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Urban Polycentricity in Southern Europe: A Comparative Analysis at the National Level

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Résumé / Summary

The concept of Polycentricity constitutes a key notion in the European Union's spatial policy. It is utilized as a guiding principle in the European Spatial Development Perspective (ESDP) and the Territorial Agenda (TA) in order to achieve the common goals of efficiency, equity and sustainability. Although the first application of polycentricity as a policy concept was back in the 1960's when the french "métropoles d'équilibre" aimed to the economic balance at the national level in order to counterweight the dominant Paris, in recent years it was firstly advocated in Germany as early as 1993.

In the ESDP, polycentricity is defined as an opposite to the notions of monocentricity, dispersal, and sprawl rather than explained directly. The concept is supposed to contribute to balanced regional development, European competitiveness and sustainable development, and facilitating new urban-rural partnerships. In general, an area is polycentric if its population or employment is not concentrated to a substantial extent in one single centre. According to the ESPON project, polycentricity is applied at the European level (macro),

the national and interregional levels (meso) and the intraregional level (micro). In this article, the analysis is applied only at the national level of the examined countries. At this level, almost every country seems polycentric, so it is important to define the degree of polycentricity, which derives from the urban hierarchy of the country. Some countries have few large metropolises which tend to dominate the national urban system (less polycentric), while others are characterized by a large number of urban areas of similar size (more polycentric).

Considering the importance of the notion of polycentric development for the European Union objectives (efficiency, equity and sustainability), this paper aims to capture the change in the degree of polycentricity that has been achieved in the recent years in the member-states of Greece, France, Italy, Spain and Portugal (the European South), especially in this economic downturn.

Initially, we deal with the multidimensional concept of polycentricity and its definition. Subsequently, we examine the distribution of urban population in national space for the countries of the analysis (morphological dimension of polycentricity). For the causes of the latter and in compliance with the existing literature the following measures are employed.

We calculate urban primacy, which takes into account the proportion of population in the most populated city over the total national population or over the sum of the urban population of a country. For the purposes of this paper, urban primacy is defined as the share of population in the most populated FUA over the total population in each country.

Also for capturing national polycentricity we utilize a rank-size function, trying to assess how the total population of each FUA within a given country and its size rank relate. The derived slope of the line -given by the estimated beta- indicates the level of polycentricity of each country. The rank-size analysis is based on the population of the largest functional urban areas (FUAs) in each country. Specifically, the number of FUAs found in Greece is used as a benchmark for the number of FUAs taken into account in every country of the analysis, for more comparable and reliable results. The data used in the analysis come from the ESPON project and Eurostat for 1999 or 2000 and 2011, respectively.

As far as urban primacy is concerned, Greece has the highest urban primacy; on the other hand, Italy shows the lowest urban primacy among the examined countries during the given period. Moreover, Italy, France and Spain indicate higher levels of polycentricity (beta coefficients) than Greece and Portugal in 2011. However, compared to 2000, Italy and Spain present lower levels of polycentricity in 2011, while the rest of the countries increase their levels.

Keywords

Polycentricity, functional urban areas, urban primacy, rank-size distribution

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