farmdoc DAILY

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

2013 Farm Program Choice: An Initial Perspective

Carl Zulauf

Department of Agricultural, Environmental and Development Economics
The Ohio State University

Gary Schnitkey

Department of Agricultural and Consumer Economics
University of Illinois

February 22, 2013

***farmdoc daily* (3):35**

Recommended citation format: Schnitkey, G. "2013 Farm Program Choice: An Initial Perspective." *farmdoc daily* (3):35, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, February 22, 2013.

Permalink: http://farmdocdaily.illinois.edu/2013/02/2013-farm-program-choice.html

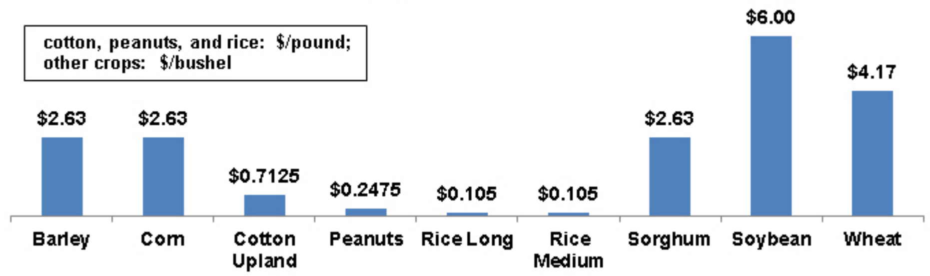
Introduction

Congress extended the 2008 Farm Bill to the 2013 crop. Thus, farms will have the decision to enroll in either the Direct and Counter-Cyclical Program (DCP) or Average Crop Revenue Election (ACRE) program. Enrollment status in the 2012 farm program does not matter. Any Farm Service Agency farm serial number, hereafter simply referred to as a farm, can enroll or not enroll in the 2013 ACRE program. This post discusses this decision. It is not an easy decision. It involves consideration of all 3 farm safety net programs: the traditional DCP program, the ACRE election option, and crop insurance. As in prior years, ACRE appears to offer more risk management assistance than DCP, especially for crops associated with the midwest and plains. However, unlike prior years, ACRE also appears, in general, to offer higher price risk assistance relative to individual crop insurance. Thus, as of late February 2013, the context in which the 2013 ACRE decision will be made is likely to differ from that of prior years.

Direct and Counter-Cyclical Program (DCP)

Farms can sign up for DCP from February 19 through August 2, 2013. DCP provides direct payments and potential counter-cyclical and marketing loan price payments. Direct payments are made irrespective of price and yield. They will be paid beginning in October 2013. Counter-cyclical payments are made only if the average U.S. price for the crop year is below a crop's target price (see Figure 1). Payments are based on a farm's counter-cyclical program yield and historical base acres. Counter-cyclical payments, if they occur, are made after the crop year ends. For example, for corn and soybeans, any payment will probably occur in October 2014. Marketing loan payments occur if market price is below the loan rate for the county in which the farm is located on a day chosen by the farm. Marketing loan rates for a crop range from 17% below (soybeans) to 38% below (rice) the crop's target price.

Figure 1. Counter-Cyclical Target Price, U.S., 2013 Crop Year



ACRE election

Farms have the option to enroll in the ACRE program. Previous ACRE elections do not matter. The decision to enroll in ACRE for 2013 crops must be made by June 3, 2013. ACRE must be elected as the DCP program is the default selection. Farms electing ACRE

- have direct payments equal to 80% of direct payments under the DCP program,
- have marketing loan payments with loan rates set at 70% of the DCP marketing loan rates, and
- substitute ACRE revenue payments for DCP counter-cyclical price-based payments.

ACRE must be elected for all farm program crops grown on the farm. However, payments by ACRE are specific to a crop, state, and farm. An ACRE payment is made for the 2013 crop year if revenue for the crop and state is less than the 2013 ACRE revenue guarantee for the crop and state. In addition, a farm level condition must be met. Thus, both the state and farm have conditions that must be met for a farm to receive an ACRE payment. Because of length, the farm payment condition and other consideration related to the farm are discussed in detail in the section titled "Other Decision Factors" later in this article.

