ANALYSIS OF THE EUROPEAN TOURISM FROM THE PERSPECTIVE OF THE CORE – PERIPHERY MODEL

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Abstract: The European economy is characterized by a robust tourism industry, with significantly different growth rates between different geographical areas. The purpose of this paper is to analyze the links created between the economic and spatial periphery (tourism arrivals, tourism overnight stays, tourism intensity, tourism total contribution to GDP, tourism total contribution to employment, accessibility potential) of the eastern versus southern periphery of the EU. We will try to answer questions as: Does spatial position influence the degree of tourism development? Are there any similarities or differences between the Eastern and Southern periphery? Could the southern periphery be an example for the Eastern one?

Keywords: tourism industry, economic development, peripherality, accessibility, EU

Introduction

Currently tourism at both international and national levels is a widespread phenomenon that causes a significant impact on the economy, society, quality of life and well-being, becoming a dynamic engine of social progress.

Tourism (i) increases foreign exchange earnings, which in turn can be used to finance imports (Brida and Pulina, 2010), (ii) encourages investment and local companies to drive increased efficiency as a result of increased competition (Ballaguer and Cantavella-Jorda, 2002; Bhagwati and Srinivasan, 1979; Krueger, 1980), (iii) alleviates unemployment as tourism activities are strongly based on human capital (Brida and Pulina, 2010) and (iv) increases the income and GDP per capita levels (Croes and Vanegas, 2008; Sugiyarto, Blake and Sinclair, 2003).

Tourism causes positive economies of scale and economies of scope (Helpman and Krugman, 1985; Andriotis, 2002; Croes, 2006). Economies of scale help companies reduce average production costs while increasing the number of units produced, and economies of scope support the reduction of production costs while increasing the variety of products and services produced.

The European economy is characterized by a robust tourism industry, with significantly different growth rates among different geographical areas. These discrepancies

became a significant setback after the EU's enlargement towards east. In front of the European integration and globalization, nations increasingly entered into a fierce competition, in particular regarding tourism development and accessibility.

In order to measure the tourism development disparities between the southern and eastern peripheries of EU, we analyzed in our study variables defining tourism arrivals and overnight stays, tourism contribution to GDP and employment, tourism intensity and accessibility, considering it necessary not only to include indicators that refer to the economic problems, but also those which refer to the spatial structure (motor density and railway density).

1. Literature review

Within Europe processes of economic convergence and divergence operate at various geographical scales, resulting in a very uneven geographical landscape. Economic integration leads to a core-periphery spatial structure, resulting in greater congestion and increased specialization at the expense of peripheral countries/regions (Krugman, 1991a).

Economic integration (both within the EU and globally) determines the concentration of economic activities in a limited number of locations, while the economic structure of many areas has become unstable due to increased competition between countries or regions (Lagendijk and Lorentzen, 2007). The process of economic integration may reveal detrimental effects for less developed regions and advantages to those initially developed.

Despite the rapid integration process that took place in the last decade, market access remains uneven between EU regions mainly because of intangible barriers and intra-community trade, which still maintain the fragmented structure of the EU market (Head and Mayer, 2004). Because of these barriers, countries with good geographic and economic accessibility to the main European markets benefit more from the effects of concentration of economic activity than peripheral countries. Agglomeration effects indicate the presence of high-quality infrastructure, specialization, greater competition and also a favorable business environment for foreign investors.

The development of any country depends on a series of economic, social, political and geographical factors. An important part is played by the geographical location, which is associated with the spatial and territorial background where a place is developing. Its location and implicitly everything which separates it from other places may be decisive for the dynamics of several of its economic activities, namely its tourism activities (Bulai et al., 2011). However, the uneven development of tourism is not only influenced by accessibility, but also by more complex problems related to economic peripherality.

The tourism industry, like other production sectors, is reliant on agglomeration economies (Capone and Boix, 2008) tending to form territorial clusters which share large-sized infrastructures (airports, ports, museums), resource endowments and have good market access. These factors are part of the center – periphery pattern and affect the competitiveness of destinations.

