

**COMMENTS ON
NISHIMURA AND OKAMURO (2012)
“KNOWLEDGE AND RENT SPILLOVERS
THROUGH GOVERNMENT-SPONSORED
R&D CONSORTIA”**

Schumpeter Tamada
Kwansei Gakuin University

mailto: tamada@kwansei.ac.jp

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Summary (1)

- Objective
 - To empirically examine the **spillover effects of government-sponsored R&D consortia**
- Data & Methodology
 - Using **firm-level data**
 - Applying the **propensity score method**
 - focused on a major support program called the "Consortium R&D Project for Regional Revitalization" by METI

Summary (2)

- Key findings
 - Both direct (knowledge) spillover effects by the firms' participation in the program and indirect (rent) spillover effects from the consortia members to their customer firms are confirmed.
 - Only SMEs obtain knowledge spillovers in R&D consortia, whereas only large customer firms enjoy rent spillovers
 - The Average Treatment effect of the Treated (ATT) of the customers with a strong bargaining power are positive and significant
 - Almost all of the ATT with respect to the customers transacting with multiple consortia firms are not significant
 - There are no rent spillover effects on the second tier

Summary (3)

Cost-benefit analysis

Knowledge spillover (¥7bil.)

∧

Grant size (¥20bil.)

∧

Knowledge spillover (¥7bil.) + Rent spillover (¥162bil.)

Comments (1)

- This study explicitly addresses two different spillover effects. One is the knowledge effects within the R&D consortia members. The other is the effect on the customers of the consortia member companies through business transactions.
- By using carefully designed research methods, authors controlled for sample selection bias by employing propensity score matching in the empirical analysis. In this way, they estimated the effects of publicly supported R&D consortia more properly than previous studies.
- Authors confirmed positive and significant effects in both spillover effects. They estimated the economic effects of publicly supported R&D consortia more extensively than most previous studies.

COMMENTS (2)

- Authors compared spillover effect on SMEs and large firms. They found that **knowledge spillover** within publicly supported R&D consortia is positive and significant only for SMEs but **rent spillover** effects through business transactions were larger for large firms than for SMEs.
- I believe that **this is the first study which evaluates the effects of publicly supported R&D consortia in Japan using micro data**. This empirical policy study is not only a significant academic achievement but also has a considerable practical value.

Discussion

- Authors suggest for policymakers to take the rent spillover effects through business transactions into account when determining which research proposals or consortia members be approved and when evaluating the outcomes of supported projects.
- “Specifically, policymakers should pay special attention to with what types of customers consortia firms have business relationship.”
 - ⇒ I feel this suggestion is a bit too abstract. Policy makers need more concrete and step-by-step suggestions.
 - ⇒ I also feel that this suggestion is somewhat counterintuitive. To maximize rent spillover effects, should government support SMEs with less bargaining power?