

## COMPETITIVENESS OF TOURISM REGIONS IN HUNGARY

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### INTRODUCTION

A study into the competitiveness of tourism regions raises a rather high number of questions (Lengyel 2000, Nemes Nagy 2005.). One such matter is the basis of comparison by which a region is considered to be competitive or non-competitive? An issue raised during the calculation of competitiveness was the estimation of the tourism regions' level of development, as it depended upon which factors of competitiveness we were attempting to define. Number of studies has identified the attributes of competitiveness for tourism destinations (Ritchie and Crouch 2003., Dwyer and Kim 2003.), but relatively few methods exist with regard to the measurement of tourism competitiveness; however amongst those the following are highlighted:

- On this basis, some authors have built models which will help to understand the competitiveness (Dwyer and Kim 2003., Ritchie and Crouch 2003.) of tourism destination. However Crouch and Ritchie (2003) acknowledge that 'there is a need also to investigate the relative importance of attributes as they apply to particular segments of the tourism market'.

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- The 'Travel and Tourism Competitiveness Index' (WEF, 2008), based on fourteen indicators, measures the tourism competitiveness of 130 countries. The index categorises the indicators in three broad thematic areas: regulatory framework, business environment and infrastructure, human, cultural, and natural resources.

- The Competitiveness Monitor (Gooroochurn-Sugiyarto, 2004) measures the competitiveness of tourism by way of eight quantitative indicators (price, trade openness, technological development, state of infrastructure, human resources of tourism, social development, environmental conditions and general human resources). Since the ranking of countries varies from year to year, it hinders the ability to present the trends (Jancsik – Madarász 2009).

- The 'Destination Performance Index', developed by Ritchie (2003), allows the comparison of the performance of destinations by the evaluation of about one hundred and sixty indicators on economic performance, sustainability, visitor satisfaction and management-related activities.

- According to Go-Govers (2000), the relative competitive position of the destination depends on facilities, accessibility, service quality, image, climate, environment and attractions.

Theoretically, it is possible to define the level of development by applying one of the complex development indicators. Alternatively, an estimation based on the most widespread indicator, i.e. on GDP of the tourism regions, might also be performed. For this analysis, we found the second method to be more appropriate, and the results of those calculations are presented.

## **RESULTS**

Firstly, we estimated the GDP of the tourism regions in Hungary and, using this data and its specific value, the respective levels of their development were compared. The highest GDP among the tourism regions of Hungary is produced in the Budapest–Central Danube Region. Basically, there a continuous increase was experienced between 2000 and 2005 with regard to its share, whilst all of the other regions either stagnated or indicated a decline. The significant differences in the level of development are indicated by the fact that the gross domestic product in one of the regions approximates to half of the national value, and compared to this region, all the others fail to function as counter-poles.

Compared to 2000, the rate of increase of the national GDP by 2005 was 63%. A more rapid growth is witnessed only for the Budapest–Central Danube Tourism Region (+77%). For all other regions, with the exception of the Northern Hungary Tourism Region (+63%), an increase lower than the national average is observed (Figure 1), the lowest being for the Western Transdanubia Tourism Region (+42%).

National tourism GDP was divided into tourism regions by way of an estimation procedure, with which the turnover of each region's accommodation was taken into account using an evaluation method based on the type of accommodation. As concluded, tourism GDP during the period between 2000 and 2005, at national level, and calculated upon a basic price, increased by 67%. The most significant growth is indicated for the Central Transdanubia Tourism Region, while the lowest is experienced in the Southern Transdanubia Tourism Region. An increase lower than the national level is indicated for only two regions, those being Lake Balaton and Southern Transdanubia Tourism Regions.

Between 2000 and 2005, the ranking of regions for tourism GDP underwent only minor changes. Practically no changes were indicated within the first four places as the Budapest–Central Danube Tourism Region is followed by the Lake Balaton, the Western Transdanubia and the Northern Great Plain Tourism Regions. In 2000 the fifth place was attained by the Southern Transdanubia Tourism Region, but it fell back to the eighth position by 2005. In 2000 the Southern Transdanubia Tourism Region was followed by the Northern Hungary Tourism Region, the Southern Great Plain and the Central Transdanubia Tourism Regions, but all three of these had advanced one place by 2005. The lowest value of tourism GDP during the entire study period was produced in the Lake Tisza Tourism Region.

