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Measure Twice, Cut Once. Entrepreneurial Ecosystem Metrics

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Abstract

In spite of the popularity of the entrepreneurial ecosystem approach in science and policy, there is a scarcity of credible, accurate and comparable metrics of entrepreneurial ecosystems. This is a severe shortcoming for both scientific progress and successful policy. In this paper, we bridge this metrics gap. We use the entrepreneurial ecosystem approach to quantify and qualify regional economies. Entrepreneurial ecosystems consist of the actors and factors that enable entrepreneurship. We operationalize the elements and outputs of entrepreneurial ecosystems for 273 European regions. The ecosystem elements show strong and positive correlations between them, confirming the systemic nature of entrepreneurial economies, and the need for a complex systems perspective. Our analyses show that physical infrastructure, finance, formal institutions, and talent take a central position in the interdependence web, providing a first indication of these elements as fundamental conditions of entrepreneurial ecosystems. The measures of the elements are used to calculate an index to approximate the quality of entrepreneurial ecosystems. This index is robust and performs well in regressions to predict entrepreneurial output, which we measure with novel data on productive entrepreneurship. The entrepreneurial ecosystem approach and the metrics we present provide a lens for public policy to better diagnose, understand and improve entrepreneurial economies.