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Invited Paper prepared for presentation at the International Agricultural Trade Research Consortium's (IATRC's) 2018 Annual Meeting: Interlinkages among Global Value Chains, Trade, and Transformation of the AgriFood Industry, July 25-27, 2018, Whistler, BC, Canada.

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# Effects of the **Bipartisan Budget Act** on U.S. Upland Cotton

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# Background on U.S. upland cotton policy

- 2008 farm bill
  - Direct and Countercyclical Payments (DCP)
  - ACRE
  - Marketing loans
  - Regular crop insurance

#### • WTO dispute

- WTO panel convened in 2003 to hear case brought by Brazil against US over programs
- WTO ruled against U.S. in 2005 and 2008
- In 2009, agreement between U.S. and Brazil signed to avert counter-measures
  - U.S. made monthly payments to the Brazil Cotton Institute
  - U.S. farm programs temporarily continued



# 2014 farm bill

#### Termination of WTO case

- \$300 million settlement to BCI
- Changes to export credits
- Changes in U.S. cotton programs

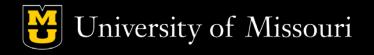
#### U.S. cotton programs

- Upland cotton not eligible for ARC or PLC
- Cotton base acres become generic base acres
- Retains marketing loan program
- Option of Supplemental Coverage Option (SCO) or
- Stacked Income Protection (STAX)
- Transition payments for 2014



#### STAX

- Area-based insurance for range between up to 90% and higher of individual coverage level or 70%, specified in increments of 5%
- Individual policies do not effect eligibility
- Operates at the county level
- 80% subsidized
- Option of "protection factor" of up to 120%
- Started in 2015

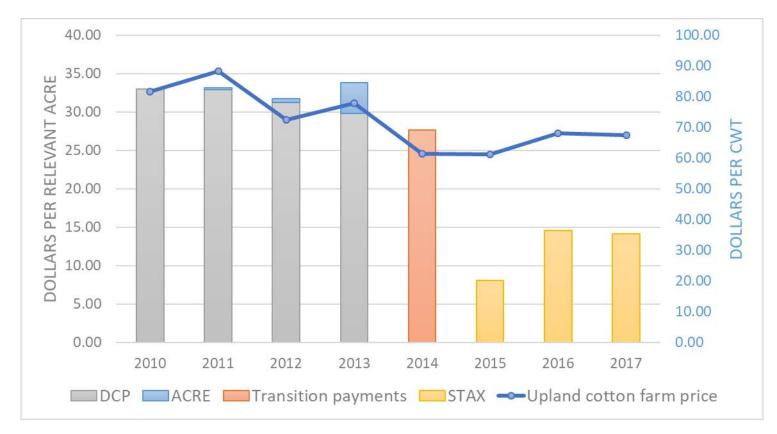


#### **STAX enrollment**

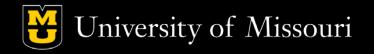




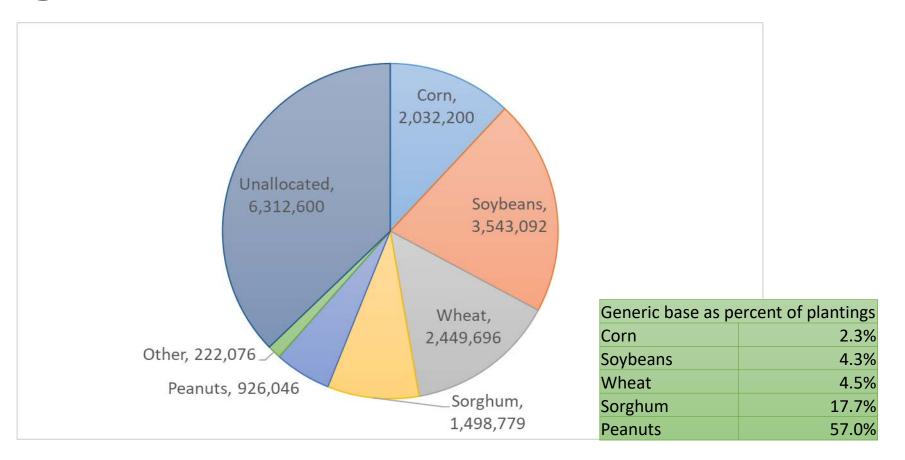
#### Net benefits to upland cotton



#### STAX is per participating acre



#### 2015 generic base acres





### Seed cotton

- "Unginned upland cotton that includes both lint and seed"
- Added as covered commodity in the Bipartisan Budget Act of 2018
- Effective price =  $\frac{P_L Y_L + P_S Y_S}{Y_L + Y_S}$ 
  - $P_L$  and  $P_S$  are the price of the lint and seed, respectively, in dollars per pounds
  - $Y_L$  and  $Y_S$  are the U.S. total production of lint and seed, respectively, pounds



