Crop Insurance

INTRODUCTION

This memo introduces federal programs that support production agriculture through the farm bill’s Crop Insurance Title (Title XI of the 2014 Farm Bill). Section I surveys the history of the farm bill’s crop insurance policy. Section II provides an overview of the current support for federal crop insurance in the 2014 Farm Bill. Finally, Section III discussed some key issues that may inform debate as Congress moves to reauthorize the farm bill.

I. HISTORY

The federal government’s role in crop insurance began in 1938 with the creation of the Federal Crop Insurance Corporation, which was a response to major crop losses in the Dust Bowl. Since that time, federal crop insurance has grown from catastrophic protection to a multi-faceted mechanism deployed as part of a broader farm “safety net.” Now authorized and shaped by the farm bill’s Crop Insurance Title, federal crop insurance is deeply embedded in the nation’s agricultural system. This section provides a history of the evolution of federal crop insurance in our country from the early twentieth century to the present.

A. After the Great Depression

Congress established the Federal Crop Insurance Corporation (FCIC) in 1938 to “insure, or provide reinsurance for insurers of, producers of agricultural commodities grown in the United States under one or more plans of insurance determined by the Corporation to be adapted to the agricultural commodity concerned.” The initial experimental program was limited to a few commodity crops in select production areas. The pilot program sought to address the private insurance industry’s unwillingness to provide affordable disaster protection to the agriculture sector. The idea of agricultural risk shifting to the public sector was globally unprecedented at the time. The push for federal crop insurance was largely instigated by public response to widespread drought in the 1930s.

Private insurers at the time would not provide “multi-peril” insurance, a single policy that covers many causes of crop loss, including “adverse weather, fire, insects, disease, wildlife, earthquake, volcanic

---

1 The following people contributed to this report: Nathan Leamy (Harvard Kennedy School of Government), Drake Carden (Harvard Law School), Jack Zietman (Harvard Law School), and Eliza Pan (Summer Intern, Harvard Law School Food Law and Policy Clinic), and Lee Miller (Harvard Law School).
5 SHIELDS, supra note 2, at 1.
7 Id. at 185.
eruption and failure of irrigation water due to unavoidable causes." Originally, the FCIC only covered named perils, but that has expanded over time.

B. Federal Crop Insurance Act of 1980

The FCIC initially offered policies for only three commodity crops and only in specific areas of the country, as an experiment. The Federal Crop Insurance Act of 1980 ("1980 Act") expanded federal crop insurance into a wider farm safety net by providing subsidies on premiums and expanding the crops and regions that could receive coverage. By subsidizing the premiums paid by producers, Congress hoped to incentivize participation in the program and in turn limit the amount of ad hoc disaster payments Congress made to producers without federal insurance. In the 1970s, the Government Accountability Office found that ad hoc disaster payments alone provided "little economic relief" in the wake of widespread crop failures because funding for disaster payments remained limited by budget constraints.

C. 1990s and 2000s: Continued Expansion

Although the 1980 Act expanded federal crop insurance by providing coverage to more crops and subsidizing premiums to a certain degree, it still had not achieved the desired levels of participation by the early 1990s, with less than 25 percent of eligible land covered. Thus, many producers continued to rely on ad hoc disaster assistance through Congressional appropriations. In response, the Federal Crop Insurance Reform Act of 1994 ("1994 Act") and the Agricultural Risk Protection Act of 2000 ("ARPA") further increased premium subsidies available to producers, with ARPA essentially doubling the available subsidies. The role of the private insurance industry in providing federal insurance expanded during this time as the government attempted to diversify insurance products available to producers. The 1994 Act made participation in the federal catastrophic program ("CAT")—which indemnifies losses greater than 50 percent of price or yield, depending on the policy—a prerequisite for participation in other subsidized insurance policies. Aside from a small enrollment fee, CAT is entirely federally subsidized. To receive the fully subsidized premium, however, producers must meet "conservation compliance" requirements set forth in Title II of the farm bill.

