



# Who Receives Crop Insurance Subsidy Benefits?

By Eric J. Belasco and Vincent H. Smith

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## Key Points

- Crop insurance subsidies are consistently heavily concentrated on the largest farms. The largest 10 percent of farms receive 56.4 percent, and the largest 5 percent receive 36.4 percent, of all crop insurance subsidies.
- Crop insurance subsidies per acre are larger for larger operations. The largest 1 percent of farms receive an average of \$41 per acre, compared to \$24 per acre for farms in the 80–90 percent range and \$22 per acre for farms in the 50–80 percent range.
- The largest farm owners have high levels of wealth and income. The top 1 percent have an average adjusted gross income (AGI) of \$1.5 million and average wealth of \$15.7 million, eight times the AGI and five times the total wealth for farms in the 80–90 percent range and 12 times the AGI and nine times the total wealth for midsize farms in the 50–80 percent range.

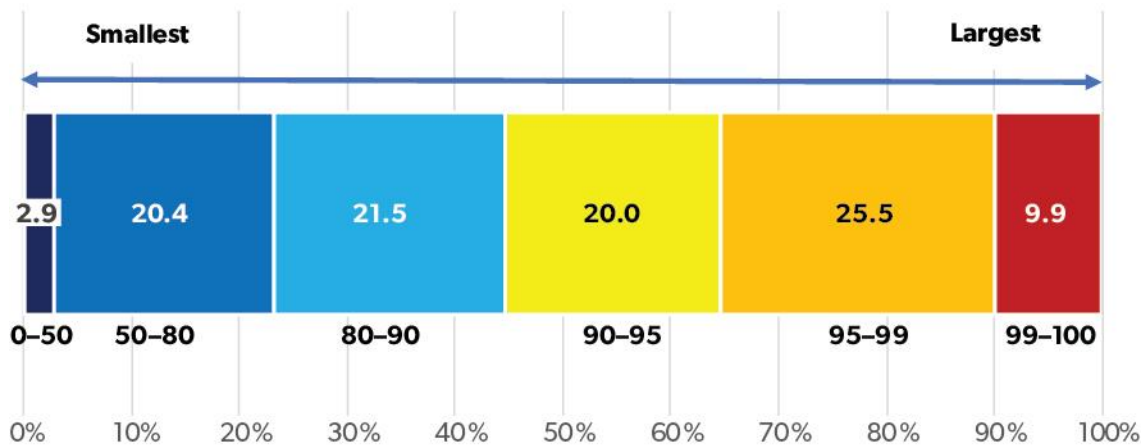
It is often difficult—and in many situations seemingly impossible—for the major US political parties to find common ground. However, many members of Congress agree on one issue, regardless of their party affiliation. Whether the vehicle is crop insurance subsidies, price and income support programs, or ad hoc disaster relief, for decades a bipartisan congressional tradition has been that the federal government should give farmers substantial subsidy checks, regardless of the state of the farm economy.

In 2022, little has changed with the politics of taxpayer-funded payments to farmers, even though as a group farm families and farm business owners are much wealthier and enjoy substantially higher incomes than the average US household does.<sup>1</sup> Currently, there appears to be little serious discussion about moderating farm payments in the forth-

coming 2023 Farm Bill. This is despite the agricultural sector as a whole enjoying well-above-average net farm incomes in 2021 and the agricultural sector expecting even higher revenues and incomes in 2022. Further, the sector is projected to receive above-average incomes in the next few years, albeit at slightly lower levels.<sup>2</sup>

Taxpayers with no vested interests in farm programs rarely weigh in on this issue, in part because annually farm subsidies, which run between \$20 and \$25 billion in most years, make up a miniscule fraction of the total federal budget, estimated to be over \$6 billion in 2022.<sup>3</sup> Nevertheless, especially because farm program outlays are heavily concentrated on fewer than 200,000 farms, we must consider what programs are being supported and whom these funds ultimately benefit.

**Figure 1. Percentage Share of Total Crop Insurance Subsidies by Crop Sales Quantiles, Average, 2012–19**



Source: Authors' calculations using data from the Agricultural Resource Management Survey.

