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The Farm Safety Net: In Brief

Dennis A. Shields
Specialist in Agricultural Policy

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Summary

The U.S. Department of Agriculture (USDA) operates several programs that supplement the income of farmers and ranchers in times of low farm prices and natural disasters. The following programs are collectively called the farm safety net.

- **Federal crop insurance** is often referred to as the centerpiece of the farm safety net because of its cost and broad scope for addressing natural disasters. The program is permanently authorized and makes available subsidized insurance for more than 130 commodities (ranging from apples to wheat) to help farmers manage risks associated with a loss in yield or revenue. Insurable causes of loss include adverse weather such as drought and excess rain. Program cost is projected by the Congressional Budget Office to total $9.0 billion per year over the next decade. Producers pay a portion of the premium which increases as the level of coverage rises. The federal government pays the rest of the premium—62%, on average, in 2014—and covers the cost of selling and servicing the policies. This differs from farm programs, which require no participation fees.
- **Farm commodity programs** historically represented the heart of U.S. farm policy by virtue of their long history (dating back to the 1930s). Price and income support is based primarily on statutorily fixed prices and not market prices (as in crop insurance), which can be quite low in some years. For crop years 2014-2018, the Agricultural Act of 2014 (2014 farm bill, P.L. 113-79) established minimum prices via the marketing loan program for approximately two dozen commodities, including corn, soybeans, wheat, rice, and peanuts. In addition, producers with production histories for covered crops have a one-time choice between *Price Loss Coverage (PLC) payments* and *Agriculture Risk Coverage (ARC) payments*, depending on their preference for protection against a decline in either crop prices or crop revenue. Benefits from farm programs are in addition to those under crop insurance, and program costs were projected in spring 2014 at about $3.2 billion per year.
- **Agricultural disaster assistance** is permanently authorized for livestock and orchards. With enactment of the 2014 farm bill, nearly all parts of the U.S. farm sector are now covered by either a disaster program or federal crop insurance, which is expected to reduce calls for ad hoc assistance. As of mid-September 2014, producer payments totaled $2 billion for losses in FY2012-FY2014. Additional support is provided by emergency loans and discretionary assistance.

Compared with the previous farm bill, the 2014 farm bill was enacted with more crop insurance options and higher reference prices designed to trigger payments more often than under previous law. Funding was accomplished by eliminating direct payments that had been made annually since 1996 but played no role in managing farm risk because they did not vary with farm prices.

USDA has begun implementing the farm bill commodity programs and crop insurance provisions. At some point, Members might be interested in reviewing the effectiveness of the revised safety net and actual costs, which could rise sharply for the 2014 crop year given lower-than-expected prices. Farm safety net proponents say the suite of programs has been designed for such situations and is necessary because "one program doesn't fit all producers and regions." Critics believe that a simplified approach might be more effective and less expensive, with funds used instead for broad societal gains, such as investment in agricultural research or transportation infrastructure.

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Overview

Congress has devised a variety of programs operated by the U.S. Department of Agriculture (USDA) to support farm income and help farmers and ranchers manage production or price risk. The programs essentially supplement farm incomes in times of low farm prices and natural disasters, and they are collectively called the farm safety net. The three main components are (1) permanently authorized federal crop insurance, (2) farm commodity price and income support programs for crop years 2014-2018, and (3) permanently authorized agricultural disaster programs. Additional support is provided through emergency loans and USDA discretionary assistance. The suite of programs is designed to allow for maximum farmer choice and flexibility.

Most farmers and ranchers are eligible for at least one of these federal programs. Some commodities are supported by only one method; others receive support through a combination of program tools (**Table 1**). Within the farm safety net, federal crop insurance is most extensive, as policies are available for much of U.S. agriculture, including grains, fruits and vegetables, pasture, nursery crops, and livestock gross margins. About two dozen of these crops (e.g., corn, soybeans, wheat) are eligible for both crop insurance and farm commodity programs, including minimum statutory prices. Sugar and dairy have their own programs, while disaster programs support livestock producers. The federal cost for the farm safety net was projected in April 2014 to average about $12.5 billion per year during FY2016-FY2024 (see note in **Table 1**).

Table 1. Farm Support by Commodity

Commodity	Federal Crop Insurance	Farm Commodity Programs	Disaster Assistance
Feed grains (corn, sorghum, barley, oats), peanut, pulses (dry peas, lentils, chickpeas), rice, soybeans, other oilseeds, wheat	Yield or revenue guarantees based on historical yields and *same-year market* prices, plus county yield or revenue guarantee for some crops (Suppl. Coverage Option—SCO)	Price or revenue guarantee based on historical yields and *minimum prices* (or five-year *historical* prices); nonrecourse loans with *minimum prices*	—
Upland cotton	Same as above, plus county revenue guarantee (Stacked Income Protection Plan—STAX)	Transition payments in 2014 (and possibly 2015); nonrecourse loans with *minimum prices*	—
Sugar	Yield guarantees based on same-year market prices	Import quotas, nonrecourse loans with *minimum prices*, and marketing allotments	—
Fruits, vegetables, & nursery	Yield or revenue guarantees, & other products, incl. whole farm	—	Payment for loss of fruit trees and vines (assets)
Livestock & poultry	Insurance for livestock prices, gross margins, & pasture/forage	—	Payment for loss of animals, forage, & feed
Dairy	Insurance for livestock prices, gross margins, & pasture/forage	Margin protection (milk price minus feed costs)	Payment for loss of animals, forage, & feed
Projected ave. annual cost[a]	$9.0 billion	$3.2 billion	$0.3 billion

Source: CRS Report IF00025, Overview of Farm Safety Net Programs (In Focus); costs from CBO.

