The Formation of Internal Innovation Capability and External Sources in ASEAN Economies

Yuji Akematsu
Graduate School of Economics, Osaka University
e-mail: y.akematsu@sky.plala.or.jp

Hiroki Idota Faculty of Economics, Kinki University

Yasusi Ueki Institute of Developing Economies/JETRO

and

Masatsugu Tsuji Graduate School of Applied Informatics, University of Hyogo

ABSTRACT: In order to achieve successful innovation, a firm has to have the capacity to create innovation. Based on survey data from four ASEAN economies, this paper identifies the content of internal capability at the technological level, in managerial organization, and through human resources. In order to make this concept more tractable for analysis, the index of internal capability using AHP (Analytical Hierarchy Process) was used. This paper also examines how external sources such as MNCs, universities, and public organizations enhance internal capability. More importantly, this paper attempts to identify the transmission mechanisms through which external sources influence internal capability. By using probit/Tobit models, the following results were obtained: (1) Internal capability significantly promotes product innovation; (2) External sources significantly influence enhanced internal capability; (3) Information from public organizations improves internal capability; and (4) Transmission channels which elevate the internal capability of local firms are extracted through the dispatch of engineers and cooperation for quality control with foreign MNC/JVs.

JEL classification: O30, O31, O32