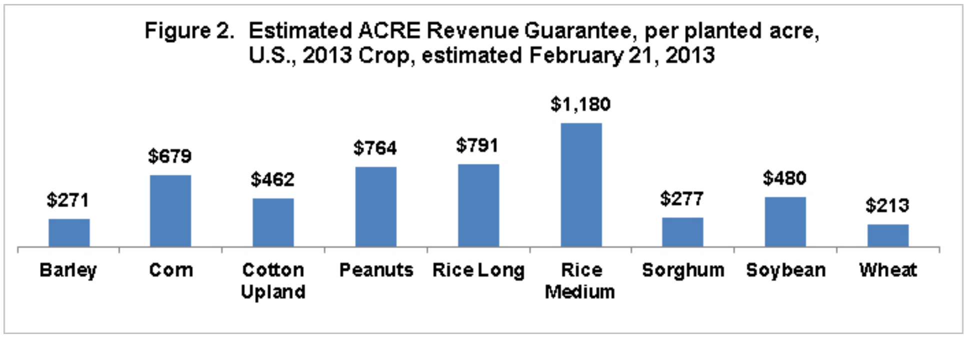
If ACRE payments exist, they will be made beginning in October 2014. More detail on the ACRE program is provided in a January 9, 2009 farmdoc article available in the management section titled *"Questions and Answers about the ACRE Provision of the 2008 Farm Bill"*.

Estimated ACRE Revenue Guarantee for U.S

Because all program crops planted on a farm must be enrolled in ACRE, it is important to evaluate the 2013 ACRE decision for the mix of farm program crops. For the reason of simplicity in illustrating the key considerations, this article will evaluate this decision from the perspective of the U.S. A given crop's U.S. ACRE revenue guarantee equals [90% times (ACRE benchmark U.S. yield per planted acre) times (ACRE benchmark price)]

- Benchmark Yield is an Olympic average (removes low and high yields) of yields for the 5 most recent years (2008 through 2012 crops for the 2013 ACRE program).
- Benchmark Price is a simple average of U.S. price for the 2 most recent crop years (2011 and 2012 crop years for the 2013 ACRE program).
- Also, a 10% limit exists on year-to-year decrease or increase in ACRE's revenue benchmark.

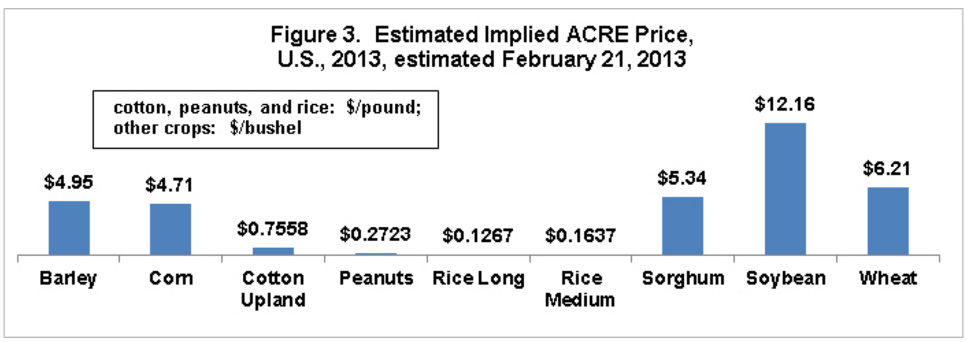
ACRE calculations for this article start with the 2009 crop year, the first year ACRE was offered. It is important to underscore that the ACRE revenue guarantees presented in Figure 2 for selected farm program crops are estimates. They are for the U.S., not a specific state. In addition, price for the 2012 crop year is not yet known, although the current estimate is not likely to change by a lot since farms have already sold a majority of their 2012 crops. Moreover, the use of a 2-year average to calculate the ACRE price benchmark dampens any change in the 2012 crop year price. The estimates are calculated using data from the U.S. Department of Agriculture (USDA), National Agricultural Statistics Service (NASS) and USDA, Office of the Chief Economist (OCE).



