An Econometric Analysis of Cost Efficiency Relevant to Municipal Waste Treatment

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In Japan, there has been a dramatic change in the approaches to waste management ever since the country began facing the problem of landfill scarcity. Since it is necessary to test the validity of waste management, there have been a few studies on the cost. Hence, we tackle the estimation of waste management cost in Japanese municipalities by using panel data analysis. First, by using panel data instead of only cross-sectional data, we obtain a more precise estimation. Second, we test the validity of using wide-area treatment, which is a commonly treatment method in incineration plants and landfill sites. We also compare the cost efficiency of using a common plant and a self-owned plant, which is an analysis that has not been performed in previous studies.

Recycling, Panel data, Waste, Municipality