Restructuring of peripheral areas in Central Europe after the political transition and the current situation of Hungary

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Regional Processes of Central and Eastern Europe, 1990–2015

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Introduction – obstacles to provide a Central European overview

The comparability problem of the calculations made in each country is due to several factors:

- the available and accessible datasets are extremely heterogeneous;
- it is almost impossible at the various countries to find same (or similar) spatial splitting and same methodology at the same period;
- spatial issues in different countries occur in different emphasis;
- the same indicator – which usually outlines the peripheral areas well –, because of the spatial characteristics, may not provide a realistic picture;
- calculations can have different results, none the less, they taken into consideration the similar methods, referring to the same time and same area;
- this can be further complicated by the issue of temporal comparison, since the content of the indicators can change in differentiated manner;
- the periphery term is relative;
- those comparative analyses are rarities, which examining the same area for a long-term period from the aspect of peripheral territories.
Peripheral areas of Central Europe during the socialist period

Peripheral areas of Central Europe

after the millennium

Altering spatial pattern – transforming peripheral areas

Most important and spectacular transformations in the spatial pattern:

- each of the countries the *capital city and rural area spatial dichotomy* became stressful;
- increasing role of the large *urban-rural dichotomy* – especially in Poland;
- the *East-West dichotomy* can be detected in some forms in all four countries;
- the *increasing spatial concentration of peripheral areas in the Eastern regions*:
  - *geographical peripheries along/at the borders*;
  - *internal peripheries* are present;
  - *both traditionally backward areas and territories with structural crisis*. 
Attempt to detect the location and situation of the Hungarian peripheral areas

Methodology of the delimitation of peripheral areas:

- Collecting of 136 variables → multi steps systematic narrowing;
- Finally chosen 7 variables (from 2012):
  - Taxable income per capita;
  - Ratio of children supported by regular child protection aid;
  - Number of inhabitants per dwelling;
  - Average housing price;
  - Number of respiratory diseases cases per capita;
  - Ratio of newly built dwellings;
  - Elderly dependency ratio.
Attempt to detect the location and situation of the Hungarian peripheral areas

The following multivariate methods were taken into consideration in the case of the seven chosen variables:

1. ranking;
2. scoring;
3. Bennett-method (transformation into the ratio of maximum value);
4. normalization;
5. standardization;
6. factor analysis with principal component method;
7. cluster analysis with hierarchical clustering;
8. discriminant analysis.
The distribution of peripheral settlements categorised by the summarized results of delimitations, 2012

Source: own edition by the data from HCSO
The spatial pattern of peripheries in Hungary – in the light of the concluded results

Source: own edition by the data from HCSO
Favoured settlements of the Hungarian regional policy between 1986 and 2015 by the cases of delimitations

Source: own edition by official measures
The spatial pattern of Hungary – calculated by the ‘territorial development index’, 2013

Source: own edition by the data from HCSO
Results from comparative perspective

Correlation matrix for different indices

<table>
<thead>
<tr>
<th></th>
<th>Index of territorial deprivation, 2011</th>
<th>Index of objective well-being, 2011</th>
<th>Territorial development index, 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index of territorial deprivation, 2011</td>
<td>1.000</td>
<td>0.860</td>
<td>0.824</td>
</tr>
<tr>
<td>Index of objective well-being, 2011</td>
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</tbody>
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Source: own edition by the results of the IRS CERS of the HAS (MTA KRTK RKI) and by the data from HCSO

This three methods and the latest delimitation of the favoured settlements (governmental regulation 105/2015 (IV.22.)) gives the following decomposition after the separating the least developed one third of the settlements:

- 660 settlements (20.9%) was categorised as backward by all of the methods;
- 773 settlements (24.5%) was delineated by 1-3 methods;
- Non of the methods attached 1721 settlements (54.6%).
Conclusions

- Peripheral areas transformed in Central Europe during the transition period and there are common elements and factors;
- The transformed spatial pattern seems to be ‘frozen’ in the case of Hungary after millennium;
- Different methodologies produced quite similar results and spatial overlapping;
- This fact proves the multidimensional backwardness of one fifth of Hungarian settlements;
- The development paths of the ‘semi-peripheral’ settlements will be interesting to investigate in the next few years.
Thank you for your attention!

RESOURCES:

• ŠSR - Štatistický úrad Slovenskej republiky
• HCSO; IRS CERS of the HAS