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MAJOR ECONOMIC COHERENCES OF PERIPHERAL AREAS IN HUNGARY

GLÓWNE ELEMENTY SPÓJNOŚCI EKONOMICZNEJ OBSZARÓW PERYFERYJNYCH NA WĘGRZECH

Key words: regional development, regional competitiveness, least-developed micro-region, development of human resource

Słowa kluczowe: rozwój lokalny, konkurencyjność regionalna, najsłabiej rozwinięte mikro-regiony, rozwój zasobów ludzkich

Abstract. The examination of disadvantaged regions goes back to a long history, which is greatly influenced by the ever-changing natural, economic and human resources. Consequently, while examining the disadvantaged areas, we face new systems of coherences. Today's regional policy also needs to answer the question whether the spatial development funds of the past have been efficient or not and whether the land use distribution influences the spatial competitiveness or not. These issues occur every day while analyzing the efficiency of the past 20 years' regional policy.

Introduction

In our opinion, the topic is timely, since there are significant territorial differences in most of the EU countries in and out of the borders. The gap between the urban and rural areas is also significant. 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 the space and time [Harsányi et al. 2005]. This restructuring can be observed in Hungary, in the Carpathian basin, in Central-Eastern-Europe, as well as in the European Union and in the world. In order to get a real picture about today's spatial processes, it is necessary to learn the processes resulting in the spatial imbalances as well as their impacts on the change of spatial structure. These discrepancies can be observed at various territorial levels. During micro-regional investigations researchers carry out researches in larger areas than the town-village dichotome, however, in a narrower territory compared to the West-East investigations [Molnár 2007]. The general features of the disadvantaged areas are the low infrastructural supply, low quality of services, and there are shortages of jobs. As a consequence, there is high unemployment rate and the wages are low. It is also a common phenomenon that young people migrate from these disadvantaged rural areas, contributing to the aging population in long terms [Káposzta et al. 2010]. The change in the economic structure starting in the 1990s also contributed to the territorial inequalities to a large extent, since dynamically developing centres and peripheral territories lagging behind have been created [Nagy, Káposzta 2006]. The targets of our research, i. e. the least-developed micro-regions are also located on these peripheral areas. Hungary is a one-centered country, there are only few large or middle-sized towns and there are a lot of small villages in the countryside.

Materials and methods

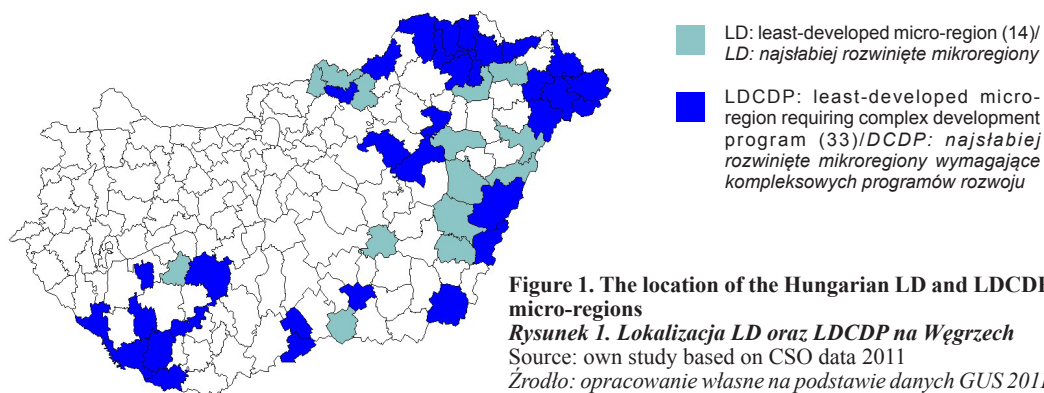
In the paper there was introduced the possible methods to carry out territorial competitiveness analyses regarding the land-use, for which were collected the data from the TeIR (National Regional Development and Spatial Planning Information System) electronical database and the yearly published Spatial statistics yearbooks for Hungary. 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, there were aggregated 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 (VÁTI Hungarian Nonprofit LTD. for Regional Development and Town Planning).
 The paper focuses on the 47 least-developed micro-regions, with special focus on the 33 ones requiring complex development programs. The carried out research were done 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 I 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.