In this report, we use farm-level data from the annual national Agricultural Resource Management Survey (ARMS) implemented by the US Department of Agriculture Economic Research Service to evaluate how crop insurance subsidies are distributed across farms. We focus on crop insurance policy premium subsidies since that is the annual mechanism through which direct payments are made to farmers. Those subsidies are a consistent indicator of the expected and annual average flow of program benefits from taxpayers to farmers over time.<sup>4</sup> We examine the subsidy amounts paid to farmers based on each farm's crop sales, allocating each farm to sales quantiles (for example, farms falling in the lowest 10 percent or highest 1 percent when ranked by such sales) to sort farms by size. This approach follows methods introduced in recent peer-reviewed academic research.<sup>5</sup>

We explore the distribution and level of subsidies received by farms of different sizes using the annual ARMS data for 2012–20, during which the key elements of the current federal crop insurance system—access to revenue-based and yield-based insurance and the structure of subsidy rates—have been relatively stable, even though new federal crop insurance products have been added since 2012.

### **Crop Insurance Subsidies Are Extremely Concentrated**

One notable aspect of crop insurance, as opposed to other federal assistance programs, is that there

is almost no means testing. Because the subsidies are largely tied to the value of production, the benefits to individual farm businesses and owners are essentially unrestricted. Consequently, the wealthiest and largest farm owners and farm businesses receive the largest benefits.

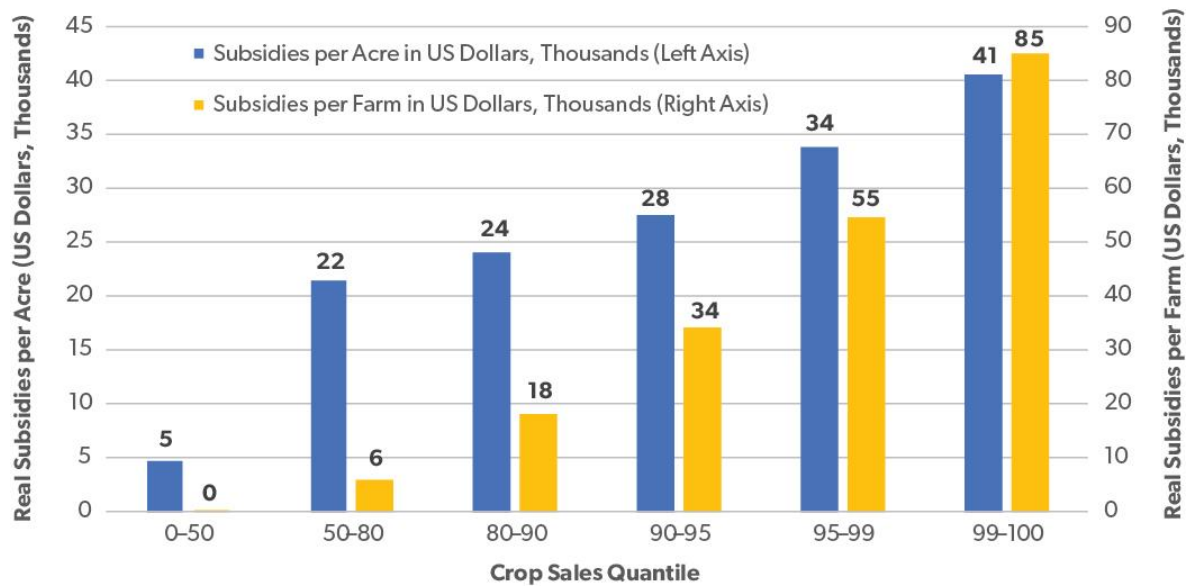
Figure 1 shows that since 2012, farms ranked as the smallest 80 percent in size received only 23.3 percent of all crop insurance subsidies. In contrast, the largest 1 percent of farms received 9.9 percent, the top 5 percent received 36.4 percent, and the top 10 percent received 56.4 percent of all crop insurance subsidies. Stunningly, well over half of all crop insurance benefits flow to the largest 10 percent of farms.