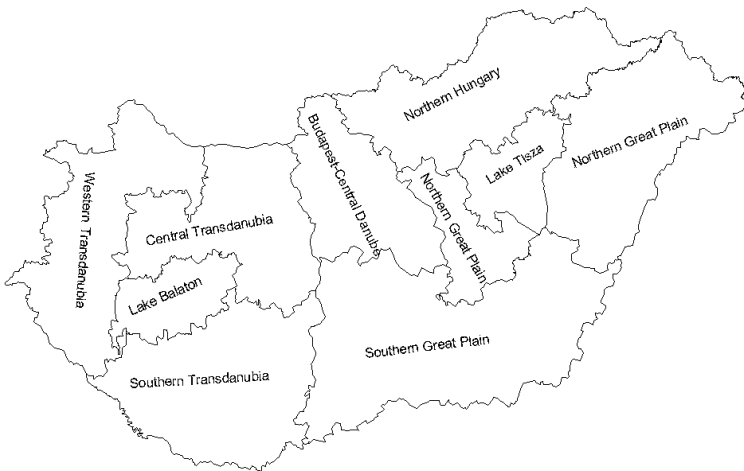
Based upon the studies, it can be concluded that the spatial concentration of tourism GDP in Hungary is significantly higher at the regional level compared to the total GDP, with the concentration becoming ever stronger for both.

Spatial disparities in the tourism GDP per capita are far more significant than that of GDP. It may be concluded that, despite the remission of differences between the most and least developed regions in the field of tourism, the level of spatial disparities in the development level of tourism in Hungary is still significant.

In order to compare regions, having varying areas and population, from the point of view of tourism, (regional) tourism GDP per capita was

calculated and was taken into consideration as an index of the level of tourism development. With regard to tourism GDP per capita, the ranking of tourism regions did not change significantly during the period of the six years studied, with the Lake Balaton, Budapest-Central Danube and Western Transdanubia Tourism Regions being the first three.

**Figure 1** Tourism regions in Hungary



Applying the method of de-aggregation, we intended to study tourism competitiveness and its components in the tourism regions of Hungary. In the first general economic approach the development (GDP per capita), productivity (GDP per employee), employment (an active age per employee) and the age structure (active age per capita) were taken into consideration as the factors of competitiveness.

After some mathematical modifications conducted (logarithms of values will have to be applied), the product is transformed into a more

easily manageable sum as according to the formula below (DCF=Destination Competitiveness Formula):

$$\log\left(\frac{GDP}{\text{Number of population}}\right) = \log\left(\frac{GDP}{\text{Number of employed}}\right) + \log\left(\frac{\text{Number of employed}}{\text{Number of active aged}}\right) + \log\left(\frac{\text{Number of active aged}}{\text{Number of population}}\right)$$

In a static competitiveness analysis of general economic approach, only the Budapest–Central Danube Tourism Region may be regarded as competitive in Hungary. However, due to the factor of age structure, only multi-factorial competitive advantage can be observed here. Contrary to this, in all other tourism regions some type of competitive disadvantage is represented.

