



DIVISION OF AGRICULTURE
RESEARCH & EXTENSION

University of Arkansas System

Farm Bill Update

Eric J. Wailes, K. Bradley Watkins, and Vuko Karov

Department of Agricultural Economics & Agribusiness

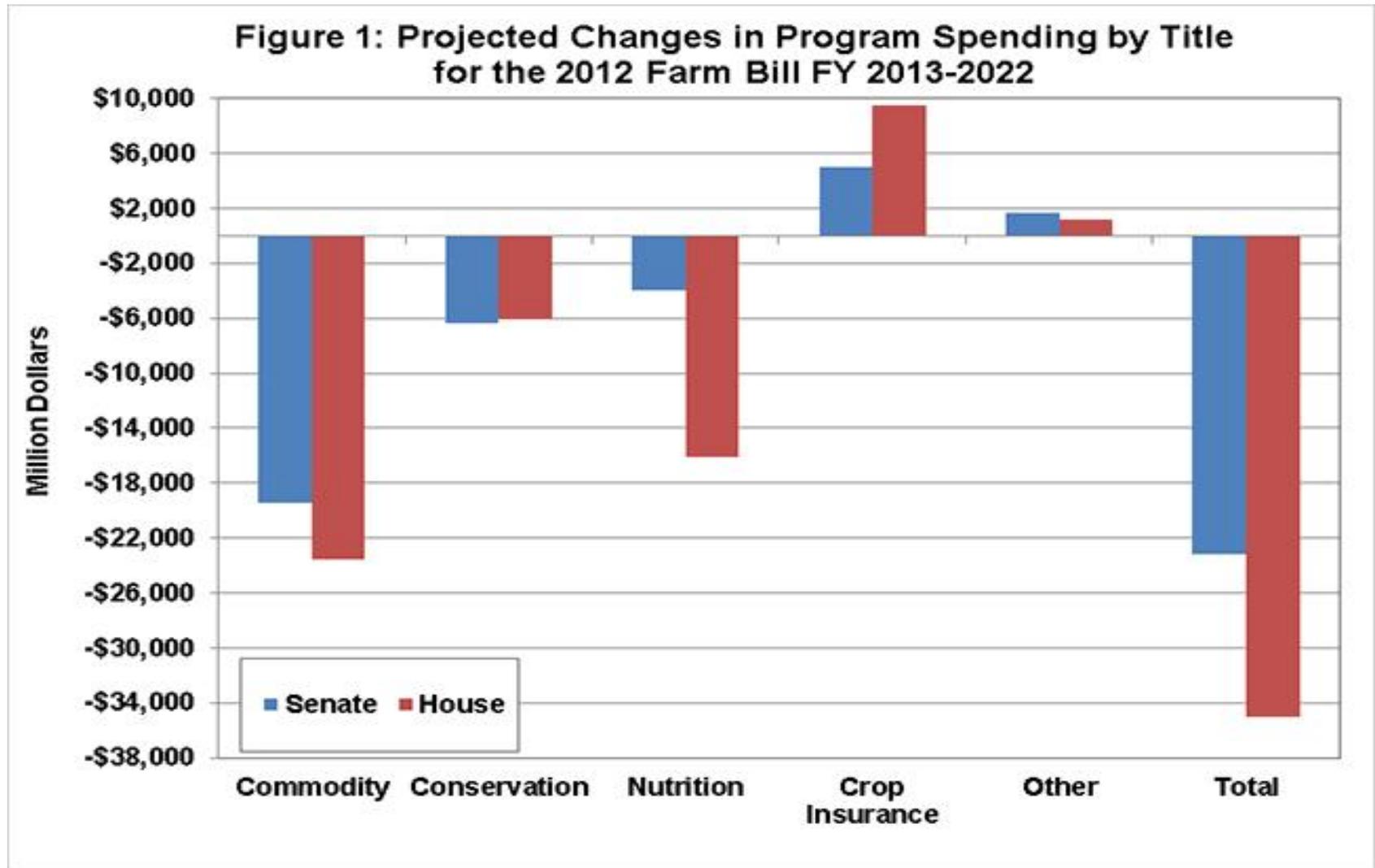
University of Arkansas Division of Agriculture

2012 Arkansas Rice Expo - August 3, 2012
Grand Prairie Center (10 am – Classroom C)

2012 Farm Bill proposals

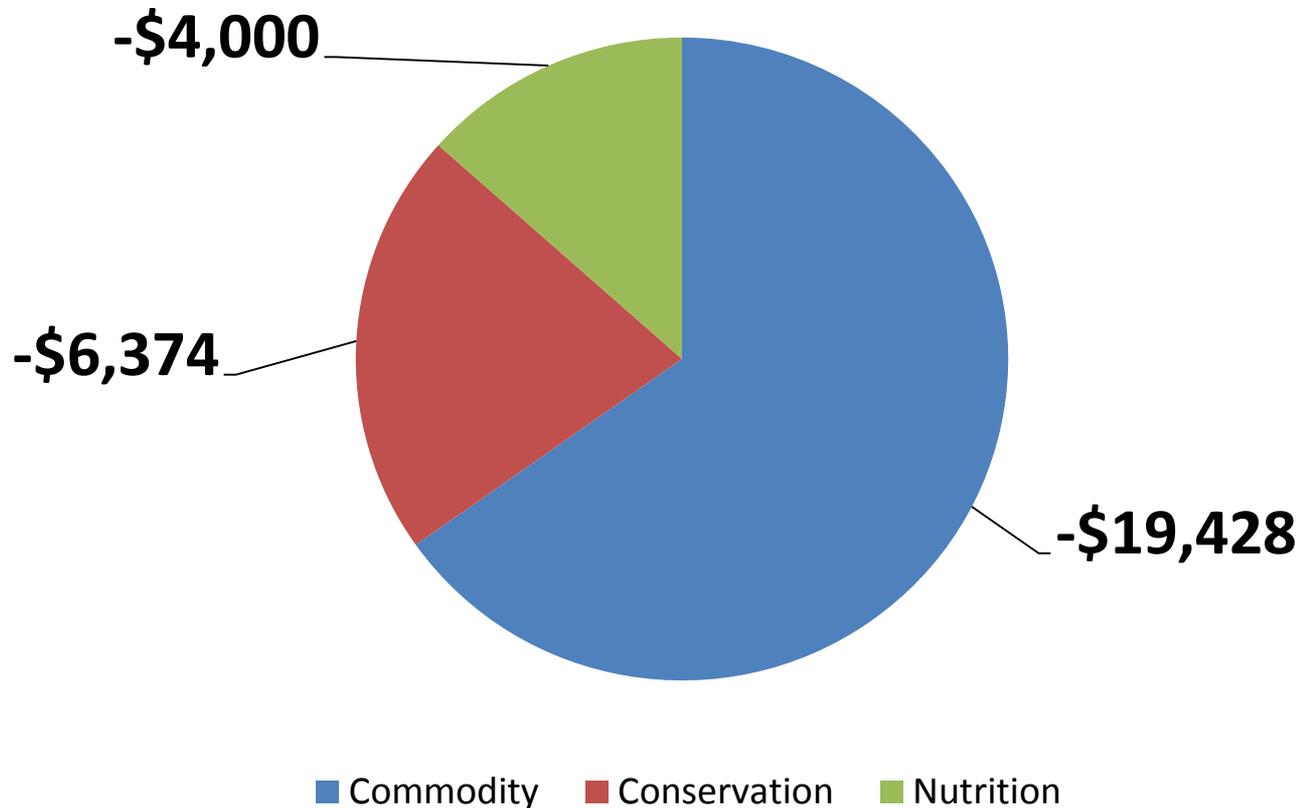
- **S. 3240 Agriculture Reform, Food, and Jobs Act of 2012**
- **H.R. 6083 Federal Agriculture Reform and Risk Management (FARRM) Act of 2012**
- **There will be a bill--but when?**
- **Process is in LIMBO!!**
 - **Addressing disaster assistance**
 - **1-year extension?**
 - **Wait for lame-duck session?**

