ABSTRACT WORKING PAPER 4.9

Determinants of innovation diffusion in the EU: A microeconometric analysis of firms’ innovation adoption choices

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Abstract

Using a sample of 45,674 EU firms from the Community Innovation Survey, this paper analyses the drivers of innovation adoption. In contrast to most empirical studies on innovation diffusion in which a specific technology is analyzed, this study covers several countries and industries in the European Union. Following Van de Ven and Van Praag (1981), Heckman’s method is applied in a context of binary endogenous variable to explain the choices made by firms regarding innovation. Distinctions are made between the internal generation of innovation and the adoption of innovation produced by others, as well as between different types of adoption (cooperation-based adoption vs. isolated adoption). The study focuses on the impact of users’ features and their cooperation with suppliers on the adoption choices. The results point out that cooperation is a key driver of adoption choices. Usual determinants such as firm size, absorptive capability or exports would foster generation of innovation instead of adoption. In addition, the distinction between Old and New EU countries show that the innovation gap between these two groups of countries would rely more on the lack of absorptive capacity and export exposure of the former than on a division of the innovation process in which Old EU countries would generate innovation and New EU countries would adopt them.