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SURE Impact? An Empirical Investigation of Moral Hazard and Adverse Selection Behavior

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Overview

• SURE is the Supplemental Agricultural Disaster Assistance program (2008 Farm Bill, section 12033).
• Producers must purchase a federally subsidized crop insurance on all planted crops to be eligible for SURE.
• SURE provides disaster relief payments for:
  ▶ Farms within or bordering counties qualified for natural disaster coverage.
  ▶ Farms experiencing weather-related losses that result in a farm-wide revenue loss of more than 50% of the annual production base.
• Farms experiencing production losses that exceed 50% of the annual production base to receive SURE indemnities.

Relevant Research Questions

• Can SURE exacerbate adverse selection and moral hazard behavior in multiple peril crop insurance (MPCI)?
• How can SURE's impact on producer behavior be measured?
• Has SURE affected producer behavior?

SURE Program

• Insuring: provide disaster relief payments to U.S. agricultural producers in cases of unexpected, rare, and catastrophic production losses.
• Participation requirements: purchase federally subsidized MPCI coverage for all planted crops.
• Eligibility for SURE payments:
  ▶ Be within or border a declared natural disaster area
  ▶ Be within or border a county that meets the 50% revenue-to-county requirements for SURE indemnities.
  ▶ Farms within or bordering counties qualified for natural disaster coverage.
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SURE impact analysis

• Ø $1 of SURE payment is offset by $0.60 of MPCI payments

SURE and Moral Hazard

• SURE can cause moral hazard incentives.
• SURE can cause adverse selection.

SURE and Adverse Selection

• Adverse selection: High
• Adverse selection: Low

SURE and Risky Farms

• SURE may induce moral hazard and adverse selection behavior in U.S. corn, soybeans, and wheat producers.

SURE and Empirical Analysis

• Smith and Watts (2010) simulate and show SURE’s effects on moral hazard incentives.
• This study examines MPCI demand before and after SURE to empirically test for moral hazard behavior.

SURE and Modeling

• Potential moral hazard behavior exist in the production of three major U.S. crops.
• Modeling details: the annual production history is used to calculate indemnities for each crop.
• Factors that can trigger SURE payments:
  ▶ Recent deviations from APH
  ▶ Yield deviations at risky farms

SURE and Policy Implications

• Implications of SURE on moral hazard and adverse selection behavior in U.S. crops, soybeans, and wheat producers.

SURE and Policy Impact

• Policy changes to SURE to mitigate moral hazard and adverse selection behavior in response to SURE.

SURE and Empirical Evidence

• Empirical evidence suggests the 2008 SURE policy may exacerbate moral hazard and adverse selection behavior in U.S. corn, soybeans, and wheat producers.

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