Funding Comparison to March Baseline



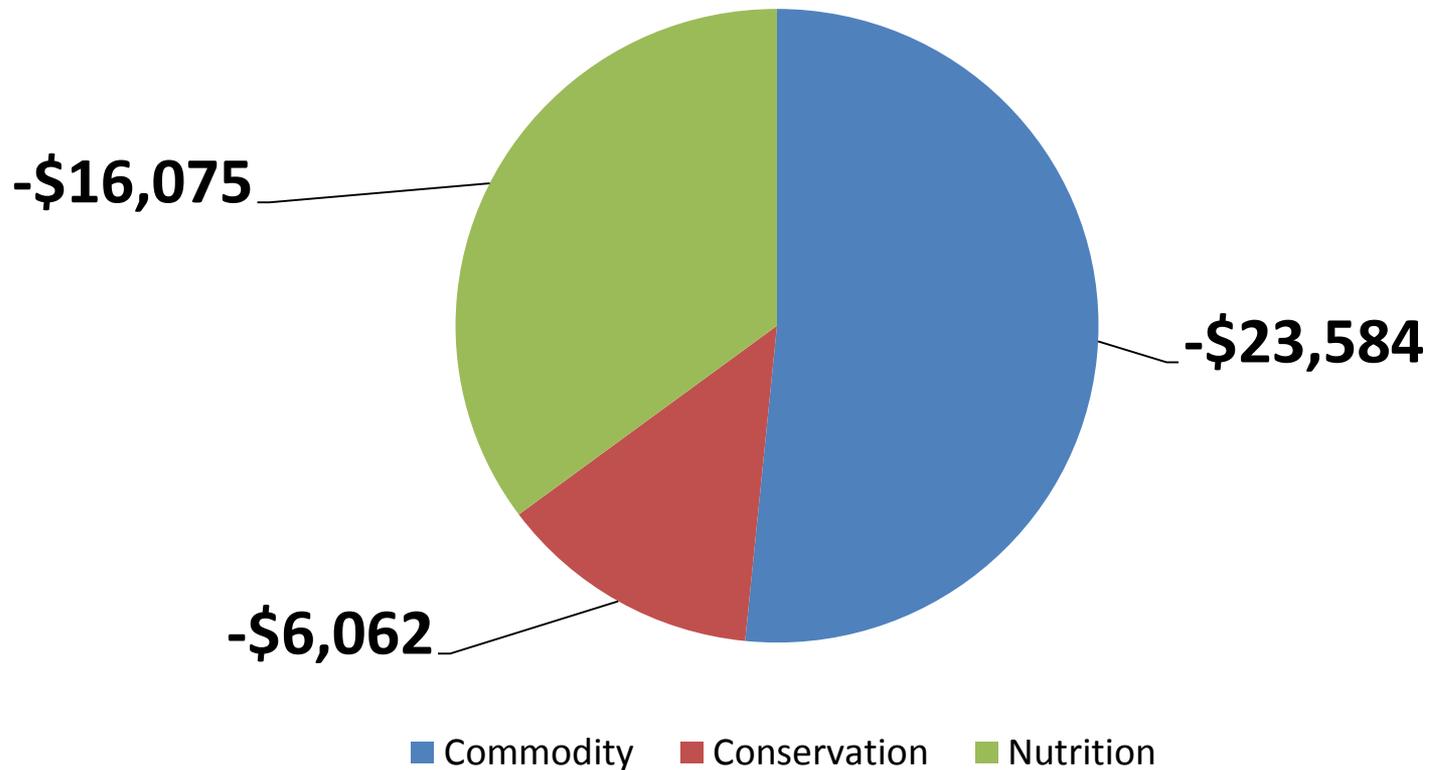
Funding Comparison

**Figure 2. Projected Cuts (Million \$) to Commodity, Conservation, and Nutrition Titles in the Senate's 2012 Farm Bill (2013-2022)
S. 3240**



Funding Comparison Cont'd

**Figure 3. Projected Cuts (Million \$) to Commodity, Conservation, and Nutrition Titles in the House Committee's 2012 Farm Bill (2013-2022)
H.R. 6083**



S. 3240 Agriculture Reform, Food, and Jobs Act of 2012

- Passed June 21, 2012 (Vote: 64-35)

NEW and Retained PROGRAMS

- **Title I: Commodities**

1. Agriculture Risk Coverage (ARC)
2. Loan-Deficiency Payments (LDPs)

- **Title XI: Crop Insurance**

1. Supplemental Coverage Option (SCO)
2. Stacked Income Protection Plan for Producers of Upland Cotton (STAX)

- **PROGRAMS ELIMINATED**

- ✓ Direct payments (DPs),
- ✓ counter-cyclical payments (CCPs), and
- ✓ Average Crop Revenue Election (ACRE)

- **OPPOSITION BY THE SOUTH**

- The bill was opposed by southern state Senators who viewed the bill as unfair to southern commodities, relative to mid-west commodities.

