NATIONAL SUSTAINABLE AGRICULTURE COALITION

NSAC ISSUE BRIEF:

AN ECONOMIC ANALYSIS OF PAYMENT CAPS ON CROP INSURANCE SUBSIDIES

WRITTEN BY ERIC J. BELASCO

INTRODUCTION

With the expiration of the 2018 farm bill quickly approaching in 2023, there is much discussion on a range of federal agricultural support programs and how they might change with the next farm bill. After accounting for expenditures under the Nutrition title of the farm bill, the largest federal expenditures are devoted to the federal crop insurance program. While a suite of new disaster aid and other support programs have been introduced in recent years, the crop insurance program has consistently remained intact.

One of the program's central features is that farmers and ranchers receive a roughly 60 percent subsidy premium discount on their insurance policies. The primary purpose of the subsidy is to encourage higher levels of participation to avoid adverse selection and potentially reduce pressures from the farm sector for congress to provide ad hoc disaster aid payments (Goodwin and Smith 1995). In 2021, federal crop insurance programs included 2.2 million policies sold that covered over 300 million acres with a total liability of $136.6 billion, while farmers received $8.6 billion in subsidy discounts (RMA 2022).

Advocates have argued that crop insurance is an essential element of the federal safety net program as it is needed to stabilize the food production system and provides farmers with "skin in the game" in reducing variations in farm revenues. However, there has long been concern about the concentration in subsidy benefits across farms. For example, Bonnen (1968) estimated that in the mid-1960s the largest 20% of farms received over 50% of federal farm program benefits. Nearly twenty years later, Johnson and Short (1983) estimated that the largest 1% of farms received approximately 17% of net agricultural program benefits.

A more recent study by Bekkerman, Belasco, and Smith (2019) found that the largest 10% of farms received over 60% of all subsidy benefits. While consolidation in federal agricultural subsidy programs has long been a concern, the concentration of payments on a small number of farms has almost surely increased as the average size of commercial farms has increased through farm consolidation (MacDonald, Korb, and Hoppe 2013).

INTRODUCTION (CONT'D)

Implementing caps to crop insurance subsidy benefits has been proposed as a way to limit excessively large payments being made to the largest farms, while still preserving some assurances to small and medium sized farm operations. Another argument in favor of such caps is that they can be an effective way to save a substantial amount of taxpayer expenditures, which may allow for reallocating resources to other priority areas such as agricultural research, conservation, beginning farmer and rancher programs, or deficit reduction, while affecting a relatively small number of farms (Bekkerman, Belasco, and Smith 2019).

In this study, five possible caps are evaluated, to help inform the tradeoffs to be considered in such policies. The obvious trade-off between higher or lower subsidy caps involves the percentage of farms that receive fewer subsidies under each cap, which are then offset by savings in expenditures that can either be utilized for other federal agricultural programs or returned to taxpayers. To that end, for each cap scenario I focus on the percentage of farms that will receive fewer government payments and the total cost savings. The following five cap scenarios are examined:

Scenario 1: **$50,000 cap on crop insurance subsidies per farm.**

Scenario 2: **Eliminate premium subsidies for farmers with an Adjusted Gross Income (AGI) over $250,000 /$500,000 / $750,000 / $900,000.**

Scenario 3: **Reduce premium subsidies by 15% for farmers with an AGI over $250,000 / $500,000 / $750,000/$900,000.**

Scenario 4: **Reduce premium subsidies by 50% for farmers with an AGI over $250,000 / $500,000 / $750,000 / $900,000.**

Scenario 5: **Phase out premium subsidies starting at a 50 percent reduction on production exceeding $1 million and reaching 100 percent on production exceeding $2.5 million.**

The remainder of this report is organized as follows. First, the data and methods used to estimate the impact and cost of each cap scenario are described. Then, the results and are documented and discussed. Finally, the implications of these results are discussed, along with appropriate caveats regarding the findings.

DATA AND EMPIRICAL METHODOLOGY

To estimate the impact from the five detailed policy scenarios, data from the Agricultural Resource Management Survey (ARMS) are used. The ARMS is an annual survey that provides individual farm production and financial information that is weighted from the National Agricultural Statistics Service to be nationally representative of all U.S. farms. Of particular interest for this study is that the ARMS contain the following farm-level information: (1) crop insurance expenditures by the farm that can be used to estimate the subsidies the farm receives; (2) adjusted gross income reported for each farm; and (3) total crop sales. Each of these variables provide a straight-forward way to evaluate the impact of the proposed subsidy caps.

