



A New Farm Program Option: Average Crop Revenue Election (ACRE)

Dennis A. Shields
Analyst in Agricultural Policy

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Summary

Farm commodity programs over the decades have focused on protecting farmers against declines in farm prices and not declines in revenue (price times production). Current programs for field crops provide benefits to producers when farm prices drop below specified levels. To help farmers manage their revenue risks, Congress included the Average Crop Revenue Election (ACRE) program in the Food, Conservation, and Energy Act of 2008 (P.L. 110-246) as a revenue-based program option for farmers who enroll in traditional farm commodity programs.

The ACRE program pays a farmer when two conditions are met: (1) state-level revenue for a crop falls below a guaranteed level, and (2) the farmer experiences an individual crop revenue loss. (Payments for each crop are calculated separately.) If farmers select ACRE, they forgo 20% of their direct payments under the Direct and Counter-cyclical Payment Program (DCP), and commodity loan rates under the Marketing Assistance Loan Program are reduced by 30%. Also, ACRE participants are not eligible for counter-cyclical program payments under DCP. Producer sign-up for the 2009 crop year is expected to begin in April and will continue until June 1, 2009.

Once a farm is enrolled in ACRE, the program applies to all eligible crops on that farm. A farmer who operates more than one farm may elect to enroll one or all of the farms in ACRE. Importantly, once a farm is enrolled in ACRE, it must remain in the program for subsequent crop years (the program covers crop years 2009 through 2012).

When deciding to participate in ACRE, producers must consider the trade-off between reduced benefits under traditional programs and the expected increase in revenue risk protection and potential payments provided by ACRE. Analysis of the trade-off requires assumptions about the next year's prices and historical crop yield variability at both the state and individual farm levels. Farmers also need to consider expected price trends for the life of the program.

In its January 2009 baseline, the Congressional Budget Office estimates that ACRE program payments will total \$4.9 billion during FY2010-FY2014, with corn, soybeans, wheat, and sorghum accounting for nearly all of the total. (Note that 2009 ACRE crop-year payments are made in FY2011.) These five-year figures compare with \$22.1 billion for direct payments, \$3.6 billion for counter-cyclical payments, and \$1.1 billion for marketing loan program benefits. The estimates account for reduced traditional program payments for farmers who participate in ACRE.

The ACRE program will be tested later this year when farmers harvest and sell their 2009 crops. But with season-average prices not determined until after the crop market year ends in 2010, it will be more than a year before policymakers can assess the program. At that time, program effectiveness will likely be measured in part by whether payments in fact reach farmers who experience revenue losses.

Beyond the program itself and potential effectiveness, the introduction of ACRE to U.S. farm policy provides a unique opportunity for farmers to trade benefits in one program for those in another. In the coming years, policymakers may find different trade-offs with other agricultural programs or policy objectives. This may be particularly relevant as concerns about the federal deficit mount.

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Farm commodity programs over the decades have focused on protecting farmers against declines in farm prices and not declines in revenue (price times production). Current programs for field crops—specifically marketing assistance loan benefits and counter-cyclical payments—provide benefits to producers when farm prices drop below specified (and fixed) levels.¹ While such programs can help farmers when prices are low, they do not necessarily compensate farmers who suffer yield losses or face a revenue shortfall caused by some combination of both yield loss and price declines. The 2008 farm bill debate produced a new program to help farmers manage their revenue risks.²

Congress included the Average Crop Revenue Election (ACRE) program in the Food, Conservation, and Energy Act of 2008 (P.L. 110-246, the 2008 farm bill) as a revenue-based program option for farmers who enroll in traditional farm commodity programs. Under the ACRE program, farmers can forgo a portion of their direct payments and marketing loan benefits and all of their counter-cyclical program payments in exchange for potential revenue-based payments. Producer signup for the 2009 crop year is expected to begin in April and will continue until June 1, 2009.³ Farmers who do not select the option remain eligible for full benefits of the traditional commodity program (Direct and Counter-cyclical Payment Program and Marketing Assistance Loan Program) as provided in 2008 farm bill.⁴

Traditional Commodity Programs

Traditional farm commodity programs for field crops include three basic types of benefits for farmers: direct payments, counter-cyclical payments, and marketing loan benefits. The first two types of payments are made under the Direct and Counter-cyclical Payment Program (DCP). Eligible DCP crops are wheat, corn, grain sorghum, barley, oats, upland cotton, rice, pulse crops,⁵ soybeans, other oilseeds,⁶ and peanuts.⁷

Direct payments are fixed annual payments based on a farm's historical plantings, historical yields, and a national payment rate. Direct payment rates vary by crop as specified in the 2008 farm bill and do not depend on market prices. To receive this payment, farmers have almost complete flexibility in what they plant (except for fruit, vegetable, and wild rice planting restrictions), but they must abide by conservation provisions that basically amount to good management practices.