H.R. 6083 Federal Agriculture Reform and Risk Management (FARRM) Act of 2012

- Passed House Ag Committee July 12, 2012 (Vote: 35-11)

NEW AND RETAINED PROGRAMS

- **Title I: Commodities**

1. Price Loss Coverage (PLC)
2. Revenue Loss Coverage (RLC)
3. Loan-Deficiency Payments (LDPs)

- **Title XI: Crop Insurance**

1. Supplemental Coverage Option (SCO)
2. Stacked Income Protection Plan for Producers of Upland Cotton (STAX)

- **PROGRAMS ELIMINATED**

- ✓ Direct payments (DPs),
- ✓ Counter-cyclical payments (CCPs), and
- ✓ Average Crop Revenue Election (ACRE)

- **SUPPORT BY THE SOUTH**

- As the following CBO scores show, H.R. 6083 treats southern commodities more equitably

CBO Projected Spending, 2013-2022, (Million \$)

Commodity	March 2012 Baseline	Senate bill	% change	House bill	% change
Corn	\$22,179	\$16,639	-25	\$11,148	-50
Soybeans	\$7,618	\$9,133	+20	\$6,109	-20
Wheat	\$11,131	\$4,403	-60	\$5,683	-49
Cotton/STAX	\$6,843	\$3,990	-42	\$4,666	-32
Rice	\$4,336	\$1,282	-70	\$3,261	-25
Peanuts	\$1,013	\$590	-42	\$1,200	18
Sorghum	\$2,038	\$1,553	-24	\$1,017	-50
Barley	\$852	\$214	-75	\$714	-16

Key Differences

- Shallow revenue losses approach
- Senate – Agriculture Risk Coverage (ARC) uses a flex price—support changes with market prices, interestingly as price declines, the safety net support declines.
- House – Price Loss Coverage (PLC) or Revenue Loss Coverage (RLC) uses a fixed price, support remains tied to a “reference price”

Key Differences

Provision	ARC-Individual	ARC-County	PLC	RLC
Revenue Guarantee	Starts at 89% of 5-year Olympic Average	Starts at 89% of 5-year Olympic Average	N/A	Starts at 85% of 5-year Olympic Average
Payment acres	65% of planted	80% of planted	85% of planted	85% of planted
Payment band	10% (89% -79%)	10% (89% -79%)	N/A	10% (85% -75%)
Reference Price	Only for rice and peanuts	Only for rice and peanuts	For all commodities	For all commodities
Yield update	N/A	N/A	Yes	N/A
Options	Can opt out for SCO with coverage up to 90%, otherwise max SCO 79%	Can opt out for SCO with coverage up to 90%, otherwise max SCO 79%	Can add SCO coverage up to 90%	Can opt out for SCO coverage
Pay Limit	\$50,000/person	\$50,000/person	\$125,000/person	\$125,000/person
AGI Limit	\$750,000	\$750,000	\$950,000	\$950,000

2013 Farm Bill Variables

Crop	Unit	Loan Rate	Reference Price
Long-Grain Rice	\$/cwt	6.50	13.00/14.00
Medium-Grain Rice	\$/cwt	6.50	13.00/14.00
Soybeans	\$/bu	5.00	8.40
Wheat	\$/bu	2.94	5.50
Corn	\$/bu	1.95	3.70
Upland Cotton	\$/lbs	1/	2/

1/ The cotton loan rate is based on a 2-year simple average of the adjusted world cotton price for the immediately preceding years, and must fall in the range of \$0.47-\$0.52/lbs.

2/ For the STAX program, the House bill establishes a \$0.6861/lbs reference price for upland cotton.

Arkansas Representative Panel Farm Analysis

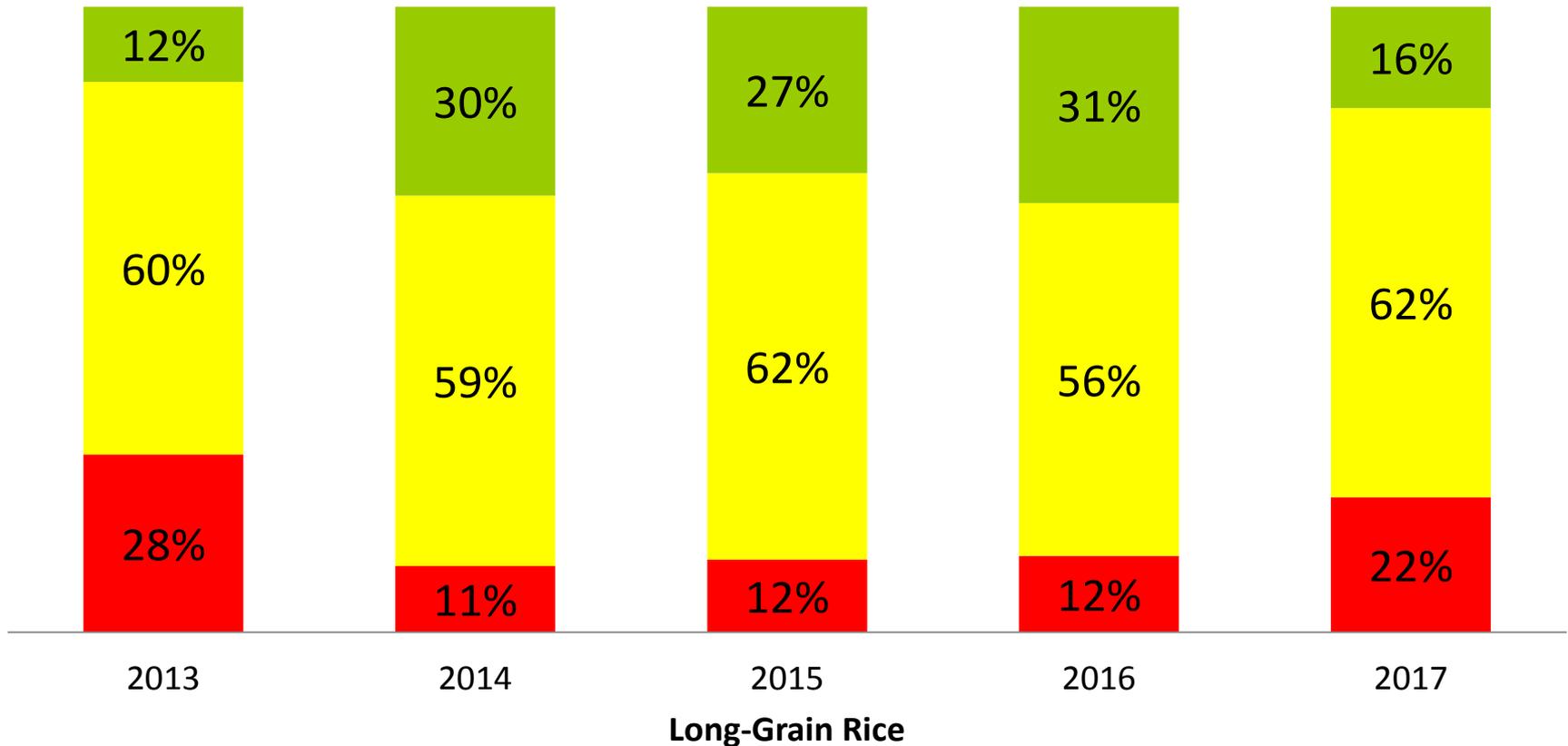
- Stochastic simulation of farm-related variables:
 - national and world crop prices;
 - projected and harvest crop prices (futures market);
 - farm and county-specific crop yields.
- 500 iterations per variable per year
- Data sources: FAPRI-MU; USDA/ERS; USDA/NASS; Arkansas representative panel farm interviews