For the purposes of this analysis, surveys from the most recent nine years are used, which include responses from 2011-2019. While previous studies have made use of only one year (Bekkerman, Belasco, and Smith 2019; Belasco and Smith 2021), the present study includes additional years in order to provide results that are less susceptible to potential year-to-year variations in the indicators of interest. Additionally, while data prior to 2011 are also available, purchases of crop insurance fundamentally changed with the implementation of revenue-based insurance policies, making that data not representative for future projections. These assumptions are made in order to produce reliable future expenditure projections.

In this report, the methodology originally developed in Bekkerman, Belasco, and Smith (2019) is used to estimate farm-level insurance subsidies in each of the nine years of history. Crop insurance subsidies are not explicitly reported in the ARMS since they are essentially discounts applied to insurance premiums, and farmers are only quoted the insurance premium they have to pay after the subsidy discount has been applied.

Data in the ARMS provides information on the farmer-paid cost of insurance from federal crop insurance programs. The effective subsidy benefit (Sub) received by each farm can be recovered using the farm's reported out-of-pocket insurance expenses (IExp) and the effective subsidy rate (SR), using the following equation from Bekkerman, Belasco, and Smith (2019):

$$Sub = IExp\left[\frac{SR}{1 - SR}\right]$$

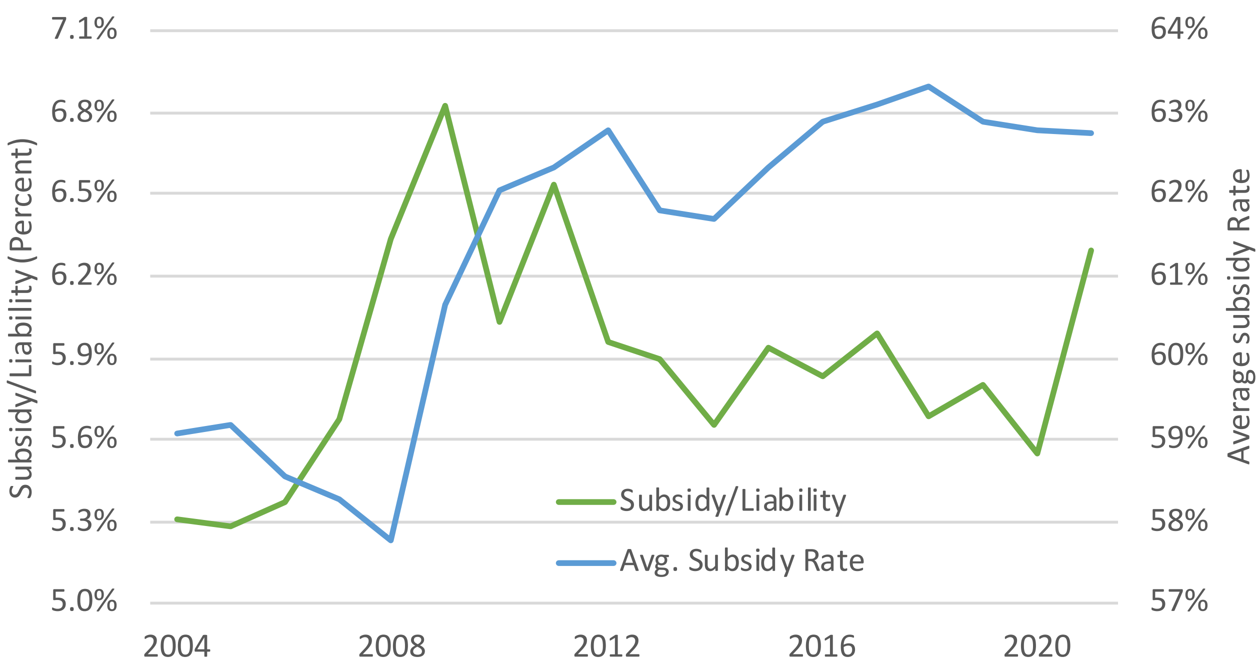
Bekkerman, Belasco, and Smith (2019) show that subsidy rates vary systematically by geographic area and crop. Thus, the effective farm-level subsidy benefit can be estimated by accounting for county-level variations in subsidy rates that result from systemic geographic variations in the coverage levels and other policy characteristics that farmers select. The sample of all farms is limited to observations with more than $1,000 in crop sales to be consistent with the USDA definition of a farm. The focus is further limited to corn, cotton, grain sorghum, soybeans, and wheat. While other crops can be insured, those five products comprise over 80% of all crop insurance subsidies, based on historical data from the USDA RMA Summary of Business from 2011-2019. While additional crops were considered, the estimation of crop insurance under these cropping systems introduces additional variance into the estimates that is avoided here.