Counter-cyclical payments are crop-specific payments that depend upon national average farm prices. When prices (not revenue) drop below a certain level, participating farmers receive a

¹ For more information, see CRS Report RL34594, *Farm Commodity Programs in the 2008 Farm Bill*, by Jim Monke.

² Revenue insurance products have been available to help manage farm-level revenue risk for major field crops since 1996 and 1997.

³ U.S. Department of Agriculture, "Direct and Counter-cyclical Program and Average Crop Revenue Election Program," 43 *Federal Register* 79284-79306, December 29, 2008.

⁴ For a full description of provisions in the 2008 farm bill, see CRS Report RL34696, *The 2008 Farm Bill: Major Provisions and Legislative Action*, by Renée Johnson et al.

⁵ Pulse crops include dry peas, lentils, small chickpeas, and large chickpeas.

⁶ Other oilseeds include sunflower seed, rapeseed, canola, safflower, flaxseed, mustard seed, crambe, and sesame seed.

⁷ All commodities except peanuts are defined as a "covered commodity" in the 2008 farm bill. Peanuts are supported similarly but not considered a "covered commodity." All receive direct payments except pulses. Commodities eligible only for the marketing loan program include extra long staple cotton, wool, mohair, and honey.

payment based on the season-average farm price and their farm's historical acreage and yield. This is the program that the ACRE option replaces with revenue protection.

The Marketing Assistance Loan Program provides a government loan to participating farmers of designated crops (those listed above, plus extra long staple cotton, wool, mohair, and honey). The loan is made at a specified loan rate using the crop as collateral. Prior to loan maturity, if local market prices are at or above the loan rate, farmers repay the loan principal and interest.⁸ In cases when the price is below the loan rate, farmers may repay the loan at the lower market price and receive a "marketing loan gain."⁹ Or, rather than taking the loan, farmers may request a "loan deficiency payment," with a payment rate equal to the difference between the loan rate and the local market price. Program benefits are available to farmers on the entire crop produced, which means farmers receive no benefits in the event of a crop loss. This is in contrast to the other two programs that make payments on historic acres and yields and therefore are not dependent on current production.

How ACRE Works

Unlike traditional farm programs, the ACRE program provides farmers with protection against revenue loss for each crop regardless of its cause: price decline, yield loss, or some combination of the two. The ACRE program pays a farmer when two conditions are met: (1) actual state-level revenue for a crop (determined after harvest) falls below a guaranteed level (determined before harvest), and (2) the farmer experiences an individual crop revenue loss on a farm. The second trigger is required so that payments are made only to farmers who experience a revenue loss.

If farmers select the ACRE option on a farm, they forgo 20% of their direct payments; loan rates are reduced by 30%; and participants on the farm are not eligible for counter-cyclical program payments. The program applies to all DCP crops on that farm, and payments for each crop are calculated separately. A farmer who operates more than one farm may elect to enroll one or all farms in ACRE. Importantly, once a farm is enrolled, it must remain in the program for subsequent crop years (the program covers crop years 2009-2012).

The following explanation is shown in **Figure 1** for the 2009 crop year. **Figure 2** shows a hypothetical example for the 2009 corn crop.

State Trigger

Actual state revenue must be less than the *state ACRE revenue guarantee*.

- The *actual state revenue* is the national average market price *times* the current-year planted yield (production divided by planted area) for that state. The national price is defined as the greater of (1) the national average market price

⁸ The market price is the adjusted world market price for upland cotton and rice, and the posted county price for most other commodities.

⁹ Farmers may also forfeit the crop pledged as collateral to the government at the end of the loan period. This type of loan is called nonrecourse. A few crops are eligible only for recourse loans (i.e., must be repaid at principal plus interest), including ELS cotton, seed cotton, and high moisture grains. Recourse loans are not eligible for a subsidy but do offer low-interest financing.

received by producers during the 12-month marketing year following harvest for the eligible commodity, or (2) the national marketing assistance loan rate for the eligible commodity reduced by 30%.