Arkansas Representative Panel Farms Cont'd

Name	ARWR1400	ARHR3000	ARHR3240	ARNC5000	ARC7500
Location	Wynne	Hoxie	Stuttgart	Leachville	McGehee
County	Cross	Lawrence	Arkansas	Mississippi	Desha
Acres - Owned	420	1,000	648	1,000	1,200
Acres - Crop Share Lease	490	1,500	1,552	3,200	5,985
Acres - Cash Lease	490	500	1,040	800	315
Total Acres	1,400	3,000	3,240	5,000	7,500
Rice	700	1,450	1,620	0	1,875
Long-Grain	700	1,300	1,620	0	1,875
Medium-Grain	0	150	0	0	0
Soybeans	700	1,250	1,296	0	1,625
Cotton	0	0	0	5,000	1,500
Corn	0	300	0	0	1,500
Wheat	0	0	324	0	1,000

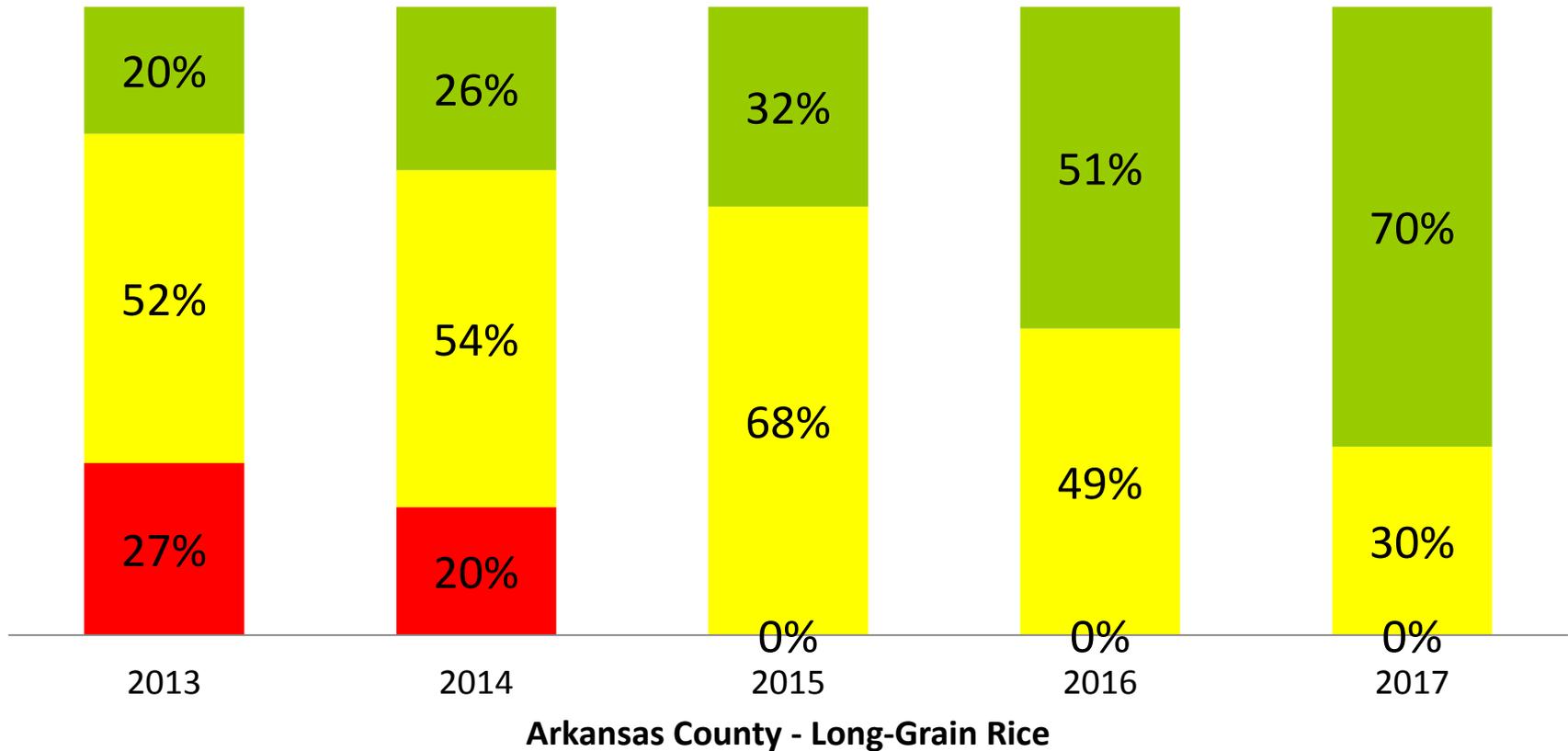
Stochastic Results: National Crop Prices