Notes: Nonrecourse loans (for cash flow and low-price protection) also are available for extra-long staple cotton, wool, mohair, and honey. Emergency loans in disaster-declared counties are not commodity-specific.

a. Uses CBO estimates for FY2016-FY2024 as of April 2014; projections are sensitive to market changes. The annual average excludes FY2015 data because payments for new farm programs are not made until FY2016.

Federal Crop Insurance[1]

Federal crop insurance often is referred to as the centerpiece of the farm safety net because of its broad scope and cost. The program makes available subsidized insurance for more than 130 commodities to help farmers manage financial risks associated with a loss in yield or crop revenue. Insurable causes of loss include adverse weather such as drought and excess rain. A distinguishing feature is that guarantees are based on market prices and not on statutory minimums, as provided in farm commodity programs. Program cost was projected by the Congressional Budget Office (CBO) in spring 2014 to total $9.0 billion per year during FY2016-FY2024, about three times the level of farm commodity programs.

Insurable commodities include major field crops such as wheat, corn, soybeans, cotton, peanuts, and rice, as well as many specialty crops (including fruit, tree nut, vegetable, and nursery crops), pasture, rangeland, forage crops, and livestock (prices and operating margins). Policies cover more than 250 million acres nationwide. For major crops, three-fourths or more of U.S. planted acreage is insured under the federal crop insurance program. Producers who grow a crop not covered by crop insurance can purchase coverage through the Noninsured Crop Disaster Assistance Program (NAP).

The program is permanently authorized by the Federal Crop Insurance Act, as amended (7 U.S.C. §1501 et seq.). The Federal Crop Insurance Corporation (FCIC) was created as a wholly owned government corporation in 1938 to carry out the program. The program is a partnership between U.S. Department of Agriculture's Risk Management Agency (RMA) and private industry. RMA approves and supports products, develops and approves the premium rates, administers premium subsidies, reimburses private companies for their administrative and operating costs (i.e., delivery costs for selling and servicing the policies), and reinsures company losses. Producer premium subsidies account for three-fourths of total federal crop insurance costs.

Farmers annually purchase about 1.2 million policies, with many producers purchasing multiple policies depending on the number of crops grown and other factors. Policies protect against individual farm losses in yield, crop revenue, or whole farm revenue. Area-wide policies are available for some crops, whereby an indemnity is paid when there is an overall loss over a broad geographic area (e.g., county). For some policies, the revenue guarantee can increase if the harvest price is higher than the expected price calculated in the springtime prior to planting, thereby increasing the point at which indemnities are triggered.

In practice, the producer selects a coverage level and absorbs the initial loss through the deductible. For example, a coverage level of 70% has a 30% deductible (for a total equal to 100% of the expected value prior to planting the crop); in this case an indemnity is made for losses exceeding 30%. The producer pays a portion of the premium, and the federal government pays the rest of the premium—62%, on average, in 2014—plus covers the cost of selling and servicing the policies. This differs from farm commodity programs (see "Farm Commodity Programs," below), which require no participation fees. Also unlike farm commodity programs, crop insurance has no subsidy limits, and participants can be eligible regardless of income levels.

[1] For more information, see CRS Report R40532, *Federal Crop Insurance: Background,* and CRS Report R43494, *Crop Insurance Provisions in the 2014 Farm Bill (P.L. 113-79).*

Farm Commodity Programs[2]

USDA farm commodity programs historically represented the heart of U.S. farm policy, by virtue of their long history (dating back to the 1930s) and because price and income support is based primarily on statutorily fixed prices and not market prices (as in crop insurance), which can be quite low in some years. Program costs were projected in April 2014 by CBO at about $3.2 billion per year over FY2016-FY2024. Funding is provided through the Commodity Credit Corporation (CCC), USDA's program financing mechanism. USDA's Farm Service Agency (FSA) delivers CCC-funded commodity program benefits through a network of local ("county") offices overseen by committees of elected farmers.

The statutory authority underpinning USDA-CCC programs is provided mainly by three permanent laws: the Agricultural Adjustment Act of 1938 (P.L. 75-430), the Agricultural Act of 1949 (P.L. 81-439), and the CCC Charter Act of 1948 (P.L. 80-806). Congress frequently alters or suspends provisions of these laws through omnibus, multi-year farm bills. The most recent omnibus farm law is the Agricultural Act of 2014 (P.L. 113-79). This law is effective for the 2014-2018 crop years. To reduce the deficit and pay for changes to federal crop insurance and farm commodity programs, Congress eliminated fixed decoupled or "direct" payments that had been in place since the 1996 farm bill and were not triggered by declining prices or a farm loss.

