

# Spillover Effects from Public Capital and Externality from Capital Mobility: Evidence from Prefecture-Level Data in Japan

Takeshi Miyazaki\* †

Faculty of Economics, Meikai University, Tokyo, Japan

1 Akemi, Urayasu, Chiba 279-8550 Japan

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## Abstract

This paper has investigated the existence or nonexistence of interprefecture productive spillover of public capital formation and externality from mobility of private capital in Japanese prefectures, by including the weighted average of foreign-region public capitals and measures of capital-mobility weighted public capital. In accordance with our theoretical analysis, we find that increases in capital mobility effects of domestic public capital enhance productivity of the production function and the level of private output. Further, estimates of productive spillover effects from public capital invested in foreign regions and externality from capital mobility effects of public capital invested abroad reveal little role of spillovers and externality from foreign public capital in affecting private productivity.

**Key words:** public capital, spillover effects, externality from capital mobility

**JEL classification:** H23, H54, H76, R53

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\*Tel.: +81-(0)47-355-5120 (Ext. 1407); fax: +81-(0)47-350-5504

†E-mail: tmiyazak@meikai.ac.jp