Farm-level crop insurance subsidies can be estimated using this approach. However, the impact of the five different cap scenarios must also integrate farm level information on Adjusted Gross Income (AGI) and the value of production. In the ARMS data, a farm owner's AGI is calculated based on formulas and specifications defined by the IRS Form 1040 for each corresponding tax year, and is reported for each survey year going back to 1996. This new variable, described in more detail in Williamson and Bawa (2018), allows for farm-level AGI to be identified for each observation in the sample.

DATA AND EMPIRICAL METHODOLOGY (CONT'D)

The total liability associated with crop insurance policies is proportional to the estimated value of production that is insured and is equal to the indemnity amount when yields are zero. In this study, we correspond the insurance subsidy level to the appropriate value of production in each of the five scenarios. In order to relate the value of production (liability) to subsidies, historical data are used from the RMA, shown in figure 1. These data show that relative to total liability from 2011-2021, subsidy payments have averaged 5.92%, and that the corresponding insurance premium subsidy rate has averaged 62.62% over that period. This implies that the associated subsidy level associated with $1m in liability (total value of liability) is around $60,000 and the subsidy level associated with a liability of $2.5m is about $150,000. While those limits are investigated here, the subsidy caps associated the same percentages of farmers affected by the liability caps are also reported.

Figure 1. Historical Subsidy Rate and Subsidy as a percent of total liability, 2004-2021

