



Department of Agricultural and Consumer Economics, University of Illinois Urbana-Champaign

A Farm Policy Dilemma: Base Acres, Planted Acres, and Ad Hoc Payments

Carl Zulauf

Department of Agricultural, Environmental and Development Economics
Ohio State University

Gary Schnitkey, Krista Swanson, Joe Janzen, Nick Paulson, Jonathan Coppess

Department of Agricultural and Consumer Economics
University of Illinois

September 23, 2020

farmdoc daily (10): 171

Recommended citation format: Zulauf, C. G. Schnitkey, K. Swanson, J. Janzen, N. Paulson, and J. Coppess. "A Farm Policy Dilemma: Base Acres, Planted Acres, and Ad Hoc Payments." farmdoc daily (10): 171, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, September 23, 2020.

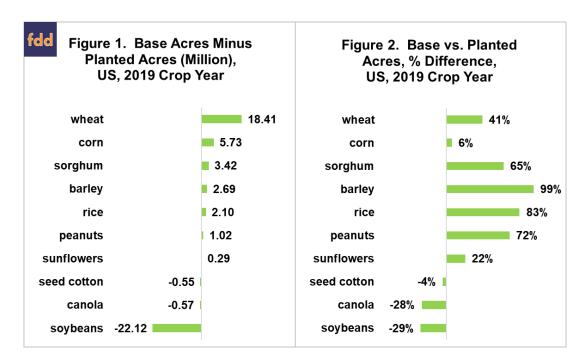
Permalink: https://farmdocdaily.illinois.edu/2020/09/a-farm-policy-dilemma-base-acres-planted-acres-and-ad-hoc-payments.html

Farm safety net payments that mitigate low farm income can encourage more production and thus more payments. Since the 1996 farm bill, this fundamental farm safety net dilemma has been managed primarily by making payments on historical base acres, not current planted acres. However, this feature, called decoupling, can create another policy issue: farm safety net assistance to producers can deviate from the actual economic damages suffered. This divergence can become a rationale for *ad hoc* payments to cover the hole in the safety net. This article examines both sides of the dilemma. Congress appears to be evolving toward an update in each farm bill as a way of managing this issue. This article also continues the discussion of *ad hoc* payments in the *farmdoc daily* articles of July 29 and August 19, 2020.

2019 Planted vs. Base Acres - An Incentive for Ad Hoc Payments

Among 2019 crop program commodities, base acres range from 18 million more (wheat) to 22 million less (soybeans) than planted acres (see Figure 1 and Data Note 1). Given that the acres planted to the crops in Figure 1 also vary widely, a better comparison is likely percent difference. Base acres range from +99% more (barley) to -29% less (soybeans) than planted acres (see Figure 2). It is single digits only for corn (+6%) and seed cotton (-4%). Average difference is 45% regardless of sign. Given that crop losses and payments differ across crops, Figures 1 and 2 clearly imply that farm safety net assistance can be too much or too little relative to the actual economic damage a given crop suffers in a given year.

We request all readers, electronic media and others follow our citation guidelines when re-posting articles from farmdoc daily. Guidelines are available here. The farmdoc daily website falls under University of Illinois copyright and intellectual property rights. For a detailed statement, please see the University of Illinois Copyright Information and Policies here.

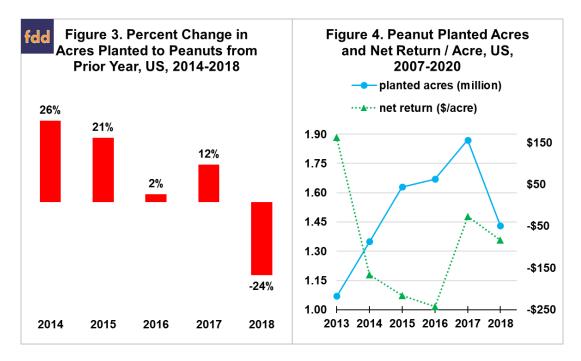


Cotton Generic Base - An Example of Why Paying on Planted Acres is a Problem

Largely due to Brazil's successful World Trade Organization suit against US cotton programs (Schnepf), cotton was not a covered commodity in the 2014 farm bill and thus not eligible for Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) payments. Congress however converted cotton base acres into generic base acres and made covered commodities planted on them eligible for ARC and PLC payments. Such payments totaled \$1.31 billion for the 2014-2017 crops. Congress ended the generic base program when it made seed cotton a covered commodity beginning with the 2018 crop.

Net return on generic base acres depended in part on government payments to the crop planted. A higher government payment, other factors the same, would increase net return and incentivize planting more of the crop. In particular, peanuts accounted for 42% of ARC and PLC payments to generic base acres but only 5% of payments to non-generic base acres. This payment difference is consistent with the widespread concern that existed over the impact of generic base on acres planted to peanuts (Paulson, Schnitkey, Coppess, and Zulauf).

Peanut acres increased 26% from 2013 to 2014, the years that bracketed implementation of the generic base program (see Figure 3). A nearly equivalent decline (-24%) occurred when the program ended. In between, acres increased even though losses exceeded \$150/acre in 2014 - 2016 (US Department of Agriculture (USDA), Economic Research Service) (see Figure 4). The losses are net returns from the market at harvest. Government payments are not included. A more detailed analysis is needed to determine the exact impact of generic base on acres planted to peanuts, but this simple analysis underscores why concern exists about making farm safety net payments on planted acres.



Summary Observations

A fundamental farm policy dilemma is that paying on planted acres better aligns assistance with economic damage but can encourage planting more acres due to higher returns and lower risk. Even larger payments can result.

In a July 22, 2020 *farmdoc daily* article; Zulauf, Schnitkey, and Langemeier find that farm safety net assistance has allowed the 9 crops for which USDA reports cost of production to cover their full economic cost of production as a group over time.