The 2014 farm bill requires USDA to offer farm commodity support, including minimum prices, for wheat, feed grains (corn, sorghum, barley, oats), cotton (upland and extra-long staple—ELS), rice, soybeans, other oilseeds (sunflower seed, rapeseed, canola, safflower, flaxseed, mustard seed, crambe, and sesame seed), peanuts, refined beet and raw cane sugar, wool, mohair, honey, dry peas, lentils, and chickpeas. The mix of supported crops reflects historical policy goals and compromises. The most recent additions were pulse crops (dry peas, lentils, chickpeas) in 2002.

Covered Commodities: Wheat, Feed Grains, Rice, Peanuts, Soybeans, Other Oilseeds, Dry Peas, Lentils, and Chickpeas. For each "covered commodity" in the 2014 farm bill, eligible producers (those with past production histories for these crops) have a one-time choice between *Price Loss Coverage (PLC) payments* and *Agriculture Risk Coverage (ARC) payments*, depending on their preference for protection against a decline in either (a) crop prices or (b) crop revenue.[3] PLC payments make up the difference between the crop's average market price and its statutory "reference price" (see **Table 2**), while ARC payments make up the difference between a county revenue guarantee (based on five-year average crop prices or statutory minimums) and actual crop revenue. Payments to a producer are paid on 85% of the farm's acreage history (i.e., "base"). Rather than selecting between PLC and the county ARC guarantee for each covered commodity, a farmer can select a farm-level "individual" ARC guarantee, which combines all covered crops into a single, whole-farm revenue guarantee. Payment is based on 65% of acreage history. In response to a trade dispute with Brazil, upland cotton is no longer a covered commodity, with support now provided by a new crop insurance policy called the Stacked Income Protection Plan (STAX) in addition to marketing assistance loans (see below).

[2] For more information, see CRS Report R43448, *Farm Commodity Provisions in the 2014 Farm Bill (P.L. 113-79)*.

[3] 7 C.F.R. §1412; Commodity Credit Corporation and USDA Farm Service Agency, "Agriculture Risk Coverage and Price," 79 *Federal Register* 57703-57721, September 26, 2014. For program purposes, producers/landowners can reallocate base acres and update yields between September 29, 2014, and February 27, 2015. They can make the PLC/ARC program choice between November 17, 2014, and March 31, 2015. Decision tools are available at http://www.fsa.usda.gov/FSA/webapp?area=home&subject=arpl&topic=landing.

Table 2. Reference Prices and Loan Rates in the 2014 Farm Bill

Crop	Reference Price	Loan Rate	Crop	Reference Price	Loan Rate
Wheat, $/bu	5.50	2.94	Peas, dry, $/cwt	11.00	5.40
Corn, $/bu	3.70	1.95	Lentils, $/cwt	19.97	11.28
Sorghum, $/bu	3.95	1.95	Sm.chickpeas, $/cwt	19.04	7.43
Barley, $/bu	4.95	1.95	Lg.chickpeas, $/cwt	21.54	11.28
Oats, $/bu	2.40	1.39	Wool, graded, $/lb	n.a.	1.15
Upland Cotton, $/lb	n.a.	0.45 to 0.52	Wool, nongraded	n.a.	0.40
ELS cotton, $/lb	n.a.	0.7977	Mohair $/lb	n.a.	4.20
Rice, $/cwt	14.00; 16.10 for temperate *japonica*	6.50	Honey, $/lb	n.a.	0.69
Soybeans, $/bu	8.40	5.00	Sugar, raw cane, $/lb	n.a.	0.1875
Minor oilseeds, $/lb	0.2015	0.1009	Sugar, refined beet, $/lb	n.a.	0.2409
Peanuts, $/ton	535	355			

Source: CRS from 2014 farm bill (P.L. 113-79).

Notes: n.a. = not applicable. Crops with reference prices are called "covered commodities." Minor oilseeds include sunflower seed, rapeseed, canola, safflower, flaxseed, mustard seed, crambe, and sesame seed.

Unlike federal crop insurance, producers do not pay to participate in these programs. Payment recipients can plant any combination of crops on their land, but conservation rules must be followed. The **Appendix** contains producer examples of PLC and ARC (county and individual).

Producers, regardless of whether they receive the above payments, also are eligible for *nonrecourse marketing assistance loans* and *loan deficiency payments*, which provide cash flow and additional price protection at statutory minimum prices. (See **Table 2** for loan rates.) To qualify, a farmer pledges the stored crop as collateral. Nonrecourse loans generally must be repaid with interest within nine months or else the producer forfeits the pledged commodity to the government, which has "no recourse" other than to accept it in lieu of money. However, two features are intended to help avert forfeitures and subsequent buildup of CCC-owned surpluses. First, the "marketing loan" feature enables the farmer to repay the loan at a USDA-calculated rate approximating market prices. If that repayment rate is below the loan rate, the farmer captures the difference as a subsidy (marketing loan gain). Loan deficiency payments (equal to marketing loan gains) also are available to eligible producers who choose not to take out a crop loan.