Starting from these aspects, we considered it important to examine how the level of tourism development of certain countries is determined by the peripherality effect and its implications.

2. Statistical approach on the peripherality effect of southern and eastern states of the European Union

2.1 Methodology and Data

In this study we considered the analysis between the „old southern periphery" (Croatia, Cyprus, Greece, Italy, Portugal, Slovenia, Spain) and the „new eastern periphery" of EU (Bulgaria, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia). Hence, we made a statistical analysis of the development differences, captured from a double perspective: economic and spatial, from which we tried to set up the determination links created between economic development, tourism and peripherality using a selective set of indicators: GDP/per capita (expressed in PPS), tourism arrivals, tourism overnight stays, tourism intensity (expressed in arrivals/population), total contribution of tourism to GDP, total contribution of tourism to employment and the accessibility potential, by taking into account the density of the transport networks. The development of such a study is without doubt needed in order to direct attention to the complexity of the center-periphery links generated by the expansion towards east.

We also add up the fact that we chose to analyze the countries that define the European Union's southern expansion and the eastern one respectively, in order to observe if the process of integration may be considered potential for economic development. The geographical location of these countries is different as concerns the proximity to the EU center, which is why we want to examine whether accessibility has a meaningful role on tourism development.

In order to answer our questions we applied the Pearson correlation coefficient, regression and cluster method towards the following correlations: economic development – tourism development – accessibility.

The data necessary for the analysis was collected from statistics and official reports, belonging to Eurostat, World Travel and Tourism Council and World Tourism Organization databases. The analysis was made for the year 2012, a choice dictated by the availability of data.

2.2 Main results and findings

2.2.1 The correlation economic development – tourism

We analyzed the southern and eastern periphery distribution from the EU average of EU28=100 (GDP per capita in PPS) and from the tourism development level (arrivals, overnight stays, tourism contribution to GDP, tourism contribution to employment and tourism intensity) under a scatter plot representation (Figure 1).
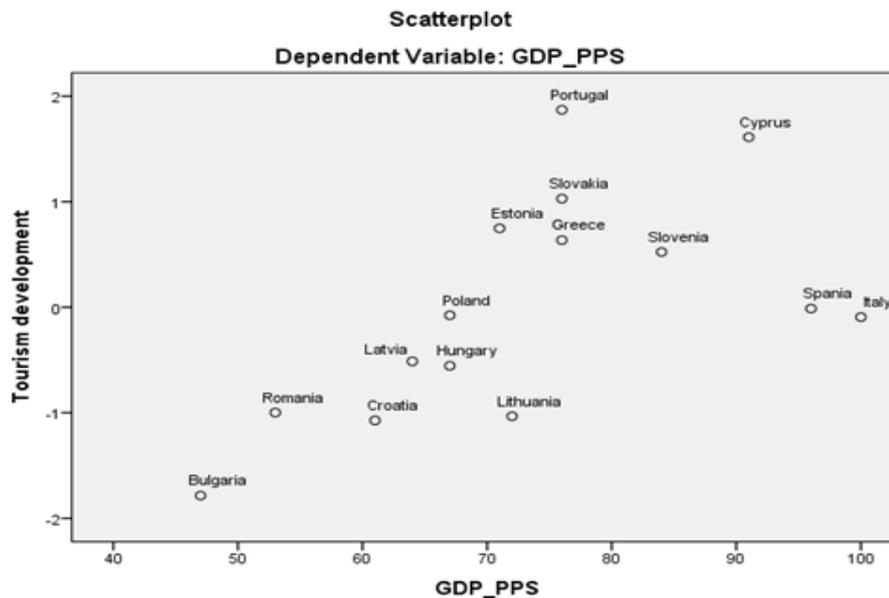
Source: Author's representation based on Eurostat, WTTC and WTO databases
Figure 1 Scatter plot Representation (tourism development)

We noticed that there are significant differences in the country distribution regarding the degree of tourism development. Most of the eastern countries (Estonia, Hungary, Latvia, Lithuania, Slovakia) are below the EU average, choosing to concentrate their economic activities among themselves, the geographical proximity and similar level of development being probably the main reason for this pattern. Thus, tourist flows are affected not only by the geographical distance but also by the characteristics of neighboring locations (LeSage & Fischer, 2008).

