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

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OBJECTIVE

This study aims at identifying the drivers underlying generation and adoption of innovation at the firm level. 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, allowing to draw more general policy implications. In particular, the aim concerning policy is to identify differences in innovation processes between developed and developing countries in order to target policies according to these specificities.

However, due to the absence of data for non EU countries, the study focuses on EU firms. Indirect inference can be made only for European Neighboring Countries according to what happened to the Eastern countries.

MAIN RESULTS

The results confirm a gap in the firm innovation propensity in Old and New EU countries. However, in spite of very different rates of innovation, the determinants as well as the modalities of innovation (generation vs adoption) in the two groups of countries are quite similar. New EU countries therefore still suffer from a gap towards Old EU countries, but the forces at work are similar and their potential to generate and adopt innovation is not so different. The gap would rely more on the lack of absorptive capacity and export exposure than on a division of the innovation process in which Old EU countries would generate innovation and New EU countries would adopt them.

POLICY IMPLICATIONS

Which policies are results important for?

The results are important for EU neighboring policy in the perspective of creating a Neighbouring Knowledge Space.







Novel or expected findings?

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This suggests that developing countries do generate innovation and may contribute to the overall knowledge space. In order to develop their innovation capacity, increasing their export exposure and their internal level of knowledge appear as the main priorities. This would foster the ability of these countries to generate innovation but also to adopt existing technologies.

In addition, adoption is strongly influenced, in both Old and New EU countries, by the intensity of collaboration. The ability of firms to adopt external technologies should therefore be improved by fostering R&D cooperation.

For which countries?

The study covers 14 EU countries, namely Belgium, Bulgaria, Czech Republic, Estonia, Spain, Greece, Hungary, Iceland, Lithuania, Latvia, Norway, Portugal, Romania and Slovakia. The largest EU countries are thus excluded from the sample (Germany, France and the UK). Policy implications are therefore relevant for this area and should be extended to other countries and especially to Neighbouring countries with a lot of care.