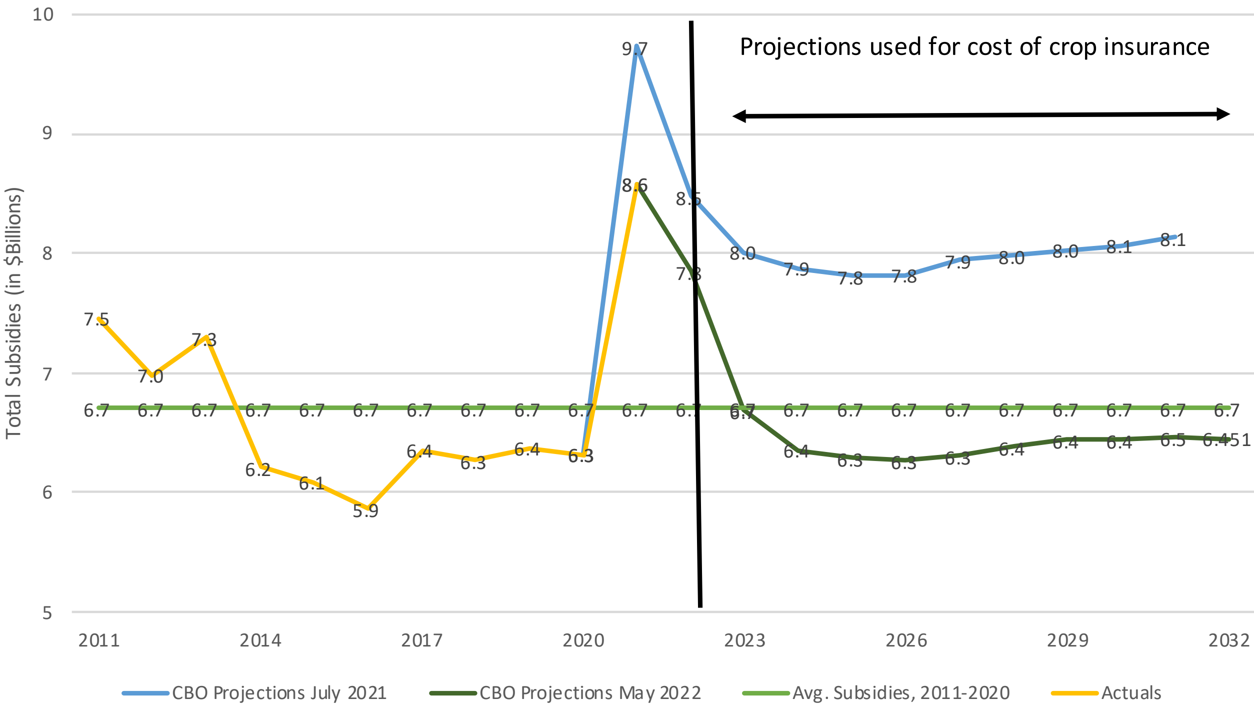


Data from the ARMS are used to estimate the impacts on total farm subsidy payments under the five cap scenarios using representative samples selected for the period 2011-2019. Impacts on subsidy payments in future years may differ from previous years due to increases in commodity prices and other factors such as yields that may alter the total liability associated with insured crops.

To better capture the future subsidy predictions, the most recent Congressional Budget Office 10-year baseline forecast (CBO 2022) is used. Since the cost savings from historical crop insurance participation are calculated as a percentage of total subsidies, these percentages can be applied to projected subsidy scenarios. As shown in figure 2, total subsidies increased in 2021 due to substantial increases in commodity prices. Of note, the May 2022 CBO projections reduced premium subsidy forecasts by around 20% lower than projected in the July 2021 projections. While results are presented using the more recent projections, this will result in fewer cost savings from caps due to the lower total cost of premium subsidies. Relative to subsidies received in 2011-2019, subsidies in 2031 are projected to be 21 percent higher under the July 2021 projections, while May 2022 projections are projected to be 4 percent lower than historical levels. Estimated savings from any subsidy cap programs are very likely to increase proportionally to increases in total subsidies.

DATA AND EMPIRICAL METHODOLOGY (CONT'D)

Figure 2. Historical and Projected Annual Premium Subsidies from Federal Crop Insurance, 2011-2031.



Note: Historical data are from RMA Summary of Business, Projected data are based on CBO July 2021 Baseline for Farm Programs.

RESULTS

Two key metrics are evaluated in each policy scenario: (1) the percentage of farms impacted by the caps; and (2) the estimated cost savings. To compute the percentage of farms receiving lower subsidies in each scenario, the number of farms represented by the criteria above that achieve the defined limit are divided by the total farms included in the sample. To compute the estimated cost savings, all limits are assumed to be binding, such that all subsidies beyond the cap are counted as savings. Once again, these figures are weighted using the weights provided in the ARMS data so that these cost estimates are representative of all U.S. farms. These historical figures are computed for each year from 2011-2019.

RESULTS (CONT'D)

Table 1 includes the percentage of farms impacted by each element of the five cap scenarios by year with averages in the far-right column, using data from 2011-2019. The average percentage of farms are used to project the percentage of farms impacted in future time periods. For example, it is estimated that an average of 3.87 percent of all farms would be impacted by a subsidy cap of $50,000.

Table 1. Percentage of farms impacted by each cap scenario, by year, 2011-2019.

	Variable	Limit	2011	2012	2013	2014	2015	2016	2017	2018	2019	Average
Scenario 1	Subsidies	50k	4.27	4.29	4.72	3.94	3.72	3.76	3.64	3.33	3.20	3.87
Scenarios 2 - 4	Adjusted	250k	7.17	12.24	12.04	12.27	10.07	11.07	10.06	10.63	11.46	10.78
	Gross	500k	2.58	4.68	4.56	4.44	3.09	3.72	3.89	3.36	3.14	3.72
	Income	750k	1.24	2.49	2.31	2.19	1.60	1.99	1.56	1.73	1.72	1.87
		900k	0.92	1.91	1.82	1.66	1.27	1.33	1.15	1.34	1.32	1.41
Scenario 5	Value of	1m	3.08	6.03	5.71	5.29	4.27	5.03	4.79	5.04	4.17	4.82
	production	2.5m	0.84	1.20	1.37	1.11	1.07	1.10	1.16	1.07	1.01	1.10
Scenario 5a	Subsidies	60k	2.71	2.83	3.22	2.55	2.65	2.53	2.47	2.33	2.32	2.62
		160k	0.10	0.14	0.11	0.09	0.09	0.12	0.16	0.08	0.10	0.11
Scenario 5b	Subsidies	40k	5.23	5.55	5.87	4.60	4.75	4.81	4.95	4.64	4.46	4.98
		90k	1.33	1.25	1.02	1.09	1.01	1.11	1.14	1.01	0.95	1.10

Source: Data are calculated by the author using 2011-2019 ARMS.

