

# **Knowledge and rent spillovers through government-sponsored R&D consortia**

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## Abstract

R&D consortia (collaborative R&D projects among private firms, universities, and public research institutes) have been attracting increasing attention as an effective means of promoting innovation. Especially for SMEs, such collaboration provides important opportunities to access and obtain advanced scientific knowledge generated by universities and public research institutes. It is expected that not only the participants in R&D consortia will enhance their performance through direct knowledge spillovers, but also that the business partners of consortia members may enjoy indirect effects (rent spillovers), through their business transactions. This paper empirically examines the spillover effects through government-sponsored R&D consortia using firm-level data and the propensity score method. Focusing on a major support program for R&D consortia in Japan, the “Consortium R&D Project for Regional Revitalization” by METI, we confirm that there are both direct (knowledge) spillover effects from firms’ participation in this program and indirect spillover effects on the customer firms of the consortia members. Moreover, by comparing SMEs and large firms, we find that only SMEs obtain knowledge spillovers in R&D consortia, whereas, among their customers, only large firms enjoy indirect effects.

Keywords: R&D consortia, business transaction, knowledge spillover, rent spillover, SME, policy evaluation

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