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The Impacts of Insurance on Agricultural Land Values

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US agricultural policy provides a financial safety net for America's farmers. Over the last fifty years, economists have shown that the monetary benefits of these policies are bid into agricultural asset values. While estimated capitalization rates vary by Farm Bill program and empirical design, the results are consistently positive and statistically significant. (A recent review of this work can be found in Kuethe and Ifft, 2014.) There has been little empirical research, however, evaluating the potential link between publicly-subsidized insurance programs, such as Federal crop insurance, and farmland values. Insurance programs are expected to play an even greater role in the farm safety net as a result of the Agricultural Act of 2014. Therefore, economists are concerned with the unintended consequence and broader impacts of these programs on the agricultural economy.

It can be difficult to identify the effects of publicly-supported insurance programs on farmland values. Unlike the laboratory environment of the physical sciences, economists are only able to observe the outcomes of real-world observations, and farmers are not neatly organized into treatment and control groups. Instead, insurance programs are available to all producers, and farmers voluntarily elect to purchase insurance coverage based on a number of characteristics of the farm business, the farm manager, and the agricultural economy.

A new study recently published in the *Agricultural and Resource Economics Review* takes advantage of a "natural experiment" provided by the gradual introduction of the USDA's pilot Pasture, Rangeland, and Forage Insurance program (PRF). Similar to Federal crop insurance, PRF provides payments to policyholders based on agronomic conditions for the production of hay and forage. The program was

rolled out gradually beginning in 2007 for a set of pilot counties. The gradual roll out provides a "natural experiment" in which one can examine the change in pastureland values before and after the introduction of the program. This change can be contrasted by that of pastureland values in counties in which the program was not available. The study uses data from the 2005-2010 USDA National Agricultural Statistics Service (NASS) June Area Survey (JAS). JAS, conducted each June, collects farmland and cash rental rate information from all operators within selected land segments, averaging approximately one square mile in size, and each segment remains in the survey for five years. Thus, the data track pastureland values in selected segments, including areas in which PRF was introduced.

The findings suggest that the introduction of the PRF Insurance Pilot Program is associated with higher pastureland values. The results, estimated through various models to ensure robustness, suggest a premium in the range of 4–9 percent of the average pastureland value. This increase is comparable with that of other government programs but is much smaller than the total increase in pastureland values observed between 2005 and 2010.

It should be noted that the estimated impact is applicable only to PRF-eligible land in the JAS database and should not be used as a measure of the totality of the program's financial impact. Further, the PRF program is currently much smaller than Federal crop insurance and other similar federal programs. Even with 48 million enrolled acres in 2012, PRF has not yet been adopted for pastureland at a level approaching the insurance products that cover many major agricultural commodities.

While the results support the notion that PRF insurance is indeed valuable to producers, they also indicate that the capitalization effects of subsidized insurance may be similar to those of other farm programs. The findings suggest that publicly subsidized insurance programs, the principal policy mechanism of Agricultural Act 2014, may have a comparable impact on farmland values as previous farm programs. In other words, the financial benefits of publicly-subsidized insurance programs may be bid into farmland values in a manner similar to price supports or direct payments.

References

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