- The *state ACRE revenue guarantee* is 0.9 *times* the five-year average state planted yield (excluding high and low years) *times* the two-year average national price (i.e., the most recent two years). For the 2009 guarantee, the two-year average uses average prices from the 2007/2008 and 2008/2009 market years.¹⁰ The two-year national average market price used here is not subject to the loan rate substitution. The 90% factor in the formula reduces the guarantee level so that at least a 10% loss below the average is needed before payments begin, similar to an insurance deductible.

Farm Trigger

Actual farm revenue must be less than the *farm ACRE benchmark revenue*.

- The *actual farm revenue* is the actual planted yield for the farm *times* the two-year average national price.
- The *farm ACRE benchmark revenue* is the farm's five-year average planted yield (excluding high and low years) *times* the two-year average national price *plus* any producer-paid crop insurance premiums. The addition of crop insurance premiums is meant to encourage farmers to use crop insurance, thus making it easier to meet the farm trigger. Also, unlike the state ACRE revenue guarantee, the farm ACRE benchmark revenue is not multiplied by 90%.

Payment Calculation

If both triggers are met, the per-acre payment rate is the lesser of:

- (a) the state ACRE guarantee *minus* the actual state revenue (from the first trigger); or
- (b) the state ACRE program guarantee *times* 25% (setting the maximum ACRE payment).

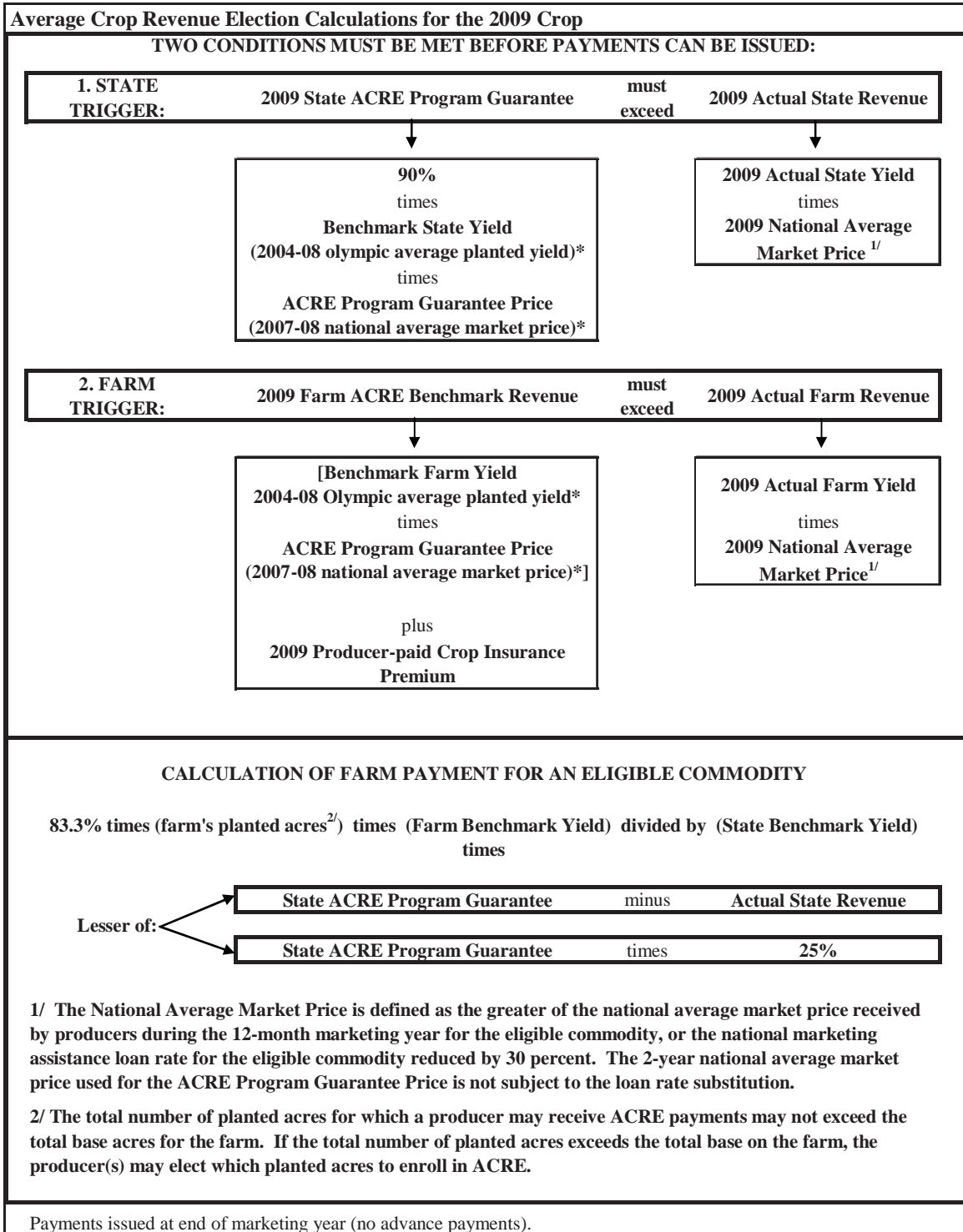
The farmer's payment for each crop is determined with the following calculation:

