



Cost of the 2014 Farm Bill Commodity Programs

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March 23, 2016

farmdoc daily (6):57

Recommended citation format: Zulauf, C., and G. Schnitkey. "Cost of the 2014 Farm Bill Commodity Programs." *farmdoc daily* (6):57, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, March 23, 2016.

Permalink: <http://farmdocdaily.illinois.edu/2016/03/cost-of-the-2014-farm-bill-commodity-programs.html>

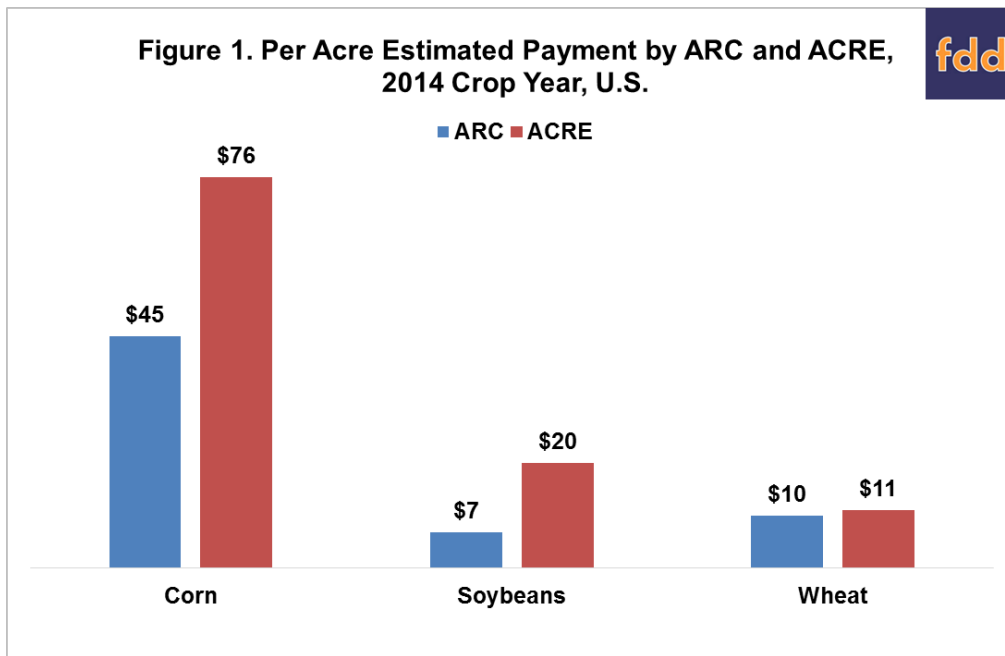
Introduction

Payments by the Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) programs for the 2014 crop year have totaled \$5.2 billion so far. Intense criticism has accompanied them, in part because the Congressional Budget Office projected payments of \$3.8 billion for the first year of ARC (\$2.1 billion) and PLC (\$1.7 billion). However, the criticism has not considered potential payments that the 2008 farm bill revenue program would have made for the 2014 crop year. In particular, the Average Crop Revenue Election (ACRE) program would have made larger per acre payments than ARC for the 2014 crops of corn, soybeans, and wheat. For 2015, per acre payments are essentially the same for soybeans and wheat while ARC payments are somewhat larger for corn.

