PUBLIC SERVICE ALLOCATION, SOCIAL UTILITY AND SPILLOVER EFFECTS: A REVISED BENEFIT INCIDENCE APPROACH

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Abstract. In many developing countries, public service provision continues to fall short of demand. In the presence of severe infrastructure backlogs and different returns on public investment expenditure, marginal benefit incidence theory envisages that measures aimed at maximizing average access rates have contradictory impacts in the medium term. While relatively uniform expansion of access coverage across target areas can be achieved in some sectors, geographical disparities may persist or worsen in others. This study revises and extends a previous modeling approach by testing for endogenous eligibility, geographically-varying functional relationships, and number of uncompensated losers (*numbers effect*) as an additional social welfare objective. Relative to medium-term changes in access rates in primary schools and healthcare, spatial and geographically weighted regression models are applied to districts in Niger. Results point to an eligibility threshold which exceeds the average coverage rate for primary education, some evidence of *numbers effect* as a target for healthcare, and substantial spatial heterogeneity particularly for primary schools.

Full text

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