# **Seed cotton policies**

- Seed cotton eligible for choice of PLC or ARC
  - Enrolling in one eliminates STAX as an option (starting in 2019)
- Reference price = \$.367 per pound
- Payment yield = 2.4 x updated upland cotton payment yield
- Base acres = option of...
  - Average seed cotton plantings + prevented plantings for 2009-2012
    - Limited between bounds of 80% to 100% of generic base
  - Reallocate all base acres based on 2009-2012 years
- Deemed loan rate = \$.25 per pound



### **FAPRI-MU stochastic models**

- Covers many U.S. crops, livestock, dairy, biofuels, farm income and government costs
- Exports represented by reduced form equations
- Projects 10 years
- Over 2,000 equations
- 500 Monte Carlo draws from error terms for some equations and some key inputs
- Baseline prepared from January to March



#### **Seed cotton prices**





# Modeling assumptions

- 99% of upland cotton producers choose PLC
  - No one chooses STAX starting in 2018

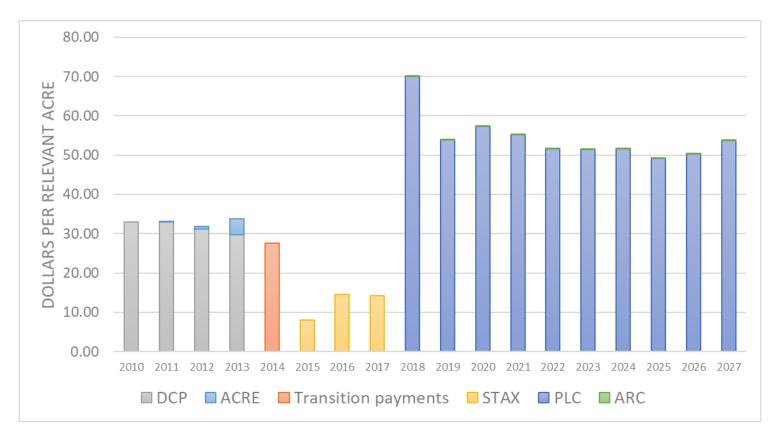
#### Generic base reallocation:

- 13 million to seed cotton
- .4 million to corn
- 1.2 million to soybeans
- -.1 million to sorghum

• National payment yield of 1,632 lbs per acre (680 x 2.4)