■ <\$10/cwt ■ \$10-\$14/cwt ■ >\$14/cwt



Stochastic Results: County Yields

■ <70 cwt/acre ■ 70 cwt-73 cwt/acre ■ >73 cwt/acre



Shallow Loss Comparison: Senate vs. House Results*

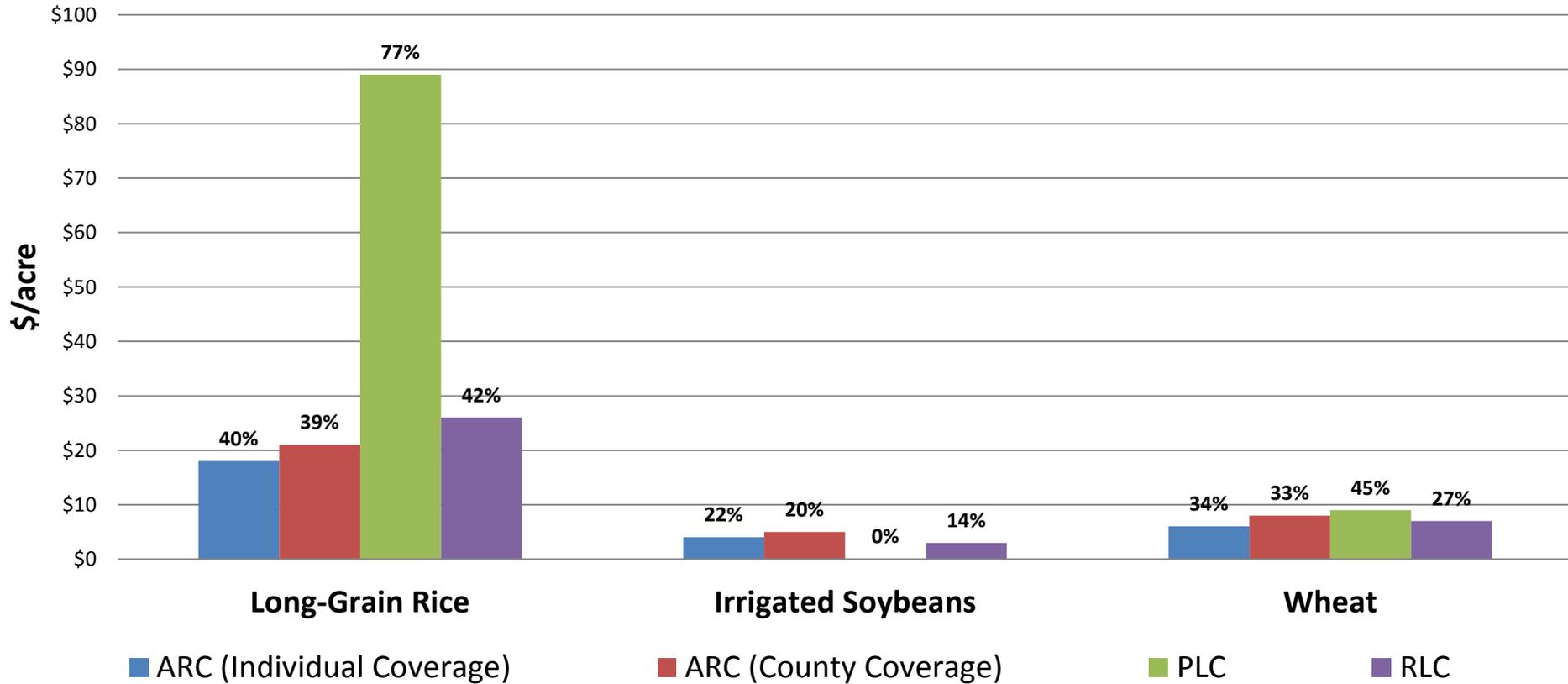
Stuttgart (Senate - ARC)			
	LG Rice	Irr Soyb	Wheat
Individual			
Pay/acre	\$18	\$4	\$6
Prob.	40%	22%	34%
County			
Pay/acre	\$21	\$5	\$8
Prob.	39%	20%	33%

Stuttgart (House - PLC and RLC)			
	LG Rice	Irr Soyb	Wheat
PLC			
Pay/acre	\$89	\$0	\$9
Prob.	77%	0%	45%
RLC			
Pay/acre	\$26	\$3	\$7
Prob.	42%	14%	27%

* Average annual (2013-2017) estimated payments per planted acre (in U.S. \$) and probabilities of receiving a payment (in %)

Shallow Loss Comparison: Senate vs. House Results*

Stuttgart



* Average annual (2013-2017) estimated payments per planted acre (in U.S. \$) and probabilities of receiving a payment (in %)

Shallow Loss Comparison: Senate vs. House Results*

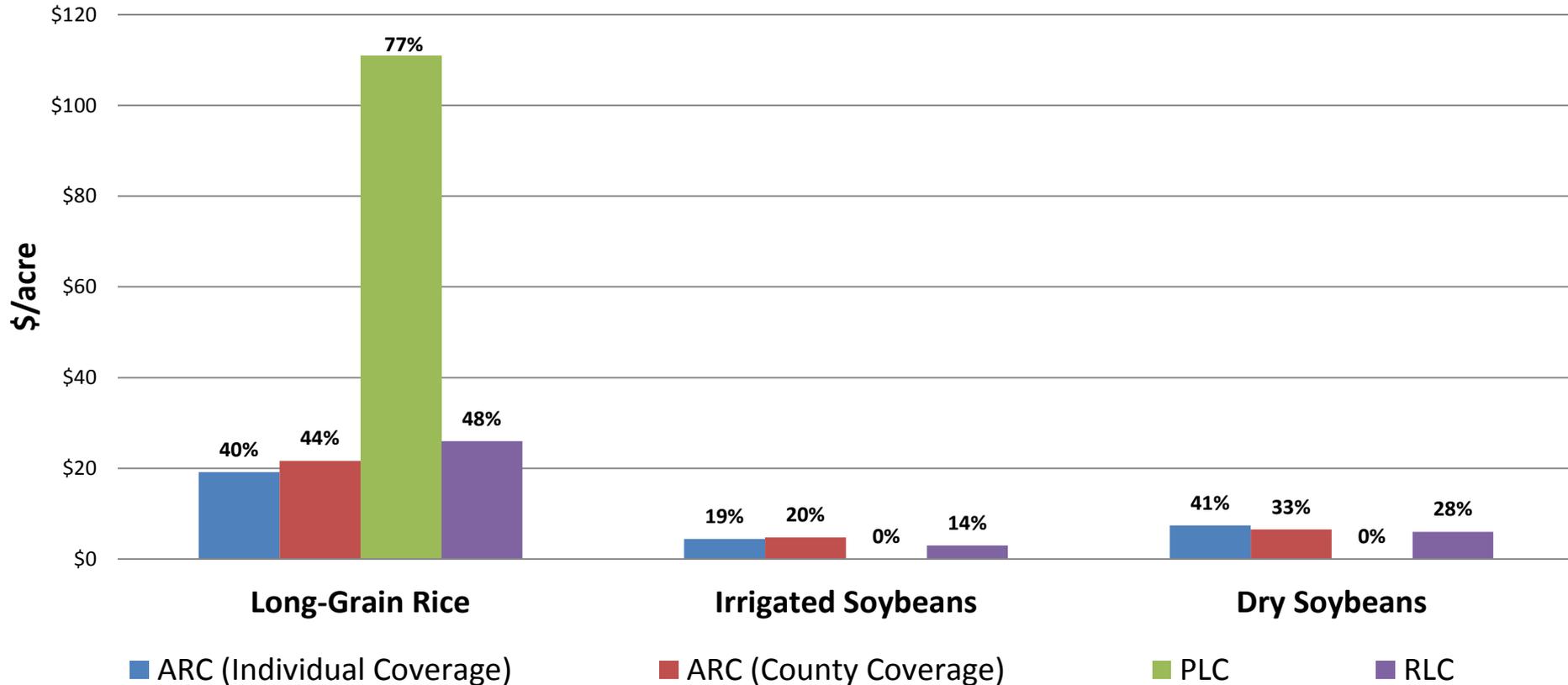
Wynne (Senate - ARC)			
	LG Rice	Irr Soyb	Dry Soyb
Individual			
Pay/acre	\$19	\$4	\$7
Prob.	40%	19%	41%
County			
Pay/acre	\$22	\$5	\$7
Prob.	44%	20%	33%

Wynne (House - PLC and RLC)			
	LG Rice	Irr Soyb	Dry Soyb
PLC			
Pay/acre	\$111	\$0	\$0
Prob.	77%	0%	0%
RLC			
Pay/acre	\$26	\$3	\$6
Prob.	48%	14%	28%

* Average annual (2013-2017) estimated payments per planted acre (in U.S. \$) and probabilities of receiving a payment (in %)

Shallow Loss Comparison: Senate vs. House Results*

Wynne



* Average annual (2013-2017) estimated payments per planted acre (in U.S. \$) and probabilities of receiving a payment (in %)