0.833 (0.85 in 2012) *times* the farm's planted area *times* (the farm's five-year yield *divided* by the state five-year yield) *times* the per-acre payment rate.

The 0.833 factor is the same as for direct payments, and reduces expenditures. The yield ratio adjusts for differences in a farmer's yield relative to the state average.

¹⁰ During the summer and fall of 2008, there was much debate whether USDA would implement ACRE using 2007- and 2008-crop year prices for the guarantee level in 2009, or 2006- and 2007-crop prices. Many members of Congress asserted they intended 2007- and 2008-crop year prices to be used, but USDA said at the time it preferred 2006- and 2007-crop prices because those years would cost less. When it issued regulations in December 2008, USDA said it would use 2007- and 2008-crop year prices—avoiding the debate, which had become less contentious after 2008-crop prices fell in fall 2008.

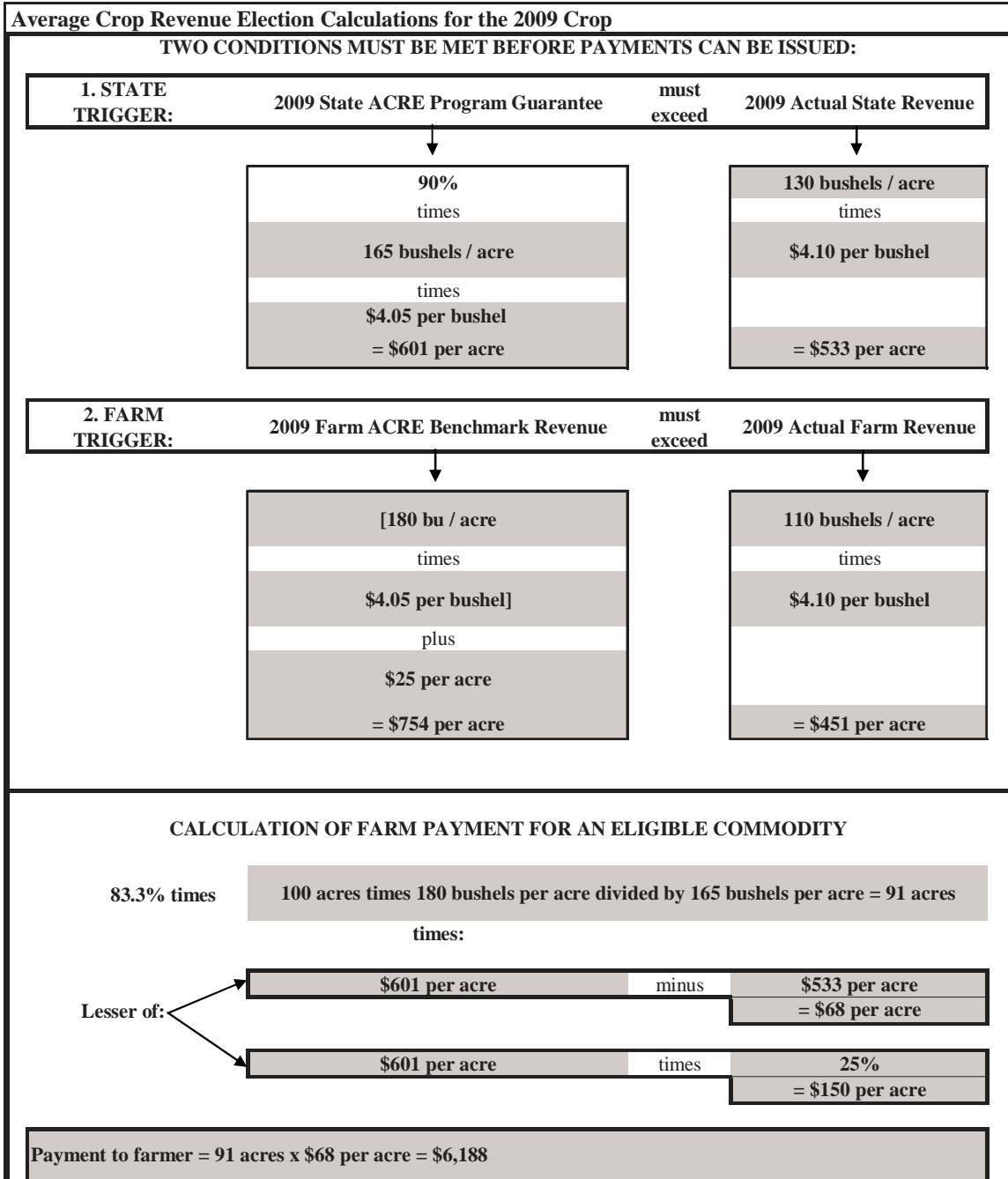
Figure 1. Average Crop Revenue Election Program



