Do EU regions benefit from smart specialization?

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Abstract

Smart specialization was conceived as a "bottom-up" framework to help EU policy-makers identify new technology growth paths connected to the existing knowledge cores of regions. Operationalization of smart specialization policy requires a mapping of technologies in knowledge space. This mapping measures the "distance" between technology types and thus an index of the "cost" of moving from one technology to another. Alongside the cost of technological adjustment, smart specialization also requires a ranking of the benefits of new technologies that is captured with a complexity measure. This paper maps the trajectories of 145 EU city-regions in a smart specialization space over the period 1981 to 2015. Fixed effects panel models are used to show employment and GDP grow faster in cities that build capabilities in complex new technologies close to their existing knowledge cores while abandoning less complex, unrelated technologies. Results appear robust to concerns with spatial autocorrelation and endogeneity.