Modern-era federal crop insurance policies assume two basic forms: yield-based and revenue-based protection policies. Prior to 1997, federal crop insurance offered yield-based protection based on historical yields over a set period of time. Options for revenue-based protection—based on a

---

11 RISK MGMT. AGENCY, supra note 4.
12 Kramer, supra note 6, at 198.
14 Kramer, supra note 6, at 197.
16 SHIELDS, supra note 2, at 1.
17 Id.
18 RISK MGMT. AGENCY, supra note 4.
19 Id.
21 SHIELDS, supra note 2, at 2.
combination of yields and expected market prices—were introduced in 1997 as a pilot program. A revenue-based policy triggers a payment when revenue falls below a certain threshold, regardless of whether that dip results from crop loss, drops in market prices, or a combination of both. Demand for revenue-based policies grew quickly, as they guarantee an annual minimum revenue, and by 2003 they accounted for the majority of policies under the federal program as more producers opted for this type of policy. As of 2014, revenue-based policies accounted for 77 percent of all policies sold.

II. The 2014 Farm Bill

A. Current Administrative Structure (2014–Present)

The Risk Management Agency (“RMA”), housed in the U.S. Department of Agriculture (“USDA”), “was created to administer FCIC programs and other non-insurance-related risk management and education programs that help support U.S. agriculture.” RMA administers premium subsidies and works directly with eighteen private insurance companies to provide federal crop insurance to producers. This public-private partnership includes RMA reinsuring the insurance companies during times of high payouts and paying overhead and administrative costs for companies that sell and service RMA policies. One result is that crop insurance companies historically receive above-market returns on their federal crop insurance policies. The RMA and FCIC set the insurance premium subsidy rates and develop the specific contracts to be used by private insurers. RMA assesses and allows issuance of policies to producers on a yearly basis, and in 2015, managed more than $102 billion in total crop insurance liability.

Policies are currently provided for over 250 million eligible acres and 130 different crops, which include fruits and vegetables (“specialty crops”) and commodity crops such as corn, soy, wheat, and cotton. Over 1.2 million individual federal policies—with some producers purchasing multiple policies—were issued in 2014 alone. In contrast to the Title I commodities programs, there are no income caps barring receipt of federal crop insurance subsidies.

Producers must be “actively engaged” in farming to receive the subsidies, though that definition is currently satisfied by farm managers and absentee owners who do not physically participate in farming activities. The current definition states that a person is eligible for federal benefits and considered “actively engaged” if they provide a “significant contribution” of: (1) capital, labor, land, or combination

---

22 Id. at 10.  
23 Id.  
25 SHIELDS, supra note 2, at 7.  
26 RISK MGMT. AGENCY, supra note 4.  
27 SHIELDS, supra note 24, at 3.  
28 Id.  
30 RISK MGMT. AGENCY, supra note 4.  
31 Id.  
32 SHIELDS, supra note 24, at 2.  
33 Id. at 3.  
34 Id. at 4.  
thereof, and (2) active personal management or labor, or combination thereof.\textsuperscript{36} The 2014 Farm Bill required the USDA to clarify the definition of “significant contribution,” and they issued a subsequent rule in 2015.\textsuperscript{37} While the rule does provide more specificity to farm management definitions and creates stronger requirements for recordkeeping, it does not go so far as to limit “actively engaged” to persons directly involved in the cultivation of the land.\textsuperscript{38} Thus, large and profitable farm owners, whether actually engaged in the cultivation of crops or not, and regardless of income, remain eligible for subsidies if they fall within the broad definition of “significant contribution” to management.