2014 Crop Year Payments

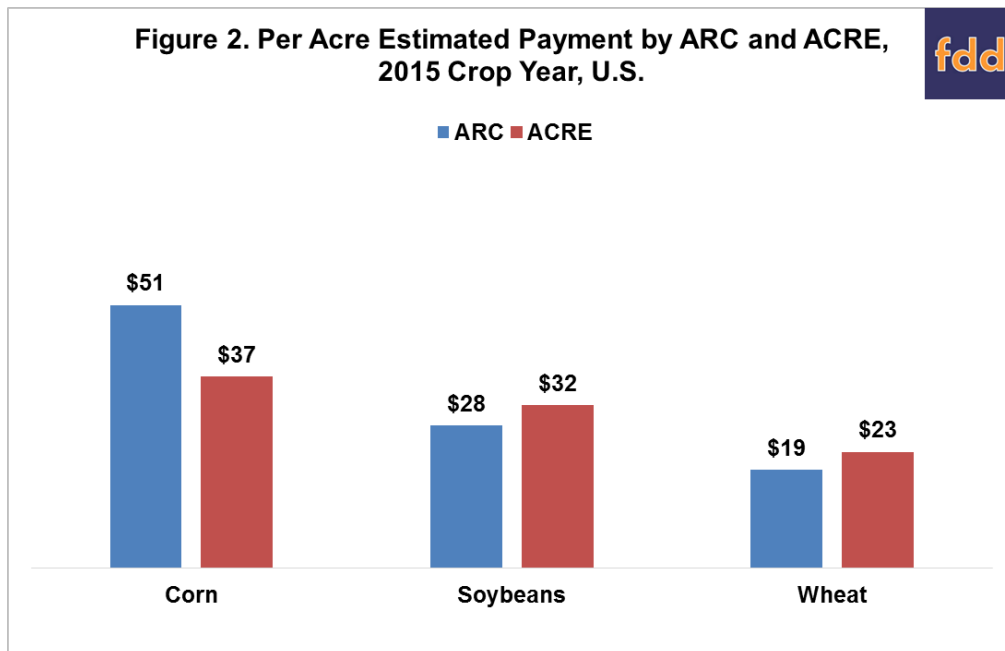
Using U.S. Department of Agriculture (USDA), Farm Service Agency (FSA) data as of February 22, 2016, ARC payment per program base acres for the U.S. for the 2014 crop is estimated to be \$45 for corn, \$7 for soybeans, and \$10 for wheat (see Figure 1). In contrast, per acre payment by ACRE is estimated to be \$76, \$20, and \$11 for corn, soybeans, and wheat, respectively. ACRE payments exceed ARC payments by 69%, 186%, and 10%, respectively. For a discussion of potential ACRE payments for earlier crop years, see the [October 22, 2015 farmdoc daily article](#) by Zulauf and Kim.

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2015 Crop Year Payments

Using the ARC-CO PLC Payment Estimator at farmdoc (see [March 8, 2016 farmdoc daily article](#) by Schnitkey, Paulson, Coppess, and Zulauf), per acre payments by ARC are estimated to be higher for the 2015 crops, especially for soybeans (see Figure 2). Per acre payments for 2015 are less for ACRE than ARC for corn and approximately the same for soybeans and wheat. Weighting payments across crops suggest that total ARC payments is likely to exceed total ACRE payments to these 3 crops for the 2015 crop year, but the difference is likely not large.



