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## **Innovations, Multi-product Firms and Export Performance: Firm-level Evidence From V-4 Countries**

**JEL Classification:** *F14; O32; P33*

**Keywords:** *export activity; firm heterogeneity; innovations, multi-product firms; Visegrad countries*

### **Abstract**

**Research background:** In this paper we study the relationship between different forms of innovations, product diversification and export performance of firms from four Visegrad (V-4) countries. Our analytical framework refers to the Melitz (2003) model. We treat innovations as a key element that can increase the level of firm productivity.

**Purpose of the article:** The main objective is to analyze the relationship between innovation of firms from Visegrad countries and their export performance. In contrast to previous studies that use R&D spending as a measure of innovation we rather focus on innovation outcomes. Our detailed hypotheses postulate the existence of positive relationships between firm export performance and four main types of innovation activities. We seek to determine which type of innovation activity is of the greatest importance for exporting and whether it depends on firm size, the level of internationalization, the use of human capital and its sector of activity. In addition we control for the product differentiation of exporting companies, i.e. whether they sell one or many products.

**Methodology/methods:** The measures of innovative activity of companies include both spending on R&D as well as its effects, such as product and process innovations. In addition, we control for the extent of product diversification measured by the share of main product in total sales and other firm characteristics. The empirical implementation of the theoretical framework is based on the probit models, applied to the fifth edition of BEEPS firm level data set covering the period 2011-2014.

**Findings:** Our results indicate that the probability of exporting is positively related to both product and process innovations and the multi-product firm status. In addition, we find that the probability of exporting is related to labor productivity, firm size, the share of university graduates in productive employment, foreign capital participation and the use of foreign licenses.