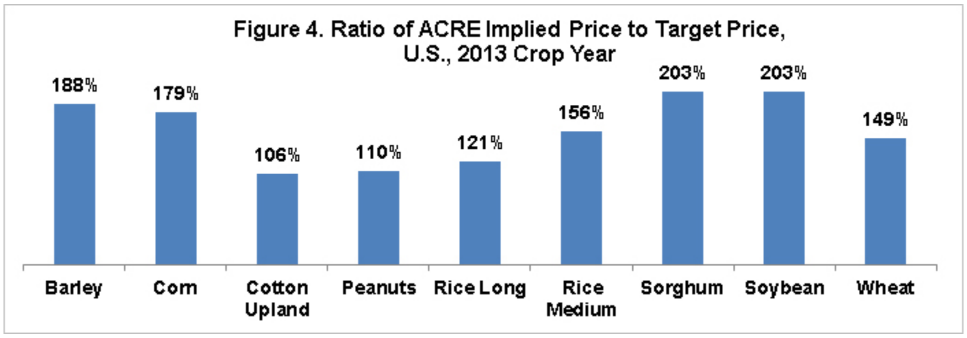
Comparing ACRE and DCP

Electing ACRE results in the ACRE revenue program replacing the counter-cyclical U.S. price program. To facilitate a comparison of these two programs, an implied ACRE price was calculated. The calculation used the ACRE benchmark revenue that underlay the revenue guarantees in Figure 2 and an expected yield per planted acre for the U.S. for 2013. An expected yield was used instead of the historical ACRE benchmark yield to put the ACRE implied price on a more current basis.

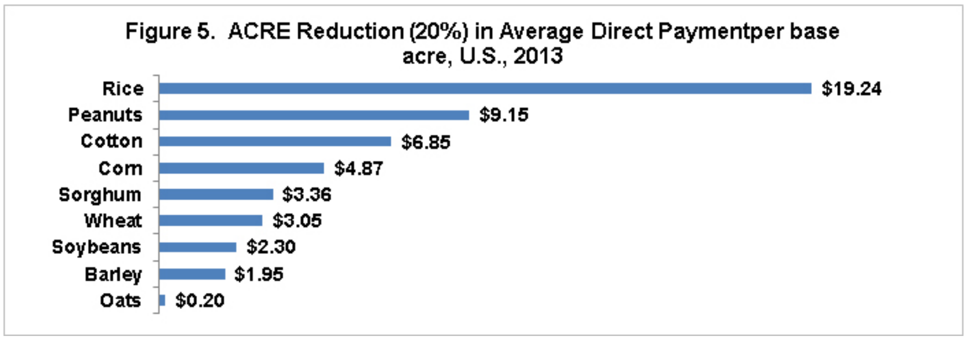
If available, the expected yield was from the USDA, OCE baseline estimate released in February 2013. If not available, a trendline yield was estimated for 2013 using USDA, NASS yields per planted acre beginning with the 1974 crops. Expected 2013 yield in bushels per planted acre are 61 for barley, 160 for corn, 58 for sorghum, 44 for soybeans, and 38 for wheat. Expected 2013 yields in pounds per planted acre are 680 for upland cotton, 3,147 for peanuts, 6,932 for long-grain rice, and 8,013 pounds for medium grain rice. The implied ACRE prices for 2013 are presented in Figure 3.



For all the crops examined in this article, ACRE's implied price is higher than the target price (see Figure 4). However, notable differences exist. For crops grown in the midwest and upper plain states, ACRE's implied price is at least 49% higher than the target price. In contrast, ACRE's implied price is closer to the target price for the crops associated with the south, especially upland cotton and peanuts. In summary, the ACRE program appears to offer higher risk assistance than the counter-cyclical price program, except possibly for upland cotton and peanuts.



Electing ACRE also results in a 20% reduction in direct payments. Figure 5 presents the average 20% reduction per base acre for the 9 U.S. crops that receive direct payments. This reduction ranges from $0.20 per base acre of oats to $19.24 per base acre of rice. The average U.S. reduction per corn and soybean base acre is $4.87 and $2.30, respectively. The values in Figure 5 include the provision that direct payments are made on only 85% of base acres.