Upland Cotton, ELS Cotton, Wool, Mohair, Honey. These commodities are not eligible for PLC/ARC payments, but producers can receive nonrecourse marketing assistance loans and (except for ELS cotton) loan deficiency payments.

Payment Limits and Adjusted Gross Income Eligibility. Farm commodity program benefits (except for "gains" from loan forfeitures) are subject to a combined payment limit of $125,000 per person, with an additional separate limit of $125,000 for peanuts. Also, the income limit per person for program eligibility is $900,000 of adjusted gross income (three-year average). The dollar amounts double for a married couple. Finally, persons must be "actively engaged" in farming. With benefits from forfeited loans not counted against the payment limit, potential 2014-crop payments for PLC/ARC have generated concerns that loans for cotton and other crops could be forfeited, resulting in government stock build-up, if producers approach the $125,000 limit.

Sugar. A combination of import quotas, nonrecourse loans, and marketing allotments (to limit sales by processors) is intended to support prices at 18.75¢/lb. (raw cane) and 24.09¢/lb. (refined beet), and at no net cost to the government. A sugar-to-ethanol (feedstock flexibility) backstop is available if allotments and import quotas fail to keep market prices above guaranteed levels.[4]

Milk. Dairy producers are eligible for the Margin Protection Program (MPP), which makes payments when the national margin (average farm price of milk minus an average feed cost ration) falls below a producer-selected margin ranging from $4.00 per hundredweight (cwt.) to $8.00/cwt. Participating producers pay premiums for margin coverage above $4.00/cwt. To assist small farms, lower premiums are charged for the first 4 million pounds (lbs.) of annual output (approximately 170 cows), while higher premiums are charged on amounts above 4 million lbs. A 25% discount on premiums is available for 2014 and 2015 on coverages below $8.00/cwt.[5]

Agricultural Disaster Assistance[6]

The 2014 farm bill permanently authorized three disaster programs for livestock and one for orchards and vineyards. Nearly all parts of the U.S. farm sector now are covered by either a disaster program or federal crop insurance, which is expected to reduce calls for ad hoc federal assistance. CBO estimated annual outlays at approximately $300 million per year for FY2016-FY2024. The programs are retroactive, and producer payments as of mid-September 2014 totaled $2 billion for losses in FY2012-FY2014. The programs are:

1. **Livestock Indemnity Program (LIP)**, which provides payments to eligible livestock owners and contract growers at a rate of 75% of market value for livestock deaths in excess of normal mortality caused by adverse weather;
2. **Livestock Forage Disaster Program (LFP)**, which makes payments to eligible livestock producers who have suffered grazing losses on drought-affected pasture or grazing land, or on rangeland managed by a federal agency due to fire;
3. **Emergency Assistance for Livestock, Honey Bees, and Farm-Raised Fish Program (ELAP)**, which provides payments (capped at $20 million per year) to producers of livestock, honey bees, and farm-raised fish as compensation for losses due to disease, adverse weather, and feed or water shortages; and
4. **Tree Assistance Program (TAP)**, which makes payments to orchardists/nursery tree growers for losses in excess of 15% to replant trees, bushes, and vines damaged by natural disasters.

The programs do not require a disaster declaration, and producers do not pay a fee to participate. For individual producers, combined payments under all programs except TAP may not exceed $125,000 per year. For TAP, a separate limit of $125,000 per year applies. Also, to be eligible for a payment, a producer's total adjusted gross income cannot exceed $900,000. Separately, for all types of farms and ranches, when a county has been declared a disaster area by either the President or the Secretary of Agriculture, producers in that county may become eligible for low-

[4] CRS Report R42535, *Sugar Program: The Basics.*

[5] CRS Report R43465, *Dairy Provisions in the 2014 Farm Bill (P.L. 113-79)*.

[6] CRS Report RS21212, *Agricultural Disaster Assistance*; and CRS Report R42854, *Emergency Assistance for Agricultural Land Rehabilitation.*

interest emergency disaster (EM) loans. USDA also has several programs that help producers repair damaged land following natural disasters.

USDA Discretionary Support

In addition to the explicitly required assistance described above, federal law has long given USDA the discretion to offer support for virtually any farm commodity. For example, USDA made direct payments to hog producers in 1999 during a period of historically low prices, and to fruit, vegetable, and nursery plant growers affected by Florida hurricanes in 2004 and 2005. The most recent emergency farm assistance extended under discretionary authority was in 2010, when USDA made farm payments for weather-related and other losses to producers of upland cotton, rice, soybeans, poultry, and aquaculture. Authority and funding for these various activities can come from CCC (under the CCC Charter Act) and Section 32 (of P.L. 74-320, a 1935 law).

