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# Federal Crop Insurance: Background

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## Summary

The federal crop insurance program began in 1938 when Congress authorized the Federal Crop Insurance Corporation. The current program, which is administered by the U.S. Department of Agriculture's Risk Management Agency (RMA), provides producers with risk management tools to address crop yield and/or revenue losses for about 130 crops. The federal farm safety net also includes the farm commodity support programs, which provide price and income support for a much narrower list of "covered and loan commodities" such as corn, wheat, rice, and peanuts.

In purchasing a crop insurance policy, a producer growing an insurable crop selects a level of coverage and pays a portion of the premium—or none of it in the case of catastrophic coverage—which increases as the level of coverage rises. The federal government pays the rest of the premium (62%, on average, in 2014). Insurance policies are sold and completely serviced through 18 approved private insurance companies. As spelled out in a Standard Reinsurance Agreement (SRA), the insurance companies' losses are reinsured by USDA, and their administrative and operating costs are reimbursed by the federal government.

In 2014, federal crop insurance policies covered 294 million acres. Major crops are covered in most counties where they are grown. Four crops—corn, cotton, soybeans, and wheat—typically account for more than 70% of total acres enrolled in crop insurance. Most crop insurance policies are either yield-based or revenue-based. For yield-based policies, a producer can receive an indemnity if there is a yield (production) loss relative to the farmer's "normal" (historical) yield. Revenue-based policies protect against crop revenue loss resulting from declines in yield, price, or both. Other insurance products protect against losses in whole farm revenue (rather than just for an individual crop) or gross margins for livestock enterprises.

Government costs for crop insurance have increased substantially during the last decade. After ranging between \$2.1 billion and \$3.9 billion during FY2000-FY2007, costs rose to \$7 billion in FY2009 as higher policy premiums from rising crop prices drove up premium subsidies to farmers and expense reimbursements (which are based on total premiums) to private insurance companies. Costs peaked at \$14.1 billion in FY2012 when crop prices surged again and poor weather resulted in program losses. With a return to more favorable weather and smaller crop losses, total program costs declined to \$6.0 billion in FY2013 and were \$8.7 billion in FY2014.

Federal outlays for crop insurance exceed those for the farm commodity support programs, making crop insurance the most significant cost component of the farm safety net and a potential target for deficit reduction. Insurance companies, farm groups, and some Members of Congress are concerned that any reductions in federal support could negatively impact the financial health of the industry and possibly jeopardize the delivery of crop insurance to farmers. Supporters of federal crop insurance do not want to make changes that would adversely affect farmer participation, policy coverage, or industry interest in selling and servicing insurance products to farmers. Critics argue that premium subsidies are higher than necessary for farmers to adequately protect themselves, and significant federal dollars could be saved if subsidies were lowered. From a farm policy standpoint, policymakers and observers alike remain concerned about how the crop insurance program interacts with farm commodity support programs and whether together they help farmers deal with business risk at a cost that is acceptable to taxpayers.

In the 2014 farm bill (P.L. 113-79), Congress expanded the federal crop insurance program by authorizing additional policies and requiring examination of potential new products, including those that would benefit specialty crops and animal agriculture. These changes are summarized in CRS Report R43494, *Crop Insurance Provisions in the 2014 Farm Bill (P.L. 113-79)*.

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For many farmers, federal crop insurance is the most important component of the farm safety net, given the breadth of commodity coverage, from apples to wheat, and the capability to reimburse producers for crop losses. The federal crop insurance program makes available subsidized policies to help farmers manage risk associated with natural disasters, including drought, excess moisture, and other perils. The average annual federal cost is approximately \$8 billion.

This report provides a primer on the federal crop insurance program and highlights changes to the program by the 2014 farm bill (P.L. 113-79). For details on crop insurance in the farm bill, see CRS Report R43494, *Crop Insurance Provisions in the 2014 Farm Bill (P.L. 113-79)*.

The farm safety net also includes the farm commodity support programs, which provide price and income support for a much narrower list of “covered and loan commodities” such as corn, soybeans, wheat, rice, and peanuts. Agricultural disaster programs are available for producers owning livestock or fruit trees. For information on these programs, see CRS Report R43448, *Farm Commodity Provisions in the 2014 Farm Bill (P.L. 113-79)*, and CRS Report RS21212, *Agricultural Disaster Assistance*. For an overview of the entire farm safety net, see CRS Report R43758, *Farm Safety Net Programs: Background and Issues*, and CRS Report IF10191, *Overview of Farm Safety Net Programs*.

## Crop Insurance History

Farming is generally regarded as a financially risky enterprise. Most agricultural production is subject to the vagaries of weather, and shifts in agricultural supply and demand often result in volatile market prices. Farm financial risk, periods of low returns, and the importance of agriculture in the nation’s economy during the early to mid-1900s led to the development of federal policies that financially supported farmers, primarily through commodity price mechanisms. Today’s farm commodity policies—authorized in the 2014 farm bill—have their roots in the 1930s.

During the same era, Congress also first authorized federal crop insurance as an experiment to address the effects of the Great Depression and crop losses seen in the Dust Bowl. In 1938, the Federal Crop Insurance Corporation (FCIC) was created to carry out the program, which focused on major crops in major producing regions. The availability of federal crop insurance remained limited until passage of the Federal Crop Insurance Act of 1980 (P.L. 96-365), which expanded crop insurance to many more crops and regions of the country. Congress enhanced the crop insurance program, including greater subsidy levels, in 1994 and again in 2000 in order to encourage greater participation. The changes also expanded the role of the private sector in developing new products that would help farmers manage their risks.<sup>1</sup> Today, many banks, when making operating loans, require that farmers purchase crop insurance.

The federal crop insurance program is permanently authorized by the Federal Crop Insurance Act, as amended (7 U.S.C. 1501 et seq.). It is periodically modified. For example, Congress chose to revise the statute in the 2008 farm bill (P.L. 110-246) to achieve budget savings and to

<sup>1</sup> For more on the history of federal crop insurance, see <http://www.rma.usda.gov/aboutrma/what/history.html>. Law citations are the Federal Crop Insurance Act of 1980 (P.L. 96-365), the Federal Crop Insurance Reform Act of 1994 (P.L. 103-354), and the Agriculture Risk Protection Act (ARPA) of 2000 (P.L. 106-224). Additional background on the program’s rationale is available the following three articles: (1) Joseph W. Glauber, “The Growth of the Federal Crop Insurance Program, 1990-2011,” *Amer. J. Agr. Econ.*, vol. 95, no. 2 (January 2013), pp. 482-488; (2) Keith H. Coble and Barry J. Barnett, “Why Do We Subsidize Crop Insurance?,” *Amer. J. Agr. Econ.*, vol. 95, no. 2 (January 2013), pp. 498-504; and (3) Barry K. Goodwin and Vincent H. Smith, “What Harm Is Done by Subsidizing Crop Insurance?,” *Amer. J. Agr. Econ.*, vol. 95, no. 2 (January 2013), pp. 489-497.

supplement crop insurance with a permanent disaster payment program. The 2014 farm bill (P.L. 113-79) expanded the program and increased budget outlays.<sup>2</sup> The U.S. Department of Agriculture's (USDA's) Risk Management Agency (RMA) operates and manages the FCIC.

## Program Basics

The federal crop insurance program provides producers with risk management tools to address crop yield and/or revenue losses on farms. Guarantees are established just prior to planting, based on historical yields and expected market prices (not statutory prices used in farm programs). Insurance policies are sold and completely serviced through 18 approved private insurance companies. Independent insurance agents are paid sales commissions by the companies. The insurance companies' losses are reinsured by USDA, and their administrative and operating costs are reimbursed by the federal government (see **Figure 1** and "Federal Program Costs," below).

In purchasing a policy, a producer growing an insurable crop selects a level of coverage and pays a portion of the premium, which increases as the level of coverage rises. The remainder of the premium is covered by the federal government (about 62% of total premium, on average, is paid by the government).<sup>3</sup> In the case of catastrophic coverage, the government pays the full premium. Also, the government, not the farmer, pays for the cost of selling and servicing all policies. In the absence of premium subsidies and free delivery, farmer participation in the crop insurance program and/or purchased coverage levels would be lower. A major benefit for producers is the timely payment for crop losses (about 30 days after the farmer signs the claim form).

In 2014, crop insurance policies covered 294 million acres (**Figure 2**). Major crops are insurable in most counties where they are grown, and approximately 83% of U.S. crop acreage is insured under the federal crop insurance program.<sup>4</sup> Four crops—corn, cotton, soybeans, and wheat—typically account for more than 70% of total enrolled acres. For these major crops, a large share of plantings is covered by crop insurance. In 2014, the portion of total corn acreage covered by federal crop insurance was 87%; cotton, 96%; soybeans, 88%; and wheat, 84%.

