

# Externality or Public Good? Choosing an Adequate Framework to Analyze Institutional Aspects of Common Goods

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## Abstract

Economic theory provides two approaches to analyze the allocation of common goods: Externality theory and Public Good theory. Arriving at the same result, both theories vary in their explanation of the problem of optimal allocation of common goods and resources. A combination of both approaches, retaining only the respective strengths of each theory is proposed. This new approach is motivated by the importance of institutional aspects neglected so far.

The externality approach is found particularly useful in identifying the endogenous potential for internalization whereas public good theory is particularly strong in capturing the problem of demand and the role of third actor interventions. As a result, the paper proposes a unification of both theories that explicitly recognizes institutional aspects of the problem of optimal allocation of common goods.

Such an institutional analysis of the problem requires the explicit distinction between market variables such as cost and profits measured in terms of relative prices and variables that remain unrecognized outside the realm of market coordination, namely utilities not reflected in relative prices.

Based on that distinction, the notion of externality is reinterpreted and restricted to *external costs measured in terms of relative market prices*.<sup>1</sup> Aspects of public good theory are used to specify the demand for the particular good as measured by preferences. Such a framework allows the separation of two distinct aspects. As long as property rights are well defined and transaction costs are not prohibitive, external costs, as redefined here, are internalized through endogenous processes. Public good aspects are introduced because external costs measured by relative market prices represent only one aspect of the common good problem. Since preferences for common goods are not captured by relative prices and remain systematically not recognized by the market mechanism, demand has to be introduced using a public good approach. The present analysis has no solution to the problems of preference revelation and aggregation; it is only concerned with the limits of endogenous coordination. This is the reason why market variables such as costs and profits as determined by relative prices are analytically separated from demand aspects as reflected in preferences that are not marketable.

These two aspects should not be confounded. Internalization based on relative prices is not motivated by an original preference for the respective common good but is simply a byproduct resulting from a more efficient production of private goods. The tendency to optimize production leads to a “spontaneous” internalization of such external costs. In addition to this aspect the direct demand for the common good needs to be determined. Since demand for common goods cannot be measured by relative prices, a public good approach is needed.

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<sup>1</sup> This classic notion of external cost is also what Coase had in mind.