Note: Scenario 1 is based on insurance subsidies above $50k; scenarios 2-4 are based on adjusted gross income; scenario 5 is based on the total value of production; scenarios 5a/5b are based on insurance subsidies.

Table 2. Percentage of cost savings relative to total subsidies by each cap scenario, by year, 2011-2019.

	Variable	Limit	2011	2012	2013	2014	2015	2016	2017	2018	2019	Average
Scenario 1	Subsidies	50k	31.05	26.94	26.20	30.10	21.78	23.63	26.11	22.97	24.04	25.87
Scenario 2	Adjusted	250k	28.00	37.83	37.06	32.09	26.39	30.16	28.09	31.22	32.90	31.53
	Gross	500k	15.16	21.84	19.19	18.34	9.53	14.84	13.60	15.34	13.42	15.70
	Income	750k	9.96	12.75	12.31	10.72	5.07	6.65	7.77	8.24	8.11	9.07
		900k	8.58	9.80	10.52	8.50	3.75	5.07	5.64	6.50	6.03	7.15
Scenario 3	Adjusted	250k	4.20	5.67	5.56	4.81	3.96	4.52	4.21	4.68	4.94	4.73
	Gross	500k	2.27	3.28	2.88	2.75	1.43	2.23	2.04	2.30	2.01	2.35
	Income	750k	1.49	1.91	1.85	1.61	0.76	1.00	1.17	1.24	1.22	1.36
		900k	1.29	1.47	1.58	1.28	0.56	0.76	0.85	0.98	0.91	1.07
Scenario 4	Adjusted	250k	14.00	18.91	18.53	16.05	13.20	15.08	14.04	15.61	16.45	15.76
	Gross	500k	7.58	10.92	9.60	9.17	4.77	7.42	6.80	7.67	6.71	7.85
	Income	750k	4.98	6.37	6.16	5.36	2.54	3.33	3.89	4.12	4.06	4.53
		900k	4.29	4.90	5.26	4.25	1.87	2.54	2.82	3.25	3.02	3.58
Scenario 5	Subsidies	60k-160k	26.49	21.71	20.89	25.27	15.73	18.04	21.37	18.11	18.58	20.69
		40k-90k	34.33	29.67	29.22	33.04	23.69	25.67	28.80	25.48	26.40	28.48

Table 2 shows the percentage of cost savings relative to total subsides for each scenario and year. The averages calculated in the far-right column is used to estimate the percentage of future cost savings from each cap policy. Following the previous example, a subsidy cap of $50,000 would result in an average reduction in total subsidies by 25.87%. It is worth noting that this decrease in subsidies is fairly large when considering it only impacts 3.87% of all farms.

Using information from tables 1 and 2, 10-year cost projections are computed using the most recent CBO projection (CBO 2022) total subsidies and the average percentage of savings relative to total subsidies. Cost savings are computed as proportional to premium subsidies, meaning that the results in tables 1 and 2 are unchanged when applied to different forecasts of premium subsidies. For purposes of the farm bill, forecasts from the CBO are used to evaluate program costs. The May 2022 CBO projections include projections through 2032. Thus, we are able to utilize all 10 years of projections from 2023-2032. The resulting 10-year cost estimates under both CBO projections are provided below in table 3.

RESULTS (CONT'D)

Scenario 1 is similar to previously proposed subsidy caps which simply limit insurance subsidies to $50,000. Once the farm receives $50,000 in subsidy benefits, any further subsidy discounts are then removed from the insurance premium. Such a policy would impact 3.53 percent of all farms, but reduce total subsidies by 25.87 percent, amounting to $16.6 billion.