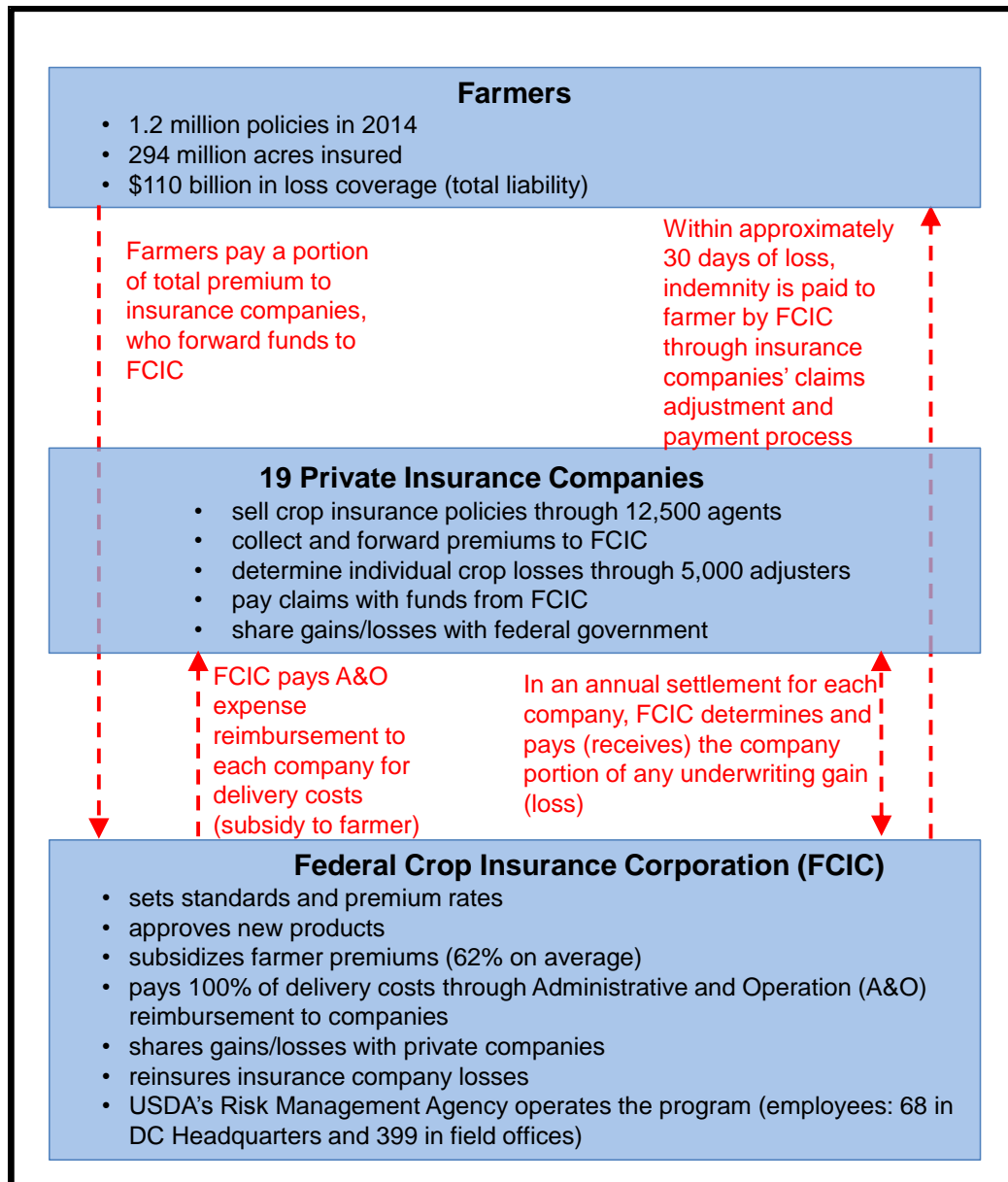
Policies for less widely produced crops are available in primary growing areas. Examples include dry peas, blueberries, citrus, pumpkins, and walnuts. In total, policies are available for about 130 crops (including coverage on a variety of fruit trees, nursery crops, pasture, rangeland, and forage).<sup>5</sup>

<sup>2</sup> CRS Report R43494, *Crop Insurance Provisions in the 2014 Farm Bill (P.L. 113-79)*.

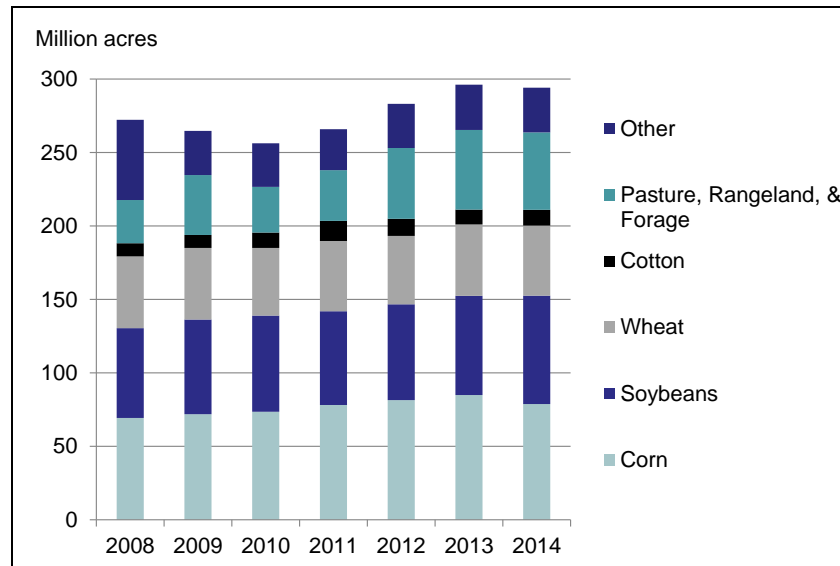
<sup>3</sup> In practice, the crop insurance company bills the farmer for the producer's portion of the premium (i.e., excluding the government portion). The company then sends the entire producer-paid premium to RMA. When a producer files a claim and the company pays an indemnity, RMA reimburses the company in full for the loss. At the end of the reinsurance year, there is an annual settlement whereby the company's proportion of any underwriting gain or loss is determined and paid.

<sup>4</sup> Insured percentage is for 2011. For a detailed analysis by crop, see USDA Risk Management Agency, *The Risk Management Safety Net: Portfolio Analysis-Market Penetration and Potential*, Washington, DC, August 2013, <http://www.rma.usda.gov/pubs/2013/portfolio/portfolio.pdf>.

<sup>5</sup> A complete list of 2015 crops is available at <http://www.rma.usda.gov/policies/2015policy.html>.

**Figure 1. Federal Crop Insurance Program**

**Source:** CRS, adapted from U.S. Department of Agriculture and industry sources.

**Figure 2. Insured Acres by Crop Year**

**Source:** U.S. Department of Agriculture, Risk Management Agency.

Many specialty crop producers depend on crop insurance as the only “safety net” for their operation, unlike field crop producers, who are also eligible for farm commodity program payments.<sup>6</sup> In the specialty crop category, insured acreage as a share of total acreage is 73% for fruits and nuts and 32% for vegetables.<sup>7</sup>

Crop insurance is not necessarily limited to crops. Relatively new or pilot programs protect livestock and dairy producers from loss of gross margin or price declines.<sup>8</sup> Livestock producers can also insure against hay and forage losses through the Pasture, Rangeland, and Forage program, which uses a rainfall index or vegetative index to determine loss.<sup>9</sup> A pilot program began in 2014 for annual hay production in North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, and Texas.<sup>10</sup>

## Policy Availability

The availability of crop insurance for a particular crop in a particular region is an administrative decision made by USDA. The decision is made on a crop-by-crop and county-by-county basis, based on farmer demand for coverage and the level of risk associated with the crop in the region, among other factors. Developing new products can be costly, and a significant challenge is

<sup>6</sup> Carey Frick, “Frick: Not So Peachy,” *The State*, May 26, 2010.

<sup>7</sup> USDA Risk Management Agency, *The Risk Management Safety Net: Portfolio Analysis-Market Penetration and Potential*, Washington, DC, August 2013, <http://www.rma.usda.gov/pubs/2013/portfolio/portfolio.pdf>. For additional information, see Federal Crop Insurance Corporation, *Report to Congress: Specialty Crop Report*, Washington, DC, November 2010, <http://www.rma.usda.gov/pubs/2010/specialtycrop.pdf>.

<sup>8</sup> For descriptions of Livestock Gross Margin (margin protection) and Livestock Risk Protection (price protection), see <http://www.rma.usda.gov/livestock/>.

<sup>9</sup> For more information, see <http://www.rma.usda.gov/policies/pasturerangeforage/>. Also see Monte Vandever, *Pasture, Rangeland, and Forage Insurance: A Risk Management Tool for Hay and Livestock Producers*, University of Nebraska-Lincoln, October 2012, [http://cropwatch.unl.edu/c/document\\_library/get\\_file?uuid=3f25e3ef-68d1-4489-a7dd-7daba3c2d385&groupId=1841&.pdf](http://cropwatch.unl.edu/c/document_library/get_file?uuid=3f25e3ef-68d1-4489-a7dd-7daba3c2d385&groupId=1841&.pdf).

<sup>10</sup> For a description of the program, see <http://www.rma.usda.gov/policies/ri-vi/annualforage.html>.



obtaining credible data (yield and price) to create an actuarially sound product. The process usually starts with a pilot program, which is conducted for about three years in order for RMA to gain experience and test the program components before it becomes more widely available. Alternatively, a policy can be reviewed and later discontinued if it fails to perform at an acceptable level (e.g., low participation or high losses).

Some policies remain as a pilot for years. For example, the forage (alfalfa) seed insurance policy was introduced in 2002 as a pilot program to provide insurance coverage to alfalfa seed farmers. On May 29, 2014, USDA announced that it would be converted to a permanent policy for the 2015 crop year. During the pilot period, USDA determined an insurance need for hybrid production and made a program change to provide coverage for growers contracting for production of hybrid alfalfa seed.

### Regions Without Coverage

In regions where a policy is not available, farmers may request from the appropriate regional office that RMA expand the program to their county.<sup>11</sup> A producer also may request insurance coverage under a written agreement, which is a document designed to provide crop insurance for insurable crops when coverage or rates are unavailable.<sup>12</sup>

When crop insurance is not available, USDA's noninsured crop disaster assistance program (NAP) provides the equivalent of catastrophic coverage (for yield losses greater than 50%) if purchased by the producer. Additional coverage (for yield losses greater than 35%) has been made available by the 2014 farm bill. To be eligible for a NAP payment, a producer first must apply for coverage under the program by the application closing date, which varies by crop, but is generally about 30 days prior to the final planting date for an annual crop. As with catastrophic crop insurance, NAP applicants pay an administrative fee (currently \$250 per crop). No premiums are required.<sup>13</sup>

### Enhancing Existing Coverage

RMA also regularly responds to requests from commodity organizations or industry representatives for enhancements to existing coverage, such as adding revenue coverage and organic practice coverage or trend yield adjustments to better reflect a producer's liability. In some cases, RMA has not pursued policies for particular commodities because producers have expressed concerns that offering insurance could adversely affect the market (i.e., because an insurance policy reduces producer risk, farmers may plant more acreage, which could drive down prices and total crop revenue). This has been a concern for many vegetable crops and explains in part lower levels of insured vegetable acreage compared with other crops.<sup>14</sup>

<sup>11</sup> A list of RMA regional offices is available at <http://www.rma.usda.gov/aboutrma/fields/rsos.html>.