### **Crop Insurance Payments Are Larger for Larger Farms**

That larger farms receive larger payments might not be surprising, given they simply have more acreage. For example, as shown in Figure 2, annually the largest 1 percent of farms on average receive around \$84,832 in subsidies, while midsize farms, widely viewed as falling in the 50th–80th percentile range in crop sales, receive around \$5,853 (about 7 percent of the payments the largest farms get).

Moreover, as Figure 2 also shows, the relationship between subsidies per farm and farm size is positive and appears to grow at an increasing rate. This is because larger farms tend to be more productive. Thus, because subsidies are linked to crop yields

**Figure 2. Real Crop Insurance Subsidy Amounts, Average, 2012–19**



Note: Payments are expressed in constant 2022 dollars using the gross domestic product deflator to convert outlays from nominal to real dollars to account for the effects of inflation.

Source: Authors' calculations using data from the Agricultural Resource Management Survey.

and the area to which they are planted, large farms' productivity advantages lead them to receive more subsidies on each acre they insure. Using the same comparison as before, the largest 1 percent of farms received an average of \$40.54 per acre, almost double the average benefit of \$21.53 per acre received by farms in the 50th–80th percentile.

Crop insurance is unique in that it provides larger benefits to those operations that already have a production advantage over smaller operations. It is hard to buy the argument that crop insurance is protected to “save the family farm” when, on a per-acre basis, the program is clearly designed to provide twice the benefits to larger and more productive operations, rather than focusing on those operations that do not have the capital reserves to invest in productivity-enhancing technologies and resources.

### The Largest Farms Also Have Higher Levels of Wealth and Income

Clearly, the largest farms receive the majority of crop insurance subsidy benefits. So, we explore a little more about the financial characteristics of these farms and their owners.

Midsize farms (those in the 50th–80th percentile) have average annual adjusted gross incomes of

\$129,900, total wealth of \$1.8 million, and crop sales over \$125,000 (Table 1), which are significantly higher than the annual incomes and wealth of nonfarm US households.<sup>6</sup> However, the households that operate larger farms enjoy much higher incomes and are much wealthier than midsize farm households. Farms in the top 1 percent are nine times wealthier than midsize farms, have adjusted gross incomes that are 10 times higher, and have crop sales that are 60 times higher,<sup>7</sup> which has been consistent over the past decade and is considered a “baked-in” feature of the program.

The farm lobby's most frequently cited rationales for subsidizing federal crop insurance programs include the claims that the program increases food security, saves the family farm, or improves food system efficiency and consumers' health. The data unambiguously show that the farms receiving the overwhelming majority of crop insurance subsidy payments are large; owned and operated by wealthy, high-income families; and face little risk of financial failure, a finding consistent with those reported by many other studies.<sup>8</sup> The program's impacts on food security are therefore almost certainly minimal and more likely nonexistent.

Further, as other studies have demonstrated, about 70 percent of all subsidies go to corn, soybean, and wheat producers, and few to fruit and

**Table 1. Farm Income and Wealth by Crop Sales Quantiles**

Crop Sales Quantiles	Adjusted Farm Household Gross Income (US Dollars, Thousands)	Average Total Farm Household Wealth (US Dollars, Thousands)	Total Crop Sales (US Dollars, Thousands)
0–50	103.9	804.9	12.0
50–80	129.9	1,760.2	125.3
80–90	194.5	3,117.8	439.9
90–95	293.4	4,214.6	853.1
95–99	503.0	6,458.9	1,743.0
99–100	1,547.3	15,717.3	7,498.0

Note: Adjusted gross income and wealth estimates are for the farm household that owns the farm.  
Source: Authors' calculations using data from the Agricultural Resource Management Survey.

vegetable producers. Thus, the claim that consumers are being provided less costly healthier food options seems even less plausible.

## Conclusion

Despite some policymakers' and lobby groups' highly questionable assertions that the federal crop insurance program is essential to save the family farm, the view that "the purpose of a system is what it does" is likely far more relevant.<sup>9</sup> If these programs were intended to save the family farm, then surely their benefits would be targeted toward farms that are more financially vulnerable.

