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Waste and organized crime in regional environments How waste tariffs and the mafia affect waste management and disposal



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ABSTRACT

Waste management and disposal are influenced by socio-economic, institutional and policy factors that possess idiosyncratic features in regional settings. The role of organized crime is a largely unexplored factor. Crime organizations such as the mafia are known to collude with local institutions to control waste markets. As a result, legal forms of waste disposal and socially preferable management options are often undermined primarily through an influence on policy enforcement. Given its high regional heterogeneity and local 'waste crises', Italy provides a compelling case for the study of crime's effects on local waste performance. Panel econometric analyses show that sorted collection of recyclable waste and legal forms of waste disposal are lower when the mafia's effect on the actions of local governments is more intense.

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1. Introduction

Many countries or regional areas are experiencing severe problems with respect to their waste management systems, due to a lack of disposal capacities and deficiencies in sorted waste collection and recovery (Mazzanti and Montini, 2014). This situation has led to detrimental effects on human health, worsened environmental quality, and a perceived reduction in the quality of public goods in urban settings. As clarified by theoretical and empirical investigations within the 'economics of waste' (Mazzanti and Montini, 2009; Pearce and Brisson, 1995; Shinkuma and Managi, 2011, among others), these problems seem to be driven primarily by policy failures and the lack of new and diversified investments in waste management and disposal facilities. Our paper intends to offer further progress in understanding these issues with reference to urban waste, focusing specifically on the case of Italy. Contrary to hazardous waste, whose illegal management involves trading (generally from the north to the south of Italy – legal flows usually move the other way around due to a lack of disposal capacity and insufficient recovery in the south), urban waste crises are driven by idiosyncratic regional features. Urban waste does not travel long distances in normal situations.¹

A prototype of the "waste crisis" has primarily affected some southern regions of Italy in the last decade. For example, a well-known waste conflict has afflicted the metropolitan area of Naples, where more than 4 million people coexist with agriculture, food production, industry, waste treatment and disposal activities (D'Alisa et al., 2010). The related complexity, together with the strikingly different environmental and economic performances across areas in the country, has created problems regarding both the management of local 'hot spots' (Pasotti, 2010) and the positioning of waste disposal infrastructures (Jenkins et al., 2004). State and market failures (particularly a lack of adequate and enforced waste management and disposal programs, a lack of diversification, and an absence of environmental policies that reflect social and environmental values) were both present as pre-conditions of such an ongoing crisis.

Beyond their still under-investigated social and sanitary consequences,² such crises create a persistent emergency that favours criminal activities and mafia-type organizations.³ Indeed, as suggested by Legambiente (League for the Environment, the largest Italian NGO working in this field), the illegal waste business in Italy has increased tremendously over the years, reaching a turnover of approximately 7 billion euros in 2009 (Legambiente, 2010), and millions of tons of hazardous waste find their way outside legal management yearly. Criminal business affects legal and illegal markets: for example, organized crime is interested in managing illegal landfills (illegal disposal) and legal landfills (by buying under-priced land beforehand and distorting waste management towards landfilling), which generate higher rents than sorted waste collection.⁴ Illegal activities concern all types of materials, including urban garbage (Massari, 2004).

¹ Although rising over time, the amount of international waste trade is a small part of total waste production (Mazzanti and Zoboli, 2013). For example, in 2010, the total generation of waste from economic activities and households in the EU27 amounted to 2570 million tons (of which 3.7% hazardous), while traded waste is around 11 million tons total, largely intra-EU.

² Evidence of the worsening human health problems can be found, for example, in the several studies focusing on the correlation between increasing cancer rates and the presence of legal and illegal landfill sites in the Campania region (D'Alisa et al., 2010).

³ To simplify, we use the term "mafia" to indicate dominant, monopolistic organized crime groups located in the Italian territory, including, among others, the Camorra (Campania), the 'Ndrangeta (Calabria), and the Sicilian Mafia itself.

⁴ The mafia may have an incentive to hamper the functioning of collection systems supporting institutional failures, creating social chaos around waste management. These actions are aimed at supporting landfilling as the only waste disposal and management option and, more generally, at favouring a lack of diversification in waste management and disposal. In such a way, organized crime can benefit from an enhanced territorial control capacity, as well as from increasing rents from land to be devoted to the creation or enlargement of landfills and to the storage of waste (D'Alisa et al., 2010). Despite association of the recent 'waste crisis' with Naples and the Campania region's collapse of waste management, many areas in the centre and south of Italy suffer from lagging performances that have often worsened over time (Mazzanti and Montini, 2014). A new crisis might for example arise in the region where Rome is located (Lazio). Even there, though explicit criminal activities are not present – the boundary is often subtle – one single landfill monopolizes the market. Gate fees in Italy are among the highest in the EU (while landfill taxes are low, EEA, 2013, p. 25), as a consequence of the scarcity of usable land and of a lack of diversification, and attract criminal activities.

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