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FARM BUREAU® 2018 Farm Bill

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State Price and County Yield Trigger for ARC-CO Benchmark Revenue

BACKGROUND

For ARC-CO, national average prices may not fully capture the regional yield-price relationships that impact crop revenues, i.e. the "natural hedge". Commodity price basis varies significantly across the country, yet basis is not a factor in determining farm-level program payments.

The natural hedge works to offset yield losses with higher prices thereby helping to smooth farm revenue across growing seasons. However, the effectiveness of the natural hedge depends on the strength of the yield-price correlation. In areas where the natural hedge is stronger, low prices are consistently offset by high yields. These strong inverse correlations reduce the variability of crop revenue and provide a natural hedging instrument to farmers. In areas where the correlation is weaker, low prices and low yields or high prices and high yields occur simultaneously with greater frequency. The natural hedge is stronger in the Corn Belt and becomes weaker in areas outside the Corn Belt. In areas with weak correlations the variability in crop revenues is higher. For example, the variability in revenue for Castro County, Texas (weak natural hedge) is nearly twice as high as revenue levels observed in Champaign County, Illinois (strong natural hedge). Similar patterns are observed across the U.S.

By ignoring price-yield correlations ARC-CO utilizes only the county yield to reflect regional crop revenues and may over or under compensate farmers relative to their actual farm revenue. As an example, the marketing year average corn price during 2014-2015 ranged from a low of $3.34 per bushel in South Dakota to a high of $5.36 per bushel in Arizona, a difference of $2.02 per bushel. Despite these differences, program payments under ARC-CO were based on the U.S. average price of $3.60 per bushel and provided large program payments in areas of the country where prices had already adjusted to new market clearing levels.

OPTION

Change the five-year Olympic Average (OA) U.S. price to a five-year OA state price. (ARC-Regional)

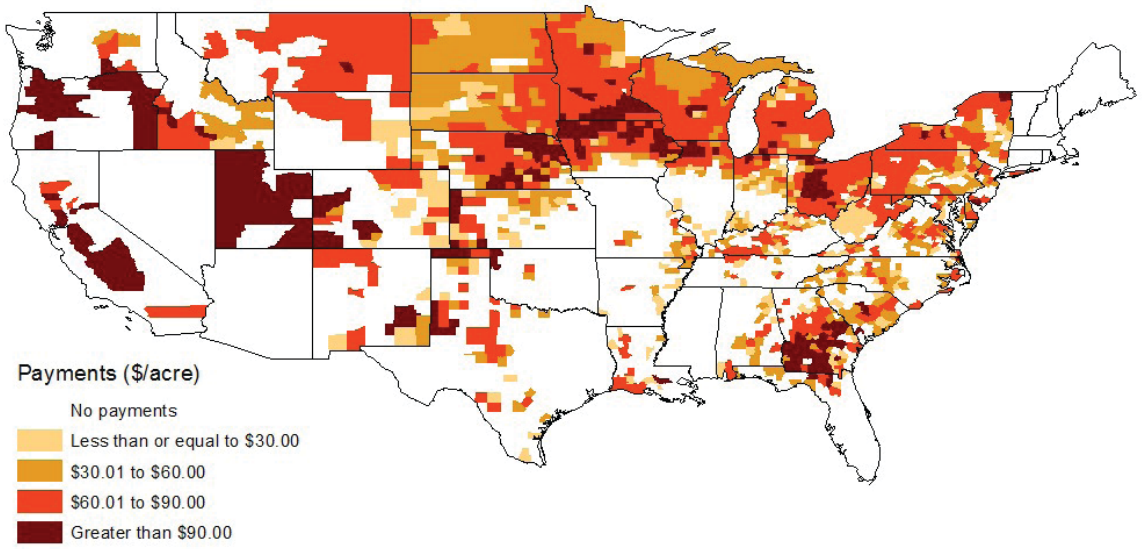
This modification may better capture the regional variation in commodity prices and the impact of these prices on farm revenue. Our estimates indicate that ARC-Regional would have slightly reduced total program payments during 2014 compared to the actual policy design. Under the actual policy design, program payments on corn, soybeans, and wheat acres totaled $4.31 billion. Under the ARC-Regional scenario, program payments decreased by one percent or $43 million. As in the previous option, results differed by commodity. For corn, the use of a five-year OA state price reduced government outlays by three percent, for soybeans payments were increased ten percent and for wheat payments were increased seven percent.