The investigations were carried out for the period 2007-2009, as mentioned earlier. The research goal was to see the changes of the indicators for the least-developed micro-regions. There was calculated the average of the three years' data (Fig. 2).



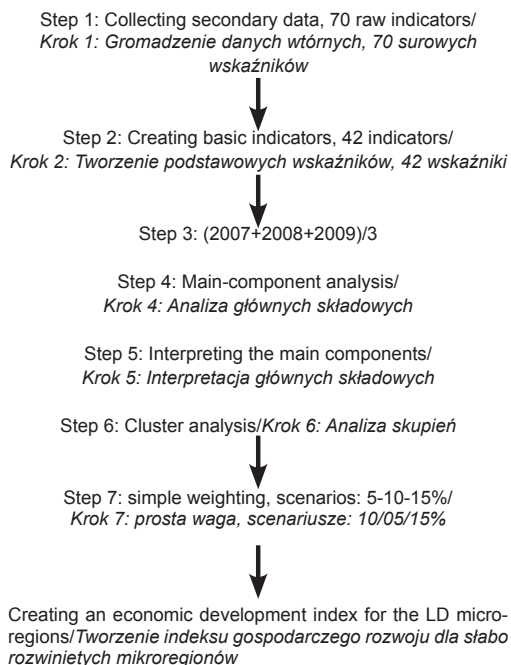
Results

The research covers the period of 2007-2009. It was backed by the work of Enyedi [2004], who has already defined the least-developed micro-regions based on nearly 10 years' data (Fig. 3). The investigations aimed to find out whether the definition and the current least-developed micro-regions cover the same area or not. In 2004, Enyedi made the following classification for the space structure:

- 1) the penetration of global network into the Hungarian settlement-network,
- 2) smaller regional networks,
- 3) mainly underdeveloped villages, out of the networks, restricted to the areas between dynamic axis [Enyedi 2004].

The authors argue that the main-component and the cluster analyses point out the problems included in the general situation assessment. The major aim of the 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 it was found out that the micro-regions can be put into three categories (Fig. 3).

Category No. 1 (developing micro-regions): the ones located in the upper ellipse of the figure. 10 micro-regions belong to this category, having the best competitiveness potentials. Mainly LD micro-



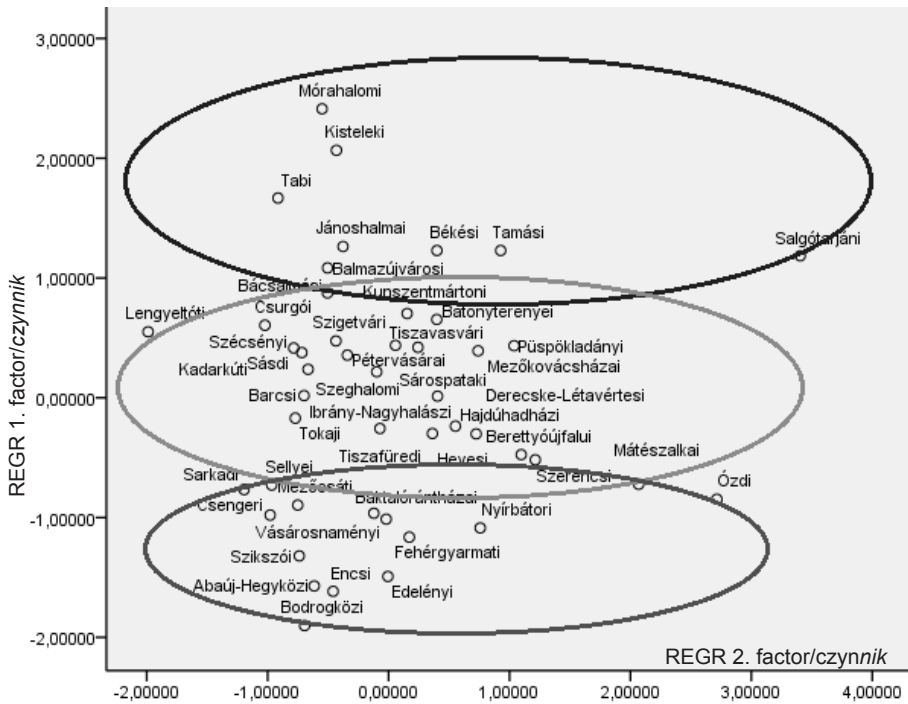


Figure 3. The results of main component analysis

Rysunek 3. Wyniki analizy głównych komponentów

Source: own study with the application of PASW 18 program, 2011

Źródło: opracowanie własne z wykorzystaniem aplikacji PASW 18, 2011

regions constitute this group (7), however, there are micro-regions (Tamási, Jánoshalmi, 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.