Source: U.S. Department of Agriculture.

Note: * Yield is a five-year moving Olympic average (excludes high and low). Price is a two-year moving average.

Figure 2. Hypothetical Example for an ACRE Payment to an Individual Farmer
(2009 corn crop; shaded numbers are hypothetical)



Source: Congressional Research Service, adapted from USDA diagram (Figure I).

Notes: All numbers are for illustration purposes only. The 2007-2008 average market price (\$4.05 per bushel) is calculated by averaging the 2007-crop final price (\$4.20 per bushel) and the current midpoint of the USDA price forecast for the 2008 crop (\$3.90 per bushel). The final 2008-crop corn price will be published in November 2009.

Other Program Features

The total number of planted acres for which a producer may receive ACRE payments may not exceed the total base acres (historical plantings) for the farm. If planted area is greater than the base, the farmer elects which planted acres to enroll in ACRE. In this respect, the ACRE program is a closer match with current plantings than the Direct and Counter-cyclical Payment Program, which uses historical base acres for calculating payments. The potential downside is that ACRE payments would likely be considered “amber box” for U.S. commitments to the World Trade Organization (see final section) and thus count against U.S. spending caps.

Another key feature of ACRE is that by using a recent average of farm prices and yields for calculating the program guarantees, the program provides a moving income support level, rather than one that is fixed over time as in traditional programs. As a result, the guarantee level for a given year depends on prices and yields in the years immediately preceding it. Also, to prevent a rapid increase or decrease, the program guarantee cannot change more than 10% from year to year. Finally, if irrigated and nonirrigated land each account for at least 25% of that crop’s land in a state, two separate crop revenue guarantees are established.

Payment Limits for ACRE

ACRE does not have a separate payment limit. Instead, ACRE payments count toward the counter-cyclical program payment limit of \$65,000 per person. The limits for both direct payments and counter-cyclical/ACRE payments are adjusted to account for the 20% reduction in direct payments under ACRE. Specifically, for ACRE participants, the direct payment limit of \$40,000 per person is reduced by the amount deducted from an individual’s direct payments (i.e., 20% of the direct payment required for ACRE participation). This same amount is added to the \$65,000 limit for counter-cyclical/ACRE payments. The total limit ($\$40,000 + \$65,000 = \$105,000$) can be effectively doubled to a combined \$210,000 for a sole proprietor’s farm by having a spouse.¹¹

Selecting the ACRE Option

When deciding to participate in ACRE, producers must consider the trade-off between reduced benefits under traditional programs and the expected increase in revenue risk protection provided by ACRE. Analysis of the trade-off requires assumptions about next year’s prices, historical state crop yield variability, and individual farm yield variability. Farmers also need to consider expected price trends for the life of the program (2009-2012 crops), because a farm stays in the ACRE program once it is enrolled.