Section 32 permanently appropriates the equivalent of 30% of annual customs receipts to support the farm sector through a variety of activities. Most of this appropriation (now about $8 billion per year) is transferred directly to USDA's child nutrition account to fund school feeding and other programs. However, Section 32 also provides USDA with a source of discretionary funds, which in addition to the direct payments above also pays for "emergency removals" of surplus agricultural commodities, disaster relief, or other unanticipated needs. USDA annually purchases hundreds of millions of dollars in meats, poultry, fruits, and vegetables under Section 32. However, in annual appropriations acts since FY2012, Congress has prohibited the use of appropriated funds to pay for salaries and expenses needed to operate a farm disaster program under either funding source.

Historical Policy Discussion

When commodity programs and the federal crop insurance program were first authorized in the 1930s, most of the country's then 6.8 million farms were diversified and small (by today's standards). There was a perceived need to address the severe economic problems faced by this large segment of rural-based society, where about 25% of the U.S. population resided. Moreover, it was argued, stabilizing the agricultural sector—through guaranteed minimum farm prices, income payments to producers, and/or various supply management techniques—would help to ensure an abundant supply of food and fiber at reasonable prices in the future.

Over the last half century, while farm size and incomes have increased, the perennial challenge of price and income variability has remained, especially as increased globalization exposed U.S. agricultural markets to international events. As a result, policy makers have focused increasingly on risk management rather than traditional price support and supply control. Both Congress and the Administration sought, for many decades, to steer price and income support programs onto a more "market-oriented" course, so that the private market rather than the government would provide economic rewards for production agriculture. And since 1980, to reduce the potential for ad hoc disaster assistance and provide producers with risk management tools, the federal crop insurance program has been enhanced for producers multiple times by increasing subsidy rates and broadening coverage.

Most recently, Congress passed the 2014 farm bill with additional crop insurance options and higher farm program guarantees (reference prices) designed to trigger payments more often than

under previous law. Funding was accomplished by eliminating direct payments that had been made annually to eligible farmland owners since 1996 but played no role in managing farm risk because they did not vary with farm prices. Also, as part of the trend toward risk management, the 2014 farm bill's new dairy program and Agriculture Risk Coverage have insurance-like features that reimburse farmers when a loss is triggered.

Supporters of the farm safety net contend that the authorized programs protect against price and market volatility, and provide needed support and/or stability to farmers who otherwise would see plunging incomes and land values due to unfavorable and unpredictable yields. Critics have long argued that U.S. commodity-based policies are outdated and transfer too much risk from private businesses (farms) to the federal government, waste taxpayers' money, and may be detrimental to society in general, particularly if policies encourage farming on environmentally sensitive land.

Prospective Issues

USDA has begun implementing the farm bill commodity programs and crop insurance provisions. Several facets of the current farm safety net might be of interest to Congress.

Actual Production History (APH) in the 2014 Farm Bill

In recent years, a particular crop insurance concern of producers affected by prolonged drought in the Southern Plains has been the inclusion of poor yields used to establish an individual's insurance guarantee, which is based on 4 to 10 years of historical farm yields and called actual production history (APH). To address this, the 2014 farm bill allows a producer to exclude years with low yields from his or her APH calculation when the average county yield is less than 50% of the 10-year county average. The farm bill manager's report directed USDA to implement the provision for 2015 crops. Given program complexity and significant data requirements, USDA first indicated that it would not do so until 2016, prompting some Members to press for an earlier rollout. On October 21, 2014, USDA announced it would implement the provision for crops planted in spring 2015. Frank Lucas, chairman of the House Agriculture Committee, responded that he hopes the benefit will be extended also to wheat planted in fall 2014.

"Generic" Base Acres

To reduce the potential for excess production and subsequent market distortions, the 2014 farm bill continues to "decouple" farm payments from actual plantings by instead making PLC/ARC payments on a farm's historical "base acres." Each farm has crop-specific bases equal to historical planted acreage on that farm. Also, as part of a package to address a long-term trade dispute, the 2014 farm bill excluded upland cotton from PLC/ARC and renamed upland cotton base (totaling 17.5 million acres) as "generic" base. Generic base becomes eligible for program payments if a covered crop is planted on the farm. Thus, generic base is an exception to the broad decoupling of plantings and farm program payments. (The precursor to ARC, called "ACRE," also tied government payments to same-year plantings.) The domestic and trade policy concern is that farmers with generic base might pursue potential farm program payments by planting certain covered crops in low-price years. For example, producers with generic base might have an economic incentive to plant additional peanuts if the combination of expected payments and market returns is greater for peanuts than for alternative crops (see **Table A-3**).

Potential Farm Program Impacts on Acreage and Prices

The 2014 farm bill increased program payment triggers (reference prices) for covered commodities (see list in **Table 2**). The additional price protection was designed to provide financial cover for producers until crop prices rebound and incomes rise. One concern is that prospective payments could increase supplies when low prices would otherwise discourage farmers from planting or applying inputs. Larger supplies could intensify the price pressure and increase government costs. Several program features are designed to minimize any adverse supply effect, such as paying only on historical base acreage and not current year plantings (except for generic base), and then only on a portion of base (85% in the case of PLC and ARC-County and 65% for ARC-Individual). Also, if farm prices were to remain low for several years, the ARC guarantees (and therefore payments) would decline as older, higher prices fall out of the five-year moving average guarantee. In contrast, PLC price guarantees remain fixed in statute.

