Relations between regional tourism productivity and agglomeration: evidence from Poland

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Abstract

Relations between productivity and agglomeration reside within a broad theoretical context of associations between international trade and New Economic Geography. Bigger, more aggregated markets present opportunities to reduce production costs and to take advantage of greater demand. These bigger markets still exhibit larger and more productive firms as well as more product variety [Melitz, Ottaviano 2008]. Productivity differences between firms activate pro-agglomeration and anti-agglomeration forces, leading respectively to the formation of agglomerations or entrenchment of local markets. We assume that a fundamental impact on agglomeration processes in tourist regions can be attributed to the types of attractions.

The aim of the paper is to learn whether and how the features of tourism destinations supporting different forms of tourist activity explain spatial differentiation of productivity. Hence the subject of the study is spatial differentiation of productivity considered against features of various tourism destinations in Poland with a special importance given to agglomeration processes.

This paper introduces different research approaches to better understand the relation between regional tourism productivity and agglomeration. The procedure includes five research methods: 1) analysis of the linear relationship (correlation), 2) multiple regressions, 3) principal component regressions, 4) spatial autocorrelation (Getis-Ord G statistic), 5) k-means cluster analysis. The data (gathered from Polish Central Statistical Office) are based on statistics for the 66 NUTS-3 sub-regions of Poland in 2009. They describe features of tourism destinations and labor productivity (stated as value added per employee): those are data on productivity in the accommodation and food services sector (section I of Polish Classification of Activities), and data on total productivity (including all sectors of the region's economy).

The study findings have confirmed that productivity in the tourism sector is spatially differentiated and depends on whether or not tourist destinations are part of an agglomeration. Traditional tourist regions built upon natural attractions are scarcely productive. The small size of firms, their spatial dispersion, seasonality of sales, and focus on local markets – all these factors together decrease productivity of the tourism sector. However, creation of business or culture tourism destinations, as a secondary process to the earlier emerged agglomeration processes, increases productivity of the tourism sector. There remains, however, a large gap between total productivity and productivity in tourism.

Keywords: agglomeration, tourism productivity, features of tourism destinations, spatial autocorrelation.