

COMPARATIVE STATICS FOR THE PRIVATE PROVISION OF PUBLIC GOODS

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1. ABSTRACT

The theory of voluntary provision of public goods has received growing attention since the 1950s. A standard assumption in much of the literature is that public goods are strictly normal for all consumers at all levels of wealth. Together with the assumption of strict normality of private good, it guarantees uniqueness of Nash equilibrium and has also been proved to be sufficient condition for the free riding to be exacerbated as the group size increases. On the other hand, there are interesting examples of privately provided public good where the assumption of its strict normality is not justified. We consider the traditional model of voluntary provision of public goods with and without imposing the assumption of normality. We provide a thorough investigation of the effects of the group size on optimal contributions (total and per consumer) and optimal private consumption.

The comparative statics analysis presented in this paper relies on the approach based on lattice-theoretic methods. We first assume normality of public good and prove, using the lattice-theoretic methodology, that the free riding problem becomes worse with the number of consumer. Then we provide comparative statics results for the case where the normality assumption is relaxed and make an attempt to describe the equilibria set.

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