As mentioned above, there are numerous ways for producers to “stack” insurance policies to receive broad coverage. Eligible crops receive catastrophic loss coverage under CAT, and premiums are entirely subsidized by the federal government (except for a small enrollment fee, which is waived for new producers).\textsuperscript{39} Additional units of coverage above CAT’s 50 percent indemnity rate are available as “buy up” coverage, and premium subsidies for these policies vary based on crop type and other factors.\textsuperscript{40} The Appendix provides a more illustrative model of how stacked coverage works to protect different tranches of a farm’s revenue or yields. The average federal subsidy on “buy up” coverage is 62 percent of the insurance premium, and around 80 percent of all federal premium subsidies in a given year go to producers of four crops: corn, wheat, soybeans, and cotton.\textsuperscript{41} From 2010–2014, the annual cost to the Treasury of Title XI programs averaged $8.7 billion, with an average of $6.2 billion directly subsidizing farmer premiums.\textsuperscript{42} The remainder largely covers administrative and operating expenses of the private crop insurance companies.\textsuperscript{43}

\textbf{B. Main Additions to the 2014 Farm Bill: Shallow Loss Protections}

The 2014 Farm Bill wrought important change to the farm safety net, including the elimination of direct payments to commodity producers under the Commodities Title. However, two additional programs were added in the Crop Insurance Title to bolster the “farm safety net” for these same commodity producers: Stacked Income Protection (STAX) for upland cotton producers and the Supplemental Coverage Option (SCO).\textsuperscript{44} SCO was initially available for only spring barley, corn, soybeans, wheat, sorghum, cotton, and rice in selected counties, but has since expanded to include other crops in selected counties, such as alfalfa seed, canola, cultivated wild rice, dry peas, forage production, grass seed, mint, oats, onions, potatoes, and rye.\textsuperscript{45} Both STAX and SCO cover “shallow losses” above the deductible for a typical “buy up” crop insurance policy.\textsuperscript{46} CBO originally estimated that STAX and SCO would add $5.7 billion annually to the cost of the Crop Insurance Title.\textsuperscript{47}

\begin{thebibliography}{9}
\bibitem{a}7 U.S.C. §1400.201(b).
\bibitem{a}\textit{HIELDS, supra} note 2, at 7.
\bibitem{a}\textit{Id.}
\bibitem{a}\textit{Id.} at 13.
\bibitem{a}\textit{Dennis A. HIELDS, CONG. RES. SERV., R43951, PROPOSALS TO REDUCE PREMIUM SUBSIDIES FOR FEDERAL CROP INSURANCE 3 (2015), http://nationalaglawcenter.org/wp-content/uploads/assets/crs/R43951.pdf.}
\bibitem{a}\textit{Id.}
\bibitem{a}\textit{HIELDS, supra} note 24, at 6-7.
\bibitem{a}\textit{Risk Mgmt. Agency, supra} note 4.
\bibitem{a}\textit{HIELDS, supra} note 24, at 6-7.
\bibitem{a}\textit{Id.} at 12.
\end{thebibliography}
The 2014 Farm Bill removed upland cotton as a covered commodity under Title I and cotton producers therefore cannot receive Price Loss Coverage (PLC) or Agricultural Risk Coverage (ARC), the two largest commodity support programs in the Commodities Title. While the 2014 Farm Bill removed these programs for upland cotton, they bolstered the safety net provided to cotton producers by authorizing STAX under Title XI. STAX provides insurance for losses under a revenue-based plan and indemnifies losses of “10% of expected revenue but not more than 30%,” which can be purchased stand-alone or as supplemental coverage. The federal government pays 80 percent of the premium. STAX thus provides a far more generous combination of federal subsidies for upland cotton as compared to any other crop under Title XI.

The SCO insurance can be stacked on both yield-based and revenue-based insurance policies for certain crops (more than just commodity crops, but not fully available to as wide a range of crops as many standard insurance policies) and is triggered after a farmer deductible of 14 percent. SCO thus covers the tranche of losses between 14 and 30 percent of expected yield or revenue, depending on the underlying policy. Within the pool of eligible crops for SCO, only producers participating in the PLC programs under Title I are eligible for SCO under Title XI, as ARC already provides shallow loss payments for commodity growers. The federal government pays 65 percent of the premium for SCO policies.

Given the bargain that eliminated Title I direct payments for commodity crops (and the removal of upland cotton from all Title I programs) in exchange for the addition of supplemental coverage in Title XI, policy recommendations for reforming federal crop insurance have been combined with recommendations for the commodities programs in Section III, below. To better illustrate the STAX and SCO additions to federal crop insurance, the Appendix shows the various types of insurance and when they are triggered under a typical revenue-based policy.