The reduction in direct payments will be greatest for crops with relatively high per-acre payments such as rice and cotton (total per-payment-acre rates are approximately \$96 and \$34). This compares with crops with lower per-acre payments such as corn, wheat, and soybeans (approximately \$24, \$15, and \$12 per payment acre). For a farmer to select ACRE, the expected per-acre benefits under the ACRE program must be at least as high as the amount of direct

¹¹ For more information on payment limits in the 2008 farm bill, see CRS Report RL34594, *Farm Commodity Programs in the 2008 Farm Bill*, by Jim Monke.

payments the producer will forgo. In Illinois, for example, fixed payments average \$18-\$25 per acre on most farms. A 20% reduction equals \$3.60-\$5.00 per acre.¹²

Key to the ACRE decision is a farmer's expectation of prices over the next few years. This expectation helps formulate expected benefits under each program. If market prices are expected to remain above levels that trigger counter-cyclical payments, a farmer would expect to give up no counter-cyclical payments. Similar logic holds for marketing loan program benefits. In this case, a farmer may be inclined to select ACRE for its revenue protection benefits if the forgone direct payment is not too large. In contrast, if prices are expected to remain high enough so that ACRE payments are not triggered, farmers may stay with traditional programs because they would not give up any direct payments. A number of economic tools are available to help producers make their decisions on participating in ACRE.¹³

Analysts indicate that the ACRE program will likely appeal to a farmer whose current plantings and historical base differs substantially from each other, because counter-cyclical payments (derived from historical base) may not match well with the revenue risk from current plantings. The program will also likely be popular in states with relatively high yield variation and for crops with prices well above their loan rates.¹⁴ For example, wheat farmers in the western Great Plains, where dry conditions lead to yield variability, may be more interested in ACRE than farmers in the Midwest, where rainfall is more plentiful and yields tend to be less variable. In the South, farmers who plant cotton, peanuts, and rice may be less inclined to select ACRE because preliminary analysis shows that traditional program payments, particularly for cotton and peanuts, are likely to be greater than ACRE payments.¹⁵

Expected Outlays

In its January 2009 baseline budget, the Congressional Budget Office estimates that ACRE program payments will total \$4.9 billion during FY2010-FY2014, with corn, soybeans, wheat, and sorghum accounting for nearly all of the total. (Note that 2009 crop-year payments are made in FY2011.) These figures compare with \$22.1 billion for direct payments, \$3.6 billion for counter-cyclical payments, and \$1.1 billion for marketing loan program benefits. The estimates account for reduced traditional program payments for farmers who participate in ACRE.

A major factor in estimating outlays is the expected pattern in season-average prices. In general, declining prices assumed in the forecast period result in ACRE outlays for the major crops. Price levels are also high enough to result in relatively low levels of marketing loan benefits.

¹² Gary Schnitkey, "The Acre Decision," *Illinois AgriNews*, January 2009.

¹³ Examples include <http://www.farmdoc.uiuc.edu/fasttools/index.asp>, http://www.card.iastate.edu/ag_risk_tools/, <http://www.extension.iastate.edu/agdm/decisionaids.html>, and http://www.fapri.missouri.edu/farmers_corner/tools/ACRE.asp.

¹⁴ Carl Zulauf, "ACRE Program Decision," January 30, 2009, <http://aede.osu.edu/people/zulauf.1>.

¹⁵ Food and Agricultural Policy Research Institute, *US Baseline Briefing Book: Projections for Agricultural and Biofuel Markets*, FAPRI-MU Report #01-09, Columbia, MO, March 2009, p. 65, http://www.fapri.missouri.edu/outreach/publications/2009/FAPRI_MU_Report_01_09.pdf.

Interaction with Other Government Programs

Other government programs that interact with ACRE (besides the traditional program discussed in this report) include crop insurance and the new Supplemental Revenue Assistance Payments (SURE) program.

Crop yield and revenue insurance products are available for most program crops in most producing regions. Farmers purchase policies to cover yield or revenue risk on specific fields. As discussed previously, ACRE requires a revenue loss at the state level, so an individual farmer with a local loss will not be compensated if the state trigger is not met. And even if both triggers are met, the payment is based on the state loss, not the level of the individual farm's loss. In this circumstance, the farmer may choose to purchase crop insurance to protect against losses specific to the farm. In contrast, for a producer with crop revenues that track the ups and downs of state crop revenues, the ACRE program may be sufficient to manage the operation's revenue risks.

