

The Determinants of the Rate and Direction of Firm-Level Innovation: The Role of Organizational Management and Competitive Pressure *

Shoko Haneda

Faculty of Commerce

Chuo University

shaneda@tamacc.chuo-u.ac.jp

Keiko Ito

Senshu University

keiko-i@isc.senshu-u.ac.jp

Abstract

In this paper we analyze the determinants of the rate and direction of firm-level innovation, using the firm-level data underlying the Japanese National Innovation Survey. We focus on the role of organizational and human resource management within a firm and competitive pressure from the external market. We find that interdivisional cooperation/teams, interdivisional meetings/systems, personnel assessment reflecting R&D outcome, and creation/relocation/integration of R&D centers positively affect both product and process innovation. Board members with R&D background positively affect product innovation, implying that top-down R&D decision may be important for firms to innovate a new product. However, employment/re-employment of retired researchers/engineers negatively affect product innovation, implying that age diversity has a negative effect on firm's likelihood to innovate. We also confirm that firms which perceive severe competitive pressure are more likely to have a strong incentive for innovation and successfully innovate new products.

JEL Classification Codes: D22, L10, L40, O31, O32

Keywords: organization; human resource management, market competition, innovation, R&D, Japan

* This paper is based on findings from research conducted by the authors at the National Institute of Science and Technology Policy (NISTEP) for 2013-2014. This work was supported by JSPS KAKENHI Grant Number 23683003. The opinions expressed and arguments employed in this paper are the sole responsibility of the authors and do not necessarily reflect those of NISTEP.