EXAMINATION OF TERRITORIAL INEQUALITIES IN HUNGARY'S MULTI-PERIPHERIC BOOMERANG MICRO REGIONS

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ABSTRACT
The gap between the urban and rural areas is significant in Hungary. The examination of disadvantaged regions goes back to a long history, which is greatly influenced by the ever-changing natural, economic and human resources. The focus of our research is to examine the economic and social dimensions of the spatial imbalances, concerning the land-use relations. The main reason for the creation of spatial differences is that the economic and social processes are always restructured in space and time (NAGY-KÁPOSZTA, 2004; RITTER, 2010). In our opinion the topic is timely because the usefulness of the research is important ranging from rural development, to spatial planning and the elaboration of local and regional development strategies. Spatial discrepancies in Hungary cause the disadvantage of rural areas, contributing to their lagging behind compared to the urban areas (HORSKÁ et.al., 2012). We have overviewed the related literature, introducing the creation of territorial imbalances, the territorial competitiveness, spatial development strategies and the up-to-date issues of the national land-use.

Keywords: disadvantage of rural areas, competitiveness, least-developed micro-regions, multi-peripherical boomerang

INTRODUCTION

We highlighted the basic issues of the demand- and supply-oriented strategies, the major coherences of the territorial competitiveness models as well as the basic characteristics of the agricultural land. We also call the attention to the NUTS system, as the classification system of the fund-allocation (KASSAI-RITTER, 2011). The territorial categories of the NUTS system changed on 1 January 2008, which are reflected by the EUROSTAT data. The Hungarian classification is based on the Parliamentary provision No. 2007/67 and the Governmental Act No. 2007/311, which both are detailed in this paper. Since we carried out a competitiveness analysis for the 47 least-developed micro-regions of Hungary, we also put great emphasis on the theoretical background of competitiveness.

Least-developed micro-regions in Hungary

In our research we focused on the 47 least-developed micro-regions, with special focus on the 33 ones requiring complex development programs. As mentioned above, we carried out research at both micro-regional and settlement level. In the period given, there were 3152 settlements with data available. According to the Act 2007./CVII., there are 174 statistical micro-regions in Hungary, thus we collected the basic data for the least-developed micro-regions according to the categories of the Parliamentary provision No. 2007/67 and Governmental regulation No. 2007/311. The 33 LDCDP micro-regions are located in 4 regions and in 12 counties as it can be seen on the map below *(Figure 1)* (RITTER, 2010).

LD: least-developed micro-region
LDCDP: least-developed micro-region requiring complex development program

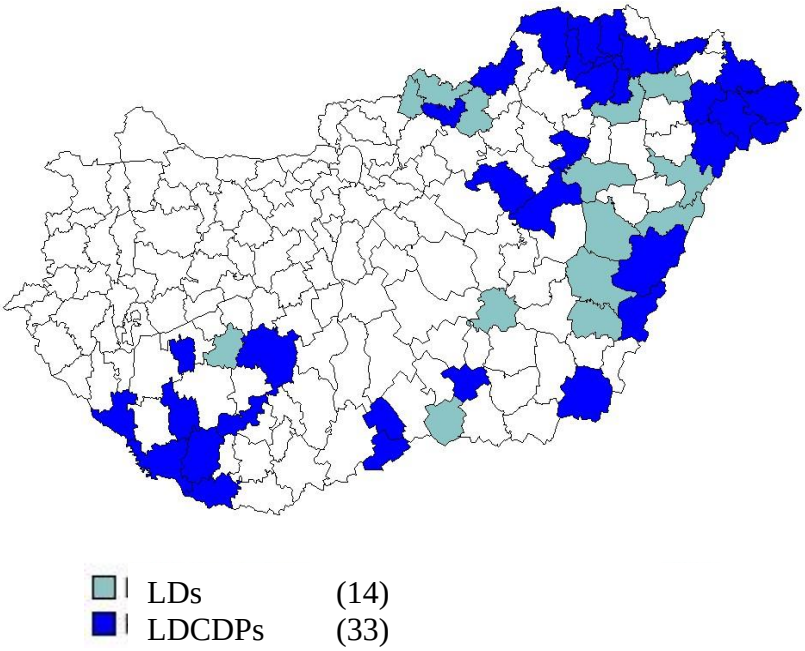

Figure 1. THE DISTRIBUTION OF THE HUNGARIAN LDS AND LDCDPS
Source: own editing based on CSO data (2011)