The 2008 farm bill authorized the SURE program to compensate eligible producers for a portion of crop losses that are not eligible for an indemnity payment under the crop insurance program. Because losses under the program will be measured in terms of a shortfall in whole-farm revenue, payments made under ACRE (and other commodity programs) will be included in the payment calculation for SURE.¹⁶

Issues for the 111th Congress

The first test of the ACRE program arrives in spring 2009 when farmers have the opportunity to elect the ACRE option. Farmers will need enough information to evaluate whether ACRE suits their operation. USDA is currently developing information to help producers make their decisions.

The next test will be later this year when farmers harvest and sell their 2009 crops. But with season-average prices not determined until after the crop marketing year ends in 2010, it will be more than a year before policymakers can assess the program. At that time, program effectiveness will likely be measured in part by the level of participation and whether payments in fact reach farmers who experience revenue losses. If, for a large number of farmers, the state trigger is met but the farm trigger is not, or vice versa, program effectiveness may be called into question.

Another question that may eventually arise is the timing of payments and whether they will arrive when needed. The season-average farm price is required in order to calculate payment levels. As a result, farmers will wait until the data are available to receive payment, which could be more than a year after selling their crop. There is no mechanism for an early (advance) payment.

As for international trade policy considerations, if payments are made under the ACRE program, the United States will eventually report them to the World Trade Organization (WTO) as part of its agricultural policy commitments under the WTO's Agreement on Agriculture. Some analysts

¹⁶ For more information, see CRS Report RL34207, *Crop Insurance and Disaster Assistance in the 2008 Farm Bill*, by Ralph M. Chite and Randy Schnepf; and <http://www.ers.usda.gov/briefing/riskmanagement/governmentprogramsandrisk.htm>.

expect the payments to be classified as “amber box” and count against the U.S. subsidy limit because payments are linked to current production and market prices.¹⁷ An offset to higher ACRE payments would be lower direct payments (which are considered by the United States as green box and do not count against the subsidy limit), counter-cyclical payments (amber box), and marketing loan benefits (amber box). Depending upon the mix and level of total program payments, policymakers may need to look for ways to avoid violating U.S. commitments.

Beyond the program itself and potential effectiveness, the introduction of ACRE to U.S. farm policy provides a unique opportunity for farmers to trade benefits in one program for those in another. Under the ACRE program, farmers may exchange a portion of their traditional income and price support benefits for an opportunity to reduce risk associated with declining crop revenues. In the coming years, policymakers may find different trade-offs with other agricultural programs or policy objectives, which may be particularly relevant as concerns about the federal deficit mount. Examples include further integration between traditional farm commodity programs, crop insurance, and disaster programs. In a broader policy and economic context, agricultural policy objectives may intersect, for example, with Congress’s efforts to reduce emissions of carbon dioxide and other greenhouse gases given that agricultural activities are both a source and sink of greenhouse gases.¹⁸

The Secretary of Agriculture recently commented that farm payments need to be tied to specific policy objectives that the public can relate to, if only to maintain long-term public support.¹⁹ Similarly, some members of Congress foresee a much different path for future farm policy, possibly without traditional commodity program payments.²⁰ Until now, direct payments made to farmers under the Direct and Counter-cyclical Payment Program have required little from the farmer besides maintaining soil conservation practices. This trade-off is new to farm programs and may provide a another step in the evolution of farm programs as additional policy objectives surface.

Author Contact Information

Dennis A. Shields
Analyst in Agricultural Policy
dshields@crs.loc.gov, 7-9051

¹⁷ Eric Wailes and C. Par Rosson III, “The WTO and U.S. Domestic Support in the Food, Conservation, and Energy Act of 2008,” *Choices*, 3rd quarter 2008.

¹⁸ For more information on the issue of carbon in agriculture, see CRS Report R40236, *Estimates of Carbon Mitigation Potential from Agricultural and Forestry Activities*, by Renée Johnson et al.; and CRS Report RS22964, *Measuring and Monitoring Carbon in the Agricultural and Forestry Sectors*, by Ross W. Gorte and Renée Johnson.

¹⁹ “Secretary Vilsack: Changes Ahead in the Ways Farmers Get Paid,” *Agri-Pulse*, February 9, 2009. Following the Secretary’s comments, several producer groups, including the National Association of Wheat Growers, wrote him to reiterate their support for direct payments and current farm programs.

²⁰ *Agri-Pulse*, February 18, 2009.