

# Angol nyelvű összefoglalók / Summaries

**György Kocziszky:**

## **Innovation potential analysis the Nord Hungarian Region**

### Abstract

Innovation potential plays an increasingly important role in the competitiveness of small regions, counties and regions. It means that the global economic position of a country is determined not only by the innovations present in the products and services developed in laboratories and research centres and successfully marketed, but also by every novel and successfully implemented idea that positions a region in the national economy of the country. On the other hand, as it is proven by international practice, only that region can be successful whose presence is not linked to an original or a chance action, but is a process consciously performed by figures constantly in action and organised into an institutionalised network. One of the major tasks of our model program designed to elaborate a model for innovation-based economic development in small regions is to provide a guideline for working out small region innovation strategies in Hungary. The European Union is also making great efforts to strengthen innovation skills. The European Commission published its Green Paper on Innovation in 1995 and the Commission Staff Working Paper, 2001 Innovation Scoreboard in 2001. Innovation strengthening programs are operating currently in Europe in the form of Framework Programs 5 and 6, in which Hungary is also involved.

EUROSTAT databases are published regularly and the indicators in them can be used in attempts to measure and compare the development levels of innovation. These data (e.g. Statistics on Innovation in Europe), however, are of national levels and do not quantify the innovation potential of individual regions, although innovation is to be examined at regional level, for it may play a major role in bridging the gap by the backward regions.

In more developed market economies, competition and market regulating mechanisms play a greater role in strengthening and spreading innovation, but in backward region centrally controlled intervention is required. This will require the development of indicators and measurement and comparison methodology, which are suitable for quantifying the innovation potential also at lower levels of statistics and planning (NUTS IV-V). Based on them, realistic development strategies and programs can be planned and supported in order to close the gaps and decrease disparities.

That is why it is necessary to conduct the survey at settlement and small region level and to utilise them. In the East German counties with the support of the Leader program several projects are being developed with the objective of measuring and developing the innovation potential of rural regions. Their measurement methodology is similar to what we have in mind. We have contacted those involved in the projects.

### **General objectives of small region innovation development**

We wish to provide a model that will help small regions being formed in Hungary to work out an innovation strategy. The model proposed is significantly based on the methodology of regional innovation strategies (RIS) developed in the regions of the European Union, but it substantially relies on Hungarian innovation research practice and on the experience of the Institute of the Economics of Europe of the University of Miskolc in strategy development. The model takes into account the differences in the innovation infrastructure, institutional system and

instruments of the innovation policy between Hungary and the EU member countries. It also takes into consideration the difficulties small regions in a weak position nowadays experience in enforcing their interests as well as the low amount of resources that can be used for technology and research and development.

The strategic management of bottom-up initiatives can achieve a significant improvement in the condition of systems of innovation at the national level as well. Our objective is for small regions to develop their innovation capacities, for the different forms of co-operation between businesses, the scientific and technology sphere to develop and for successful developers to be rewarded for their achievement.

The elaboration of the measurement and development strategy of small region innovation potential is a process that integrates all those involved in the research and technology development, supports them in thinking and acting collectively and in co-operating in order to improve the efficiency of innovation and to enhance the competitiveness and welfare of small regions.

Concrete objectives of the project are:

- Elaborating an independent, small region innovation strategy covering the complete statistical area and based on the local conditions and potentials and prepared with the involvement of local and external experts.
- Creating connections between the small region strategies of a region, consciously taking advantage of effects strengthening each other.
- Preparing innovation managers at small region level for performing their functions.
- Elaborating and implementing a solution which will be of model value at national level; which may contribute to shaping the image of the region positively and to strengthening the “knowledge-centred innovation regional image”.
- Preparing a manual for “small region innovation planning, managing and monitoring”, which will be suitable for successful application in the small regions of all regions, i.e. may contribute to building an innovation network.
- Comparing the innovation maps of the small regions of a given region (in harmony with the EU practice) and preparing projects for strengthening innovation.
- Elaborating local projects that can be connected to national and international (e.g. projects supported by the EU) projects. This will achieve continuity and a possibility for supplementary financing.

### **The process of performing the task**

The task will be performed in seven steps:

- The first step will determine the innovation potentials of the statistical areas of the region in accordance with EU standards (in accordance with the EUROSTAT measuring and quantification system).
- The second step will use the figures for a comparison that will position the small regions of the region at national and international levels.
- The third step will prepare the SWOT analyses for the “innovation small regions” for all the statistical areas of the region.
- The fourth step will compile the R&D future image for each small region with the involvement of local and external experts.
- The fifth step will elaborate small region level projects.
- The sixth step will formulate recommendations.
- The seventh step is continuous monitoring.

**Éva G.Fekete:**

**The absorption ability and the situation of subregions in the North-Hungarian region compared to other subregions of Hungary**

**Abstract**

The aim of the research carried out by the order of the Prime Minister's Office, Office for Regional Development in 2003 is to create and test a method which could be used for measuring the absorption ability of subregions. We defined absorption ability as the receiving and locking ability of external capital in Hungarian subregional statistical-planning districts.

