Comments on “Drought and Retribution”

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Summary

• Exploit the roll-out of a large scale WI program in Mexico to study the impact of insurance on agricultural productivity
  – Maize yields increase
  – Maize area planted *decrease*
  – Household expenditure (and income) increase
  – Most effects concentrated in middle-income counties, compared to poor or rich counties
WI Scheme

• Roll-out
  – Why were some counties chosen first?

• Basis risk
  – What is the correlation between yields and receiving a payout?
  – Product focuses only on rain, yet temperature seems important. Other risks not covered

• Participation in program
  – Program is fully subsidized, so eligible farmers are automatically enrolled
    • Program solves a key problem of many WI programs... low uptake.
      – Many reasons for it: Liquidity constraints, Basis risk, poor understanding of the product, trust, etc.
WI Scheme

– Since everyone may be covered, informal arrangements could be sustained.

– Yet, not everyone is covered in program counties.
  • Is this due to eligibility criteria?
  • Do farmers sign up for program? Only PROCAMPO beneficiaries are eligible?

– Do farmers understand the product?
  • Awareness vs knowledge

• Relationship with other government programs (PROCAMPO, FONDEN, etc)
  – Number of beneficiaries does not change, but what about details of the program?
    • Subsidies for inputs to maize cultivation?
    • Access to credit?
WI Scheme

• Adverse selection
  – Price does not convey underlying risk
    • Are crops with higher return being grown?
    • Do certain farmers or counties benefit disproportionately?

• Who bears the risk?
  – Does the government reinsure?
  – If not, does the risk impose a limit on the scalability of the program?
Results

• WI Program designed for maize, beans, sorghum and barley, yet area planted under maize (and perhaps the other crops?) decreased. Why?
  – Other government programs implemented simultaneously?
  – Basis risk is high?

• Effects concentrated in middle-income counties
  – Perhaps poor counties are also more risk averse (Clark, 2011)
Additional Analysis

• What happened to access to credit?
• Input usage?
  – In particular, basal vs top-dressing fertilizer application
• Migration patterns?
• Heterogeneous Effects
  – Do expenditure and income increase more for households engaged in agriculture (as opposed to non-agricultural activities, ie non-farm businesses, wage work, etc)
  – Related, do ag households closer to rainfall station benefit more?
  – Do counties with irrigation benefit less from program?
Additional Analysis

• General Equilibrium effects (prices, wages)
• Exploit eligibility rule (<20 acres) to identify impact around the threshold
  – Valid if only change is participation in WI scheme.
Cost - Benefit

- WI scheme is a poverty alleviation tool
- How does the cost-benefit of the WI scheme compare to a program that provides irrigation?