

Scenario B: Falling market price scenario¹

State assumptions	Formula	State-level scenario B: Expect falling corn prices				State-level scenario B: Expect falling cotton prices			
		2009	2010	2011	2012	2009	2010	2011	2012
Actual State revenue (per acre):									
ACRE price	(actual avg. mkt price per bu/lb or loan rate, whichever is higher)	\$5.05	\$4.50	\$4.00	\$3.75	\$0.62	\$0.58	\$0.52	\$0.47
Actual national average price per bu/lb		\$5.05	\$4.50	\$4.00	\$3.75	\$0.62	\$0.58	\$0.52	\$0.47
Reduced loan rate	(70 percent marketing assistance loan rate)	\$1.37	\$1.37	\$1.37	\$1.37	\$0.36	\$0.36	\$0.36	\$0.36
Actual yield/planted acre	(bu/lb per planted acre)	165	168	172	170	970	964	975	978
Actual State revenue	(=price*yield/planted (bu/lb per planted acre))	\$833.25	\$756.00	\$688.00	\$637.50	\$601.40	\$559.12	\$507.00	\$461.54
State ACRE guarantee (SAG) (per acre):									
ACRE guarantee price	(2-yr moving national average price-based on the prior 2 years)	\$4.88	\$5.15	\$4.78	\$4.25	\$0.58	\$0.59	\$0.60	\$0.54
Guarantee yield/acre	(5-yr Olympic average)	164	163	165	167	947	943	962	970
State ACRE Guarantee²	(=price*yield/planted acre*.9)	\$719.55	\$753.96	\$709.09	\$640.05	\$493.48	\$503.03	\$519.48	\$471.26
ACRE Payment Trigger #1:									
Is actual State revenue less than State ACRE guarantee?		No	No	Yes	Yes	No	No	Yes	Yes
Corn ACRE payment rate									
1: SAG minus actual		\$0	\$0	\$21.09	\$2.55	\$0	\$0	\$12.48	\$9.72
2: 25 percent SAG		\$179.89	\$188.49	\$177.27	\$160.01	\$123.37	\$125.76	\$129.87	\$117.81
Rate= lesser of 1 or 2	(per acre rate)	\$0	\$0	\$21.09	\$2.55	\$0	\$0	\$12.48	\$9.72

Farm assumptions	Formula	Farm-level scenario B: Expect falling corn prices				Farm-level scenario B: Expect falling cotton prices			
		2009	2010	2011	2012	2009	2010	2011	2012
Actual farm revenue (per acre):									
Planted acreage		100	100	100	100	100	100	100	100
Actual FARM yield/planted acre		178	164	170	169	989	1,000	1,020	1,010
ACRE price		\$5.05	\$4.50	\$4.00	\$3.75	\$0.62	\$0.58	\$0.52	\$0.47
Actual farm revenue (per acre)		\$898.90	\$738.00	\$680.00	\$633.75	\$613.18	\$580.00	\$530.40	\$474.70
Farm ACRE benchmark revenue (per acre):									
ACRE guarantee price	(2-yr moving national average price-based on the prior 2 years)	\$4.88	\$5.15	\$4.78	\$4.25	\$0.58	\$0.59	\$0.58	\$0.51
Benchmark farm yield/acre	(5-yr Olympic average)	164	164	165	168	938	938	968	987
Crop insurance premium		30	30	30	30	24	24	24	24
Farm ACRE benchmark revenue		\$827.90	\$872.91	\$816.82	\$742.10	\$566.83	\$579.49	\$585.18	\$527.23
ACRE Payment Trigger #2:									
Is actual farm revenue less than farm ACRE benchmark revenue?:		No	Yes	Yes	Yes	No	No	Yes	Yes
Does this producer receive an ACRE payment?		No	No	Yes	Yes	No	No	Yes	Yes

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Scenario B: Falling market price scenario¹—Continued

Farm assumptions	Formula	State-level scenario B: Expect falling corn prices				State-level scenario B: Expect falling cotton prices			
		2009	2010	2011	2012	2009	2010	2011	2012
		Corn ACRE payment				Cotton ACRE payment			
ACRE payment rate		\$0	\$0	\$21.09	\$2.55	\$0	\$0	\$12.48	\$9.72
Payment acreage		83.3	83.3	83.3	85	83.3	83.3	83.3	85
Farm Productivity ratio		0.998	1.006	0.999	1.001	0.990	0.994	1.006	1.018
Farm ACRE payment		\$0	\$0	\$1,754.24	\$217.04	\$0	\$0	\$1,045.59	\$840.57
		Corn ACRE participation tradeoffs				Cotton ACRE participation tradeoffs			
		<i>Direct payments (DPs)</i>							
Marginal DP rate		\$0.060	\$0.060	\$0.060	\$0.060	\$0.013	\$0.013	\$0.013	\$0.013
DP payment acres		83.3	83.3	83.3	85	83.3	83.3	83.3	85
DP yield		121	121	121	121	650	650	650	650
Marginal DP tradeoff		\$604.76	\$604.76	\$604.76	\$617.10	\$722.29	\$722.29	\$722.29	\$737.04
		<i>Counter-cyclical payments (CCPs)</i>							
	(Target rate-DP rate-national avg. market price)								
CCP rate		\$0	\$0	\$0	\$0	\$0.0258	\$0.1058	\$0.1258	\$0.1258
CCP base acres X .85		85	85	85	85	85	85	85	85
CCP yields		156	156	156	156	825	825	825	825
Total CCPs		\$0	\$0	\$0	\$0	\$1,809.23	\$7,419.23	\$8,821.73	\$8,821.73
		<i>Marketing loan benefits (MLBs)</i>							
		At the assumed price levels, it is unlikely that marketing loan benefits will be available for corn. The likelihood of marketing loan benefits for cotton is less clear. If marketing loan benefits are available for either crop, the maximum loan rate for enrolled producers is \$1.37 for corn and \$0.3634 for cotton.							
Net ACRE monetary benefit		\$(604.76)	\$(604.76)	\$1,149.48	\$(400.06)	\$(2,531.52)	\$(8,141.52)	\$(8,498.43)	\$(8,718.20)

¹Calculated values may differ from those shown in the table due to rounding error.

²SAG is limited to 90 percent of the prior year's SAG.

Source: USDA, Economic Research Service calculations.