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Regional economics: A new economic geography perspective ☆

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Abstract

We show that the concepts and tools developed in new economic geography may be used to revisit several problems in regional economics. In particular, we want to stress the following two points: (i) what do we mean by a region and (ii) what kind of interactions between regions do we want to study and how to model them? We conclude by discussing a few open problems that should be explored in more detail for regional economics to become a richer body of knowledge.

JEL classification: R1
Keywords: Regions; Regional economics; New economic geography

1. Introduction

This journal has been launched in 1972 under the title *Regional and Urban Economics*, which is almost the name of the JEL-classification entry *R*. The first point we wish to make is that, by the time this journal was launched, urban economics was already a well-established field drawing on new concepts and tools. By contrast, the scientific status of regional economics was less clear in

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that regional concepts, models and techniques were too often a mere extension of those used at the national level, with an additional index identifying the different regions (see, *e.g.*, interregional input–output matrices or the Harrod–Domar model of regional growth).[1] The Samuelsonian emphasis put on trade theory also acted as an impediment to the further development of regional economics, the trade of goods being viewed as a substitute to the mobility of factors. Today, thanks to the surge of new economic geography (in short, NEG), it is time to re-think regional economics. This is what we wish to do in this note.

It is worth stressing from the outset that, in order to talk even halfway sensibly about regional economics, it is necessary to tackle the following two questions: (i) what do we mean by a region; and (ii) what kind of interactions between regions do we want to study and how to model them?

Regarding the first question, we find it crucial to develop a better understanding of how the spatial scale of the analysis matters for the economic results. Too often, economists use interchangeably different, yet equally unclear, words such as locations, regions or places without being aware that they often correspond to different spatial units. In doing so, they run the risk of drawing implications that are valid at a certain level of spatial aggregation but not at another.[2] Furthermore, using vague definitions of the spatial unit of analysis reduces the scientific contents of the theory in the Popperian sense, as the empirical results can always be contested in light of the theory on the sole basis that variables are not measured at the appropriate spatial scale.

As to the second question, regardless of what is meant by a region, the concept is useful if and only if a region is part of a broader network through which various types of interactions occur. Without taking this aspect into account, one may wonder what the difference between regional economics and the macroeconomics of a closed economy would be. When there is a single region, the economy is a-spatial and there is nothing interesting to be said in terms of spatial analysis. Hence, any meaningful discussion of regional issues requires at least two regions in which economic decisions are made. Furthermore, if we do not want the analysis to be confined to trade theory, we must also account explicitly for the mobility of agents – firms and/or consumers – as well as for the existence of transport costs, which are the two main ingredients of location theory.

In the first two sections, we briefly review what we know and do not know about those two questions. We conclude in Section 4 by discussing a few open problems that should be explored in more detail for regional economics to reach the level of generality one expects for such an important field.

2. What is a region?

Since the early days of regional economics, there have been many definitions for and approaches to the concept of a *region*, Lösch (1938) being probably the most stimulating contribution. In its broadest sense, the term “region” is used to describe a bundle of places such that any two places belonging to the same region are, in a way or another, similar. Yet, the multiplicity of definitions reflects the fact that the concept of similarity to be used does not suggest itself. This difficulty may be formalized in a very rigorous, but largely unnoticed, way.

Observe first that a set of regions always involves a partition of some geographical space that contains a “large” number of places — a place being the elementary spatial unit. Keeping this in

[1] A noticeable exception is the work of Takayama and Judge (1971), which has led to a large body of extensions and real-world applications.

[2] For example, Rosenthal and Strange (2001) show that the nature of agglomeration forces differs depending on the spatial scale of the analysis (zipcode, county level, state level).