Summary Observations

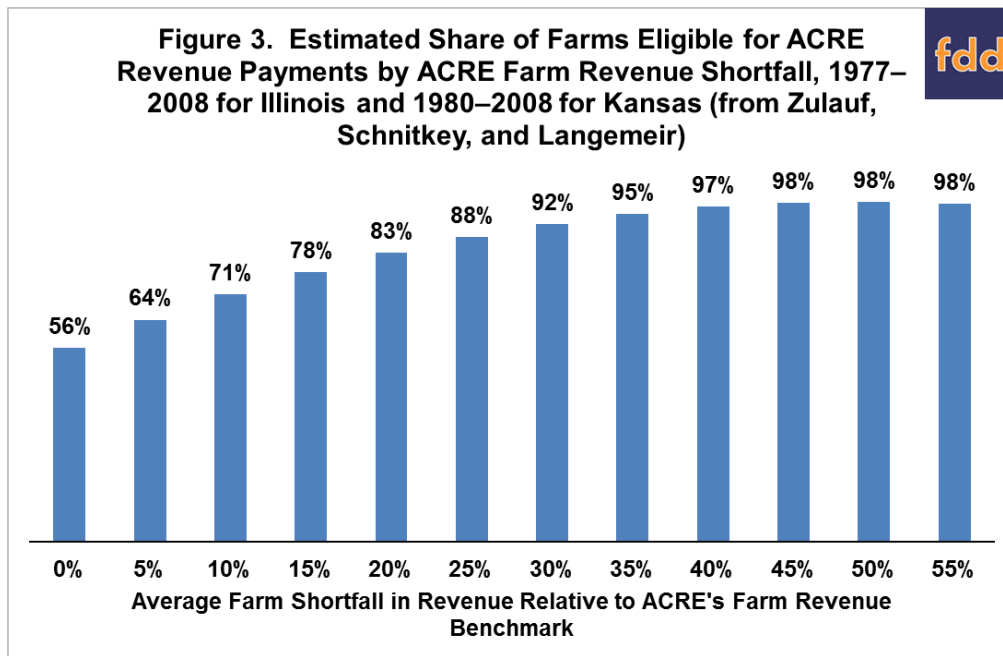
- Objective of this article is to call attention to the importance of comparing payments under the 2008 and 2014 farm bill commodity programs, in particular ACRE, when assessing cost of the 2014 farm bill.
- It is impossible to know what the participation rate for ACRE would have been in the 2014 and 2015 crop year. Given the low target prices in the 2008 Farm Bill for corn, soybeans, and wheat and the decline in their prices since 2012; it seems reasonable that participation would have likely been much higher than during the 2008 farm bill period if an enrollment option had been given. Moreover, based on the 2014 farm bill debate, direct payments likely would have been eliminated, thus eliminating the 20% reduction in direct payments imposed in the ACRE program, further increasing the incentive to choose ACRE.
- Nevertheless, the analysis clearly illustrates that the ACRE program would have made large per acre payments to 2014 and 2015 corn, soybeans, and wheat. Depending on participation rates, payments by ACRE may have exceeded payments by ARC, particularly in 2014.
- Assuming normal yields, ACRE payments will decline faster than ARC payments because ACRE used average price for the 2 prior crops while ARC uses an Olympic average for the 5 prior crops. Thus, ARC payments are likely to exceed ACRE payments in the 2016 through 2018 crop years. However, actual payments will depend on the price and yield situations that occur; hence, it cannot be ruled out that ACRE could pay more than ARC in these crop years.
- In conclusion, performance assessment of the 2014 farm bill should include potential payments under the 2008 farm bill ACRE program. Otherwise, it is incomplete and thus potentially misleading.

Appendix

Estimation Notes: Per acre payment estimates for ARC are based on reported FSA payments for the 2014 crop and estimates for 2015 obtained from the ARC-CO PLC Payment Estimator available at farmdoc. The U.S. estimate is obtained by weighting the payments estimated at the state level by the share of base acres in the state. For an extended discussion of the estimation methodology for the 2015 crop year, see the [March 8, 2016 farmdoc daily article](#) by Schnitkey, Paulson, Coppess, and Zulauf.

Payments by ACRE for crop/state/year combination are estimated on a planted acre basis using 2014 and 2015 crop year price estimates in the March 9, 2016 *World Agricultural Supply and Demand Estimates*, state yields from USDA, NASS as reported in its *QuickStats* data base, and ACRE's payment formula, which includes the acre payment factor of 85%. The ACRE analysis includes only states for which NASS reports yields. Total yields for the state are used, not yields by irrigated and non-irrigated acres. Lack of farm level data precludes including the base acre cap on a FSA farm's ACRE payment acres as well as adjusting for the difference between farm level yields and county level yields when ACRE payments are made. Net impact of these estimation issues on estimated ACRE payments is not clear, but should be kept in mind when assessing the results.

An important feature of ACRE was its requirement that an individual farm must also have a loss to receive a payment. This eligibility requirement was incorporated using the analysis of Zulauf, Schnitkey and Langemeier, specifically their graph as presented in Figure 3. The U.S. average revenue shortfall relative to the ACRE benchmark revenue was used to facilitate the calculation. It ranged from nearly 0% to as high as 18%. The farm loss eligibility requirement reduced the estimated payment by ACRE by as much as 44% for some crop-year combinations and by at least 19% in all years. As a sensitivity check on using the U.S. aggregate shortfall, the revenue shortfall was calculated for the 5 largest producing states for each crop. Their average shortfall was larger in all but one situation, soybeans in 2015. Thus, using a national average shortfall likely led to a conservative estimate of payments.



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