Table 3. Projected 10-year Cost Savings and Incidence

	Variable	Limit	Total 10-Year Cost Savings ($b)	Percent of Total Subsidies	Percent of Farms Impacted
Scenario 1	Subsidies	50k	$ 16.58	25.87	3.53
Scenario 2	Adjusted Gross Income	250k	$ 20.20	31.53	10.66
		500k	$ 10.06	15.70	3.44
		750k	$ 5.81	9.07	1.72
		900k	$ 4.58	7.15	1.28
Scenario 3	Adjusted Gross Income	250k	$ 3.03	4.73	10.66
		500k	$ 1.51	2.35	3.44
		750k	$ 0.87	1.36	1.72
		900k	$ 0.69	1.07	1.28
Scenario 4	Adjusted Gross Income	250k	$ 10.10	15.76	10.66
		500k	$ 5.03	7.85	3.44
		750k	$ 2.90	4.53	1.72
		900k	$ 2.29	3.58	1.28
Scenario 5	Subsidies	60k-160k	$ 13.26	20.69	2.46
		40k-90k	$ 18.25	28.48	4.72

Projections are based on CBO 2022. Refer to table 4 for projected cost savings based on CBO 2021.

Scenario 2 is the first of three scenarios that limit subsidies based on adjusted gross income (AGI). In this scenario, all subsidies are eliminated for farm owners with an AGI that exceeds the specified levels of $250,000; $500,000; $750,000; and $900,000. In this scenario 10.66, 3.44, 1.72, and 1.28 percent of farms would respectively be impacted by each AGI limit. The complete elimination of subsidies for farm owners with AGI's over $250,000 would result in cost savings of 31.53 percent of total subsidies, which amounts to $20.2 billion in savings over 10-years. Cost savings and the percent of all farms affected by an AGI limit fall substantially as the AGI limit increases. For example, with an AGI limit of $900,000, 1.28 percent of all farms would be impacted, resulting in a 7.15 percent reduction in total subsidies.

Scenarios 3 and 4 use the same AGI limits as in Scenario 2, but respectively impose either 15% and 50% reductions on those subsidies, instead of completely eliminating them. While the percentages of farms impacted are unchanged from Scenario 2, cost savings are reduced dramatically under Scenario 3, while savings from Scenario 4 remain modest. For example, at the $250,000 limit Scenario 3 results in total savings of $3.0 billion and Scenario 4 results in totals savings of $10.1 billion.

Scenario 5 uses a sliding scale that starts with a 50% reduction in subsidies at the initial cap that increases to a 100% reduction in subsidies at the final cap. A cap that starts at $1 million with a 50 percent reduction in subsidy payments and that completely eliminates subsidies at $2.5 million in production is of particular interest. Using the historical data from ARMS, 4.66 percent of farms are found to have crop sales over $1 million, and 1.08 percent of farms have crop sales over $2.5 million. Because insurance subsidies are roughly proportional to crop sales, a sliding scale is used that starts with $40,000 and ends at $90,000. These points are determined based on a roughly similar proportion of the farm sector that hits these limits as with crop sales. To illustrate, 4.72 percent of farms received over $40,000 in subsidies, while a cap of $90,000 would impact 1.05 percent. These figures are very close to the value of production-based caps. The sliding scale scenario is estimated to result in savings in federal subsidies of $18.3 billion over 10 years, which is approximately 28.48 percent of all subsidies. An additional cap was included that starts at $60,000 and ends at $160,000. These limits are based on the methodology that was discussed earlier that utilizes the historical average of around 6% for subsidies relative to total liability. Using this sliding scale is estimated to affect only 2.46 percent of farms, well below the proportion of farms affected by the value of production cap. The result of such a cap would still save $13.3 billion in subsidies over 10 years, which is 20.69% of total subsidies.

CONCLUSIONS

The analysis in this report provides a range of subsidy caps that can be applied to meet different policy objectives and focuses on the trade-offs that exist when implementing these caps. The strictest cap that is evaluated requires the complete elimination of insurance subsidies for any farm with an AGI over $250,000, which would amount to total savings of $20.2 billion and would impact 10.66% of all farms. All of the other caps would provide some amount of savings on subsidy payments and reduce the extent to which subsidy payments are concentrated on a few farms, but to a lesser extent. Such savings in federal expenditures could be reallocated to other higher priority programs (e.g., agricultural research, conservation, beginning farmer and rancher programs, etc.), reduce tax burdens on taxpayers, or reduce the federal budget deficit.

There are several caveats to this study. First, the estimations of impacts and cost savings provided in this report vary significantly in response to changes in CBO projections. This sensitivity of results can be seen comparing tables 4 and 5, which contain the projected impacts of each cap scenario under two CBO projections (CBO 2021; CBO 2022) that deviate by around 20%. As shown in the results, changes in actual crop insurance subsidies can drive the actual savings from the proposed caps.