In farm bill debates over the past three decades, tools have been proposed that would target relatively more benefits to midsize and smaller farms

that face more severe financial risks. However, policymakers have consistently dismissed those proposals, often in response to complaints by major farm lobbying groups. Examples include implementing modest caps on federal crop insurance subsidy programs, a concept that has been vigorously opposed by lobbies representing both private crop insurance companies and major farm interest groups.

If policymakers are serious about protecting modest-sized family farms that financially are most at risk, then they need to get serious about targeting federal program benefits to those farms. In an upcoming report,<sup>10</sup> based on recent research by Eric Belasco, we will evaluate current proposals that are intended to refocus benefits to small and midsize farms through a range of subsidy caps based on subsidy levels, adjusted gross income, and value of production.

## About the Authors

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## Notes

1. Vincent H. Smith et al., “Agricultural Policy in Disarray: An Overview,” in *Agricultural Policy in Disarray*, ed. Vincent H. Smith, Joseph W. Glauber, and Barry K. Goodwin (Washington, DC: AEI Press, 2018), 1:17–51.
2. Food and Agricultural Policy Research Institute, *U.S. Agricultural Market Outlook*, University of Missouri, March 2022, <https://www.fapri.missouri.edu/wp-content/uploads/2022/03/2022-U.S.-Agricultural-Market-Outlook.pdf>.
3. US Bureau of Economic Analysis, National Data, <https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=2&isuri=1&1921=survey>.
4. Some analyses of federal crop insurance subsidies focus on the difference between actual indemnities received by farmers and the out-of-pocket amounts they paid for premiums. This measure is highly volatile because indemnity payments in any year are driven by growing conditions in that year, and such conditions vary considerably from one year to the next. Premium subsidies reflect the intended level of government support, based on the provisions that determine the program’s structure. See Vincent H. Smith, Joseph W. Glauber, and Barry K. Goodwin, “The US Federal Agricultural Insurance Program: Time for Reform?,” in *Agricultural Policy in Disarray*, ed. Vincent H. Smith, Joseph W. Glauber, and Barry K. Goodwin (Washington, DC: AEI Press, 2018), 1:71–107.
5. See Anton Bekkerman, Eric J. Belasco, and Vincent H. Smith, “Does Farm Size Matter? Distribution of Crop Insurance Subsidies and Government Program Payments Across U.S. Farms,” *Applied Economics Policy and Perspectives* 41, no. 3 (2019): 498–518.
6. According to the US Census Bureau, in 2020 (the most recent year for which data are currently available), average household income in the United States was \$97,206, and median household income was \$67,521. See US Census Bureau, “Income and Poverty in the United States: 2020,” September 14, 2021, <https://www.census.gov/library/publications/2021/demo/p60-273.html>. Both measures were about 2–3 percent lower than in 2019, the year before the advent of the COVID-19 pandemic.
7. These estimates are obtained by adjusting the annual estimates for the impacts of inflation and averaging wealth income and sales estimate over 2012–20.
8. See, for example, the review of previous studies of the distribution of federal crop insurance and other farm programs by Eric J. Belasco and Vincent H. Smith, “The Impact of Policy Design on Payment Concentration in Ad-hoc Disaster Relief: Lessons from the Market Facilitation and Coronavirus Food Assistance Programs,” *Food Policy* 106 (January 2022), <https://reader.elsevier.com/reader/sd/pii/S0306919221001688?token=EABEDF1558A3CA9A270C6945E128CF22183A9CDC248467BF32DACD8A746180C691D151F3E7964C5029E3237F3C7BC898&originRegion=us-east-1&originCreation=20220901154744>.
9. David Benjamin and David Komlos, “The Purpose of a System Is What It Does, Not What It Claims to Do,” *Forbes*, September 13, 2021, <https://www.forbes.com/sites/benjaminkomlos/2021/09/13/the-purpose-of-a-system-is-what-it-does-not-what-it-claims-to-do/?sh=8cd09963887a>.
10. Eric Belasco’s recent research on payment limits is summarized in Eric J. Belasco, “NSAC Issue Brief: An Economic Analysis of Payments Caps on Crop Insurance Subsidies,” National Sustainable Coalition, June 2022, <https://sustainableagriculture.net/wp-content/uploads/2022/07/Payment-Limit-Report-FINAL.pdf>.

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