This aggregate finding over time may not hold for an individual crop in a given year due to the difference between planted and base payment acres. An incentive for *ad hoc* payments results.

The difference between planted and base acres may have been a reason payments were made on planted acres by the 2018 Market Facilitation Program and the recently-announced Coronavirus Food Assistance Program (CFAP) for 2020 crops.

This disconnect between economic damage and payments on historical base acres can be managed by updating base acres (and program yields), thus reducing the difference between the two acreages.

Congress authorized an update of base acres in 2 of the last 4 farm bills (2002 and 2014) and of target price program yields in 3 of the last 4 farm bills (2002, 2014, and 2018) (The National Agricultural Law Center). Congress appears to be evolving to a policy of authorizing updates every farm bill.

For updating to better align economic damage with payments, farms should not be allowed to keep their current base acres. Recent updates have allowed farms to keep current base acres.

To illustrate the improved alignment of economic damage and payments from an unconstrained update, percent difference, regardless of sign, would average 13%, not 45%, for the 10 crops in Figures 1 and 2 if 2019 base acres had been set equal to the average of 2013-2018 planted acres (USDA, Farm Service Agency and USDA, National Agricultural Statistics Service) (see Data Note 3).

A policy of routine updating of base acres and program yields to better align farm safety net payments with economic damage increases the potential for payments to impact planting decisions. Hence, the specific method used in the previous point maintains the use of historical acres to put distance between planting decisions and payments. However, research is needed to understand if a 6-year window generates the optimal tradeoff between both sides of the farm policy dilemma.

Hendricks and Sumner in a 2014 article find an expected update of base acres had limited impact on corn and soybean acres. They hypothesize the impact could be larger for crops with higher payment rates and when competing crops are not program crops. Their study implies the need to consider the equity of payment rates across crops, an issue investigated in a July 8, 2020 *farmdoc daily* article.

In conclusion, large *ad hoc* payments since 2018 has raised the issue of alignment of payments by the current farm safety net with economic loss. However, this issue needs to be addressed within the farm policy dilemma that also involves the issue of the impact of program payments on planted acres.

Data Notes

- Million base acres for the 2019 program (USDA, Farm Service Agency), with 2019 planted acres in parenthesis (USDA, *Quickstats*) by crop were: corn 95.43 (89.70); wheat 63.57 (45.16); soybeans 53.98 (76.10); seed cotton 12.95 (13.51); sorghum 8.69 (5.27); barley 5.41 (2.72); rice 3.94 (2.54); peanuts 2.45 (1.43); sunflowers 1.64 (1.35); and canola 1.47 (2.04).
- ARC uses county yield in its most commonly selected version. County yield can be higher or lower than a farm's yield. PLC yield is for a historical period, and thus is usually below current yield.
- 3. Congress has used 4 and 5 year averages to update base acres and program yields (The National Agricultural Law Center). A 6-year average is however used to align with 2 of the most common US crop rotations: corn-soybeans and corn-soybeans-wheat. For both rotations, each crop has the same number of years in a 6-year update window. A longer window also reduces outliers.

References and Data Sources

American Farm Bureau Federation. June 12, 2019. "Mapping the \$8.5 Billion in Trade Assistance: Reviewing MFP Payments by Commodity and State." Market Intel. https://www.fb.org/market-intel/mapping-8.5-billion-in-trade-assistance

Hendricks, N. P. and D. A. Sumner. April 2014. The Effects of Policy Expectations on Crop Supply with an Application to Base Updating. *American Journal of Agricultural Economics* 96(3): 903–923. file:///C:/Users/Carl/Documents/article%20archieve/farm%20program%20-%20base%20updating%20-%20Hendricks%20-%202014.pdf

The National Agricultural Law Center. July 2020. Inventory of all US farm bills. http://nationalaglawcenter.org/farmbills/

Paulson, N., G. Schnitkey, J. Coppess and C. Zulauf. "Have Generic Acres Impacted Planting Decisions?." *farmdoc daily* (7):73, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, April 20, 2017.

Schnepf, R. April 6, 2010. Brazil's WTO Case Against the U.S. Cotton Program. Congressional Research Service Report to Congress 7-5700. file:///C:/Users/Carl/Documents/Orden/Brazil%20Cotton%20Case%20CRS%20Report.pdf

US Department of Agriculture, Economic Research Service. August 2020. Commodity Costs and Returns. https://www.ers.U.S.da.gov/data-products/commodity-costs-and-returns.aspx

US Department of Agriculture, Farm Service Agency. August 2020. "ARC/PLC Program." https://www.fsa.usda.gov/programs-and-services/arcplc_program/index

US Department of Agriculture, National Agricultural Statistics Service. August 2020. *QuickStats*. https://quickstats.nass.usda.gov/

Zulauf, C. and G. Schnitkey. "Revenue Loss Coverage and Other Farm Safety Net Proposals in an Era of High Ad Hoc Payments." *farmdoc daily* (10):152, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, August 19, 2020.

Zulauf, C., G. Schnitkey, J. Coppess, N. Paulson and K. Swanson. "Ad Hoc Payments: A Leading Indicator of Farm Policy Change." *farmdoc daily* (10):140, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, July 29, 2020.

Zulauf, C., G. Schnitkey, J. Coppess, N. Paulson and K. Swanson. "Soybeans and PLC: Example of the Need for Better Equity among Program Crops." *farmdoc daily* (10):125, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, July 8, 2020.

Zulauf, C., G. Schnitkey and M. Langemeier. "The US Safety Net, Crop Profitability, and a Floor on Cost of Production." *farmdoc daily* (10):135, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, July 22, 2020.