Government Outlays

Given the outlook for record corn and soybean yields in 2014 and declining farm prices, government outlays for the farm commodity programs for 2014 crops could be significantly higher than earlier expectations. Some are saying that farm payments could be as much as $6 billion for corn alone and possibly $8 billion for all commodities, or more than double the CBO estimate made earlier in 2014 based on stronger market assumptions.[7] Official estimates for 2014-crop outlays will not be available from USDA, CBO, and others until early 2015. With ongoing congressional concern for budget deficits and federal spending, the combined cost of farm programs and crop insurance is expected to garner the attention of policy makers who want to reduce federal spending. Proponents of farm spending, however, point out that weak prices likely will have the opposite effect (i.e., reducing prospective outlays) for federal crop insurance because premiums (and premium subsidies) typically decline in tandem with falling farm prices. Moreover, supporters point out that the safety net has been designed for such situations.

Design of Overall Farm Safety Net

Challenges for farm policy makers over the years have included the complexity of the farm safety net, development of programs with similar but not identical objectives and payment mechanisms, and the potential for different programs to make payments for the same loss.[8] For example, the current farm safety net for "covered" commodities has several variations of "counter-cyclical-style" payments, including marketing loan benefits, traditional price payments (PLC), and revenue payments (ARC-County Coverage). All three focus to some extent on price declines. Farmers can also add "revenue protection" crop insurance for individual farm yield (and revenue) risk, but without minimum prices used in farm programs. (See **Figure A-1** for the interaction of crop insurance and farm programs.) Proponents say the options are necessary because "one program doesn't fit all producers and regions," while others believe that a simplified approach might be more effective and less expensive, with savings used for purposes that generate broad societal gains, such as investment in agricultural research or transportation infrastructure.

[7] Philip Brasher, "Crop Subsidies Could Top $8 Billion Due to Price Plunge," *CQ Roll Call*, September 16, 2014.

[8] For background and analysis on program overlap, see Erik J. O'Donoghue et al., *Identifying Overlap in the Farm Safety Net*, USDA Economic Research Service, Economic Information Bulletin Number 87, November 2011, http://www.ers.usda.gov/media/149262/eib87_1_.pdf.

Appendix. Farm Commodity Program Examples

The 2014 farm bill (P.L. 113-79) established commodity programs that make farm payments when either annual crop prices or revenues are below statutory reference prices or historical revenue guarantees. Producers have a one-time choice:

- For each covered crop on each farm,
  - Price Loss Coverage (PLC), or
  - Agriculture Risk Coverage-County (ARC-CO)
- Or, for all covered crops on each farm,
  - Agriculture Risk Coverage-Individual (ARC-Individual)

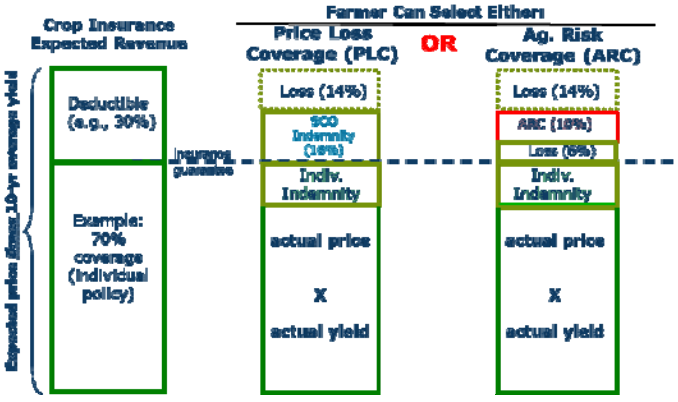
Hypothetical examples in the following tables illustrate several types of farms and how farm commodity programs might trigger payments given 2014 farm bill parameters and expected prices for 2014 crops, using USDA forecasts made in October 2014.

- **Table A-1**: Corn/Soybean farmer selects PLC for corn and ARC for soybeans
- **Table A-2**: Wheat/Lentil farmer selects ARC-Individual for the entire farm
- **Table A-3**: Peanut/Cotton farmer selects PLC for peanuts, with generic base (formerly upland cotton base) attributed to same-year peanut planted acreage

In addition to farm commodity programs, producers who purchase federally subsidized crop insurance may also be eligible for an indemnity if price and yield conditions specified in the policy are triggered. The 2014 farm bill made available a second federal crop insurance policy called the Supplemental Coverage Option (SCO) to cover part of the deductible on the underlying policy. (Note: SCO cannot be purchased for commodities enrolled in ARC.) For farm examples of crop insurance, see CRS Report R40532, *Federal Crop Insurance: Background.*

Figure A-1 illustrates the interaction between crop insurance and farm programs. The bar on the left depicts the expected revenue (prior to planting) under a typical crop insurance revenue policy with a 30% deductible (the farmer absorbs the first 30% of the loss). If the farmer selects PLC, an SCO policy can be purchased to cover part of the deductible (see PLC column). If a farm loss occurs, an initial indemnity is triggered under the farmer's individual crop insurance policy (depicted by the green box). A second indemnity from SCO would be paid (blue box) if there is also a loss at the county level. Overall, the farmer incurs a loss of approximately 14% (white box at top). A *separate PLC payment* (not shown) is made if the farm price is below the reference price. In contrast, if ARC is selected rather than PLC (see ARC column), the farm is not eligible for SCO and only an ARC payment (red box) and insurance indemnity (green box) would be made if triggered.