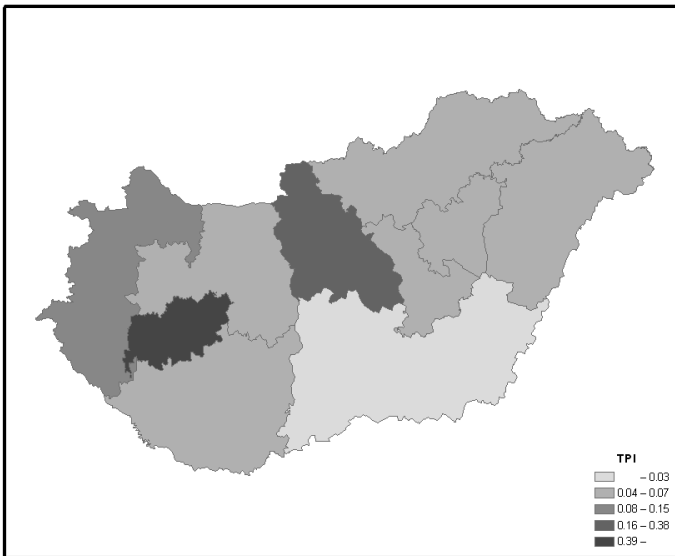
In a dynamic analysis, taking the processes of the period between 2000 and 2005 into consideration, a complex competitive advantage is seen in the Northern Hungary Tourism Region. A competitive advantage is also present in the Budapest–Central Danube Tourism Region, but this is the result of advantageous changes in productivity. On the other hand, the Lake Tisza Tourism Region, despite also being competitive, due to the disadvantageous productivity processes can be characterised as of multi-factorial competitive advantage. In all other regions, a type of competitive disadvantage can be observed.

Hereafter, in addition to a competitiveness study of general economic approach, a specific tourism approach competitiveness study is conducted with a methodology very similar to the previous ones. Tourism competitiveness has been analysed by way of two approaches: based on tourism factors, as well as on the situation of tourism and its adjustment to the economic structure. In this approach, the tourism competitiveness is modelled by the tourism factors (tourism development/tourism GDP per capita in the county/; tourism efficiency/one overnight per capita GDP of county tourism/; coverage/per capita commercial accommodations/; capacity utilization/space per overnight stay).

Following the static study of tourism factors, the Budapest-Central Danube and Lake Balaton Tourism Regions can be considered as competitive. In the case of the former, a multi-factorial competitive advantage and a value lower than the national average are seen only for specific supply. Regarding the Lake Balaton Tourism Region, it is the opposite, with a value exceeding the national average indicated only for this factor, while there are lower values for efficiency and exploitation. For all other regions, a type of competitive disadvantage is represented.

In the dynamic context, taking the processes of the period between 2000 and 2005 into account, in the Lake Tisza and Central Transdanubia Tourism Regions a complex competitive advantage is evident. The Northern Hungary and Western Transdanubia Tourism Regions display a multi-factorial competitive advantage, whereas in the Budapest–Central Danube and the Southern Great Plain Tourism Regions, a single-factorial competitive advantage can be seen. Unfortunately, in the Lake Balaton and Southern Transdanubia Tourism Regions, a complex competitive disadvantage is present.

**Figure 2** TPI indices of the tourism regions in Hungary



Tourism is a complex, multi-dimensional phenomenon, thus it is expedient to conduct the analysis of its impacts by applying a multi-dimensional indicator. In order for this, the TPI index (Tourism Penetration Index), basically a complex impact indicator of tourism (McElroy-de Albuquerque 1998; Sütő 2007), was developed for this reason by researchers.

In our second approach, tourism competitiveness does not solely derive from tourism factors alone, but also examines the general level of development and, within that, the share of tourism in a given county. Thus tourism competitiveness depends not only on the income per person produced by tourism, but also on the role of tourism in the economy and regional development. Somewhat similar results are obtained in this case too, and therefore it can be concluded that changes taking place in tourism processes can also be observed in the impact of tourism on the economic structure. Tourism competitiveness was analysed from two points of view and finally the tourism penetration of each region was studied by applying the tourism penetration index (Figure 2).

## **CONCLUSIONS**

The results presented in this research note are our first attempt to measure the competitiveness of regions. Having compared the current results to the previous studies of competitiveness, we can say that Hungary's second most important tourist destination is more affected than is justified by the situation of in-country tourism competitiveness. Consequently a different tourism development strategy should be adopted by the decision-makers. While in Budapest and Central Danube Tourism Region, in some cases – taking into consideration the conservation of environmental values - the improvements in many areas may still be green-field and new investments, as opposed to Lake Balaton Tourism Region, where primarily the development of the existing infrastructure and quality improvement are the main focus. With regard to the first region mentioned above, for some areas it may be more desirable to increase the volume of tourists. For the Lake Balaton Tourism Region a quality development program, of current services, is needed.

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