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What Repeated Crop Insurance Premium Interest Deferrals Mean for Farmers

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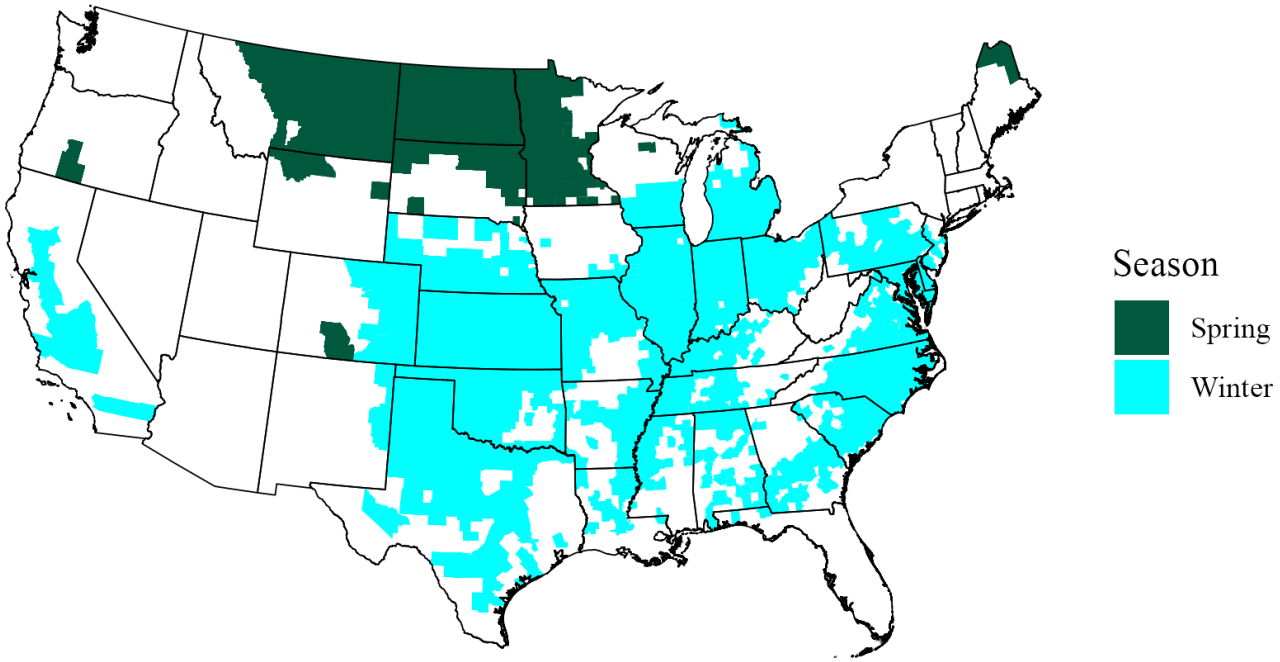
One of the lesser-known financial support mechanisms for producers participating in the Federal Crop Insurance Program (FCIP) are premium interest deferrals that temporarily waive interest charges on unpaid producer premiums during disaster years. For spring planted crops, farmers are generally billed for their share of crop insurance premiums on August 15, with interest beginning to accrue on October 1 if premiums remain unpaid. However, when natural disasters or national emergencies disrupt harvest timing and cash flow, the Federal Crop Insurance Corporation (FCIC) can authorize deferrals that extend the interest-free payment window, typically by 60 days, though occasionally longer. These interest deferrals have become a routine measure since the first deferral in 2012 following a nationwide drought. Since then, interest deferrals have been authorized in eight of the pasts thirteen years with continuous deferrals from 2019-2024. These repeated deferrals, covering over $18 billion in producer premiums and representing approximately $510 million in implicit federal subsidies, have raised important questions about whether the expectation of continued relief is influencing farmers' crop insurance purchasing decisions.

After five consecutive years of interest deferrals, it's possible that some producers have come to expect such relief as standard practice rather than exceptional disaster response. In such a case, if farmers anticipate that premium payments can be deferred without penalty, they may be more willing to insure addi-

tional acres or select higher coverage levels, knowing that payment obligations will not conflict with any harvest-time liquidity constraints. This issue is challenging to investigate empirically due to the thought process behind farmer insurance decisions being unobservable. However, wheat production provides an interesting test case due to the distinction between winter and spring wheat. Winter wheat is typically grown in the southeast and Midwest of the U.S. while spring wheat is almost exclusively grown in Montana, North and South Dakota, and Minnesota (Figure 1). Although the two types of wheat are agronomically a very close comparison, they have starkly different premium billing periods that mean winter wheat producers have generally not benefited from previous interest deferral announcements while spring wheat producers have [1].