C. Other Significant Programs in Title XI

There are several other programs worth noting in Title XI of the 2014 Farm Bill, specifically programs affecting specialty crop and diversified producers. One program is Whole Farm Revenue Protection (WFRP), which has experienced low but growing participation, with signups nearly doubling in the two years since its launch. WFRP policies “insure revenue of the entire farm rather than an individual crop by guaranteeing a portion of whole-farm historic average revenue (both crops and livestock).” Low participation may result from their administrative complexity, discouraging both producers and insurance agents who write and service the policies, or the triggering coverage rates. The 2014 Farm Bill tasked

---

48 Id. at 4.
49 Id.
50 Id.
51 Id. at 5.
52 RISK MGMT. AGENCY, supra note 4.
53 SHIELDS, supra note 24, at 5.
54 Id. at 7.
55 Id. at 5.
56 Id.
59 Interview with Steve Carlson, Practical Farmers of Iowa (Sept. 29, 2016) (Mr. Carlson stated that many of the beginning farmers he worked with in Iowa saw WFRP as time-consuming and overall not worth the trouble, even when this would be the only source of federally subsidized crop insurance for these producers).
FCIC to look for ways to achieve robust WFRP participation, as well as to provide additional coverage to organic producers, who face their own unique risks and difficulties.60 For many producers, WFRP is the only federal insurance that suits their farming system.61

The 2014 Farm Bill re-establishes the connection between Conservation Title conservation compliance requirements and the receipt of premium subsidies under the Crop Insurance Title.62 It also provides incentives for beginning producers, including waiver of enrollment fees for CAT and an additional 10 percent premium subsidy for any “buy up” coverage purchased beyond CAT insurance.63

III. KEY ISSUES

A. Subsidy Levels

Stakeholder interests in reshaping or maintaining federal crop insurance span a vast divide. For the major cost-driver of the title—premium subsidies—commodity producers and their representative groups support current crop insurance subsidy levels, and have even lobbied for increased subsidies.64 This group emphasizes the stability provided by the insurance not only for producers, but also for the American taxpayer, who they say avoids ad hoc payments to producers for disaster assistance.65 However, the government still makes ad hoc disaster payments on a regular basis: from 1989 to 2012, Congress made separate appropriations outside the farm bill of more than $22 billion for crop disaster losses.66

Insurance companies argue that without premium subsidies, the market for crop insurance would be unsustainable, with insurers unwilling to lower premiums and producers unwilling to make up the difference. Proposals to trim crop insurance rarely get far. For example, a proposed budget cut in 2015 from a Republican Congress attempting to balance the budget called for a 10 percent reduction in subsidies under the Crop Insurance Title.67 Commodity groups and crop insurance companies grounded their opposition in the argument that cuts would harm producers, while supporters of the proposal argued the cuts would not trickle down to the producer and instead would fall to insurance companies that already receive above-market profits on federally-backed crop insurance policies. In the end, the proposal did not advance.68

Current crop insurance subsidy levels also face criticism due to their lack of income-based limitations, which enables large farming operations to collect unlimited premium subsidies. Crop insurance subsidies could, like Commodities Title programs, be limited by either gross farm income or by a maximum

60 SHIELDS, supra note 24, at 6-7.
61 NAT’L SUSTAINABLE AGRIC. COAL., supra note 57.
63 SHIELDS, supra note 24, at 6-7.
64 See, e.g., Four Talking Points for Congressional Meetings: August 2014, AM. ASS’N CROP INSURERS (2014), https://www.cropinsurers.com/images/August_Talking_Points__2014.pdf (emphasis on opposing all legislation to amend crop insurance, necessity of program as is for producers, and the importance of private sector administration of the insurance).
68 Id.
subsidy per operation, or both. Large operations are most able to self-insure or access unsubsidized private insurance, and subsidizing their insurance premiums may be regressive or counter to the interests of small- and medium-sized operations.

