

# Optimal Mechanisms for Grants with Limited Enforcement

Jennifer L. Steele <sup>\*†</sup>

April 22, 2007

## Abstract

We look at a model where a principal gains utility from projects that agents undertake. The projects may differ with respect to the cost of the project, and the benefit from the project. The principal allocates the funds for the project, and the agent chooses whether or not to apply said funds to the project. With limited enforcement mechanisms the principal must use incentives to ensure compliance, and smaller projects are favored. If there is asymmetric information about the benefit from the project the number of projects funded is below the efficient level. Once the basic principal-agent mechanism has been outlined, the model is extended to have multiple agents, limits on the pool of available funds, and spillovers. These extensions are ranked in order of efficiency, and the effects of parameters on the optimal mechanism are studied. These mechanisms can be applied to a variety of settings, from government subsidies to group lending.

---

\*University of Texas at Austin, Department of Economics. steele@eco.utexas.edu

†This Paper is submitted as a Jan Whitwell Entry