Institutions, Incentives and Behavior:
Essays in Public Economics and Mechanism Design

Thesis by
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Abstract

The economic outcomes realized by a society are a function of the institutions put in place, the incentives they create, and the behavior of agents in the face of those incentives. Selecting the appropriate institutions for a given economy is particularly important in the domain of public economics, where individual incentives are often inconsistent with efficiency. Three major concerns in institutional design are addressed. First, do agents select the equilibrium strategies at which efficient allocations obtain? Second, does the repeated game nature of a long-lived institution impact behavior? Third, what degree of coercion is necessary for a planner to guarantee that the allocation selected by a mechanism can be enforced? Answering these questions helps to understand which institutions are most appropriate in various environments.

In Chapter 2, five public goods mechanisms are experimentally tested in a repeated game environment. Behavior is well approximated by a model in which agents best respond to an average of recently observed data. This model provides various sufficient conditions a mechanism must satisfy for play to converge to an efficient equilibrium. In Chapter 3, it is assumed that the designer of a one-shot mechanism must allow agents a ‘no trade’ option in which they are free to contribute nothing but enjoy the public good produced by others’ contributions. It is shown that a large set of
economies exist in which there is some agent at every allocation who prefers this option. Even in economies where this is not true, it becomes true as the economy is replicated, making it impossible to implement any allocation except the endowment in large economies.

In the final chapter, a model of group reputations is developed to explain why moral hazard problems are significant in some laboratory experiments and less significant in others. If firms believe that either all workers are selfish or all workers are reciprocal, then selfish workers may have an incentive to develop a ‘group reputation’ of being reciprocal for a fixed number of periods in order to extract higher wages. As predicted, only in those experiments in which this incentive is sufficiently large is the moral hazard problem mitigated.
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