B. Revenue vs. Yield Protection

Many critiques of federal crop insurance focus on revenue-based insurance plans, which some groups argue unnecessarily waste taxpayer money and increase moral hazard.\(^6\) The current system can also generate payments that defy the definition of a “safety net” and instead resemble windfalls. For example, after a 2012 drought in Iowa affecting soybean and corn producers with mostly revenue-based protection policies, the loss in yields resulted in windfall payouts because of a rise in market prices due to falling supplies.\(^6\) Some researchers have found that producers receive as much as $1.90 in indemnity payments for every dollar paid as insurance premiums.\(^6\) Rates of return vary, with some regions receiving higher rates of return (Southeast, southern plains) than others (Midwest).\(^6\) An insurance policy arguably can begin to look like a “generous lottery.”\(^6\)

C. Conservation

Conservation is another area where many groups see opportunities for reform. For instance, cover cropping, a conservation practice used by producers to enhance soil nutrients and avoid soil loss outside of the growing season, is underutilized due (in part) to insurance contract provisions that unnecessarily restrict planting and termination decisions.\(^6\) Conservation proponents emphasize the opportunity to use data-driven analyses on cover cropping to reward producers with policies reflecting their “good driver” behavior, which could also include conservation tillage, crop diversification, and other conservation practices beyond those included in the 2014 conservation title.\(^5\) “Good driver” policy provisions would place more emphasis on affirmative efforts of producers to actively manage environmental risk, in contrast to current policies that some argue suffer from moral hazard and windfall issues discussed above.

D. Private Insurers

Proponents of change also emphasize the role of the eighteen or so private insurance companies involved in the public-private partnership for administration of these federal policies. Many suggest that the

---

\(^6\) Moral hazard occurs when the insured party takes more risks knowing their losses will be compensated, while retaining the upside from their risky behavior. What does moral hazard look like in practice? A farmer could specialize and grow a single crop instead of diversifying (a natural form of risk management), or could plant on marginal land where crops would not otherwise be grown, knowing that the government will cover the losses. See, e.g., DEFINITION OF MORAL HAZARD, FIN. TIMES, http://lexicon.ft.com/Term?term=moral-hazard (last visited Sept. 19, 2017); Daren Bakst et al., Addressing Risk in Agriculture, HERITAGE FOUND. (Sept. 8, 2016), http://www.heritage.org/research/reports/2016/09/addressing-risk-in-agriculture (last visited Sept. 17, 2017).


\(^6\) BABCOCK, supra note 70, at 4 (upland cotton producers in the Southern Plains received well over 200 percent returns on average).


\(^6\) Cover crops must be “terminated,” or killed off, prior to planting the cash crop. Insurance companies worry that the termination process can interfere with the producer’s ability to get into the field to plant by the specified planting date. See generally Cover Crops, PRACTICAL FARMERS OF IOWA, http://practicalfarmers.org/member-priorities/cover-crops (last visited Sept. 19, 2017).

payouts to these companies, which include payment of their overhead and administrative costs and higher-than-market returns on investment for policies, are wasteful and need to be reformed.\textsuperscript{76} From 2005 to 2009, for every dollar paid out in insurance benefits to producers above their share of premiums (a measure of the total subsidy paid to producers), the insurance companies received an average of $1.44 in operating and administrative benefits, as well as underwriting gains from the federal government.\textsuperscript{77} From 2003 to 2012, RMA paid a total of $12.3 billion for these insurance company costs, “virtually guaranteeing” that they would make a profit.\textsuperscript{78} Typical private insurance companies can only pass on 10 percent of the business risk to the government, whereas the federal government absorbs 55 percent of the risk of crop insurance.\textsuperscript{79}

The private insurance companies argue, however, that without government support, they would not be able to provide crop insurance coverage as broadly: farms are geographically disparate, requiring insurers to staff agents across all regions, which is more expensive than holding fewer, more centralized offices. As Congress sought in the 2014 Farm Bill to reduce the need for emergency appropriations following negative market fluctuation by increasing crop insurance coverage, insurance providers argue that Congress should bear the cost of facilitating such coverage without private industry having to shoulder the burden.