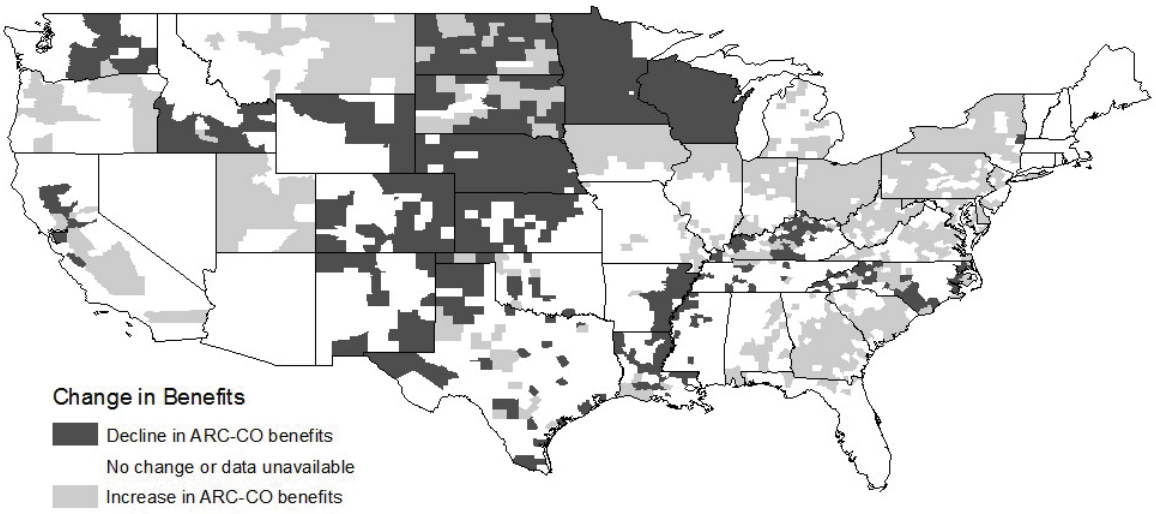
By using state-level commodity prices, program payments were directed toward areas where the state-level revenue was below the state-level benchmark revenue guarantee. As an example, under the actual policy design Cochise County, Arizona received an ARC-CO payment of $85 per base acre. Once the five-year OA Arizona corn price of $6.16 per bushel and the 2014 marketing year average

price of $5.36 per bushel were considered, the ARC-Regional payment rate fell to $0 per base acre. The following two maps show the distribution of ARC-Regional payment rates and counties where ARC-Regional resulted in additional, fewer, or no change in program payments for corn base acres.

Including the state-level prices into the ARC-CO program payment calculations does not resolve the substantial disparities in benefits across county boundaries. For example, producers in Calhoun County, Iowa received $3.5 million on 171,000 corn base acres while producers in Pocahontas County, Iowa (directly to the north) received $14 million on a similar volume of corn base acres. This disparity in program payments is directly attributable to the variation in county-level crop yields and the impact of these yields on the benchmark and actual revenue.

Estimated Program Payments and Change from ARC-CO for Corn Base Acres using State Prices and County Yields, 2014-2015 Marketing Year (ARC-Regional)





The following table summarizes the consequences in the 2014 crop year of the option described above in millions of dollars.

	Actual Program Payments 1/	ARC-Regional
Corn	$3,655	$3,556 (-3%)
Wheat	$341	$366 (+10%)
Soybeans	$314	$345 (+7%)
Total (Corn, Soybeans, Wheat)	**$4,310**	**$4,267 (-1%)**