

# **SME modes of innovation in European catching-up countries: The impact of STI and DUI drivers on technological innovation**

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## **Abstract**

At the intersection of SME innovation and innovation systems, this study investigates the characteristics of SME innovation modes in catching-up European countries (Southern, and Central and Eastern European) and compare it with selected among the most advanced countries in Europe as a mean to show key differences. Distinguishing between STI (*Science, Technology and Innovation*) and DUI (*learning-by-Doing, Using and Interacting*) innovation drivers, and analyzing their impact on technological innovation we study 29,834 SMEs innovation in 15 countries. We argue that the most effective SME innovation modes in catching-up countries are peculiar vis-à-vis other types of countries (e.g. advanced economies). Results show how their economic, institutional and innovation context influence SME forms of knowledge and learning. In general, catching-up countries show effective DUI-type collaborations for process innovations, while showing more limited returns than advanced countries from the STI mode of innovation.

## **Keywords**

Modes of innovation, Innovation systems, Catching-up countries, Europe