

SPATIAL PATTERNS OF FLYPAPER EFFECTS FOR LOCAL EXPENDITURE BY POLICY OBJECTIVE IN JAPAN: A BAYESIAN APPROACH

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Abstract

The empirical works of local public finance reported that the marginal effect of lump-sum grant on expenditure is larger than that of income. That evidence called "flypaper effect". Majority of these researches employ a single equation model to estimate the flypaper effect. In this paper, we use seemingly unrelated regression (SUR) model to examine the flypaper effect in Japan because the expenditure of policy objectives is influenced by the other expenditure of category. We also include spatial interaction to our estimation model. We apply Bayesian approach to estimate our model. Our empirical results show that SUR with spacial error model fit better than other specifications and the flypaper effect is observed in the expenditure of land development, police, education and debt. The spatial interaction is discovered in the expenditure of sanitation, police, education and disaster recovery.

JEL classification:

Key words: Flypaper effects; local expenditure by policy objective; Markov chain Monte Carlo (MCMC); seemingly unrelated regression (SUR); spatial models.

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