Second, the assumption of binding caps is only as effective as the actual policy that is drafted. Currently, farms are able to avoid such caps through redefining farm ownership among family members and other non-farm business partners. The creation of "paper farms" and other legal maneuvers to avoid these caps would drastically limit the impact of such a policy. As such, attention should be paid to establishing these policies so that they have the intended impacts and don't allow for a mitigated impact through legal loopholes.

REFERENCES

Bekkerman A, EJ Belasco, and VH Smith. 2019. "Does Farm Size Matter? Distribution of Crop Insurance Subsidies and Government Program Payments across U.S. Farms," Applied Economic Perspectives and Policy, Vol. 41, No. 3, pp. 498-518.

Belasco EJ and VH Smith. 2022. "The Impact of Policy Design on Payment Concentration in Ad-hoc Disaster Relief: Lessons from the Market Facilitation Program and Coronavirus Food Assistance Programs." Food Policy, Vol. 106.

Bonnen, JT. 1968. The Distribution of Benefits from Selected U.S. Farm Programs. In Rural Poverty in the United States, A report by the President's National Advisory Commission on Rural Poverty, Washington DC, 461–505.

Congressional Budget Office. 2021. "CBO's July 2021 Baseline for Farm Programs." Congress of the United States, Washington.

Goodwin BK and VH Smith. 1995. The Economics of Crop Insurance and Disaster Aid. The AEI Press, Washington DC.

Johnson JD and SD Short. 1983. Commodity Programs: Who Has Received the Benefits? American Journal of Agricultural Economics 65 (5): 912–21.

MacDonald JM, P Korb, and RA Hoppe. 2013. Farm size and the Organization of U.S. Crop Farming. Washington DC: U.S. Department of Agriculture, Economic Research Service, ERR-152.

Williamson JM, and SG Bawa. "Estimated Effects of the Tax Cuts and Jobs Act on Farms and Farm Households", ERR-252, U.S. Department of Agriculture, Economic Research Service, June 2018.

APPENDIX

Table 4. Projected cost savings by year (billions) under each cap scenario based on July 2021 CBO Projections, 2023-2032

	Variable	Limit	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Scenario 1	Subsidies	50k	2,073	2,038	2,020	2,022	2,055	2,065	2,077	2,088	2,103	2,060	20,602
Scenario 2	Adjusted	250k	2,527	2,484	2,462	2,464	2,505	2,517	2,532	2,545	2,563	2,511	25,109
	Gross	500k	1,258	1,237	1,226	1,227	1,247	1,253	1,261	1,267	1,276	1,250	12,503
	Income	750k	727	714	708	709	721	724	728	732	737	722	7,223
		900k	573	563	558	559	568	571	574	577	581	569	5,694
Scenario 3	Adjusted	250k	379	373	369	370	376	378	380	382	385	377	3,767
	Gross	500k	188	185	184	184	187	188	189	190	191	187	1,871
	Income	750k	109	107	106	106	108	109	109	110	111	108	1,083
		900k	86	84	84	84	85	85	86	86	87	85	852
Scenario 4	Adjusted	250k	1,263	1,241	1,231	1,232	1,252	1,258	1,265	1,272	1,281	1,255	12,551
	Gross	500k	629	618	613	614	624	627	630	634	638	625	6,251
	Income	750k	363	357	354	354	360	362	364	366	368	361	3,608
		900k	287	282	280	280	284	286	287	289	291	285	2,851
Scenario 5	Subsidies	60k-160k	1,658	1,630	1,616	1,617	1,644	1,651	1,661	1,670	1,682	1,648	16,477
		40k-90k	2,282	2,243	2,224	2,226	2,263	2,273	2,287	2,299	2,315	2,268	22,681

Table 5. Projected cost savings by year (billions) under each cap scenario based on May 2022 CBO Projections, 2023-2032

