

ごみ処理手数料有料制のごみ削減効果に関する実証分析

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Abstract

In our study, we explore the determinants of both emissions of the garbage and emissions of recyclable materials and examine how the unit pricing affects the emissions of the garbage and recyclable materials. We found that (1) the unit pricing reduces the garbage emission and encourages the recycling activity of the household, (2) the household with lower income has smaller price elasticity to the garbage and the recyclable materials emissions. (3) the availability of the smaller bag is likely to increase the price elasticity of the garbage by approximately 4 times, (4) for the case of no smaller bag, 56% of the garbage emission is missing, while 86 % is missing for the case that the smaller bag is available.

From these findings, we have the following policy recommendation.

- (1) we should be careful about the repressiveness of the unit-pricing, when the municipalities set the higher price of the bag.
- (2) the availability of the smaller bag will be an important factor in order to improve the effectiveness of the unit-pricing.
- (3) the municipality should be careful that most part of the emission reduction of the garbage might result in illegal dumping. If this is the case, the unit-pricing is not good without proper policy against the illegal dumping.

Keywords: unit-pricing, price elasticity, garbage emission, recycling

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