Bulgaria and Romania are concentrated towards the intersection point of the X and Y axes, which denotes a weak tourism development. A low level of development (economic peripherality) is usually correlated with the degree of spatial peripherality (the distance from the EU economic core).

At the opposite end we find Spain and Italy. The two countries belong to the Mediterranean arch, region that attracts 30% of the worldwide tourism. Mediterranean tourism is known as a global brand, the countries of this region having already created a tradition regarding international tourism. The tourism industries in Spain and Italy represents one of the most relevant economic activities in terms of value-added produced, employment and multiplier effects on several other manufacturing and services sectors.

Further, the correlation Pearson correlation coefficient revealed the intensity of connections between the indicators used in explaining the economic and spatial periphery (Table 1). The most conclusive results (synthesized in Table 1) highlight the fact that there is a direct connection between the total contribution of tourism to employment and the number of arrivals and overnight stays, conditionality being 99.7% ($P_{coef} = 0.997$) and 98.9% ($P_{coef} = 0.989$), respectively. Moreover the GDP per capita is also dependent on the number of arrivals (64.6%) and overnight stays respectively (65%).

The indicators *arrivals* and *overnight stays* are closely linked, representing indicators of the economic impact on a territory. The *overnight stays* indicator reflects both length of

stay and number of guests. Each additional day spent by the tourist in a different destination other than the residence destination generally translates into important revenues and benefits for the area in question: the increase of GDP level, revenues, employment rate, added value.

If we take into account aspects related to accessibility, we observe that the connections between the variable *motorway length* and the variables *arrivals* and *overnight stays* are direct, the values of the coefficient obtained being over 50% dependency (61.4% and 59.4%, respectively).

Table 1. The Pearson correlation indices

	GDP_PPS	ARRIVALS	OVERNIGHT STAYS	TOUR_ INTENSITY	TOUR_GDP	TOUR_ EMPL	MTR_LENGTH	RAILW
GDP_PPS	1	.646**	.650**	.352	.176	.593*	.441	-.10
ARRIVALS_MIL	.646**	1	.997**	.358	-.317	.989**	.614*	-.10
OVERNIGHTS_MIL.	.650**	.997**	1	.391	-.316	.982**	.594*	-.12
TOUR_INTENSITY	.352	.358	.391	1	.052	.283	-.024	.108
TOUR_GDP	.176	-.317	-.316	.052	1	-.375	-.048	.224
TOUR_EMPL	.593*	.989**	.982**	.283	-.375	1	.569*	-.07
MTR_LENGTH	.441	.614*	.594*	-.024	-.048	.569*	1	.104
RAILW_LENGTH	-.109	-.104	-.123	.108	.224	-.070	.104	1