MATERIAL AND METHOD

We are introducing the possible methods to carry out territorial competitiveness analyses regarding the land-use, for which we collected the data from the TeIR electronical database and the annually published Spatial statistics yearbooks. These databases include most of the statistical data at settlement and micro-regional level. In the case of such indicators, where there were no micro-regional indicators available, we had to aggregate the settlement data before the statistical analysis. During our investigation, we used the following data:

- Agricultural Economics Research Institute (AKI)
- Central Statistical Office (KSH)
- National Tax and Customs Authority (NAV)
- National Employment Service (NFSZ)
- Agricultural and Rural Development Authority (MVH)
- VÁTI Kht.

The latest data available is for the year 2009, because the spatial data for 2010 were supposed to be published at the end of 2011. Therefore we carried out our investigations for the years 2007, 2008 and 2009.

We have carried out the investigations for the period 2007-2009, as mentioned earlier. Our aim was to see the changes of the indicators for the least-developed micro-regions. We calculated the average of the three years' data mentioned above (see *Figure 2*).

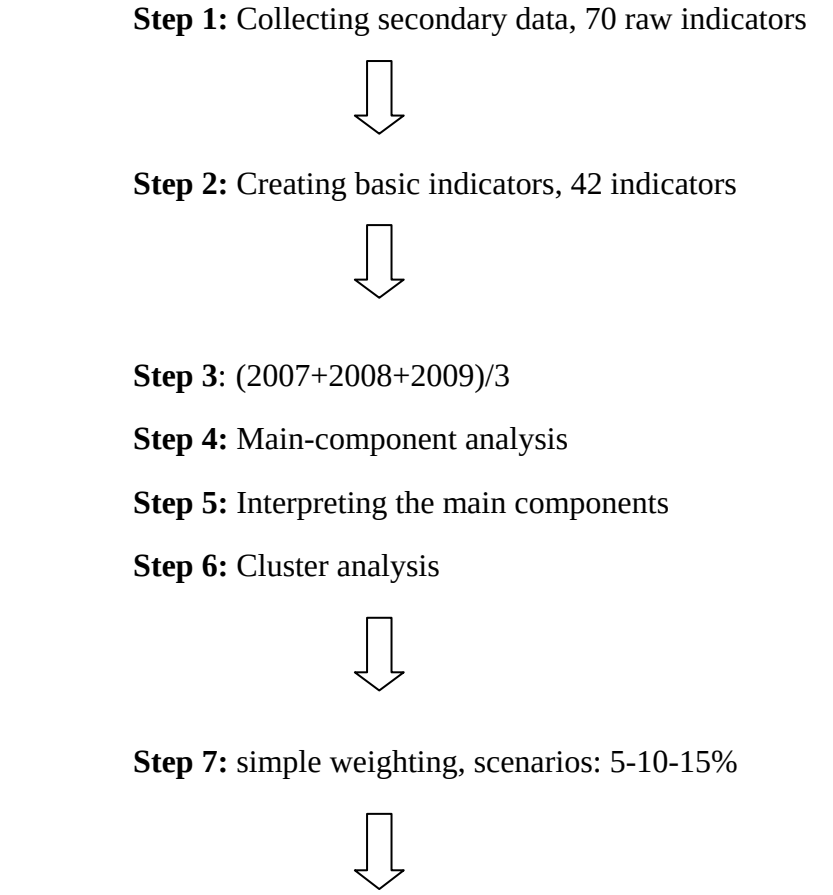

Figure 2. The major steps of my research
Source: own editing (2011)

RESULTS

We think that the main-component and the cluster analyses point out the problems included in the general situation assessment. The major aim of our research was to find out which LDCDP micro-region could improve its situation and which LD has such economic and social situation that would require complex development help. In the main-component analysis for the average of the three years we found out that the micro-regions can be put into three categories *(Figure 3).*