<sup>12</sup> For more information, see USDA, Risk Management Agency, *Requesting Insurance Not Available in Your County*, Program Aid 1929, September 2013, <http://www.rma.usda.gov/pubs/rme/requestinginsurance.pdf>. See also the FCIC "Written Agreement Handbook," <http://www.rma.usda.gov/handbooks/24000/2013/24020.pdf>.

<sup>13</sup> For more information on NAP, see the USDA fact sheet at [http://fsa.usda.gov/Internet/FSA\\_File/nap09.pdf](http://fsa.usda.gov/Internet/FSA_File/nap09.pdf).

<sup>14</sup> Growers have expressed a preference for no development of insurance products for a number of crops; see Attachment 2 in USDA Risk Management Agency, *The Risk Management Safety Net: Portfolio Analysis-Market Penetration and Potential*, Washington, DC, August 2013, <http://www.rma.usda.gov/pubs/2013/portfolio/portfolio.pdf>.

## Actuarial Soundness

Current law requires that RMA strive for actuarial soundness for the entire federal crop insurance program (that is, indemnities should equal total premiums, including premium subsidies).<sup>15</sup> As a result, RMA must set premium rates to only cover expected losses and a reasonable reserve. The agency is also required to conduct periodic reviews of its rate-setting methodology, which sets premium rates according to the average historical rate of loss (e.g., if policies pay out 10% of their value, on average, then the rate should be 10%). Based on a review completed in July 2011, RMA adjusted its methodology for several major commodities to give more weight to recent years and to make other changes.<sup>16</sup>

## Types of Insurance

Federal crop insurance policies are generally either yield-based or revenue-based. For most yield-based policies, a producer can receive an indemnity if there is a yield loss relative to the farmer's "normal" (historical) yield. Revenue-based policies were developed after yield-based policies, in the mid-1990s, to protect against crop revenue loss resulting from declines during the growing season in yield, price, or both. The most recent addition has been products that protect against losses in whole farm revenue rather than just for an individual crop. For both yield- and revenue-based policies, the price used to set the guarantee is based only on the expected price for the upcoming season, and is reset every year. This is in contrast to farm programs which either have price guarantees set in statute or use historical average prices and are designed to protect against longer-term price declines.

These two basic forms—yield-based and revenue-based—are discussed below, followed by a brief explanation of whole farm insurance. The text boxes in this report titled "Crop Insurance Examples: Yield-Based vs. Revenue-Based" and "Federal Crop Insurance: Range of Coverage and Policies" explain program operation within the two broad categories.

Slightly more than 1.2 million crop insurance policies were active in 2013, with revenue-based policies accounting for three-quarters of the total (**Figure 3**), and the remainder being yield-based policies. On a premium basis, revenue policies account for 84% of all policies.

## Yield-Based Insurance

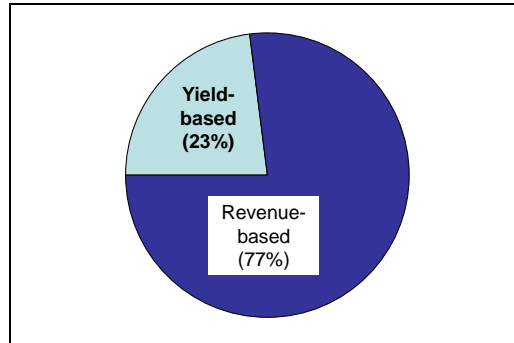
When purchasing a crop insurance policy, a producer is assigned (1) a "normal" crop yield based on the producer's actual production history, and (2) a price for his commodity based on estimated market conditions. The producer can then select a percentage of his normal yield to be insured and a percentage of the price he wishes to receive when crop losses exceed the selected loss threshold. The level of crop yield coverage is viewed by farmers as a critical feature of crop insurance, and a major determinant of whether a farmer will purchase insurance.<sup>17</sup>

<sup>15</sup> U.S. Department of Agriculture, Risk Management Agency, <http://www.rma.usda.gov/help/faq/basics.html>.

<sup>16</sup> For a detailed discussion, see U.S. Department of Agriculture, Risk Management Agency, *Premium Rate Adjustment*, November 2012, <http://www.rma.usda.gov/news/2012/11/2013premiumrateadjustment.pdf>.

<sup>17</sup> A number of university and Extension Service offices provide information to farmers when making crop insurance decisions. Some examples include [http://www.agmanager.info/crops/insurance/risk\\_mgt/default.asp](http://www.agmanager.info/crops/insurance/risk_mgt/default.asp), <http://www.ag.ndsu.nodak.edu/aginfo/cropmkt/cic.htm>, and <http://www.farmdoc.uiuc.edu/cropins/index.asp>.

**Figure 3. Types of Crop Insurance Policies**  
(policies earning premiums in 2014 = 1.2 million)



**Source:** U.S. Department of Agriculture, Risk Management Agency.

**Notes:** When calculated by share of premiums paid, yield-based policies account for 20% of total policies and revenue-based policies account for 80%. Index and “dollar” policies are included in yield-based total.

In determining what a normal production level is for an insurable farmer, USDA requires the producer to present actual annual crop yields (usually stated on a bushel-per-acre basis) for the last 4 to 10 years. The simple average of a producer’s annual crop yield over this time period then serves as the producer’s actual production history (APH). If a farmer does not have adequate records, he can be assigned a transition yield (T-yield) for each missing year of data, which is based on average county yields for the crop.

The most basic policy is called catastrophic (CAT) coverage. The premium for this level of coverage is completely subsidized by the federal government. The farmer pays an administrative fee for CAT coverage (\$300 per crop per county), and in return can receive a payment on losses in excess of 50% of normal yield, equal to 55% of the estimated market price of the crop (called 50/55 coverage).

Coverage levels that are higher than CAT are called “buy-up” coverage, and most farmers purchase buy-up policies because of the additional protection.<sup>18</sup> For an additional premium paid by the producer, and partially subsidized by the government, a producer can “buy up” the 50/55 catastrophic coverage to any equivalent level of coverage between 50/100 and 75/100 (i.e., up to 75% of “normal” crop yield and 100% of the estimated market price). In limited areas, production can be insured up to the 85/100 level of coverage.

The policy name depends on how pricing is determined for the crop. APH policies use a projected price determined by RMA, while Yield Protection policies use a projected price based on the commodity exchange markets. For example, policies are APH for plums and Yield Protection for wheat.

Several other policies, including Area Yield Protection (formerly called Group Risk Plan) and Dollar Plan (see box), are not widely used but can be important for certain crops. Some of these policies use an area-wide index—such as county-level yield in the case of the Area Yield Protection—to measure losses.

<sup>18</sup> Participation at the CAT level has steadily decreased, particularly since subsidies on buy-up levels were increased in the Agriculture Risk Protection Act (ARPA) of 2000. In 2014, only about 5% of insured acres were insured at the CAT level.

### Crop Insurance Examples: Yield-Based vs. Revenue-Based

Two basic forms of crop insurance are yield-based and revenue-based. Yield-based insurance provides an indemnity when the actual yield falls below the guarantee level. Revenue-based insurance provides an indemnity when the revenue (actual yield x price) falls below the guarantee.

#### Actual Production History (APH) Example:

A loss occurs when the bushels of soybeans produced for the insurance unit (insurable acreage) fall below the production guarantee as a result of damage from a covered cause of loss. Assumptions: "normal" production = 48 bushels / acre; yield coverage level = 75%; established price coverage = 100%; price election = \$9.90 / bushel; actual production = 20 bushels per acre.

48	bushels per acre APH yield
x .75	coverage level
<hr/> 36.0	bushel / acre guarantee
- 20.0	bushels / acre actually produced
<hr/> 16.0	bushels / acre of covered loss
x \$9.90	per-bushel price election
<hr/> \$158.40	per-acre gross indemnity payment
- \$6.00	estimated producer-paid premium per acre (varies)
<hr/> <b>\$152.40</b>	<b>per-acre net indemnity</b>

#### Revenue Product Example:

36.0	bushels / acre guarantee (see prior example)
x \$11.00	per-bushel base price (announced in March)
<hr/> \$396.00	per-acre guarantee
20	bushels / acre actually produced
x \$10.00	per-bushel harvest price (announced in November)
<hr/> \$200.00	per-acre revenue
 \$196.00	 per-acre gross indemnity payment (\$396.00 - \$200.00)
- \$13.00	estimated producer-paid premium (varies)
<hr/> <b>\$183.00</b>	<b>per-acre net indemnity</b>

**Source:** U.S. Department of Agriculture, Risk Management Agency, *2009 Commodity Insurance Fact Sheet - Soybeans - Iowa*, January 2009, [http://www.rma.usda.gov/fields/mn\\_rso/2009/2009iasoybeans.pdf](http://www.rma.usda.gov/fields/mn_rso/2009/2009iasoybeans.pdf).

## Federal Crop Insurance: Range of Coverage and Policies

**I. Catastrophic Coverage (CAT)** pays 55% of the established price of the commodity on crop losses in excess of 50%, which is the deductible or out-of-pocket loss absorbed by farmer. The premium on CAT is paid by the federal government; however, producers must pay a \$300 administrative fee for each crop insured in each county. Limited-resource and beginning farmers may have this fee waived. CAT coverage is not available on all types of policies.

**II. Buy-up Coverage** offers higher coverage (a lower deductible) and is purchased instead of CAT. Policies include:

### Yield-based policies:

**Actual Production History (APH)** and **Yield Protection (YP)** policies insure producers against yield losses due to natural causes such as drought, excessive moisture, hail, wind, frost, insects, and disease. The farmer selects the amount of average yield he or she wishes to insure, from 50% to 85%. The farmer also selects the percentage of the projected price he or she wants to insure—between 55% and 100% of the crop price (for APH, the price is established annually by RMA; for Yield Protection, the price is based on futures market prices). If the harvest is less than the yield insured, the farmer is paid an indemnity based on the difference. Indemnities are calculated by multiplying this difference by the insured percentage of the selected price.

