STAX vs. SCO for Cotton Producers

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Background
Both the House and Senate farm bills include two new supplemental crop insurance programs:

- Supplemental Coverage Option (SCO)
- Stacked Income Protection Plan (STAX) for upland cotton
- Similar to a Group Risk Income Protection (GRIP) policy
New Crop Insurance Programs in the Farm Bill

- Area triggered revenue or yield insurance product to cover the deductible portion of their individual insurance policy
  - Covers county-wide losses
  - New concept to stack insurance products
- If the producer has an individual policy, supplemental policy would sit on top
Cotton

- Title I shallow loss revenue protection and price protection programs would not be available to cotton producers

- Cotton producers would have the option to purchase the supplemental insurance product
Cotton

- Adjustment for producers
  - Not required to pay a premium to participate in the Direct and Counter-Cyclical Payment (DCP) program

- Producers do not pay a premium to participate in ACRE either but few cotton producers have participated in ACRE
SCO
Senate Bill
- Not available to producers enrolled in STAX
- If enrolled in ARC: 22% deductible
- Not enrolled in ARC: 10% deductible

House Bill
- Not available for acreage enrolled in STAX or RLC
- If enrolled in PLC: 10% deductible
SCO

• Coverage cannot exceed 90% - deductible level of the individual insurance policy

• Tied to the individual yield or revenue insurance policy

  • So a producer with an individual Yield Protection (YP) policy would only have the option to purchase an SCO yield protection policy
STAX

- Similar to SCO
  - Only available to upland cotton producers
  - Revenue coverage (not revenue or yield as in SCO)
  - Can purchase as a stand-alone policy or as supplement to individual policy
  - Includes a payment rate multiplier of 80-120% for higher/lower coverage
    - Ex: if the indemnity is $25/acre and the producer chooses a protection factor of 120%, the indemnity would be $30/acre ($25*1.2)
If the producer has an individual policy, STAX would sit on top and cover losses ranging between 10% - 30% of expected county revenue.

- 70–90% coverage is available with STAX.

In the recently passed House and Senate bills, the STAX program has the same parameters.

- In an earlier version, House included a minimum STAX reference price of $0.6861/lb.
Very few cotton producers purchase GRIP policies.

In 2012, only 37 policies were sold across the U.S.

Similar to GRIP, STAX provides coverage for county-wide revenue losses.

Key difference between GRIP and STAX: producers can purchase a STAX policy and an individual insurance policy.
**Examples**

- A producer with 80% coverage on an individual policy could get up to 10% coverage under STAX

- A producer with 70% coverage on his individual policy could get up to 20% coverage with STAX

- The majority of U.S. cotton producers have 65-75% coverage on their individual policy
  - Quite a few Texas cotton producers have 50-60% coverage as well
In an earlier version of the House and Senate farm bills, the premium subsidy was closer for SCO and STAX:
- 70% for SCO and 80% for STAX

In the latest versions of the farm bill, SCO premium subsidy was reduced to 65%
STAX vs. SCO
<table>
<thead>
<tr>
<th>How are prices determined?</th>
<th>STAX</th>
<th>SCO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected Price</td>
<td>Futures price at planting</td>
<td>Futures price at planting</td>
</tr>
<tr>
<td>Harvest Price</td>
<td>Futures price at harvest</td>
<td>Futures price at harvest</td>
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<tr>
<td>Expected Price</td>
<td>Projected price</td>
<td>Projected price</td>
</tr>
<tr>
<td>How is county revenue determined?</td>
<td>STAX</td>
<td>SCO</td>
</tr>
<tr>
<td>----------------------------------</td>
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<td>-----</td>
</tr>
<tr>
<td>Expected county yield</td>
<td>Higher of: Expected county trend NASS yield or 5-year moving average county NASS yield</td>
<td>Expected county trend NASS yield</td>
</tr>
<tr>
<td>Expected county revenue</td>
<td>Expected county yield * projected price</td>
<td>Expected county yield * projected price</td>
</tr>
<tr>
<td>Final expected county revenue</td>
<td>Expected county yield * higher of: projected price or harvest price</td>
<td>Expected county yield * higher of: projected price or harvest price</td>
</tr>
<tr>
<td>Actual county revenue</td>
<td>Actual county NASS yield * harvest price</td>
<td>Actual county NASS yield * harvest price</td>
</tr>
<tr>
<td>How is farm revenue determined?</td>
<td>Expected farm revenue</td>
<td>STAX</td>
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<tr>
<td></td>
<td></td>
<td>N/A</td>
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<tr>
<td>Final expected farm revenue</td>
<td></td>
<td>N/A</td>
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<tr>
<td>Final expected farm revenue</td>
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</tr>
</tbody>
</table>