Figure A-1. Crop Insurance and Farm Programs



Source: CRS.

Table A-1. Hypothetical Corn/Soybean Farm in 2014

(farmer selects *Price Loss Coverage (PLC)* for corn and *Ag. Risk Coverage (ARC)* for soybeans)

Step 1.	Step 2.	Step 3.	Step 4.
Data	**Payment Formula**	**Calculation**	**Payment**
Price Loss Coverage (PLC) for corn: *payment occurs when actual farm price ($3.40/bu.) is below reference price ($3.70/bu.)*			
Corn Reference Price = $3.70/bu. 2014 Actual Price = $3.40/bu. Farm Base = 500 acres Farm Program Yield = 100 bu./acre	**Payment =** (Reference Price - Actual Price) x Base Acres x 85% acreage factor x Program Yield	**Payment =** ($3.70/bu. - $3.40/bu.) x 500 acres x 85% x 100 bushels/acre = $12,750	**Corn payment =** $12,750
Agriculture Risk Coverage – County (ARC) for soybeans: *payment occurs when actual county revenue ($/acre) is below guarantee*			
Soybeans **County yield** bu./acre / **Nat'l price** per bu. 2009 *36* *$9.59* 2010 38 $11.30 2011 40 $12.50 2012 42 *$14.40* 2013 *44* $13.00 Data in *italics* are not used in calculation.	**Benchmark Revenue =** 5-year "Olympic" average county yield x 5-year "Olympic" average national price The "Olympic" averages exclude the high and the low years (in *italics* at left).	**Average yield and price calculations** Average yield = (38 + 40 + 42) / 3 = 40 bu./acre Average price = ($11.30 + $12.50 +$13.00) / 3 = $12.27/bu. **Benchmark Revenue =** $40 bu./acre x $12.27/bu. = $491/acre	
	Revenue Guarantee = Benchmark Revenue x 86% guarantee factor	**Revenue Guarantee =** $491/acre x 86% = **$422**/acre	
2014 county yield = 40 bu./ac 2014 nat'l price = $10.00 /bu.	**2014 Actual Revenue =** county yield x national price	**2014 Actual Revenue =** 40 bu./acre x $10.00/bu. = **$400**/acre	
Farm Base (soybeans) = 500 acres	**Payment =** (Revenue Guarantee - Actual Revenue) x Base Acres x 85% acreage factor	**Payment =** (**$422**/acre - **$400**/acre) x 500 acres x 85% = $9,350	**Soybean payment =** $9,350
Total farm payment = PLC for corn + ARC for soybeans			$22,100

Source: CRS, based on statutory provisions of P.L. 113-79, hypothetical data (county yields, farm program yields, and farm bases), and USDA crop prices (2014 "actual" prices are forecast as of October 10, 2014).

Notes: Statutory parameters include the reference price, the payment acreage factor (85%), and the guarantee factor for "shallow losses" (86%). Payments do not depend which crop is actually planted and are scheduled to be made in October 2015 after final 2014-crop price and yield data become available. In ARC, reference prices serve as minimums; maximum payment is 10% of the benchmark revenue. In both PLC and ARC, the loan rate is used if higher than actual price. Higher prices or yields might not trigger a farm payment for 2014 crops.

Table A-2. Hypothetical Wheat/Lentil Farm in 2014

(farmer selects *Agriculture Risk Coverage-Individual* for entire farm—wheat and lentils)