**Area Yield Protection** (formerly Group Risk Plan or GRP) insures against widespread loss of production based on county average yields. When the county yield for the insured crop falls below the trigger level selected by the farmer, an indemnity is paid regardless of the individual farmer's actual yield. Coverage is available for up to 90% of the expected county yield. This protection involves less paperwork and costs less than the farm-level coverage described above. However, individual crop losses may not be covered if the county yield does not suffer a similar loss. This insurance is suitable for farmers whose crop losses typically follow the county pattern.

**Dollar Plan** provides protection against declining value due to damage that causes a yield shortfall. (Crop examples include cherries, chili peppers, citrus, and nursery crops.) Amount of insurance is based on the cost of growing a crop in a specific area. A loss occurs when the annual crop value is less than the amount of insurance. The maximum dollar amount of insurance is stated on the actuarial document. The insured may select a percentage of the maximum dollar amount equal to CAT (catastrophic level of coverage), or additional coverage levels.

The **Vegetation Index** and **Rainfall Index** do not measure direct production or loss; rather the farmer is insuring against an index that is expected to estimate production. The Pasture, Rangeland, and Forage (PRF) pilot program and the Apiculture pilot program (for beekeepers) use an index for different parts of the country.

### Revenue-based policies:

**Revenue Protection (RP)** insures producers against yield losses due to natural causes such as drought, excessive moisture, hail, wind, frost, insects, and disease, and revenue losses caused by a change in the harvest price from the projected price. The producer selects the amount of average yield he or she wishes to insure, from 50% to 75% (in some areas to 85%). The projected price and the harvest price are 100% of the price determined by futures contracts. The amount of insurance protection is based on the greater of the projected price or the harvest price. If the harvested plus any appraised production multiplied by the harvest price is less than the amount of insurance protection, the producer is paid an indemnity based on the difference. The policy "Revenue Protection With Harvest Price Exclusion" is based on the projected price only (i.e., the amount of insurance protection is not increased if the harvest price is greater than the projected price).

**Actual Revenue History (ARH)** insures an average of historical grower revenues instead of insuring historical yields as done under APH. Like other revenue coverage plans, ARH protects growers against losses from low yields, low prices, low quality, or any combination of these events.

**Area Revenue Protection** (formerly Group Risk Income Protection or GRIP) makes indemnity payments only when the average county revenue for the insured crop falls below the revenue guarantee selected by the farmer; Area Revenue Protection with Harvest Price Exclusion is available if upside harvest price protection is not desired.

**Whole-Farm Revenue Protection (WFRP)** insures revenue of the entire farm rather than an individual crop by guaranteeing a portion of whole-farm historic average revenue (both crops and livestock). To calculate the guarantee, the plan uses five consecutive years of a producer's Schedule F tax form and current-year expected farm revenue. Beginning in 2015, it replaces Adjusted Gross Revenue (AGR) and AGR-Lite.

**Livestock Policies** insure against declining market prices or gross margins for swine, cattle, lambs, and milk.

**III. Supplemental Coverage Option (SCO)** may be purchased with CAT or Buy-up to cover part of the deductible of underlying policy. Eligible crops in 2015 are corn, cotton, sorghum, rice, soybeans, barley, and wheat.

**Source:** USDA's Risk Management Agency, <http://www.rma.usda.gov/policies/>.

## Revenue-Based Insurance

Revenue insurance accounts for more than half of all crop insurance policies (**Figure 3**). It began in 1997 as a buy-up option on a pilot basis for major crops. By 2003, acreage under revenue-based insurance exceeded acreage covered by yield-based policies.<sup>19</sup>

A “Revenue Protection” policy combines the production guarantee component of crop insurance with a price guarantee to create a target revenue guarantee. Under revenue insurance programs, participating producers are assigned a target level of revenue based on expected market prices for the upcoming season and the producer’s yield history. A farmer who opts for revenue insurance can receive an indemnity payment when his actual farm revenue (crop-specific or entire farm, depending on the policy) falls below a certain percentage of the target level of revenue, regardless of whether the shortfall is caused by low prices or low production levels. The price portion of the guarantee rises if the market strengthens between planting and harvest, unless the producer purchases “Revenue Protection With Harvest Price Exclusion.” Insurable crops are barley, canola/rapeseed, corn, cotton, grain sorghum, peanuts, rice, soybeans, sunflowers, and wheat. For selected other crops such as tart cherries and strawberries, Actual Revenue History (ARH) insures historical revenues and protects growers against losses from low yields, low prices, low quality, or any combination of these events.

## Whole Farm Revenue Protection (WFRP)

The Whole-Farm Revenue Protection (WFRP) policy insures revenue of the entire farm rather than an individual crop. The policy is designed for highly diverse farms that are growing a wide range of commodities, including farms selling to local or regional, and farm-identity preserved, markets and growing specialty crops and animals and animal products. The amount of farm revenue that can be protected is the lower of the revenue expected on the current year’s farm plan or five-year historic income adjusted for growth. All commodities produced by the farm are covered under WFRP except timber, forest, and forest products, and animals for sport, show or pets. Maximum total coverage per farm is \$8.5 million.<sup>20</sup> WFRP replaces the Adjusted Gross Revenue (AGR) and AGR-Lite pilot programs and provides additional enhancements, such as a range of coverage levels from 50%-85% to fit the needs of more farming and ranching operations; replant coverage for annual crops; the ability to consider market readiness costs as part of the insured revenue and expenses; provisions to adjust the insurance guarantee to better fit expanding operations; and an improved timeline for operations that operate as fiscal year filers.

## Geographic Distribution of Program Participation and Indemnities

With widespread use of crop insurance products for major crops (corn, cotton, soybeans, and wheat), the geographic distribution of acreage enrolled in crop insurance mirrors that of major producing areas (**Figure 4**). Crop insurance indemnities follow the same pattern, but with an emphasis on producing areas with less rainfall and more variable crop-weather conditions. For example, in 2011, relatively high indemnities were paid in the Great Plains, where drought

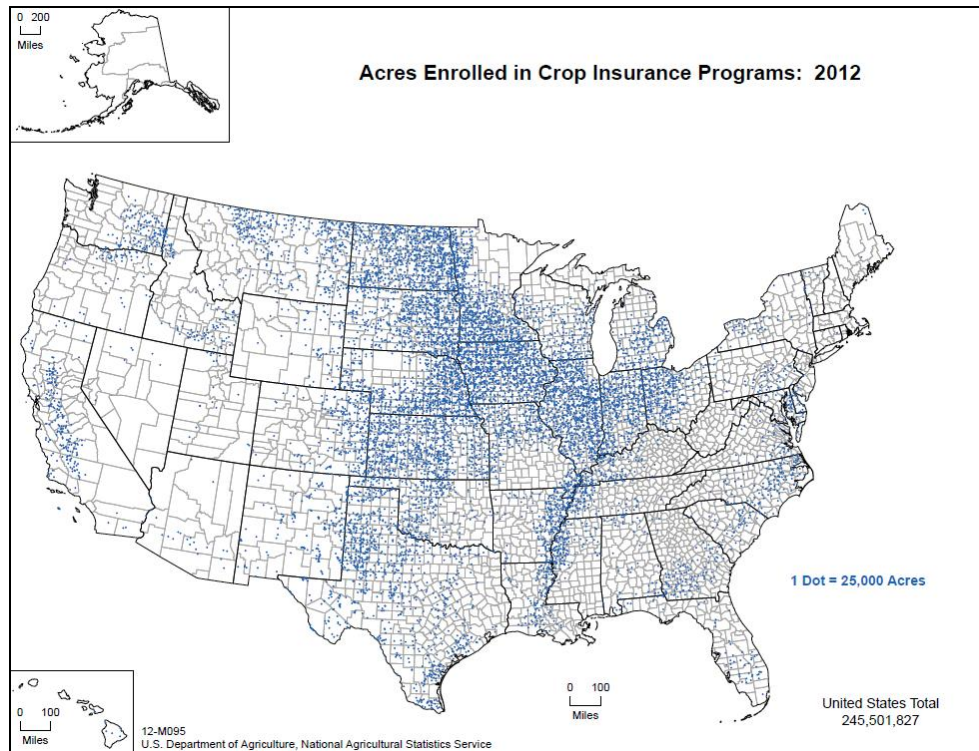
<sup>19</sup> After years of development, USDA’s Risk Management Agency issued the “COMBO” rule in late March 2010 to consolidate several crop insurance plans into a single “Common Crop Insurance Policy” beginning with the 2011 crop year. The biggest change was the consolidation of several previous revenue products (Crop Revenue Coverage, Income Protection, Indexed Income Protection, and Revenue Assurance) into a single revenue product called Revenue Protection. See USDA, Risk Management Agency, “RMA Releases New Common Crop Insurance Policy Basic Provisions,” press release, March 31, 2010, <http://www.rma.usda.gov/news/2010/03/combo.html>.

<sup>20</sup> Additional information on WFRP is available from USDA/RMA at <http://www.rma.usda.gov/policies/wfrp.html>.