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-peripheral areas.

We have carried out the cluster analysis in three different cases (similarly to the former investigations):

- we have modified the values of the key indicators by 5 %,
- we have modified the values of the key indicators by 10 %,
- 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, Bodroglózi (Fig. 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-peripheral 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.

Based on all these, we can state that we have created an economic development index specialized for the least-developed micro-regions with the following elements/part-indices: operating enterprises,

- developing micro-region (6)/ *rozwijający się mikroregion (6)*
- lagging behind micro-region (11)/ *opóźniony mikroregion (11)*

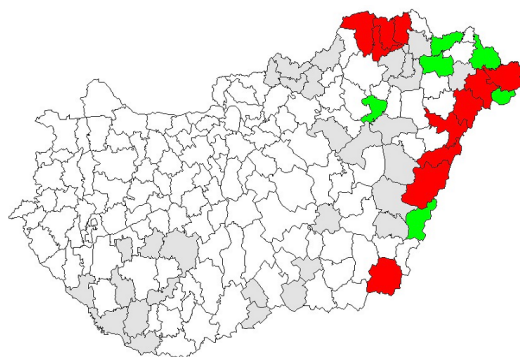


Figure 4. The change of the most and least competitive micro-regions after modifying their key indicators
Rysunek 4. Zmiana w zakresie najbardziej i najslabiej konkurencyjnych mikroregionów po zmianie ich głównych wskaźników

Source: own study based on CSO data 2011

Źródło: opracowanie własne na podstawie danych GUS 2011

businesses in the service sector, human development, migration, those receiving regular social benefit, unemployment, aging. Therefore, these factors determine the most the competitiveness of the Hungarian least-developed micro-regions.

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:

- the low quality of human resource,
- high rate of migration,
- bad infrastructure,
- problems of the social groups.

Conclusions

As a result of conducted researches, there were draw 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.

4. The investments should be carried out in these areas which create jobs and require human work, providing job opportunities for the local active population. Just a few examples: the creation and development of industrial parks, energy forests, the collection and use of forestry products. I believe that the rate of migration may be reduced due to such activities.
5. The development of human resource should be a key priority in their future strategies. If the human resource is developed, it encourages the investments, the absorption of funds and the submission of project proposals. At the moment, in several micro-regions the qualified human resource is not available, which is required for the efficient use of EU and national funds. The development of vocational trainings should also be a key priority as well as the start of trainings dealing with family assistance and drug- and alcohol-prevention.
6. The micro-regions which are located in the gravitation zone of pole-cities (e.g. Miskolc, Debrecen, Nyíregyháza, Szeged, Békéscsaba, Vásárosnamény, etc.), have better competitiveness potentials than the others out of the zones. Therefore, it is suggested that most of the funds and investments need to be channeled to the pole-cities, which will have a positive impact on the micro-regions of the zones as well (due to the center-periphery model).
7. In order to optimize the rural land-use, we suggest the preference of alternative energy sources, sustainable technologies and food industry, which could result the increase of rural added value in the least-developed micro-regions.

Overall, it can be stated that all four hypotheses were justified, since the areas near the borders constitute a homogenous peripheral zone and the negative tendencies are due to accumulated social and economic conditions.

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Streszczenie

Podjęto próbę analizy rozwoju regionalnego najsłabiej rozwiniętych obszarów na Węgrzech. Badania przeprowadzono dla obszaru 47 najsłabiej rozwiniętych mikroregionów. Stwierdzono, że ich obecna klasyfikacja jest błędna z uwagi na uśrednioną metodologię. Zaproponowano nową formę oceny, wyodrębniając trzy typy obszarów. Określono sposoby poprawy ich sytuacji ekonomicznej.

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