

Nudges for Increasing Participation in Conservation Programs

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Why Participation Matters

- Programs that pay for ecosystem services rely on voluntary participation by land owners/managers
- Effectiveness: Two possibilities
 - More participation = more acres enrolled
 - More participation = better acres enrolled
- Cost effectiveness: Two possibilities
 - More participation = lower costs from better offers
 - More participation = better practices

What impacts participation?

- Financial incentives (standard economists' view)
 - Program managers can offer higher payments to encourage greater participation
- Nudges (view of sociologists, psychologists, institutional economists, behavioral economists)
 - Information (Outreach by mail or by program staff)
 - Social norms, peer effects

Two challenges

- Program management
 - What resources should be put toward outreach efforts (or other nudges)?
 - What is the right mix of financial incentives and outreach efforts?
- Policy research
 - How do we model outreach efforts and nudges versus financial incentives?
 - There are no standard simulation methods for modeling the impact of various nudges.

Outreach Field Experiments

- Prior Research
 - (Allcott 2010, Costa and Kahn 2010, Ferraro and Price 2011):
 - Outreach “nudges” are effective in water and energy conservation
 - The type of nudge matters; social norms and personalization have an impact.
- Our research
 - How do outreach letters impact participation in conservation programs?
 - Offer rate, acres offered
 - Practices installed
 - Cost (bid)

Context for the Experiment: The Conservation Reserve Program

- CRP structure
 - Farms retire cropland in 10- to 15- year contracts
 - Offers are ranked by EBI score
 - Practices and costs (rental rate) influence EBI score
- CRP in 2012
 - Feb. '12 enrollment: 29.6 million ac., \$1.97 bil./yr.
 - 6.5 million acres on expiring contracts (fall 2012)
 - General signup from March-April, 2012
 - High commodity prices over past five years

Experimental Design: Letters

- Two groups of farms
 - Expiring contracts
 - Eligible but not enrolled land
- Data efforts
 - Identifying eligibility (crop history, erodibility, etc.)
 - Identifying “operations”
- Sampling and treatments
 - 100,000 letters
 - Three treatments (based on power analysis)
 - Random assignment of letters to farm operations

Preliminary Lessons Learned

- Low costs: letters are inexpensive
- Effectiveness
 - Data is not yet available (signup ended April 13)
 - But even a minimum effect (15 offers/10,000 letters) would make them cost effective
- Complexity
 - Outreach has to be coordinated with other communication efforts
 - Data requirements are not trivial

Conclusions

- Nudges
 - Field experiments provide a useful way to evaluate many nudges
- Financial incentives
 - Field experiments could also be used to evaluate financial incentives, but structuring the experiments is much more difficult
- Gaps in theory and modeling
 - Policy research may need to expand beyond models with only financial incentives

Research Team

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