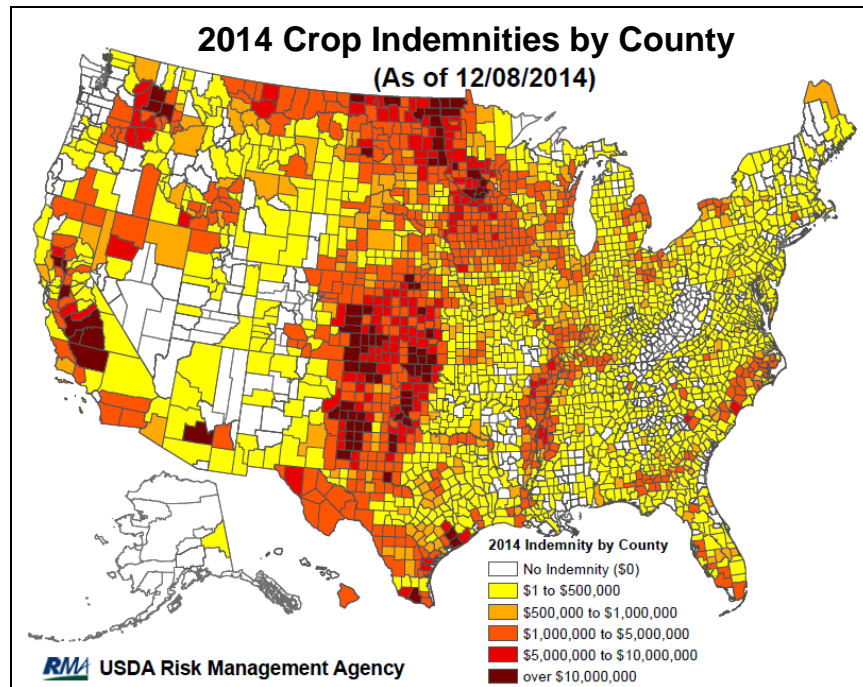
reduced crop yields in the south and central areas while excessive moisture affected plantings and production in the north.<sup>21</sup> In 2012, a major drought affected a large portion of the United States, and crop insurance indemnities totaled \$17.4 billion in 2012, compared with \$10.9 billion in 2011 and \$4.3 billion in 2010. With improved weather, indemnities declined to \$12.1 billion in 2013 and \$9.0 billion in 2014. As was the case in 2013, losses in 2014 were extensive across the Plains due to continued drought conditions (**Figure 5**).

**Figure 4. Acres Enrolled in Crop Insurance, 2012**



**Source:** USDA, National Agricultural Statistics Service, *2012 Census of Agriculture*.

<sup>21</sup> Adverse weather can affect crops in various ways. For example, in some North Dakota counties in 2009, the cause of loss was drought for some wheat policies, while it was excess moisture for other wheat policies in the same county.

**Figure 5. Crop Insurance Indemnities in 2014**

Source: USDA, Risk Management Agency, <http://www.rma.usda.gov/data/indemnity/>.

## Crop Insurance Premium Subsidies

The producer's premium for a policy increases as coverage levels rise, and the premium on buy-up coverage is subsidized by the government at amounts from 38% to 100%, depending on the coverage level (Table 1). The subsidy rate declines as coverage rises (i.e., deductible declines).

**Table 1. Crop Insurance Premium Subsidies**  
(government-paid portion of premium as a percent of total premium)

Coverage Level (%)	CAT	50	55	60	65	70	75	80	85
Premium subsidy (%) for most policies (including those using basic and optional units)	100	67	64	64	59	59	55	48	38
Premium subsidy (%) for enterprise units	n/a	80	80	80	80	80	77	68	53
Premium subsidy (%) for area plans (yield)	n/a	n/a	n/a	n/a	n/a	59	59	55	55
Premium subsidy (%) for area plans (revenue)	n/a	n/a	n/a	n/a	n/a	59	55	55	49
Premium subsidy (%) for whole farm units	n/a	80	80	80	80	80	80	71	56

Source: 7 U.S.C. §1508(e).

**Notes:** n/a = not applicable. Deductible equals 100% - coverage level percentage. A basic unit covers land in one county with the same tenant/landlord. An optional unit is a basic unit divided into smaller units by township section. An enterprise unit covers all land of a single crop in a county for a producer, regardless of tenant/landlord structure. A whole farm unit covers more than one crop. For CAT, a loss beyond 50% is indemnified at 55% of the expected price. For coverage level of 50%, a loss beyond that percentage is indemnified at a higher percentage of price (selected by the purchaser) within a minimum and maximum range set by RMA. Whole farm subsidy is for farms with three or more commodities; if commodity count is less than three, coverage is not available at 80% and 85%.



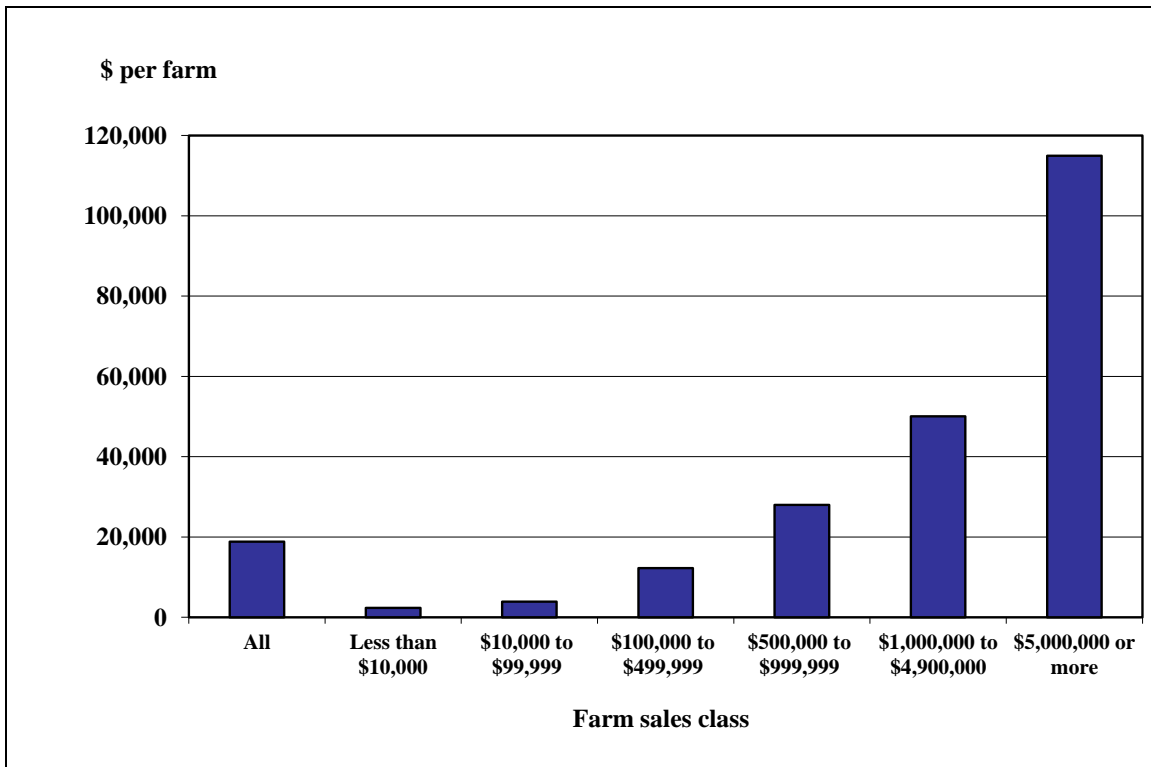
Subsidy rates range from 38% to 67% for policies using either “basic” or “optional” units. Basic units cover all plantings in a single county of a crop with the same tenant/landlord. Optional units are basic units divided into smaller units by township section. As authorized under the 2008 farm bill, a higher subsidy rate (up to 80%) is provided for policies using enterprise units (all land for a single crop in a county, regardless of the tenant/landlord structure). Because the premium for policies using enterprise units is lower (a discount is given because the combined unit has greater geographic diversity and hence is less risky), a higher subsidy rate for enterprise units provides for an equal dollar amount of premium subsidy regardless of the type of unit used. Overall, the average subsidy rate across all policies purchased was 62% in 2014.

Premium subsidies for federal crop insurance have been instrumental in expanding program participation to levels acceptable to policymakers (i.e., avoiding ad hoc disaster assistance). Crop insurance subsidies, by design and like other purchasing-based subsidies, encourage farmers to purchase more insurance than they otherwise would because they are not paying full price. The higher coverage provides better farm financial protection and reduces the probability of requests for federal ad hoc assistance, but it also increases costs to taxpayers and can encourage production on environmentally sensitive land. Some question whether current subsidy levels are necessary to maintain program participation. For more information, see CRS Report R43951, *Proposals to Reduce Premium Subsidies for Federal Crop Insurance*.

## Distribution of Producer Subsidies

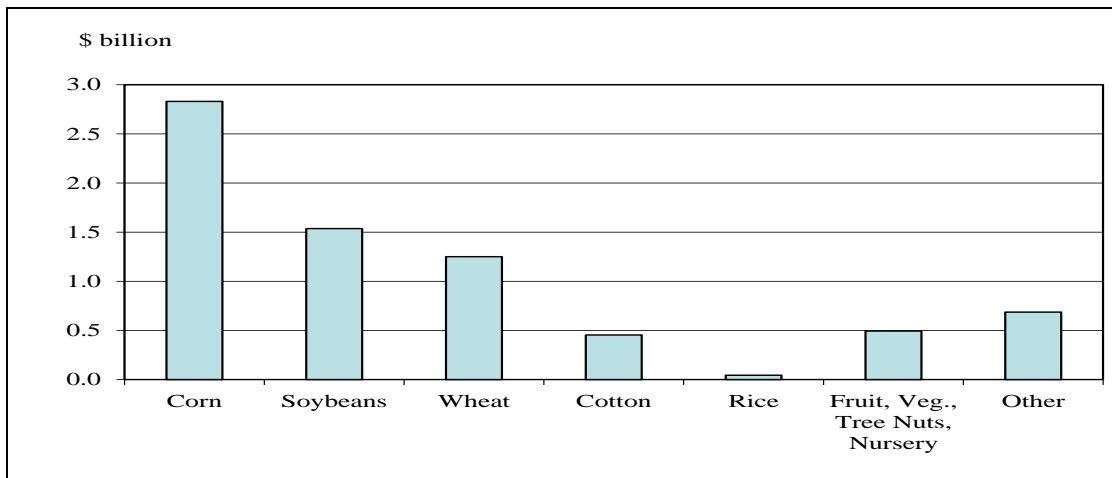
Producer subsidies for crop insurance are proportional to the value of the premiums and underlying liability of the policies. Compared with small farms, larger operations have greater crop liability, which increases the total costs of insurance and value of the government-paid portion of the total premium. Based on federal crop insurance expenditures data from USDA’s Agricultural Resource Management Survey (ARMS) and the average subsidy percentage (62%) from RMA, CRS estimates that the producer subsidy in 2013 averaged about \$19,000 per farm for farms purchasing crop insurance. By farm size, the calculated average ranged from \$2,300 per farm for operations with less than \$10,000 in sales to \$115,000 for farms with at least \$5 million in sales (see **Figure 6**). Unlike farm commodity programs, subsidies received under the crop insurance program are not subject to payment limits.