Figure 1: ***Winter and Spring Wheat Distributions.***



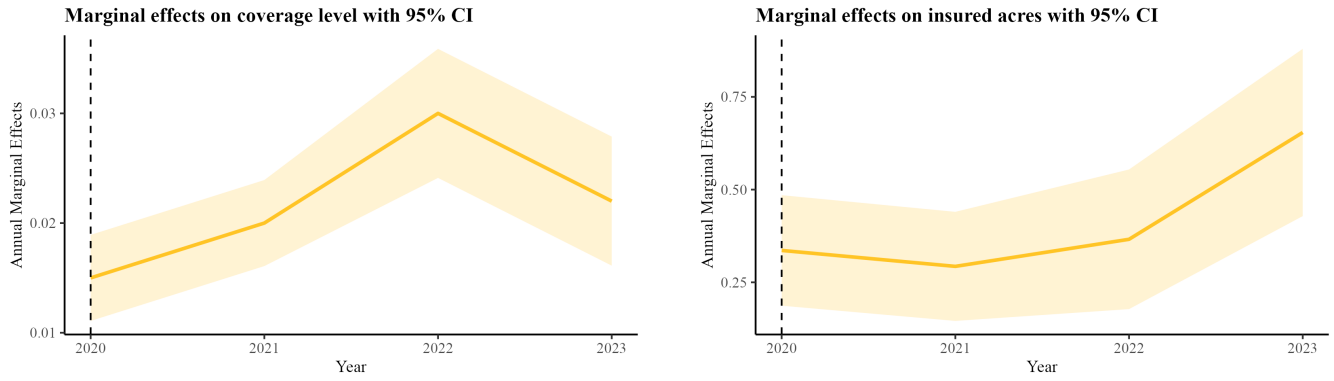
To explore whether repeated interest deferrals have influenced insurance demand, a preliminary analysis was conducted using historical crop insurance data from 2015 to 2023. By exploiting the differential timing of premium billing cycles, it is possible to isolate the effect of deferrals on farmer crop insurance decisions. Preliminary results from an instrumented two-way fixed effects (TWFE) model based on the

[1] Winter wheat premiums are typically billed from May to July, while spring wheat premiums are billed from August to October. As an example, when FCIC announced a 60-day interest deferral in August 2021 in response to drought conditions, spring wheat farmers whose premiums were due that month directly benefited from the relief, while winter wheat producers who had already paid their premiums months earlier received no comparable advantage.

demand framework of Tsiboe and Turner (2023) indicates that coverage levels increased by 1.6%, while insured acreage expanded by an average of 7.4% [2]. These results provide some initial evidence that premium deferrals may be associated with slightly higher demand for crop insurance, particularly with respect to how much acres farmers insure.

A more nuanced view of this result is provided by the annual marginal effects presented in Figure 2. Following the initial 2019 announcement, there was little observable adjustment in demand in 2020. However, with successive policy announcements in 2020, 2021, and 2022, the estimated effects show a gradual increase in demand, consistent with the growing expectation among farmers that similar deferral measures would likely be implemented when future premiums were billed.

Figure 2: *Annual Marginal Effects*



(a) *Coverage Level* **(b) *Insured Acres***

A recent ARPC white paper (Tsiboe and Steinbach, 2025) shows that U.S. crop producers are currently facing mounting financial pressure as production costs remain elevated while commodity prices have fallen to multi-year lows. While FCIP premium interest deferrals provide short-term cash-flow relief—helping farmers avoid distress sales and meet loan obligations—our analysis indicates that repeated reliance on them carries longer-term behavioral and fiscal consequences. Evidence from the wheat sector shows that interest deferrals have modestly but significantly increased crop-insurance demand, suggesting that producers have begun to view them as a routine feature of the FCIP rather than as temporary disaster relief. This normalization, though subtle, can expand insured exposure and increase implicit federal subsidy costs. If the expectation of these deferrals has indeed boosted demand for crop insurance, their sudden

[2] Fixed effects are included at the county-year level. The interaction term between "Spring Wheat" and "Interest Deferral" captures the effect that interest deferrals had on spring wheat in particular.

discontinuation may leave some farmers unprepared for liquidity constraints, particularly those who built financial plans around anticipated extensions.

The debate therefore points to a structural, not cyclical, challenge. The 2008 Farm Bill's shift of premium billing to pre-harvest months created a persistent cash-flow mismatch that recurring deferrals merely postpone. Rather than relying on ad hoc extensions that risk eroding fiscal discipline, policymakers could consider realigning billing schedules with post-harvest revenue cycles or establishing a standardized payment-grace framework. Such reforms would maintain liquidity support when needed while preserving the long-term stability and integrity of the crop-insurance program—ensuring that emergency relief remains the exception, not the expectation.

Data and Model Notes

The analysis utilizes public data from the U.S. Federal Crop Insurance Program spanning 2015–2023. The dataset includes crop–insurance type–level variables for all participating counties, including coverage levels, premiums paid, subsidies received, crop prices, and total liabilities, among others. The sample contains 298,631 observations for spring wheat across 142 counties and 711,840 observations for winter wheat across 220 counties. To estimate the demand for crop insurance, we employed a two-way fixed effects (TWFE) framework, specified as a system of equations designed to capture both spatial and temporal variation in policy implementation and farmer response.

$$lnA_{it} = \beta_0 + \beta_D SpringWheat_i * Post2019_t + \beta_r lnr_{it} + \beta_w w_{it} + v_{it} + e_{it}$$

$$ln\theta_{it} = \alpha_0 + \alpha_D SpringWheat_i * Post2019_t + \alpha_r lnr_{it} + \alpha_w w_{it} + \gamma_{it} + \epsilon_{it}$$

The log-linear form of the empirical model captures both extensive and intensive demand margins as A, net insured acres, and θ, coverage level. The paid premium rate, r, was instrumented (see Tsiboe and Turner (2023) for details). Other controlled variables, w, include crop prices, land rent, county crop acreage, and county-year fixed effects. The demand shifter is estimated as β_D and α_D for percentage of demand changed due to the premium interest deferral policy starting in 2019.

References

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The Agricultural Risk Policy Center at North Dakota State University conducts independent, evidence-based economic research to inform agricultural policy and strengthen the U.S. farm safety net. The Center's work focuses on evaluating risk management tools such as crop insurance and disaster assistance, analyzing market disruptions, and providing timely insights that support producers, policymakers, and industry leaders.

ARPC Briefs communicate the outcomes of this research by presenting data, methods, and findings in a structured format. Designed to make rigorous analysis accessible, these briefs translate complex economic issues into clear insights that enhance understanding and support evidence-based decisions, contributing to the resilience and long-term prosperity of U.S. agriculture.

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