**. Correlation is significant at the 0.01 level (2-tailed); *. Correlation is significant at the 0.05 level (2-tailed).

Note: GDP_PPS = GDP per capita in PPS; ARRIVALS = total tourism arrivals calculated as the sum of residents and non residents arrivals at a destination (country); OVERNIGHT STAYS = total tourism overnight stays calculated as the sum of residents and non residents overnight stays in a destination (country); TOUR_INTENSITY = arrivals/population, TOUR_GDP = total contribution of tourism to GDP, representing the sum of the value added generated by all industries in response to internal tourism consumption and the amount of net taxes on products and imports included within the value of this expenditure; TOUR_EMPL = total contribution of tourism to employment ; MTR_LENGTH = motor length expressed in kilometers; RAILW_LENGTH = railway length expressed in kilometers.
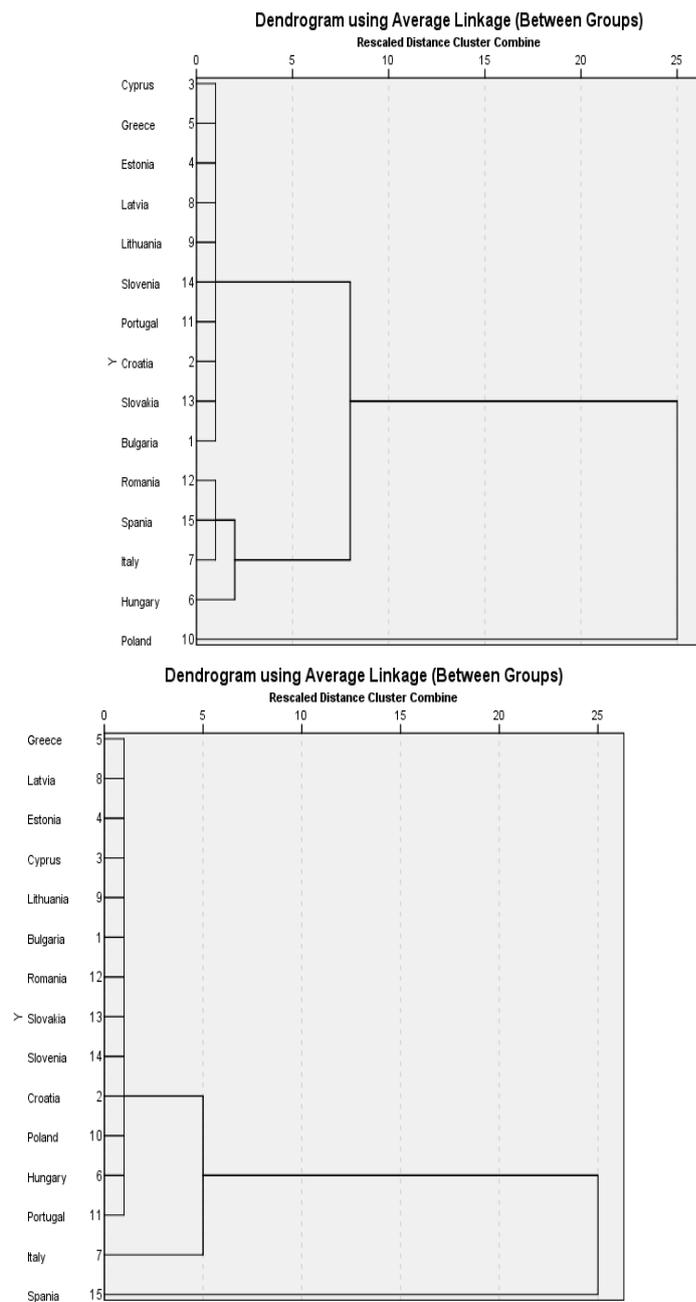
Source: Author's representation based on Eurostat, WTTC and WTO databases

However, the relationship between the level of GDP and tourism flows goes both ways. The GDP level of the destination areas represents an indicator of the economic development in the receiving area and it is expected to influence the incoming tourism flows. A high income region provides better quality public services, like health care, public transport and law enforcement, which are important components of the product characteristics provided to tourists (De la Mata and Llano-Verduras, 2012; Eilat and Einav, 2004). Despite new trends, as people tend to explore isolated and untapped places of the great tourist flows, most tourists still prefer areas with high concentrations of tourists, which usually rhymes with high income countries, characterized by agglomeration economies, good market access, a diverse range of

activities, traditions and tourism services and high accessibility to many opportunities, an aspect noticed above in the scatter plot representation for Spain and Italy.

2.2.2 The correlation tourism – accessibility

In order to have a better view on the accessibility potential of the southern periphery and the eastern one respectively, we employed hierarchical clusters (Figure 3 and Figure 4).

Source: Author's representation based on Eurostat data

Figure 2. Hierarchical cluster analysis – railway density   Figure 3. Hierarchical cluster analysis – motorway density

As it can be observed, the country grouping took place in the conformity with the national specificity, taking into account the elements describing the economic and spatial peripherality, obtaining three clusters. By analyzing them it can be noticed that the railway density (Figure 3) has the highest value in Poland. According to European research, with Keeble's et al. (1982; 1988) most cited work, the western part of EU is more accessible being characterized by two European central areas: one from London to northern Italy and one between Paris and Berlin. This accessibility decreases towards east. Hence, the concentric distribution of potential accessibility is maintained with respect to the economic nucleus of the EU.