By crop, the bulk of producer subsidies are for corn, wheat, soybeans, and cotton, which together account for more than 80% of the premium subsidies (**Figure 7**). By state, premium subsidies are greatest in states where these crops are grown, primarily across the Great Plains, Corn Belt, and parts of the South (**Figure 8**). An analysis by the Government Accountability Office shows a similar geographic distribution for farmers receiving at least \$40,000 in producer premium subsidies (**Figure 9**).

**Figure 6. Estimated Average Crop Insurance Premium Subsidy Per Farm in 2013**

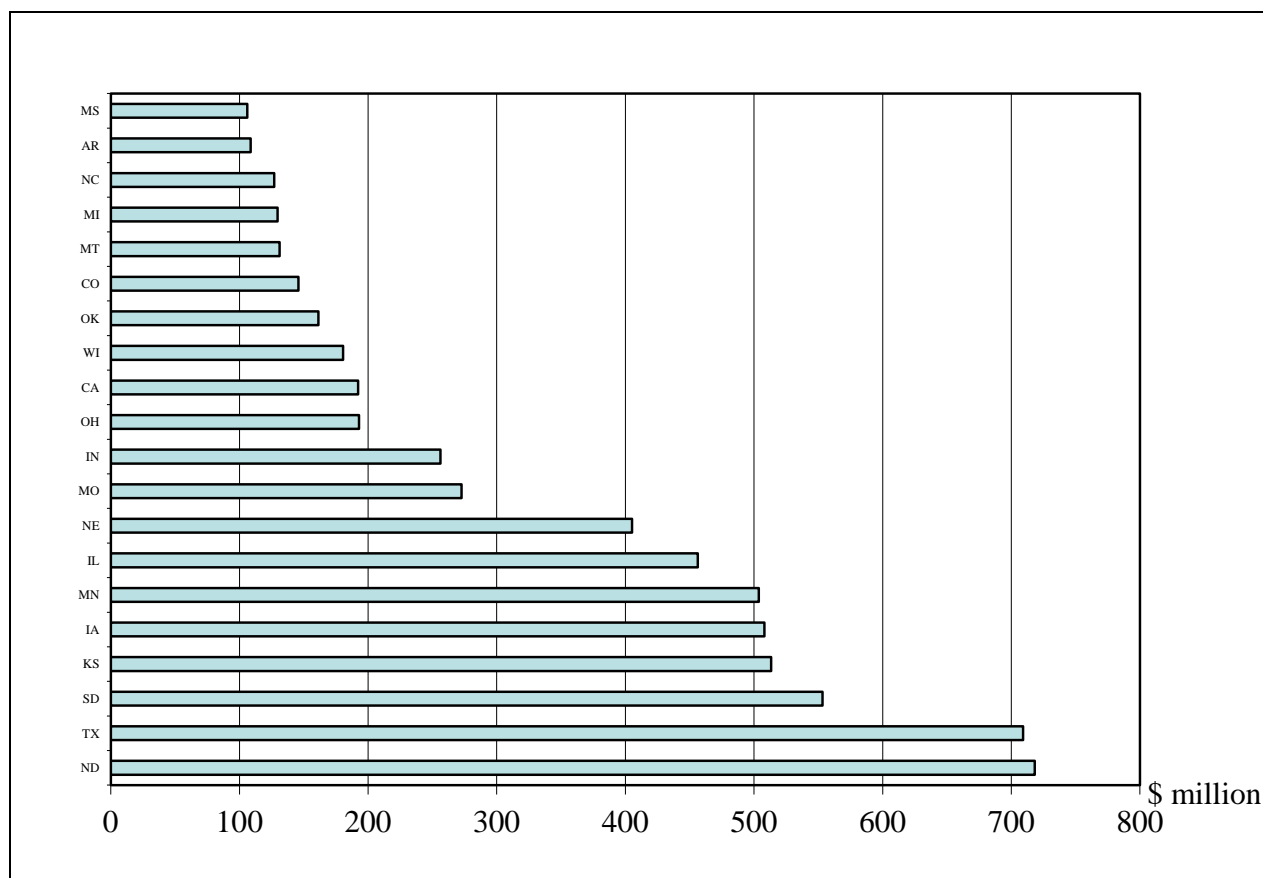
**Source:** CRS calculation using average premium subsidy of 62% from USDA's Risk Management Agency (RMA) and total federal crop insurance expenditures by farm sales class from USDA's Agricultural Resource Management Survey, provided by USDA's Economic Research Service.

**Notes:** The calculated average was \$18,900 per farm (calculation includes only farms that pay federal crop insurance premiums). Total premium subsidy reported by RMA was \$7.3 billion for crop year 2013.

**Figure 7. Crop Insurance Premium Subsidies by Crop in 2013**

**Source:** USDA's Risk Management Agency, Summary of Business, <http://www.rma.usda.gov/data/sob.html>.

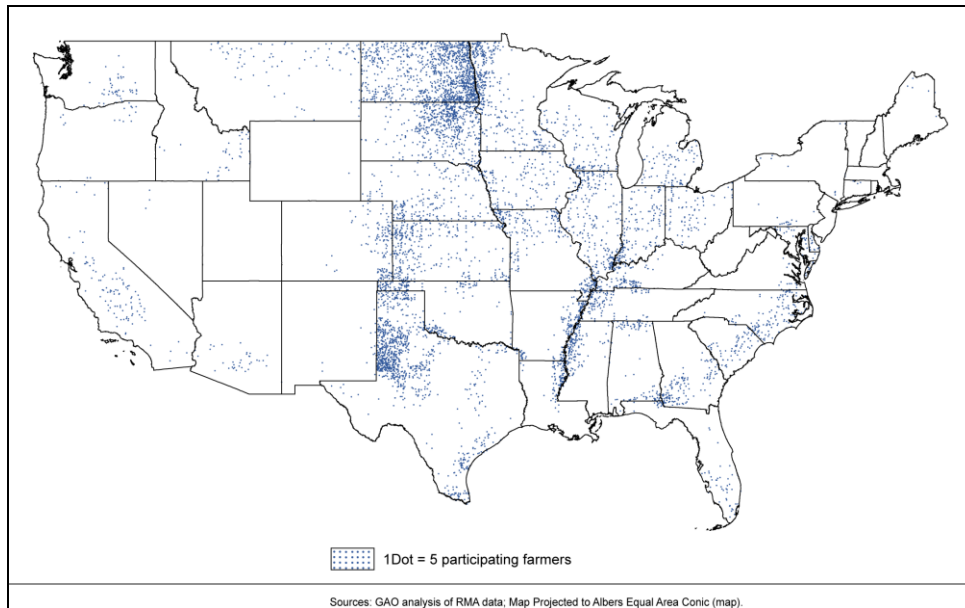
**Notes:** Total is \$7.3 billion in crop year 2013. Corn, soybeans, wheat, and cotton account for 83% of the total. Other includes minor oilseeds, other feed grains, tobacco, peanuts, sugar beets and sugar cane, pasture, and other crops.

**Figure 8. Crop Insurance Premium Subsidies for Top 20 States in 2013**

**Source:** USDA's Risk Management Agency, Summary of Business. <http://www.rma.usda.gov/data/sob.html>.

**Notes:** Total producer subsidy was \$7.3 billion in crop year 2013. States in chart accounted for 87% of the total.

**Figure 9. Locations of Participating Farmers Receiving Premium Subsidies of More Than \$40,000 in 2011**



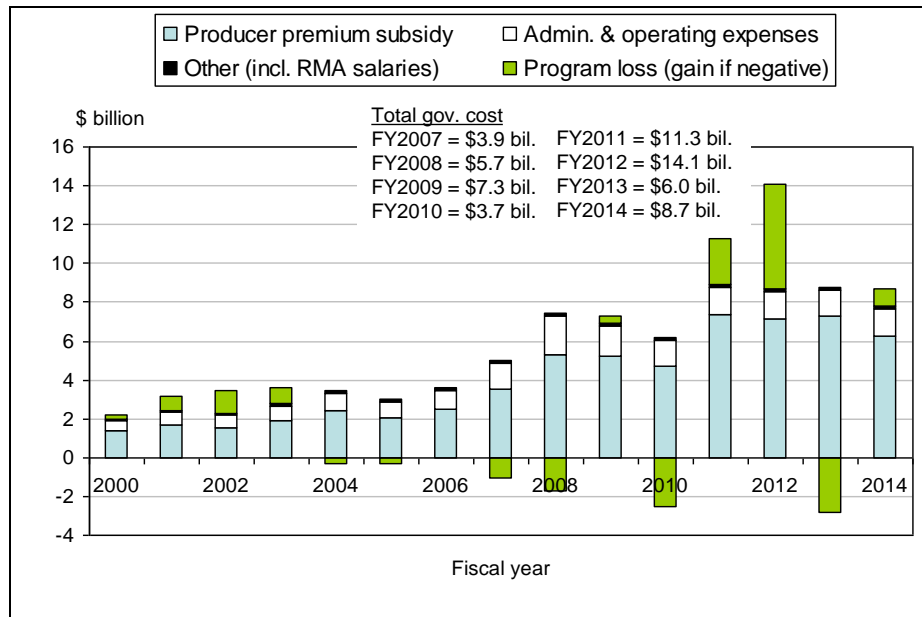
**Source:** U.S. Government Accountability Office, *Crop Insurance: Savings Would Result from Program Changes and Greater Use of Data Mining*, GAO-12-256, March 2012, p. 45, <http://www.gao.gov/assets/590/589305.pdf>.