*Farm APH yield*
<table>
<thead>
<tr>
<th>How is the maximum coverage level calculated?</th>
<th>STAX</th>
<th>SCO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range of coverage</td>
<td>20% of expected county revenue subject to a 10% deductible</td>
<td>Senate: if in ARC, from individual buy-up coverage level to 78%, otherwise individual buy-up coverage level to 90%</td>
</tr>
<tr>
<td>Maximum payment</td>
<td>Range of coverage * final expected county revenue * payment</td>
<td>Range of coverage * final expected farm revenue</td>
</tr>
<tr>
<td>How is the payment calculated?</td>
<td>Percent loss</td>
<td>STAX</td>
</tr>
<tr>
<td>--------------------------------</td>
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<tr>
<td></td>
<td></td>
<td>90% - ( \frac{\text{actual county revenue}}{\text{final expected county revenue}} )</td>
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<tr>
<td></td>
<td>Payment</td>
<td>Minimum of:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maximum payment or ( (\text{percent loss} \times \text{final expected county revenue}) \times \text{payment multiplier} )</td>
</tr>
<tr>
<td>Question</td>
<td>STAX</td>
<td>SCO</td>
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<tr>
<td>----------------------------------------------------</td>
<td>-------------------------------------------</td>
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<tr>
<td>What is the premium Subsidy?</td>
<td>Government subsidy</td>
<td></td>
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<tr>
<td></td>
<td><strong>80% (producer pays 20%)</strong></td>
<td><strong>65% (producer pays 35%)</strong></td>
</tr>
<tr>
<td>What is the maximum deductible?</td>
<td>Deductible</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td><strong>Senate: 22% if in ARC, 10% if not in ARC</strong></td>
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<td></td>
<td></td>
<td><strong>House: 10%</strong></td>
</tr>
<tr>
<td>What is the payment multiplier?</td>
<td>Multiplier</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td><strong>Up to 120%</strong></td>
<td></td>
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</tbody>
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STAX/SCO vs. DCP
STAX/SCO vs. DCP

- Under the previous two farm bills, cotton producers enrolled in the DCP program and were eligible for DP’s and CCP’s

- Although ACRE was an option, few producers/landowners with cotton base acreage enrolled in ACRE
  - Lose counter-cyclical payment, 20% of direct payments, and 30% of marketing loan rates

- This was an important consideration for cotton producers as opposed to producers of some of the other crops
STAX/SCO vs. DCP

• With STAX or SCO, cotton producers will no longer receive a guaranteed payment each year and will have to pay a premium.

• However, unlike Title I commodity programs, crop insurance programs are not subject to payment limits.

• Senate bill does include a new income limitation that would affect the crop insurance subsidy amount.
Direct Payments

$/base acre

- Corn
- Grain Sorghum
- Wheat
- Cotton
- Rice
- Peanuts
- Soybeans

DP Payments
Cotton producers received a CCP payment every year (since 2002) until the 2010/11 crop year.

For most other program commodities, CCP payments have only been made one or two times between 2002 and 2012.

Wheat and soybean producers have never received a CCP payment.
County Examples
Jackson Co., OK Irrigated

$/acre

2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

STAX w/ Ref  STAX  SCO  DCP
Tillman Co., OK Irrigated

$/acre

$0
$50
$100
$150
$200
$250
$300

2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

STAX w/ Ref  STAX  SCO  DCP
Summary

- When comparing STAX to SCO, STAX generally provides more coverage
  - STAX uses the higher of the county trend yield or the 5-year moving average yield
- For many of the counties, a STAX payment would have been made in only 5 or 6 of the 10 years
Summary

- For most counties, in the years with a STAX payment, STAX performs about the same or better than DCP or SCO.

- Yields were low in 2011 but prices were high so producers did not receive a CCP payment.
• Producers would receive more payments under the DCP program than under the STAX or SCO programs

• Under STAX and SCO, payments vary from year to year and producers can expect years with no STAX or SCO payments

• STAX and SCO payments vary for each county and for irrigated and non-irrigated cotton
A simple linear trend yield was used for the expected county yield.

Actual NASS trend yield incorporates additional factors.

Premium estimates for STAX and SCO were not included.

Producers will need to examine the interactions between STAX/SCO and their individual buy-up coverage.

Producers may want to lower the coverage level of their individual policy and purchase a higher coverage level with STAX/SCO.