	Variable	Limit	2025	2026	2027	2028	2029	2030	2031	2032	Total
Scenario 1	Subsidies	50k	1,627	1,622	1,632	1,650	1,666	1,667	1,671	1,669	16,577
Scenario 2	Adjusted	250k	1,983	1,977	1,990	2,011	2,031	2,031	2,037	2,034	20,204
	Gross	500k	988	984	991	1,002	1,011	1,012	1,014	1,013	10,060
	Income	750k	571	569	572	579	584	584	586	586	5,812
		900k	450	448	451	456	460	461	462	461	4,582
Scenario 3	Adjusted	250k	298	297	298	302	305	305	306	305	3,031
	Gross	500k	148	147	148	150	151	151	152	152	1,506
	Income	750k	86	85	86	87	88	88	88	88	871
		900k	67	67	68	68	69	69	69	69	686
Scenario 4	Adjusted	250k	991	988	994	1,005	1,015	1,015	1,018	1,017	10,099
	Gross	500k	494	492	495	501	506	506	507	506	5,030
	Income	750k	285	284	286	289	292	292	293	292	2,903
		900k	225	224	226	228	231	231	231	231	2,294
Scenario 5	Subsidies	60k-160k	1,301	1,297	1,306	1,320	1,332	1,333	1,337	1,335	13,258
		40k-90k	1,791	1,786	1,797	1,817	1,834	1,835	1,840	1,837	18,250

APPENDIX (CONT'D)

Table 6. Historical Crop Insurance Performance Indicators, 2004-2021

Year	PoliciesSold	Total Liability	Total Premium	Total Subsidy	Total Indemnity	Subsidy/Liability	Avg. Subsidy Rate
2004	1,988,947	46,574,578,436	4,185,163,371	2,471,647,697	3,207,540,948	5.31%	59.06%
2005	1,969,461	44,240,755,752	3,948,604,400	2,336,661,880	2,366,698,664	5.28%	59.18%
2006	1,952,696	49,893,360,823	4,578,607,101	2,681,400,474	3,502,858,744	5.37%	58.56%
2007	1,933,719	67,313,087,412	6,561,141,675	3,822,719,550	3,547,067,356	5.68%	58.26%
2008	1,956,111	89,865,329,041	9,850,217,591	5,690,205,828	8,679,500,125	6.33%	57.77%
2009	2,047,521	79,519,868,957	8,950,733,995	5,426,929,637	5,220,454,007	6.82%	60.63%
2010	2,029,345	78,058,206,615	7,594,490,440	4,711,412,564	4,252,668,109	6.04%	62.04%
2011	2,065,655	114,185,126,823	11,971,437,175	7,462,869,989	10,867,772,980	6.54%	62.34%
2012	2,104,992	117,139,947,543	11,116,455,047	6,979,008,807	17,450,601,831	5.96%	62.78%
2013	2,192,098	123,788,471,303	11,807,291,161	7,296,422,127	12,084,348,629	5.89%	61.80%
2014	2,211,652	109,884,244,737	10,072,433,677	6,214,802,374	9,134,573,075	5.66%	61.70%
2015	2,237,451	102,521,312,088	9,768,274,044	6,089,512,323	6,314,263,142	5.94%	62.34%
2016	2,206,846	100,607,945,278	9,328,226,054	5,866,201,999	3,912,913,999	5.83%	62.89%
2017	2,182,992	106,052,421,093	10,071,169,993	6,354,949,549	5,434,702,791	5.99%	63.10%
2018	2,162,024	110,145,106,422	9,895,542,506	6,265,632,396	7,321,727,263	5.69%	63.32%
2019	2,159,177	109,858,346,121	10,128,255,851	6,370,099,026	10,604,769,079	5.80%	62.89%
2020	2,186,039	113,922,148,015	10,063,899,899	6,318,282,949	8,680,784,586	5.55%	62.78%
2021	2,237,258	136,604,220,137	13,713,564,382	8,604,371,066	9,021,884,431	6.30%	62.74%
Avg. All Years						5.89%	61.34%
Avg. 2011-2021						5.92%	62.61%
Avg. 2017-2021						5.86%	62.97%

Source: Data are from USDA RMA Summary of Business, collected on April 20, 2022.

About the Author:

Eric J. Belasco is a professor of agricultural economics in the Department of Agricultural Economics and Economics at Montana State University, where he studies federal agricultural support programs and risk management. He received a PhD in Economics from North Carolina State University in 2007 and has published 35 peer reviewed journal articles, two book chapters, and has been highlighted in the Washington Post, New York Times, MarketWatch, among others for his research on agricultural policy.

110 Maryland Avenue NE, Suite 209
Washington, DC 20002
202-547-5754 phone
202-547-1837 fax
sustainableagriculture.net

Follow us on Facebook, Twitter, and Instagram

NATIONAL SUSTAINABLE AGRICULTURE COALITION

Distributed Electronically