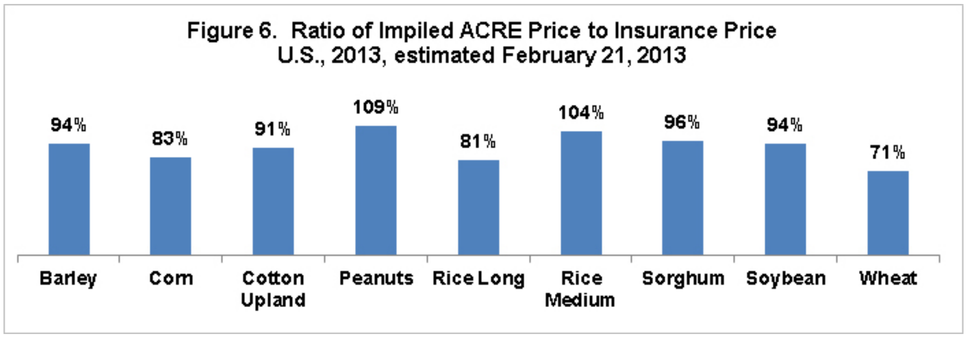


Comparing Price Risk Assistance from ACRE and Insurance

ACRE is not a substitute for crop insurance. ACRE provides assistance against yield risk at the state level, not at the individual farm or county level. However, ACRE and insurance both provide assistance against low prices. Thus, it is important to ask if ACRE's price risk assistance supplements (is higher than) the crop insurance's price risk assistance. The crop insurance prices used for this comparison are for a large producing state: North Dakota for barley, Illinois for corn and soybeans, Texas for upland cotton, Georgia for peanuts, Arkansas for long-grain rice, California for medium-grain rice, and Kansas for sorghum and wheat. The peanut insurance price used in this article is the established price.

Figure 6 presents the ratio of the implied ACRE price to the crop insurance price for 2013 as of February 21, 2013. The Kansas (hard red winter) wheat insurance price is $8.78. In comparison, the Illinois (soft red winter) and North Dakota (hard red spring) wheat insurance prices for 2013 are $8.57 and $8.55, respectively. Thus, the wheat insurance prices are close to one another.

The median level of insurance coverage bought by U.S. farms varies by crop and state, but usually is between 70% and 80% coverage. Thus, Figure 6 implies that, as of February 21 and except for wheat, ACRE at present is likely providing more coverage against price risk decline than the most commonly-purchased individual revenue insurance products. The breadth of this finding across crops is different than in previous years, and implies that farms will need to think carefully about the ACRE Election option for the 2013 crop.



It is important to understand that ACRE and crop insurance have different windows of risk protection for price. Crop insurance provides price risk protection from the month the expected insurance price is determined through the month the harvest price is determined. In contrast, ACRE provides price risk protection for the marketing year. To illustrate these different price windows, the harvest insurance month is October for corn and soybeans. In contrast, the crop year for corn and soybeans is from September through the following August. These different windows have become more important with the growing importance of production in South American and other parts of the world.

Other Decision Factors

ACRE has a number of provisions that could impact the decision to elect ACRE. Some exist to reduce the projected cost of ACRE and thus work against electing ACRE. Others work in favor of electing ACRE.

- An individual farm will receive an ACRE payment only if its actual revenue for the crop is less than the farm's ACRE benchmark revenue plus the per acre crop insurance premium paid by the farm for the crop. This provision implies that, even if a state qualified for an ACRE payment, not every farm in the state may qualify for and thus receive an ACRE payment. Historical analysis suggests this provision is most important in years when low revenue results from low yields due to a weather event.
- The per acre crop insurance premium can make a difference in whether or not a farm qualifies for an ACRE payment, especially if the farm buys insurance at higher coverage levels. Thus, this ACRE program provision is an incentive to purchase crop insurance and is consistent with the observation made earlier in this article that ACRE is not a substitute for crop insurance.
- ACRE payment to a farm is adjusted by the ratio of farm yield to state yield. Higher yielding farms will receive higher ACRE payments.
- ACRE makes payments on acres planted to the crop, but a farm cannot receive an ACRE payment on more total acres than its total base acres. In contrast, direct and counter-cyclical payments are made on 85% of a farm's historical base acres for a crop. For ACRE, if total acres planted to program crops exceed total base acres on the farm, the farm gets to choose the crop(s) for which it can receive any ACRE payment, but not to exceed 100% of the farm's base acres.
- ACRE's 30% lower marketing loan rate could be important to farms that use the marketing loan program to manage cash flow and/or income taxes.
- ACRE per acre payment for a crop is capped at 25% of the state's ACRE revenue guarantee.
- Separate ACRE programs exist for irrigated and non-irrigated land if a state's planted acres are at least 25% irrigated and at least 25% non-irrigated. Crop insurance does not offer this feature.

