## New insights into the existence of an optimal dimension for the outsourcing of waste service

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Abstract ID: 129 Inviato: 21/03/2023

Evento: XXI Workshop Annuale SIEPI

Argomento: 8. Infrastrutture, servizi pubblici procurement e regolamentazione Parole chiave: municipal solid waste; regulation; stochastic frontier analysis (SFA); scale economies; competition for the market; transaction cost theory

Inserisci l'Abstract (max 200 parole).

This study provides new insights into the relationship between the dimension of the territorial units for which the provision of public services is entrusted to external operators and their efficiency. The need for a deeper investigation of this relationship arises from the fact that on one side, the European Union pushes Member States towards the adoption of laws aimed at ensuring the competition for the market whenever competition in the market is impossible; on the other, both the theoretical (transaction cost theory) and the empirical literature cautions policymakers against the risks associated with contracting out. This problem is addressed here through an efficiency analysis of Italian municipalities in the organization of waste services. The stochastic frontier analysis (SFA) is applied to estimate efficiency scores for the municipalities. Then, a regression analysis is carried out to investigate the relationship between the efficiency scores and the population of the municipalities (dimensional variable). This analysis has been performed using data on a sample of 6,916 Italian municipalities (87.39% of the entire population) for the year 2019. The optimal dimension of the territorial units for which the provision of public services is entrusted to external operators is approximately 62,000 inhabitants.