

Essays on Behavioral Economics and Policy Design

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Abstracts

This thesis consists of three self-contained chapters:

Chapter 1: Social norms and information diffusion in water-saving programs: Evidence from a randomized field experiment in Colombia

This paper investigates spillover effects of a social information campaign aimed at encouraging residential water savings in Colombia. The campaign was organized as a randomized field experiment, consisting of monthly delivery of consumption reports, including normative messages, for one year. We first evaluate both direct and spillover effects of the campaign. Then we investigate the role of social networks on information dissemination. Results indicate that social information and appeals to norm-based behavior shaped the behavior of households under study. Households directly targeted by the campaign reduced water use by 6.8% during the first year following the intervention. Most importantly, we find significant but short-term evidence of spillover effects: households that were not targeted by the campaign reduced water use by 5.8% in the first six months following the intervention. Nevertheless, neither direct nor spillover effects can be attributed to social networks for any of our chosen proxies of social and geographic proximity.

Chapter 2: Does the water spill over? Spillover effects from a social information campaign

We investigate whether a social information campaign aimed at reducing water use causes a spillover effect on the use of electricity. On average, water use decreased by 6% for a treatment group for whom we conducted a social information campaign on their use of water, compared with that of a control group. We identify a further spillover effect on electricity usage among households that had efficient use of water before the campaign. The effect is sizeable; this group has almost 9% lower use of electricity after the campaign compared with the control group. We argue that this is consistent with a model of cognitive dissonance where, before the campaign, the individual held the belief that the moral cost/benefits of consumption are not important despite being an efficient consumer. Due to the campaign, this belief is changed and there is a spillover effect on electricity use.

Chapter 3: Interactions between CAP agricultural and agri-environmental subsidies and their effects on the uptake of organic farming

In this article, we analyze the effects of the interactions of the two pillars of the European Union Common Agricultural Policy – market support and rural development – on farmers' uptake of organic farming practices. Special attention is given to the 2003 reform, which substantially altered the relative importance of the two types of support by decoupling direct agricultural payments from the production of a specific crop. In our empirical analysis, we study the case of Sweden, making use of the variation in the timing of farmers' decisions regarding participation in support programs. We estimate a dynamic non-linear unobserved effects probit model to take account of unobserved individual heterogeneity and state dependence. Our results indicate the existence of a negative effect of the market support system in place when organic farming techniques were adopted before the 2003 reform; however, this effect is reversed by the introduction of decoupling. Furthermore, the effects of support differ between certified and non-certified organic production: both pillars have significant effects on non-certified organic farming, whereas certified organic farming is exclusively driven by agro-environmental subsidies.

JEL Classification: C23, C93, D03, L95, O12, Q12, Q18, Q50.

Keywords: Peer effects, Social norms, Randomized evaluation, Water utilities, Social information, Spillover effects, Common Agricultural Policy, Micro-analysis of farm firms, Panel data models, Subsidy decoupling.

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