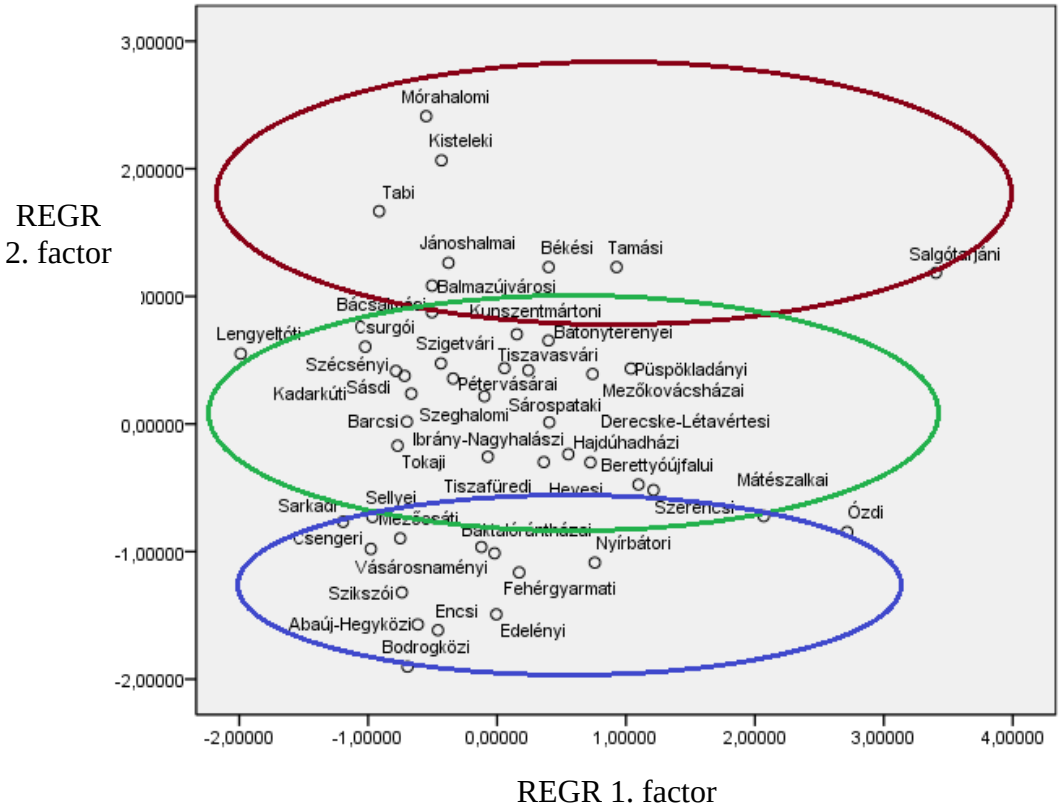

Figure 3. The results of main-component analysis
Source: own editing with the application of PASW 18 program (2011)

Category No. 1 (developing micro-regions): the ones located in the lower ellipse of the Figure. 10 micro-regions belong to this category, having the best competitiveness potentials. Mainly LD micro-regions constitute this group (7), however, there are micro-regions (Tamási, Jánoshalmai, Bácsalmási) which are at the moment in the LDCDP category.
Category No. 2 (stagnating micro-regions): the ones in the middle ellipse of the Figure. The category consists of 23 members with moderate competitiveness factors. The category includes both LD (6) and LDCDP micro-regions (17).
Category No. 3 (micro-regions lagging behind): the ones located in the below ellipse. The category consists of 14 micro-regions with the poorest competitiveness potentials. There are 13 LDCDP micro-regions and 1 LD (Ózdi). This highlights that the competitiveness in the Ózdi micro-region has decreased so much that it might slip to the LD classification to the LDCDP one if a new classification is elaborated in the near future.

After carrying out the main-component analysis, we have got the indicators which influence the territorial competitiveness of the micro-regions the most. Therefore, we continued with an analysis concentrating only on those indicators. We increased the determining factors' values by 5-10-15%, which can reflect the change in the competitiveness. The weighted indicators are used in the cluster analysis. At first, the analysis was carried out for all the 47 micro-regions, then only for the 17 least-competitive ones.

Before detailing the results, we considered it important to list up the indicators that were modified with the abovementioned percentages in the cluster analysis: number of operating

enterprises, difference in migration rates, businesses in the service sector, share of those receiving regular social benefits, unemployment rate, people over 60, HDI.