## Federal Program Costs

The annual agriculture appropriations bill traditionally makes two separate appropriations for the federal crop insurance program. It provides discretionary funding for the salaries and expenses of the RMA. It also provides “such sums as are necessary” for the Federal Crop Insurance Fund, which finances all other expenses of the program, including premium subsidies, indemnity payments, and reimbursements to the private insurance companies.

Government costs for crop insurance have increased substantially in the last decade (**Figure 10** and **Table 2**). After ranging between \$2.1 billion and \$3.9 billion during FY2000-FY2007, costs rose to \$5.7 billion in FY2008 and \$7.0 billion in FY2009 as higher policy premiums from rising crop prices drove up premium subsidies and expense reimbursements to private insurance companies. After a decline in FY2010 following a drop in crop prices and good weather, program costs rose sharply to \$11.3 billion in FY2011 and \$14.1 billion in FY2012, when crop prices surged again and poor weather resulted in program losses. With a return to more favorable weather and smaller crop losses, total program costs declined to \$6.0 billion in FY2013 and were \$8.7 billion in FY2014.

The largest cost component of federal spending on crop insurance is for the subsidy on policy premiums for producers, which totaled \$6.3 billion in FY2014. Historically, the next largest item is reimbursement of administrative and operating (A&O) expenses to private insurance companies (\$1.4 billion in FY2014). With premiums reflecting only costs associated with policy risk, the A&O reimbursement is meant to pay delivery costs. In 4 of the last 10 years, the federal government also has realized underwriting losses (indemnities in excess of premiums received). In the other six years, the government has realized gains, which has partially reduced total costs. The underwriting gains (or losses) are derived in part from the federal government’s role in providing the first level of reinsurance—that is, insurance for insurance companies.

**Figure 10. Government Cost of Federal Crop Insurance**

**Source:** CRS using data from U.S. Department of Agriculture, Risk Management Agency, <http://www.rma.usda.gov/aboutrma/budget/costsoutlays.html>.

**Table 2. Government Cost of Federal Crop Insurance**  
(millions of dollars)

Fiscal Year	Program Losses or (Gains) <sup>a</sup>	Federal Premium Subsidy	Private Company A&O Expense Reimbursements <sup>b</sup>	Other Costs <sup>c</sup>	Total Government Cost
2004	(305)	2,387	900	143	3,125
2005	(293)	2,070	783	139	2,699
2006	(32)	2,517	960	126	3,571
2007	(1,068)	3,544	1,341	124	3,941
2008	(1,717)	5,301	2,016	137	5,737
2009	340	5,198	1,602	131	7,271
2010	(2,523)	4,680	1,371	143	3,671
2011	2,392	7,376	1,383	144	11,295
2012	5,370	7,149	1,411	141	14,071
2013	(2,827)	7,279	1,350	149	5,951
2014 (est.)	847	6,272	1,407	133	8,659

**Source:** U.S. Department of Agriculture, Risk Management Agency, <http://www.rma.usda.gov/aboutrma/budget/costsoutlays.html>.

- Government's underwriting loss (gain if negative) = the difference between total indemnity payments for crop losses and total premiums (farmer and government paid), plus or minus any private company underwriting gains or losses.
- A&O = administrative and operating.
- Other costs include federal salaries of USDA's RMA and, beginning in 2002, various research and development initiatives mandated by the Agriculture Risk Protection Act of 2000 (P.L. 106-224).

## Standard Reinsurance Agreement (SRA)

The administrative and operating (A&O) expense reimbursement to the companies and risk sharing between USDA and the private companies are spelled out in a Standard Reinsurance Agreement (SRA), which plays a large role in determining program costs. The current SRA was completed in summer 2010. As authorized by the 2008 farm bill, USDA may renegotiate the SRA once every five years starting with the 2011 reinsurance year (the 12-month period beginning July 1, 2010). The 2014 farm bill requires that any renegotiated SRA must be budget-neutral, with the congressional intention that it not be used to cut federal funding of the crop insurance program.<sup>22</sup>

### Administrative and Operating (A&O) Reimbursement

Under the current SRA, the calculated reimbursement rate for A&O has been approximately 12% of total premiums since 2011, compared with an average of 20% in 2006-2010.<sup>23</sup> This means that for every \$100 in total premiums (farmer-paid plus government-paid), the companies receive a reimbursement of \$12 from the federal government. The reimbursement rate varies by insurance product, depending on whether it is for a yield-based or a revenue insurance product.

The SRA places a maximum for A&O reimbursements at \$1.3 billion per year (adjusted annually for inflation) and a minimum at \$1.1 billion. The cap controls government costs when crop prices rise (price levels directly affect policy premiums), while the minimum is intended to protect companies against low market prices that could reduce reimbursement amounts.

### Private Company Risk Sharing

The SRA also defines risk-sharing between the government and private insurance companies. Under the SRA, insurance companies may transfer some liability associated with riskier policies to the government and retain profits/losses from less risky policies.<sup>24</sup> This transfer of risk is accomplished through a set of reinsurance funds maintained by FCIC. Within 30 days of the sales closing dates for each crop, companies allocate each policy they sell to one of two funds that are maintained for each company by state: Assigned Risk or Commercial. Each company then decides what proportion of premiums (and potential for losses/gains) to retain within each reinsurance fund, subject to required retention limits of individual funds. The by-state retention requirements are 20% for the Assigned Risk Fund and at least 35% for the Commercial Fund. The ceded (i.e., not retained) portion of premiums goes to the government.

The assigned risk fund is used for policies believed to be high-risk because it provides the most loss protection to insurance companies through “stop-loss” coverage that reinsures against state-level disasters. For producers, it helps ensure that benefits of the federal crop insurance program

<sup>22</sup> For more information on the SRA and related issues, see CRS Report R40966, *Renegotiation of the Standard Reinsurance Agreement (SRA) for Federal Crop Insurance*.

<sup>23</sup> The lower calculated rate is a result of a significant rise in premiums between the two periods and legislative changes. The 2008 farm bill (§12016(E)) reduced the A&O reimbursement by 2.3 percentage points beginning with the 2009 reinsurance year (July 1, 2008). The farm bill also reduced the A&O reimbursement rate to 12% for any plan of insurance that is based on area-wide losses and reduced the target loss ratio (indemnities paid divided by premiums collected of the entire program) from 1.075 to 1.00.

<sup>24</sup> Dmitry V. Vedenov et al., “Portfolio Allocation and Alternative Structures of the Standard Reinsurance Agreement,” vol. 31, no. 1 (April 2006), pp. 57-73, <http://ageconsearch.umn.edu/bitstream/10145/1/31010057.pdf>. See also Joseph W. Glauber, “Crop Insurance Reconsidered,” *American Journal of Agricultural Economics*, vol. 86, no. 5 (2004), pp. 1179-1195.

are extended to all eligible farmers, regardless of risk. Because companies retain only 20% of their business as specified in the SRA, the federal government assumes a large portion of liability associated with high-risk policies. The SRA also specifies a 75% limit (by state) on the proportion of a company's business that may be placed in the Assigned Risk Fund.

The Commercial Fund is for policies that the companies expect to have the greatest opportunity for profit and only a small amount of losses. While the profit potential is greater compared with the Assigned Risk Fund, so is the loss potential.

Once the policies are allocated to one of the two funds, the gain/loss sharing for a company's retained business is based on loss ratios (indemnities paid divided by premiums collected) as established in the SRA. As a general rule, the higher the loss ratio, the lower the company share of gains or losses (and vice versa, except at very low loss ratios when the company share of gains declines). See **Table 3** for the schedule contained in the current SRA. **Figure 11** illustrates risk sharing for the Commercial Fund.

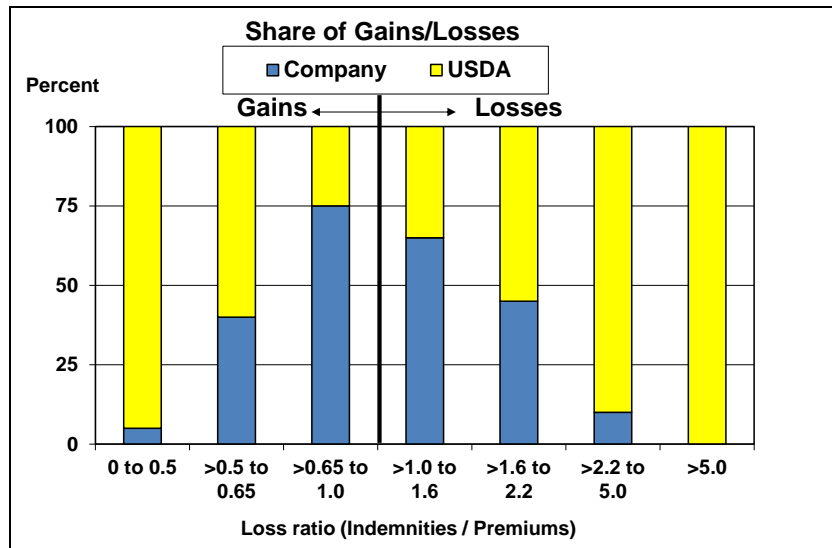
**Table 3. Share of Crop Insurance Company's Gains/Losses by Fund and Loss Ratio**  
(share of gains/losses in percent)

Loss Ratio (%)	Share of Company's Gains/Losses in Assigned Risk Fund (%)	Share of Company's Gains/Losses in Commercial Fund (%)	
		Group I (IL, IN, IA, MN, NE)	All other states
0 to 50	3	5	5
>50 to 65	13.5	40	40
>65 to 100	22.5	75	97.5
>100 to 160	7.5	65	42.5
>160 to 220	6	45	20
>220 to 500	3	10	5
>500	0	0	0

**Source:** U.S. Department of Agriculture, Risk Management Agency, Standard Reinsurance Agreement dated June 30, 2010, <http://www.rma.usda.gov/news/2010/06/630sra.pdf>.

