Agglomeration and tourism flows: empirical evidence from European countries

Justyna Majewska

http://trc.aiest.org/members/justyna-majewska
Poznan University of Economics, Poland; Dep. of International Economics

Abstract

The research subject of the paper is the spatial agglomeration phenomenon in tourism which is regarded to be the concentration of firms registered in the tourism sector. We can distinguish localization- (inter-industry specialization) and urbanization-driven (sectoral diversity) clusters reflecting the two types of the agglomeration economies widely debated in the New Economic Geography literature. The discrimination between the cluster types in tourism is crucial as the tourism supply and other sectors of the regional economy are complementary and heterogeneous.

The goal of the paper is to identify "inter-regional" clusters in tourism by investigating the occurrence and strength of the geographic spillovers (as the concentration of firms spill over into the neighboring regions) and their effects on the regional development of tourism considering both types of clusters. The question arises how to measure these effects within one procedure of cluster-mapping in tourism.

The common and accepted measure of relative concentration is the Location Quotient (LQ) which compares the employment (or business activity) structure of a region to a larger geographic area, such as the state, showing regional sectoral specialization. Its high value is interpreted as an indicator of the existence of the clusters. However, in traditional way agglomeration phenomenon is measured on the basis of statistics within regional administrative boundries which is insufficient due to the omission of the potential spatial dependency between the phenomena in neighboring regions. In tourism it is crucial to capture phenomena outside the boundries, hence there is a need to capture geographic spillovers – as proposed in the paper by applying local indicators of spatial association (LISA) – local Moran's I statistic.

We used the data collected by the Central Statistical Office in Poland and Germany at NUTS-4 and NUTS-3 level, respectively, which describe the size of the tourism agglomeration, intensity and dynamic of tourism flows. We used the methods of the explorative data analysis with local indicators of spatial autocorrelation and location quotients – in order to study the spatial concentration of the tourism sector and its linkages with neighboring regions and the method of the tree clustering – to analyze similarities within "inter-regional" tourism clusters due to the agglomeration types and intensity of tourism flows.

As the result of corrected (by LISA) cluster-mapping procedure we identified thirty "inter-regional" tourism clusters in Poland and within this group we observed three types of determinants of regional tourism development. The first two are commonly known: the localization and urbanization. However, the third one is new and can be identified as geographic spillovers which can be divided into localization and urbanization types. The study have revealed that spatial statistics are sensitive to the measures of the neighborhood identification (spatial-weight matrices) and localization of the territorial units boundaries.

Keywords: agglomeration, localization, urbanization, tourism clusters, location quotients, local indicators of spatial association, Polish districts, German regions.