\textit{E. Access for Organic, Small, Diverse, and Specialty Growers}

For organic, small-scale, diverse, and specialty crop growers, the opportunities to participate in federal crop insurance are limited, leaving them lagging behind in government support when compared to commodity producers.\textsuperscript{80} Specialty crop producers are subsidized at a lower rate when compared to their “relative crop value.”\textsuperscript{81} Some reasons proffered for this relative lack of coverage as compared to commodity crops include: the lack of availability and acreage participation; the level of coverage purchased; and lower levels of coverage for the same types of insurance as commodities, such as CAT.\textsuperscript{82} Even with WFRP, participation is still at low levels among specialty crop producers. This may be because program is new,\textsuperscript{83} and it may be that the paperwork burden causes the benefits to fall short of the time investment required to participate.\textsuperscript{84} Some experts remain optimistic that WFRP, if amended and administered wisely, may provide an opportunity to promote diversification and healthier, sustainable systems. However, it is too early to determine its effectiveness in achieving its goals.\textsuperscript{85}

\textsuperscript{76} Tracy Bruckner, \textit{Crop Insurance: How Does the Money Flow?}, CTR. FOR RURAL AFF. (April 13, 2015, 9:45 AM), http://www.cfra.org/node/5592 (Based on 2012 figures, it cost taxpayers $1.2 billion to cover overhead and administrative costs of insurance companies administering the federal policies for crop insurance.).

\textsuperscript{77} Goodwin & Smith, supra note 71, at 492.


\textsuperscript{80} NAT’L SUSTAINABLE AGRIC. COAL., supra note 57.


\textsuperscript{82} Id. at 11-12.

\textsuperscript{83} Id.

\textsuperscript{84} Id. at 11-12.

\textsuperscript{85} Id.

\textsuperscript{86} Interview with Steve Carlson, Practical Farmers of Iowa (Sept. 29, 2016).

\textsuperscript{87} NAT’L SUSTAINABLE AGRIC. COAL., supra note 57.
This chart shows how producers “stack” different kinds of insurance policies to insure different tranches of expected revenue. It shows a revenue-based policy model, since the majority of policies are revenue-based and not yield-based.

CAT, which is a 100 percent subsidy, provides the basic disaster insurance for extreme loss. Anything above CAT is considered a “buy-up” policy, with varying levels of premium subsidies depending on a variety of factors (e.g. type of crop, size of farm, location). After the 2014 Farm Bill, select crops can opt for supplemental coverage under SCO, and upland cotton producers can opt for more coverage under STAX. This chart demonstrates that producers participating in these combinations of policies are insured from all but the shallowest losses in revenue. Producers who opted into Agricultural Risk Coverage (a Title I program) are not eligible for SCO but receive so-called “shallow loss” protections under that program.

<table>
<thead>
<tr>
<th>Loss Coverage of a Typical Revenue-Based Federal Crop Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="chart.png" alt="Chart Image" /></td>
</tr>
</tbody>
</table>

- **Self-insurance**: 100% subsidy
- **65% subsidy**: 38-65% subsidy
- **80% subsidy**: 38-80% subsidy
- **100% subsidy**: Self-insurance

**Legend**:
- Standard Disaster Insurance (CAT)
- "Buy-Up" Crop Insurance
- Supplemental Coverage (SCO or STAX)
- Farmer Deductible

---

**APPENDIX**

This chart shows how producers “stack” different kinds of insurance policies to insure different tranches of expected revenue. It shows a revenue-based policy model, since the majority of policies are revenue-based and not yield-based.

CAT, which is a 100 percent subsidy, provides the basic disaster insurance for extreme loss. Anything above CAT is considered a “buy-up” policy, with varying levels of premium subsidies depending on a variety of factors (e.g. type of crop, size of farm, location). After the 2014 Farm Bill, select crops can opt for supplemental coverage under SCO, and upland cotton producers can opt for more coverage under STAX. This chart demonstrates that producers participating in these combinations of policies are insured from all but the shallowest losses in revenue. Producers who opted into Agricultural Risk Coverage (a Title I program) are not eligible for SCO but receive so-called “shallow loss” protections under that program.