As stated in the literature, the performance of a region depends crucially on the development and characteristics of neighboring regions (Fujita și Mori, 2005). Tourist destinations that are close to developed areas with a high rate of growth, tend to be more developed than the other peripheral destinations. Thus, Poland's position in the cluster dendrogram (Figure 2) can be explained by its proximity to Western Europe. The greatest motorway density belongs to Spain, aspect explained by the country's endowment with high speed transport facilities.

Further it can be seen that most of the eastern countries are grouped together. These countries are characterized by inadequate infrastructure, poor railways and roads and lack of motorways and high-speed trains. Consequently, it can be said that the modest dynamic of the eastern periphery is also largely due to factors such as spatiality, especially the accessibility of tourist destinations. Further, this setback can be explained by the fact that the eastern countries have long been under the influence of communism, a period when tourism was firmly subordinated to political and ideological considerations and considered a foreign policy tool rather than an instrument for economic development.

An essential requirement for the development of tourism and most sectors of the economy is the development of a transport infrastructure, and adequate accessibility to the surrounding areas. A transport infrastructure contributes to economic success based on tourism. For a majority of tourists, good accessibility to a tourist destination is when the area can be reached and explored, quickly, cheaply and comfortably (e.g. by car or using public transport). Prideaux (2000) argues that a destination should be easy to get to and easy to travel around the area. The importance of infrastructure in tourism development has been confirmed also by empirical studies (Eugenio-Martín Morales and Scarpa, 2004; Khadaroo and Seetanah, 2007, 2008; Louca, 2006; Naudé and Saayman, 2005). Different types of infrastructure are essential for tourism development because they provide location-specific resources, upon which different types of tourism are based (Smith, 1994).

Accessibility is the main product of a transport system (Spiekermann and Neubauer, 2002), while being a direct expression of the mobility of people, goods and information. Well developed and efficient transport systems provide a high level of accessibility, while the least developed provides a low degree of accessibility, which implies a number of consequences for the territories' opportunities - both economically and socially. Kaul (1985) stated that „provision of suitable transport has transformed dead centers of tourist interest into active and prosperous places attracting multitudes of people".

Concluding remarks

The results of our study outlined the fact that the countries with a GDP per capita under the EU average, but located near the development centers (see Poland's case), have a different potential to build on their advantages in terms of tourism. Tourism growth is heavily dependent on agglomeration economies that provide positive spatial spill-overs, good market access and cost savings. Thus, tourism is affected not only by the destination's specific features, but also by the characteristics of neighboring places. Furthermore, the role played by accessibility and transport infrastructure respectively in influencing a destination's development was discussed. Should the ability of tourists to travel to preferred destinations be inhibited by inefficiencies in the transport system (including the internal transportation system), there is some likelihood that they might search for alternative destinations. Hence, we consider that the success or failure of a country resides also in its capacity to establish a high accessibility potential, as the results of our study pointed out. Destinations at great geographical distances from major centers are characterized by underdevelopment: inadequate infrastructure, dependence on external demand, poor diversity of production and trade.

The vulnerability of developing countries from the east, especially in the actual volatile international context, makes the reduction of the peripherality effect more difficult to achieve. But even though the countries from the eastern periphery have a slower tourism development rate than those in the south, through sustained efforts each must identify its comparative advantage in terms of tourism. Since tourism is an industry which provides great added value, supports economic and social development, territorial and sustainable balance, and sustains the improvement of infrastructural conditions and business environment, the eastern states must employ good management of the existing resources and efficient economic policies.

The experience of the southern periphery showed that these countries could make up for the EU enlargement towards south and have reduced the discrepancies in terms of tourism development. The concern remaining now for the eastern periphery is the measure in which the countries from this region have the ability to capitalize and send experience towards south.

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