>
<th>171 40</th>
<th>175 35</th>
<th>177 42</th>
</tr>
</thead>
<tbody>
<tr>
<td>1020 680</td>
<td>1020 680</td>
<td>800 800</td>
<td></td>
</tr>
</tbody>
</table>

Risk vs. Return

- Smaller Expected Return
- Larger Expected Return
Risk vs. Return

Risk vs. Return

Expected Net Revenue (millions)

Less Risk

More Risk

5th Percentile Net Revenue (millions)

Good

Bad
## Selected Election Combinations for Corn

<table>
<thead>
<tr>
<th>Unit Structure</th>
<th>Policy Type</th>
<th>Coverage</th>
<th>TA</th>
<th>SCO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Enterprise</td>
<td>RP</td>
<td>80%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>A Enterprise</td>
<td>RP-HPE</td>
<td>85%</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

### Corn: SCO vs. No SCO

![Graph showing comparison between With SCO and Without SCO](image)

- **With SCO**
- **Without SCO**
Corn: High vs. Low Coverage Levels

Soybeans
Soybeans

Selected Election Combinations for Soybeans

<table>
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<tr>
<td>Base</td>
<td>Enterprise</td>
<td>RP</td>
<td>80%</td>
<td>No</td>
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<tr>
<td>A</td>
<td>Enterprise</td>
<td>RP-HPE</td>
<td>85%</td>
<td>Yes</td>
</tr>
<tr>
<td>B</td>
<td>Enterprise</td>
<td>RP-HPE</td>
<td>85%</td>
<td>Yes</td>
</tr>
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</table>
Soybeans: SCO vs. No SCO

Soybeans: High vs. Low Coverage Levels
Conclusions

- Regardless of When Bill is Finished There Will be a Shift from Commodity Program Tools to Manage Risk to More Insurance Tools
- Not a Problem... Just Different Than Producers and Lenders are Used to
- Major education role for Extension

Thanks!!!

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