Shallow Loss Comparison: Senate vs. House Results*

Hoxie (Senate - ARC)

LG Rice MG Rice Irr Soy Dry Soy Corn

Individ

Pay/acre	\$16	\$15	\$7	\$5	\$14
Prob.	36%	26%	26%	37%	32%

County

Pay/acre	\$18	\$16	\$3	\$5	\$16
Prob.	39%	25%	18%	31%	27%

Hoxie (House - PLC and RLC)

LG Rice MG Rice Irr Soy Dry Soy Corn

PLC

Pay/acre	\$97	\$1	\$0	\$0	\$4
Prob.	77%	6%	0%	0%	13%

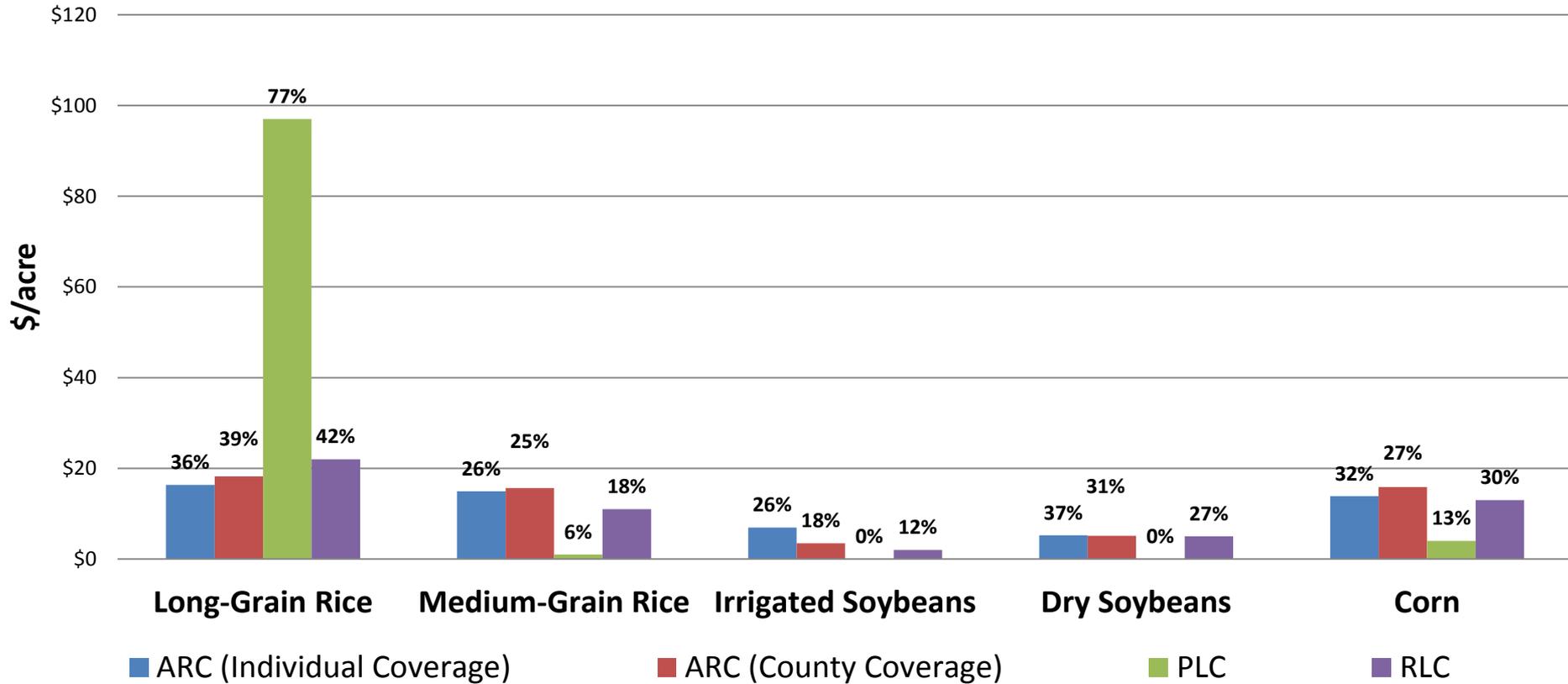
RLC

Pay/acre	\$22	\$11	\$2	\$5	\$13
Prob.	42%	18%	12%	27%	30%

* Average annual (2013-2017) estimated payments per planted acre (in U.S. \$) and probabilities of receiving a payment (in %)

Shallow Loss Comparison: Senate vs. House Results*

Hoxie



* Average annual (2013-2017) estimated payments per planted acre (in U.S. \$) and probabilities of receiving a payment (in %)

Shallow Loss Comparison: Senate vs. House Results*

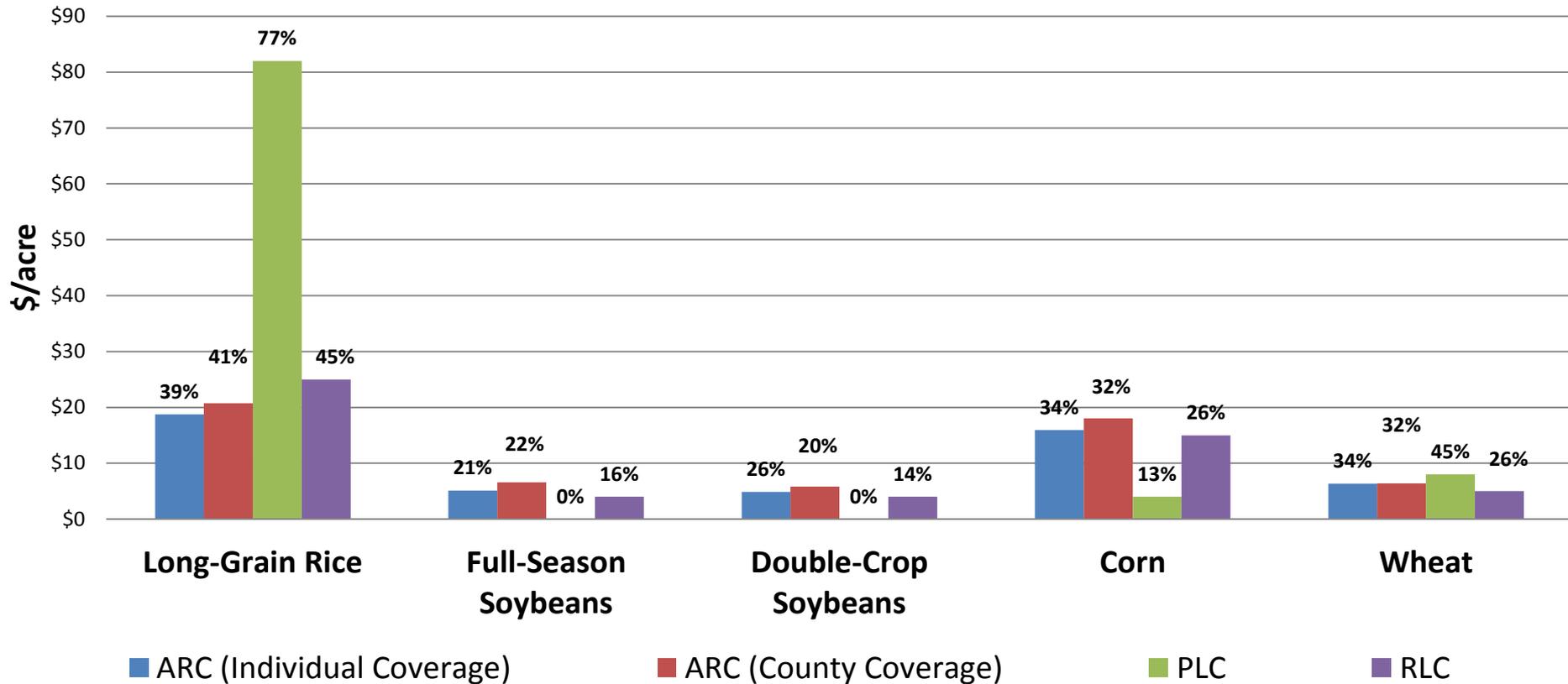
McGehee (Senate - ARC)					
	LG Rice	FS Soy	DC Soy	Corn	Wheat
Individ.					
Pay/acre	\$19	\$5	\$5	\$16	\$6
Prob.	39%	21%	26%	34%	34%
County					
Pay/acre	\$21	\$7	\$6	\$18	\$6
Prob.	41%	22%	20%	32%	32%

