The efficiency of monopolistic provision of public goods through simultaneous bilateral bargaining

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Abstract

In this paper, we consider a bargaining situation between the monopolistic supplier of a (pure) public good and consumers of the public good. In this situation, the monopolistic supplier can produce the public good, but he/she does not benefit from it, while the consumers benefit from it, but they cannot produce it on their own. For the mutual benefit, the monopolistic supplier and the consumers must trade through negotiation. Providing a bilateral and simultaneous bargaining model to analyze this situation, we investigate under which situation the allocation is efficient through the bargaining. A key factor of this analysis is a *bargaining power of the supplier*. We show that under some conditions, the supplier produces the public good at the Pareto efficient level if and only if his/her bargaining power is sufficiently low. We also show that under those conditions, the possibility of the efficient provision of the public good diminishes if the number of consumers increases. We demonstrate by a numerical example that the source of the inefficient provision of the public good when the supplier's bargaining power is sufficiently high may be the over-supply of the public good.

Keywords Public good; Simultaneous bilateral bargaining; Bargaining power of the supplier; Nash bargaining solution.
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