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## **CORRUPTION, ACCOUNTABILITY AND EFFICIENCY. AN APPLICATION TO MUNICIPAL SOLID WASTE SERVICES**

### **Abstract:**

The paper models the determinants of inefficiency in a framework in which politically connected local monopolies organize the provision of a local public service. We first use a standard career concern approach of political agency to model the relation between voters observability of the managerial behavior and political accountability. We then enrich our setting, by explicitly introducing corruption. Following the World Bank's definition (World Bank, 1997), we regard corruption as the abuse of public office for private gain. Using Dal Bò and Rossi's (2007) approach, we then characterize a corrupt environment as one where private benefits from diverting managerial effort away from the productive process are substantial. We show that corruption distorts managerial effort incentives, leading to an increase in the extent of inefficiency. We derive the implication that inefficiency is greater for waste operators located in more corrupt regions, and in regions where voters are less informed. We test these predictions using a rich unique micro dataset on the solid waste collection and disposal activity in Italy, which includes more than five hundred municipalities observed in the years 2004-2006. We use a stochastic cost frontier approach to analyze the effects of accountability and corruption on the costs of providing municipal solid waste (MSW) services throughout Italy. We measure accountability by newspaper readership and electoral participation, and corruption by the number of criminal charges against the State, public governments and social institutions. The empirical evidence supports our predictions. We find that both accountability and corruption have an impact, in the expected direction, on the costs of MSW services. Moreover, by enriching our cost frontier specification, we obtain some interesting additional insights. In particular, we find that the impact of accountability on reducing inefficiency is smaller or even disappears when municipalities organize the service in-house or join an intermunicipal consortium, while corruption is less of harm to efficiency when municipalities are ruled by left-wing parties.

### **Keywords:**

corruption, accountability efficiency, solid waste

**JEL Classification:** D24, D73, Q53