McGehee (House - PLC and RLC)					
	LG Rice	FS Soy	DC Soy	Corn	Wheat
PLC					
Pay/acre	\$82	\$0	\$0	\$4	\$8
Prob.	77%	0%	0%	13%	45%
RLC					
Pay/acre	\$25	\$4	\$4	\$15	\$5
Prob.	45%	16%	14%	26%	26%

* Average annual (2013-2017) estimated payments per planted acre (in U.S. \$) and probabilities of receiving a payment (in %)

Shallow Loss Comparison: Senate vs. House Results*

McGehee



* Average annual (2013-2017) estimated payments per planted acre (in U.S. \$) and probabilities of receiving a payment (in %)

Stochastic Results - STAX

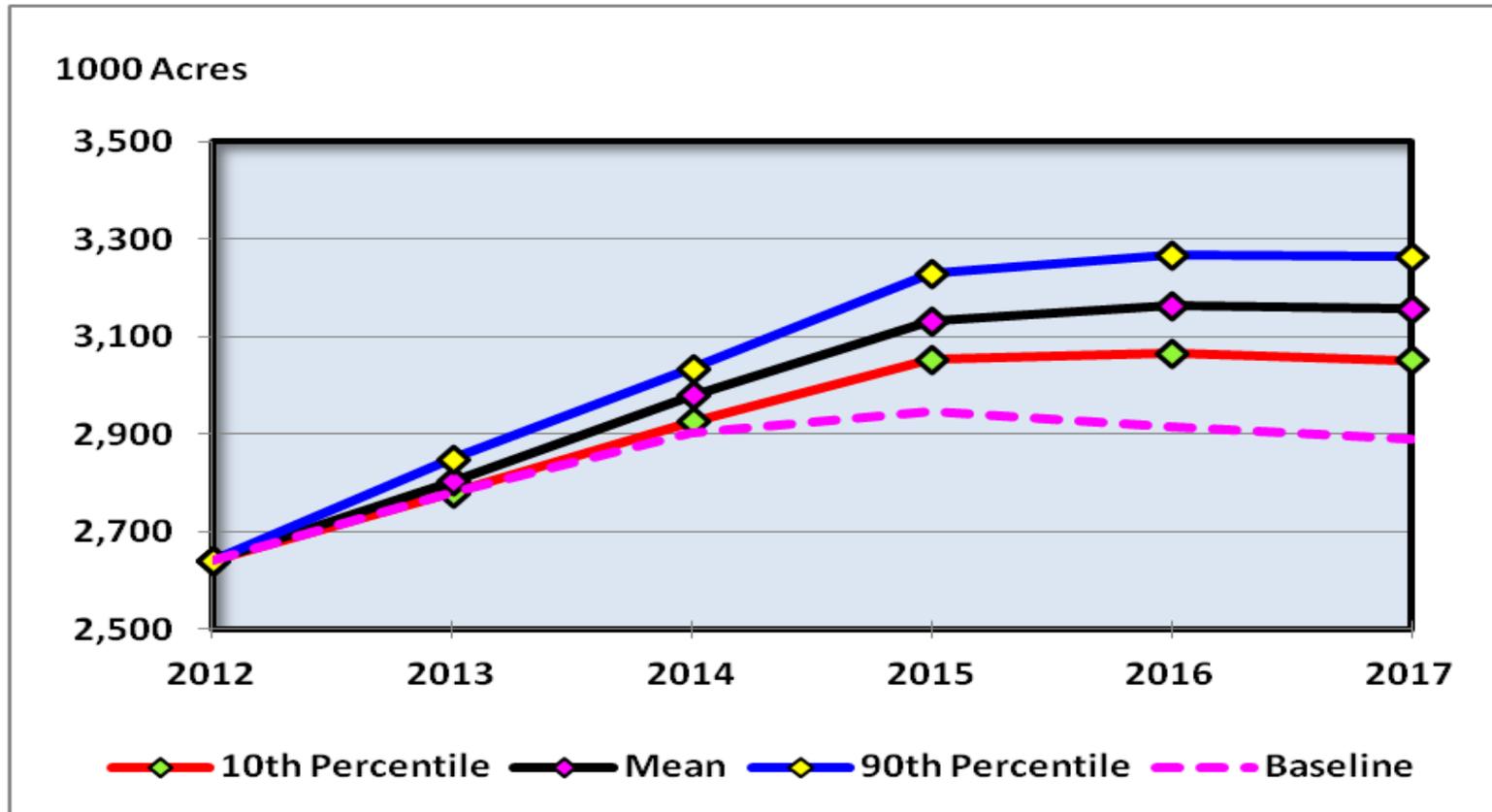
	<u>Leachville</u>		<u>McGehee</u>
Revenue Guarantee	Irrigated Cotton	Dryland Cotton	Irrigated Cotton
	<i>Annual Average (2013-2017) Indemnity Payments Per Planted Acre (in U.S. \$)</i>		
70	40	32	41
80	68	53	68
90	99	76	98
	<i>Annual Average (2013-2017) Probabilities of an Indemnity Payment (in %)</i>		
70	32	32	35
80	46	47	52
90	67	66	68

note: A protection factor of 120 is assumed.