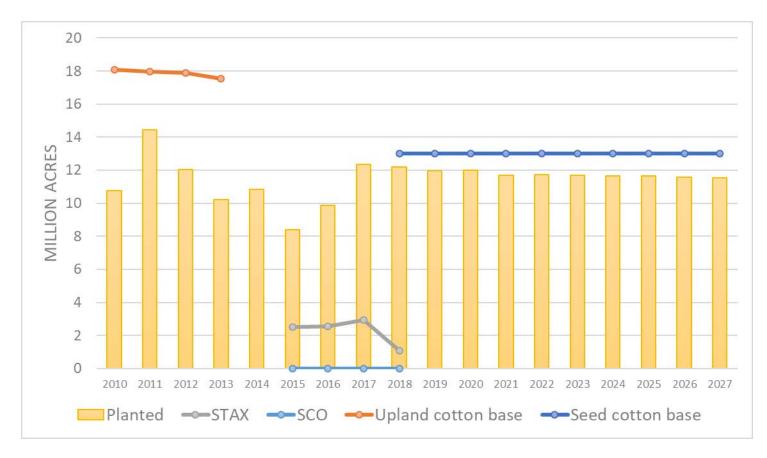
#### Net benefits to upland cotton



STAX is per participating acre, PLC and ARC are for seed cotton

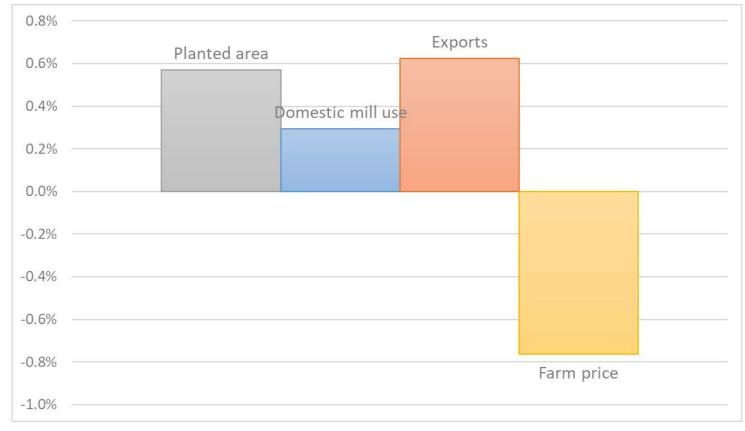


#### **Base has changed**

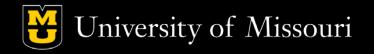




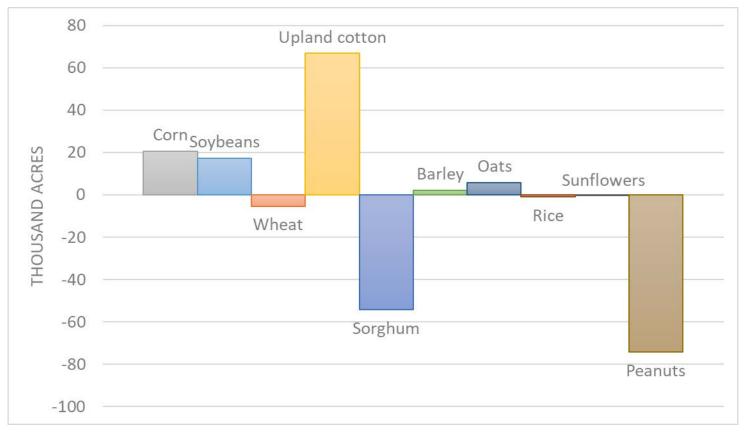
#### **Cotton results**



#### 2018-2027 average



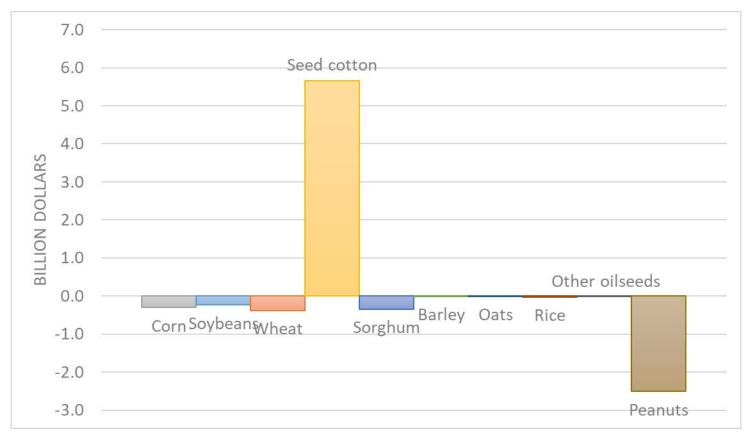
#### Changes in planted area



<sup>2018-2027</sup> average



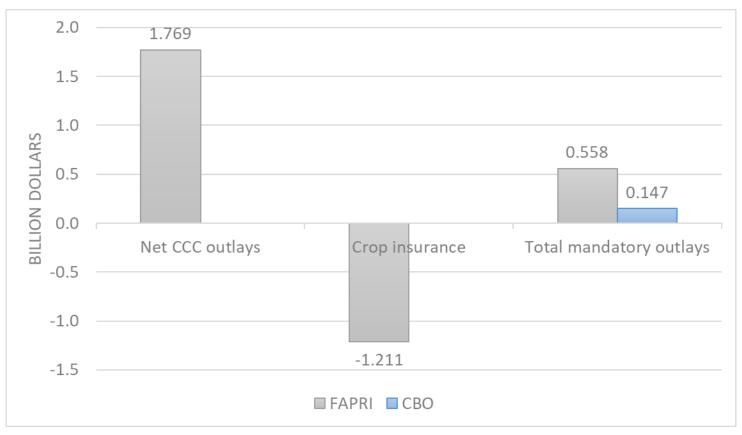
### Change in mandatory outlays



#### 2018-2027 totals, Title I only



#### Change in mandatory outlays



2018-2027 totals



# Summary

- Minimal changes in upland cotton supply and use
- Less coupling of payments
- Peanut planted area falls
- Cotton receives more support than before, but less coupled
- Crop insurance costs fall
- Thanks!