Farm Safety Net Payment Limits per Person or Legal Entity

For those farms that confront payment limit considerations, crop insurance offers an advantage because no payment limit exists. When considering the ACRE vs. DCP decision, payment limits are a minor consideration because payment limits are essentially the same for both alternatives. The payment limits are

- for DCP direct payment: $40,000
- for DCP counter-cyclical program: $65,000
- for ACRE direct payment: $40,000 minus amount equal to 20% reduction in direct payment
- for ACRE revenue payment: $65,000 plus amount equal to 20% reduction in direct payment

Importance of Waiting to Make a Decision

An important decision feature of any option is that the option should usually not be exercised until it needs to be. In this case, the government is providing a free option to choose either DCP or ACRE through June 3, 2013. A lot more will be known by June 3: the size of the main South American crops of corn and soybeans, the condition of the wheat crop in the major production areas of Europe, the former Soviet Union, China, and the U.S.; and planting progress of the U.S., Canadian, Chinese, and Eastern European corn and oilseed crops. Hence, it is prudent decision making to make the ACRE election decision as close to June 3 as possible, thus using the best information available by the time the farm program decision option expires. While waiting is a useful strategy in making the ACRE election decision, completing some of the paperwork earlier is advisable if the ACRE election is being considered. Signing up for ACRE will require landlord permission, as well as yield histories for enrolled farms. Having this documentation completed before the end of May will be desirable and minimize hassles at decision time for both the farmer and Farm Service Agency personnel.

Summary

The ACRE option is not an easy decision. It involves consideration of all 3 farm safety net programs: the traditional DCP program, the ACRE election option, and crop insurance. Moreover, the ACRE option election is not made on an individual crop basis, but applies to all farm program crops grown on a farm.

As of late February 2013, the ACRE election option is fundamentally different than in previous years. Like prior years, ACRE appears to offer more risk management assistance than the DCP program, especially for crops associated with the midwest and plains. However, unlike prior years, ACRE also appears to offer higher price risk assistance relative to commonly-elected individual crop insurance levels. In some respects, the 2013 ACRE program appears, as of late February 2013, to function in a manner consistent with the ARC (Agricultural Risk Coverage) and RLC (Revenue Loss Coverage) programs proposed in the 2012 farm bill drafts by providing shallow loss coverage above the individual insurance coverage levels elected by farms. It is important to underscore that ACRE and crop insurance are not substitutes because ACRE makes payments on a state yield and crop insurance makes payments on yield more closely related to the farm. However, farms who are concerned about price declines may find ACRE advantageous as it appears likely to provide additional price protection at the cost of a lower direct payment equal on average for the U.S. to the values presented in Figure 5 per base acre.

In addition, the different price windows covered by crop insurance and ACRE could have significant meaning. The authors suggest that the most risky scenario that could play out for U.S. crop farms is a large 2013 crop in South American, followed by a large 2013 crop in the U.S., and followed by a large 2014 crop in South America. ACRE offers some protection against this scenario because of its use of crop year price. Crop insurance offers no protection against this scenario after its harvest price is determined for the 2013 crop. Moreover, the crop insurance expected price for 2014 will be reset based on prices that exist at the time the expected insurance price for 2014 is determined.

Last, option decision making theory suggests that farms should wait until late May to make the ACRE election decision. This strategy allows farms to make a more informed decision about potential revenue for 2013 and thus of the potential for ACRE to significantly enhance risk protection for the 2013 crop year.

This publication is also available at http://aede.osu.edu/publications.