Summary of Safety Net Options

- Comparisons of Senate and House bills
 - ❖ Common features are elimination of Direct and Countercyclical Payments (DCP) and ACRE programs, retain Loan Deficiency Payment Program
 - ❖ Senate: Agriculture Risk Coverage (ARC), Stacked Income Protection Plan (STAX), and Supplemental Coverage Option (SCO); Payment limit on ARC = \$50,000/person; AGI=\$750,000
 - ❖ House: Price Loss Coverage (PLC) or Revenue Loss Coverage (RLC), Stacked Income Protection Plan (STAX), and Supplemental Coverage Option (SCO); Payment limit on PLC+RLC = \$125,000/person; AGI = \$950,000

AGRM model results for Rice Acreage



Implications for Arkansas Rice Producers

- House bill provides a significantly stronger safety net overall
- For long grain rice, PLC provides a relatively good price safety net with payments 77% of the time in a range of \$82 to \$111/acre, and it also allows for SCO coverage up to 90% for an average expected indemnity payment of \$8-10/acre

Questions?

Thank you for your time and attention

PLC Program Overview

- Similar to the CCPs program
- Payment is received if the EFFECTIVE PRICE is lower than the REFERENCE PRICE (\$14/cwt for rice)
- The EFFECTIVE PRICE is the higher of the NATIONAL LOAN RATE (\$6.50/cwt for rice) and the 5-MONTH AVERAGE MID-SEASON PRICE (August-December for rice)
- The PAYMENT RATE is the difference between the REFERENCE PRICE and the EFFECTIVE PRICE

PLC Program Overview Cont'd

- The PAYMENT AMOUNT is the product of the PAYMENT RATE, the PAYMENT YIELD, and the PAYMENT ACRES
- PAYMENT YIELD is established under the CCP Program of the 2002 and 2008 Farm Bills
- PAYMENT ACRES=85% of the total planted acres (total farm PAYMENT ACRES cannot exceed total farm BASE ACRES including cotton BASE ACRES) and 30% of the approved total acres prevented from being planted

PLC Program Overview Cont'd

- Producers can update the PAYMENT YIELD for a crop to 90% of the five year (2008-2012) planted acres average excluding years in which the planted acreage was zero
- For any of the five years 2008-2012, a plug of 75% of the average county yield can replace the yield on the farm if it is lower than this value
- Payment limit=\$125,000/person (\$250,000/household) and AGI limit=\$950,000

RLC Program Overview

- Similar to the ARC program
- Payment limit=\$125,000/person (\$250,000/household) and AGI limit=\$950,000
- Payment is received if the ACTUAL COUNTY REVENUE is lower than the COUNTY REVENUE LOSS COVERAGE TRIGGER
- ACTUAL COUNTY REVENUE is equal to the product of the ACTUAL COUNTY YIELD and the higher of the MID-SEASON PRICE and the NATIONAL AVERAGE LOAN RATE
- COUNTY REVENUE LOSS COVERAGE TRIGGER is equal to 85% of the BENCHMARK COUNTY REVENUE

RLC Program Overview Cont'd

- The BENCHMARK COUNTY REVENUE is equal to the product of the 5-year Olympic average of the AVERAGE HISTORICAL COUNTY YIELDS and the 5-year Olympic average of the AVERAGE NATIONAL MARKETING YEAR AVERAGE PRICE, where:
 - the AVERAGE NATIONAL MARKETING YEAR AVERAGE PRICE for any of the 5 years cannot be lower than the REFERENCE PRICE
 - the AVERAGE HISTORICAL COUNTY YIELD for any of the 5 years cannot be lower than 70% of the TRANSITIONAL YIELD

RLC Program Overview Cont'd

- The PAYMENT RATE is the lower of:
 - a) the difference between the COUNTY REVENUE LOSS COVERAGE TRIGGER and the ACTUAL COUNTY REVENUE
 - b) 10% of the BENCHMARK COUNTY REVENUE
- The PAYMENT AMMOUNT is equal to the product of the PAYMENT RATE and the PAYMENT ACRES
- PAYMENT ACRES=85% of the total planted acres (total farm PAYMENT ACRES cannot exceed total farm BASE ACRES including cotton BASE ACRES) and 30% of the approved total acres prevented from being planted (same rule as in the PLC program)

ARC Program Overview

- In 2013 producers make a one-time irrevocable decision to receive:
 - a) an individual coverage
 - b) a county coverage
- ARC payments are received if: the actual crop revenue for the crop year for the covered commodity is less than the agriculture risk coverage guarantee for the crop year for the covered commodity.
- The AGRICULTURE RISK COVERAGE GUARANTEE for a crop year for a covered commodity shall equal 89 percent of the benchmark revenue.

ARC Program Overview Cont'd

- The ACTUAL CROP REVENUE for a crop year of a covered commodity is equal to the product of:
 - (A)(i) in the case of individual coverage, the actual average individual yield for the covered commodity, as determined by the Secretary; or (ii) in the case of county coverage, the actual average yield for the county for the covered commodity, as determined by the Secretary; and
 - (B) the higher of: (i) the midseason price; or (ii) if applicable, the national marketing assistance loan rate for the covered commodity.

ARC Program Overview Cont'd

- The BENCHMARK REVENUE is the product of:
 - (I)(aa) in the case of individual coverage, the average individual yield, for the most recent 5 crop years, excluding each of the crop years with the highest and lowest yields; or (bb) in the case of county coverage, the average county yield for the most recent 5 crop years, excluding each of the crop years with the highest and lowest yields; and
 - (II) the average national marketing year average price for the most recent 5 crop years, excluding each of the crop years with the highest and lowest prices.
 - Includes a minimum price benchmark for long and medium-grain rice of \$13.00/cwt for any of these five years (as well as \$530/ton for peanuts)

ARC Program Overview Cont'd

- Separate actual crop revenue and agriculture risk coverage guarantee for irrigated and non-irrigated covered commodities are calculated in the program
- The PAYMENT RATE is equal to the lesser of:
 - (A) the amount that (i) the agriculture risk coverage guarantee for the covered commodity; exceeds (ii) the actual crop revenue for the crop year of the covered commodity; or
 - (B) 10 percent of the benchmark revenue for the crop year of the covered commodity.
- The PAYMENT AMMOUNT is the product of:
 - (A) the payment rate; and

ARC Program Overview Cont'd

- (B)(i) in the case of individual coverage the sum of: (I) 65 percent of the planted eligible acres of the covered commodity; and (II) 45 percent of the eligible acres that were prevented from being planted to the covered commodity; or
(ii) in the case of county coverage: (I) 80 percent of the planted eligible acres of the covered commodity; and (II) 45 percent of the eligible acres that were prevented from being planted to the covered commodity.
- When calculating the benchmark revenue under an individual coverage, the average individual yield for any of the 5 most recent years (starting in 2013) cannot be lower than 70% of the TRANSITIONAL YIELD
- Payment limit=\$50,000/person (\$100,000/household)