

Modes of International Activities and the Innovativeness of Firms*
An Empirical Analysis Based on the Japanese National Innovation Surveys for 2003 and 2009

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Abstract

In this paper, we investigate differences in characteristics of innovation activities between firms with international activities and firms without such activities, utilizing the firm-level data underlying the Japanese National Innovation Surveys for 2003 and 2009. We quantitatively measure the factors which account for differences in innovation output depending on the status/mode of international activities, employing the accounting framework for innovation.

We find that globally engaged firms use more innovation inputs and generate more innovation outputs, particularly firms with R&D establishments abroad showing the best innovation performance followed by firms with both production and sales establishments abroad and firms with only sales establishments abroad, and so forth. Although we confirm that a significant part of the higher innovation performance of firms with international activities can be explained by their superiority in intra-group or intra-firm knowledge spillovers, R&D intensity, perceived competitive pressure, and proximity to basic research, we find that firms with international activities are much more efficient in innovation. Our results may suggest that firms with international activities realize the higher innovation performance by utilizing foreign firms and/or commercial or public research laboratories as information sources and/or innovation partners.

Key words: Learning from Internationalization; Innovation; R&D; Japan.

JEL Classification: D22; F23; L10; L60; O31

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