**Notes:** Loss ratio is indemnities divided by total premiums. See figure on risk sharing for illustration.

**Figure 11. Risk Sharing for the Commercial Fund**  
(for Group 1 states of IL, IN, IA, MN, NE)



**Source:** CRS, using data from U.S. Department of Agriculture, Risk Management Agency, Standard Reinsurance Agreement dated June 30, 2010, <http://www.rma.usda.gov/news/2010/06/630sra.pdf>.

**Notes:** The USDA share of gains and losses is lowest when the loss ratio (indemnities divided by premiums) is near 1.0. Insurance companies place “less risky” policies in the Commercial Fund. Separate schedules apply to the Commercial Fund in all other states and for the Assigned Risk Fund (higher risk policies).

## Trends in A&O Reimbursement and Underwriting Gains

Since A&O reimbursements are based on a percentage of premiums, the dollar amount of A&O reimbursement increased sharply during the late 2000s as premiums rose, reflecting higher crop prices. The A&O reimbursement increased from an average of \$881 million during 2004-2006 to \$2.0 billion in 2008 (**Table 2**). A&O reimbursements declined to \$1.6 billion in FY2009 following a decline in crop prices. Under changes in the 2010 SRA, an inflation-adjusted cap has limited annual A&O expenditures to about \$1.4 billion. Company underwriting gains (the amount by which a company’s share of retained premiums exceeds its indemnities) increased substantially during the 2000s as weather was generally favorable for crops (**Table 4**). In 2012, though, a major drought across major producing regions led to sharply higher indemnities, which resulted in large losses for the 2012 crop year. More favorable weather returned in 2013, which reduced indemnities and generated an underwriting gain for the insurance companies.

During the last decade, increases in insured acreage and higher crop prices have also increased gross liability. Liability represents total exposure of the program, meaning that if all participating farmers suffer losses to the full extent of coverage, indemnities would be the total liability.

**Table 4. Federal Crop Insurance Program and Company Data**

Crop Year	Net Acres Insured (mil. acres)	Gross Premium <sup>a</sup> (\$ million)	Gross Liability <sup>b</sup> (\$ million)	Gross Loss Ratio <sup>c</sup>	Private Co. Underwriting Gain (Loss) <sup>d</sup> (\$ million)
2004	221	4,186	46,602	0.79	693



Crop Year	Net Acres Insured (mil. acres)	Gross Premium <sup>a</sup> (\$ million)	Gross Liability <sup>b</sup> (\$ million)	Gross Loss Ratio <sup>c</sup>	Private Co. Underwriting Gain (Loss) <sup>d</sup> (\$ million)
2005	246	3,949	44,259	0.60	915
2006	242	4,580	49,919	0.77	821
2007	272	6,562	67,340	0.54	1,577
2008	273	9,851	89,893	0.88	1,096
2009	265	8,951	79,572	0.58	2,301
2010	256	7,594	78,102	0.56	1,912
2011	266	11,970	114,201	0.91	1,687
2012	283	11,114	117,136	1.57	(1,299)
2013	296	11,805	123,776	1.02	657
2014 (est.)	295	10,063	109,827	0.90	not avail.

**Source:** For premium, liability, and loss ratio, *Summary of Business Report*, FCIC, <http://www.rma.usda.gov/data/sob.html>. For underwriting gain/loss, *Crop Year Premium and Other Income*, FCIC, <http://www.rma.usda.gov/aboutrma/budget/14costtable4.pdf>.

- Farmer-paid premium plus government-paid premium subsidy.
- Liability represents total exposure of the program, meaning that if all participating farmers suffered losses to the full extent of coverage, program indemnities would be the total liability.
- Indemnities divided by premiums. Gross loss ratio is for the program in total (government plus private companies).
- The underwriting gains represent the amount by which the company's share of retained premiums exceeds its indemnities (vice versa for underwriting losses).

## Crop Insurance in the 2014 Farm Bill

The federal crop insurance program is permanently authorized. Hence, periodic reauthorization of the program, including premium subsidies, is not needed, unlike farm commodity programs that are enacted under traditional “farm bills.” The 2014 farm bill (P.L. 113-79) authorized farm programs for the years 2014-2018 and made a number of permanent changes to the federal crop insurance program.<sup>25</sup>

### Policies for “Shallow Losses”

A prominent crop insurance feature of the 2014 farm bill is the authorization of policies designed to reimburse “shallow losses”—an insured producer’s out-of-pocket loss associated with the policy deductible. A new crop insurance policy called Stacked Income Protection Plan (STAX) is made available for upland cotton producers, while the Supplemental Coverage Option (SCO) is made available for other crops. The STAX policy indemnifies losses in county revenue of greater than 10% of expected revenue but not more than the deductible level (e.g., 25%) selected by the producer for the underlying individual policy. (It can also be purchased as a stand-alone policy.) Similarly, SCO is based on expected county revenue (or yields) and covers part of the deductible

<sup>25</sup> This section summarizes information in CRS Report R43494, *Crop Insurance Provisions in the 2014 Farm Bill (P.L. 113-79)*.

under the producer's underlying policy. The government subsidy as a share of the policy premium is set at 80% for STAX and 65% for SCO.<sup>26</sup>

SCO was first made available for the 2015 crop year for barley, corn, soybeans, cotton, cottonseed, rice, sorghum, and wheat. For 2016, SCO will be available in select counties for alfalfa seed, canola, cultivated wild rice, dry peas, forage production, grass seed, mint, oats, onions, and rye. SCO is also expected to be available in 2016 for almonds, apples, blueberries, grapes, peaches, potatoes, prunes, safflower, tomatoes, and walnuts. USDA plans to extend coverage in the 2017 crop year to grapefruit, lemons, mandarins/tangerines, oranges, and tangelos.

## **"Yield Exclusion" for Yield Guarantee**

A 2014 farm bill provision called APH Yield Exclusion allows farmers to exclude low yields in exceptionally poor years from their production history when calculating yields used to establish their crop insurance coverage. This is available when the average yield in the county was at least 50% below the simple average for the previous 10 consecutive crop years. Under this provision, producers can receive a higher approved yield on their insurance policies.

## **New Products**

A variety of additional farm bill provisions expands existing crop insurance products or requires examination of the potential for new products, including those that would benefit specialty crops and animal agriculture. Provisions revise the value of crop insurance for organic crops to reflect generally higher prices of organic (not conventional) crops. USDA is also required to conduct more research on whole farm revenue insurance with higher coverage levels than currently available. Studies or policies are also required for insuring (1) producers of specialty crops (e.g., fruits, vegetables) for food safety and contamination-related losses, (2) swine producers for a catastrophic disease event, (3) producers of catfish against reduction in the margin between market prices and production costs, (4) commercial poultry production against business disruptions caused by integrator bankruptcy, (5) poultry producers for a catastrophic event, (6) producers of biomass sorghum or sweet sorghum grown as feedstock for renewable energy, and (7) alfalfa producers. A peanut revenue insurance product and rice margin insurance were mandated. Another provision provides funding for index weather insurance for protecting against weather conditions that deviate from average levels.

## **Conservation Compliance**

To address conservation concerns, the 2014 farm bill links eligibility for crop insurance premium subsidies to compliance with wetland and conservation requirements for highly erodible land. Also, crop insurance subsidies are reduced for plantings on native sod acreage in certain states. For more information, see CRS Report R42459, *Conservation Compliance and U.S. Farm Policy*.

<sup>26</sup> Additional information and examples of SCO and STAX are available in USDA, FCIC, *Supplemental Coverage Option (SCO) Endorsement Standards Handbook*, July 2014, [http://www.rma.usda.gov/handbooks/18000/2015/15\\_18180.pdf](http://www.rma.usda.gov/handbooks/18000/2015/15_18180.pdf); and *Stacked Income Protection Plan of Insurance (STAX) Standards Handbook*, August 2014, [http://www.rma.usda.gov/handbooks/18000/2015/15\\_18170.pdf](http://www.rma.usda.gov/handbooks/18000/2015/15_18170.pdf).

## **Costs**

Despite calls by critics of the program to reduce federal funding, the crop insurance title of the farm bill increased total funding for the program, according to the Congressional Budget Office, by an additional \$5.7 billion over 10 years relative to projected levels that assumed no change in policy. The largest cost items were STAX (\$3.3 billion) and SCO (\$1.7 billion). The cost of expanding the crop insurance program was offset by the elimination of fixed “direct” payments, marking a policy shift from farm payments made regardless of market conditions to enhanced risk management programs. A controversial item not included in P.L. 113-79 was the reduction of premium subsidies for high-income farmers, which had been included in the Senate farm bill but not the House bill.

## **Views on Federal Crop Insurance**

Federal outlays for crop insurance exceed those for the commodity support programs, making crop insurance the most costly component of the farm safety net and a potential target for legislators looking for budget offsets to pay for other legislation or for deficit reduction. For some policymakers, a main goal when contemplating future modifications to the crop insurance program would likely be saving federal dollars without adversely affecting farmer participation or policy coverage in a way that might result in calls for ad hoc disaster assistance. A concern from the industry is that any cuts could adversely affect company interest in selling and servicing crop insurance to farmers, although some critics say that compensation is more than adequate. Separately, environmental groups are concerned that the premium subsidies might actually encourage production on environmentally fragile land.

For many farmers, crop insurance is the most important component of the farm safety net, given the loss protection it affords and the large number of crops that are covered. Similarly, institutions that lend to farmers support federal crop insurance because it helps buffer cash shortfalls. Another major supporter is the set of approved insurance providers and the network of independent agents who sell and service the federal policies. With significant support from these three groups, the program generally has widespread support among farm-state legislators and Members of the agriculture committees where farm policy is developed.

During the debate that shaped the 2014 farm bill, critics of crop insurance vigorously attempted but were not successful in reducing the scope and benefits of the federal crop insurance program, including premium subsidy levels and reimbursements to private insurance companies. Critics question whether premium subsidies are too generous for farmers, particularly high-income farmers, and expect that farmers would maintain crop insurance coverage at lower subsidy rates. The issue of program savings might be revisited in the 114<sup>th</sup> Congress, particularly if future budget resolutions require deficit reduction.

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