The results of the cluster analysis for the 17 micro-regions (with weighted indicators):

In the last phase of our research we wanted to find out which micro-regions could break out from the downward tendency from the least competitive, mainly multi-peripherical areas.
We have carried out the cluster analysis in three different cases (similarly to the former investigations):

1. We have modified the values of the key indicators by 5 %.
2. We have modified the values of the key indicators by 10 %.
3. We have modified the values of the key indicators by 15 %.

As a result of the modified indicators, the following micro-regions show developing tendency regarding competitiveness: Sarkadi, Ibrány-Nagyhalászi, Mezőcsáti, Csengeri, Vásárosnaményi, Bodrogközi *(Figure 4)*. The results of the cluster analysis show the same picture in each case (5-10-15%), there is no difference between the clusters. As a conclusion, out of the least competitive, multi-peripherical micro-regions there are only 5, where the improvement of the indicators resulted positive effects. In other micro-regions the accumulated negative conditions are so serious that even 15% improvement cannot result positive effect. In our opinion, the situation is even worse due to their unfavorable geographical location (peripheral areas, out of the gravitation zones of large cities), the aging population and the poor quality of the human resource (PESTI, 2009).

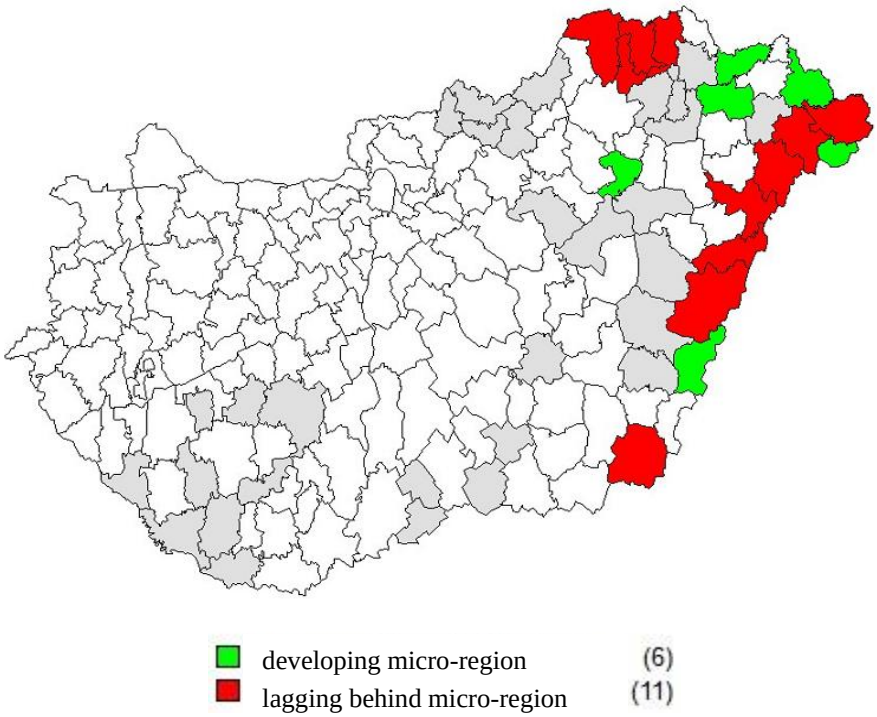

Figure 4. The change of the most and least competitive micro-regions after modifying their key indicators (multi-peripherical boomerang)
Source: own editing based on CSO data (2011)

CONCLUSIONS

We have proven that there is spatial link among the least-competitive territories due to their location and similar economic and social conditions. We have also proven that these defined micro-regions have negative multiplication effect on one another, therefore their break off can be predicted. In order to define these areas, we have created the expression of multi-peripherical boomerang. Based on our research findings, it is clear that they lag well behind the national average regarding both economic and social indicators. In our opinion, the following factors have contributed much to their break off:

1. The low quality of human resource
2. High rate of migration
3. Bad infrastructure
4. Problems of the social groups

As a result of our researches, we make some recommendations (strategic guidelines) how to improve the competitiveness of such micro-regions in long-terms, which are, at the moment, stagnating or breaking off. Overall, it can be stated that all four hypotheses were justified, since the areas near the borders constitute a homogenous peripherical zone and the negative tendencies are due to accumulated social and economic conditions.

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