

ABSTRACT

Title: Drivers of productivity growth in European regions

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Subject area: 1. Crecimiento, convergencia y desarrollo.

Abstract:

Since 2000 regional productivity disparities have increased in Europe. The rapid progress of the richest regions has been considered one of the main forces at work. In this paper we analyse the extent to which the level of regional labour productivity is explained by the presence of agglomeration economies, using different scope measures. In order to do this, we estimate a production function where labour productivity depends on regional capital intensity, knowledge related variables (human capital and R&D), and the presence of agglomeration economies in the region. We use a Spatial Durbin Model (SDM) specification to capture possible spatial interactions across spatial units. The data covers a set of 121 NUTS-2 regions belonging 9 European countries (Germany, Austria, Belgium, Spain, France, Netherlands, Italy, Portugal and Sweden) over the period 2000-2014. The results of the spatial regression are robust to different measures of agglomeration. The main finding is that, on average, agglomeration within the region generates a positive impact on the productivity level of the region, but the indirect spatial impacts derived from agglomeration are not significant. This result is robust regardless of the agglomeration proxy used. Similarly, the direct and total estimated impacts of patent intensity on regional productivity are also positive. Additionally, we find positive and significant direct impacts of human capital and capital per worker that are offset by the presence of negative and significant spatial spillovers. On average, the total impact of these two types of capital on regional labour productivity is not significant.

Keywords: Productivity disparities, unbalanced economic growth, agglomeration.

JEL codes: R10; R11; R12.

Acknowledges

The authors acknowledge the financial support from the Spanish Ministerio de Ciencia, Innovación y Universidades, Agencia Estatal de Investigación and FEDER Project PGC2018-095821-B-I00 and Project PID2019-107161GB-C32 from Spanish Ministerio de Ciencia, Innovación y Universidades; as well as the financial support from the Generalitat Valenciana PROMETEO/ 2020/083 and AICO 2018/130.