Do Public Goods Actually Reduce Inequality?

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Abstract

When adhering to the Samuelsonian definition of public goods, i.e. imposing non-rivalry, nonexcludability and universality (all citizens benefit), one is bound to conclude that public goods are highly redistributive. Indeed, public goods represent 25-30% of the OECD's GDP and, by assumption, benefit all individuals equally. However, the bulk of public spending goes to public goods and services that violate at least one of these assumptions. In particular, most public goods require physical access to facilities for their consumption. For example, one needs access to a hospital or a doctor for healthcare, and access to schools for education. Since such facilities are not uniformly distributed across geographical areas, their physical distribution provides valuable insight into their potential distributive impact. Our contribution has a theoretical and an empirical component: the theory shows that the allocation that maximizes efficiency allocates public goods to richer and denser areas. In this case, the allocation of public goods reinforces existing inequality, instead of reducing it. It takes an equity-maximizing government to obtain the opposite. Examining the data on Belgium, we find confirmation of the former pattern: areas with abundant public amenities tend to have higher population density and higher income levels. Moreover, their geographic allocation is more unequal than the distribution of income. Insofar as this distribution accurately reveals their true benefits, the geographical allocation of public goods amplifies existing income inequality instead of reducing it.