Step 1. Data	Step 2. Payment Formula	Step 3. Calculation	Step 4. Payment
Agriculture Risk Coverage – Individual (ARC): *payment occurs when actual whole-farm revenue ($/acre) is below whole-farm guarantee*			
2014 total plantings = 600 acres Wheat = 500 acres Lentils = 100 acres	**2014 Planting Shares:** **Wheat:** (2014 **wheat** plantings / 2014 total plantings) **Lentils:** (2014 **lentil** plantings / 2014 total plantings)	**2014 Planting Shares:** **Wheat:** 500 ac. / (500 ac. + 100 ac.) = 83% **Lentils:** 100 ac. / (500 ac. + 100 ac.) = 17%	
Wheat Farm yield bu./acre x Nat'l price per bu. = Rev. $/ac. 2009 36 x $5.50* = *$198* 2010 38 x $5.70 = $217 2011 40 x $7.24 = $290 2012 42 x $7.77 = *$326* 2013 44 x $6.87 = $302	**Average Revenue Calculations:** The "Olympic" averages exclude the high and the low revenue years (in *italics* at left)	**Average Revenue Calculations:** **Wheat:** ($217/ac. + $290/ac. + $302/ac.) / 3 = $270/ac. **Lentils:** ($334/ac. + $275/ac. + $312/ac.) / 3 = $307/ac.	
Lentils Farm yield cwt./acre x Nat'l price per cwt. = Rev. $/ac. 2009 14 x $26.80 = *$375* 2010 13 x $25.70 = $334 2011 11 x $25.00 = $275 2012 12 x $20.70 = *$248* 2013 15 x $20.80 = $312 Data in *italics* are not used in calculation; *reference price of $5.50 serves as a minimum price for wheat.	**Benchmark Revenue =** 5-year "Olympic" average revenue for **wheat** x wheat 2014 planting share + 5-year "Olympic" average revenue for **lentils** x lentil 2014 planting share	**Benchmark Revenue =** **Wheat:** $270/ac. x 83% = $224/ac. **Lentils:** $307/ac. x 17% = $52/ac. **Total Benchmark revenue =** $224/ac. + $52/ac.= $276/ac.	
	Revenue Guarantee = Benchmark Revenue x 86% guarantee factor	**Revenue Guarantee =** $276 / acre x 86% = **$ 237 / acre**	
2014 Actual Crop Revenue Data Farm prod. x Nat'l price = Revenue Wheat:18,000 bu. x $5.90 = $106,200 Lentils: 1,400 cwt. x $19.00 = $26,600	**2014 Actual Revenue =** Sum of crop revenues divided by total 2014 planted area	**2014 Actual Revenue =** ($106,200 + $26,600) / 600 acres = **$221**/ac.	
Total Farm Base = 600 acres In this case, base acres = total planted acres	**Payment =** (Revenue Guar. - Actual Revenue) x Base Acres x 65% acreage factor	**Payment =** (**$237**/acre - **$221**/acre) x 600 acres x 65% = $6,240	**Farm payment =** $6,240
Total farm payment			$6,240

Source: CRS, based on statutory provisions of P.L. 113-79, hypothetical data (acreage and yields), and USDA crop prices (2014 "actual" prices are forecast as of October 10, 2014).

Notes: Statutory parameters include the reference price, the guarantee ("shallow loss") factor (86%), and the payment acreage factor (65%). Payments are scheduled to be made in October 2015 after final 2014-crop price and yield data become available. Reference prices serve as minimums; maximum payment is 10% of benchmark revenue. Higher actual prices or yields might not trigger farm payment for 2014 crops.

Table A-3. Hypothetical Peanut/Cotton Farm in 2014

(farmer selects *Price Loss Coverage (PLC)* for peanuts, with *Generic Base* attributed to peanuts)

Step 1.	Step 2.	Step 3.	Step 4.
Data	**Payment Formula**	**Calculation**	**Payment**
Price Loss Coverage (PLC) for peanuts: *payment occurs when actual farm price ($400/ton) is below reference price ($535/ton)*			
Reference Price = $535/ton 2014 Actual Price = $400/ton Peanut Base = 200 acres Farm Program Yield = 1.5 tons/acre 2014 Total Plantings = 300 acres of peanuts Note: payments do not depend on same-year plantings.	**Payment =** (Reference Price – Actual Price) x Base Acres x 85% acreage factor x Program Yield	**Peanut Payment =** ($535/ton - $400/ton) x 200 acres x 85% x 1.5 ton/acre = $34,425	**Peanut payment =** $34,425
Generic Base = 100 acres (formerly Upland Cotton Base) Note: payments on Generic Base depend on same-year plantings of covered crops.	For plantings on Generic Base: Payment = same formula as above but Generic Base acres are attributed to a particular covered commodity in proportion to actual plantings for that crop year. In this case, all Generic Base (100 acres) are attributed to peanuts because no other covered commodity was planted in 2014.	Payment on Generic Base = ($535/ton - $400/ton) x 100 acres x 85% x 1.5 ton/acre = $17,213	**Payment on Generic Base =** $17,213
Total farm payment = PLC for peanuts + PLC for Generic Base (planted/attributed to peanuts)			$51,638

Source: CRS, based on statutory provisions of P.L. 113-79, hypothetical data (acreage and yields), and USDA crop prices (2014 "actual" prices are forecast as of October 10, 2014).

Notes: Statutory parameters include the reference price and the payment acreage factor (85%). For each crop year, generic base acres are attributed to (i.e., temporarily designated as) base acres to a particular covered commodity base in proportion to that covered crop's share of total plantings of all covered commodities in that year. The loan rate is used in the payment calculation if it is higher than the actual price.

Upland cotton is no longer a covered commodity and not eligible for PLC/ARC payments (marketing assistance loans remain available). Instead it is eligible for a new crop insurance policy called Stacked Income Protection or STAX (see CRS Report R43494, *Crop Insurance Provisions in the 2014 Farm Bill (P.L. 113-79)*). Transition payments are made for upland cotton for the 2014 crop year, and for 2015 if STAX is not available.

Author Contact Information

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