The theme was very up-to-date because by 2004 Hungary had to prepare for the reception of the Structural Funds and the correct, effective and efficient use of the 1100-1600 billion forints available for Hungarian subregions (6-8 billions for each). The basic questions were the following:

- Which factors determine and how can subregions' ability of locking external capital be measured?
- How can Hungarian subregions be evaluated according to their absorption ability?
- What further steps must be taken to prepare?

Studying the relevant documents and special literature we stated that the ability of absorbing EU funds was equal with the ability of elaborating and implementing relevant, attainable, sustainable projects. The absorption ability of subregions depends on spatial factors, development capacity and the ability to enforce interests. These factors together form the complex spatial indicator of absorption ability, which was determined as a value expressing the closeness to the subregional absolute maximum point tied to the biggest subregional values occurring in each indicator's case.

The analysis of spatial factors of the absorption ability accomplished to Hungarian statistical subregions indicated that in the spatial formation of absorption ability the closest connection could be proved with the indicators of being accessible and the present economic environment.

According to the complex development indicator describing the situation of subregions compared with each other, which was created from the indicators of subregional absorption ability, the Hungarian subregions can be classified in three categories.

- The number of subregions with good (above 0,5) absorption potential is 42. Of these 18 constitutes the group of subregions with the best spatial factors.
- Average absorption potential characterizes 91 subregions.
- 17 subregions have weak absorption potential.

At the same time, the defined regional categories of the spatial development factors mark out the target area of the subsidies which help achieving the goals of cohesion and sustainable development. On the basis of the development of absorption conditions, besides the usual Budapest-Győr, Budapest-Balaton spatial structural axis, became important the Budapest-Keckskemét-Szeged and the Budapest-Miskolc axis. The significance of the Budapest-Pécs axis decreased.

In the North-Hungarian region, according to spatial factors, subregions situated along the M3 motorway as a main spatial structural line (in close relationship with attainableness) are the most suitable to receive external economic resources. The Eger subregion is the 7th most attractive subregion in the country. This is followed by the subregion of Miskolc, Salgótarján and Gyöngyös in the 21st, 22nd and the 28th place, respectively. Besides the areas which are far from the centres along the northern and eastern borderline and cannot be accessed easily, the subregions of Szécsény, Balassagyarmat and Pásztó turn up as the inner periphery of the region.

The analysis of the coincidence of spatial production factors and the supportable objectives from the Structural Funds in the frame of the Hungarian National Development Plan between 2004 and 2006 revealed that a significant part of the measures did not contain geographical preferences at all, e. g. in these cases areas with more developed spatial factors would start with more chance. Among the measures, the rural development and some regional development objectives are the ones which help definitively the disadvantaged areas. These cover the 10 percents of the total amount of money.

The results of the survey carried out in 15 sample subregion (3 of them are North-Hungarian) and former researches on assessing subregional development capacity reveal that the development of subregional development capacity has at least the same role in determining the absorption ability as the spatial factors. There is no unambiguous relationship between the development of subregional capacity and spatial factors. In the case of our sample, subregions with the most developed development capacity are from the category of the weakest spatial conditions. At the same time, nor can the reversed relationship be generalized.

The subregional development capacity is formed mostly by plan supply, the density of connections network, professionals supply and the financial background.

In the case of half of the associations lack of capacity can be expressed according to at least one point of view. The most shortfalls are in the field of planning (despite the lively planning processes in the near past). Primarily not the programmes but the lack of the colourfulness of those and the project plans built on them can be indicated.

The subregional development associations of the North-Hungarian region show strong dispersion which is similar with the national situation.

Beyond planning, on the basis of the other three main condition approximately the one-fourth of the associations need being developed.

Our recommendation is that capacity analysis must be carried out for every subregion. In this process help the questionnaire elaborated by us and the marginal values created by the sample.

On the basis of the results of research the capacity-building plans are to be worked out for subregions. The elements of the plans:

- the development of organizational structure, documents needed for operating, list and system of conditions of rules
- description of planning processes
- information strategy
- human resource management, training plan
- financial strategy

General frames helping subregional absorption, which must be constructed and regulated centrally. The elements of these:

- the plan law, which regulates the process of programming, authority, harmonizing plans
- helping the creation and operation of national initiatives, forums, which build connections between subregional organizations and other participants of regional development
- carrying through the process of the institutionalization of subregional development, determining the authority and the division of tasks among different types of institutions
- clearing up the legal status of subregional managers, accepting it as a job
- constructing the system of the vocational training of regional development
- constructing the national and regional subregional-development information system.

**János Zsúgyel:**

**The impact of the factors on the regional development disparities in the EU-27 member and candidates countries**

Abstract

The paper analyses the regional development disparities of the EU-27 member and candidate countries and their factors at the regional level. The author analyses the data published by the European Commission in the Third Report on Economic and Social Cohesion. The analyses deals with descriptive statistical methods and cluster analyses.

The GDP per capita figures of the EU-27 member and candidate countries show that the EU-15 countries have a favourable situation comparing with the new member and candidate countries. In the elimination of the development disparities were the western-European countries also more successful as the new member states. Because of the low level of general development the regions of the candidate Balkan countries have a lower level of regional disparities than the other east-European countries. The regional disparities are more serious in the Czech Republic and in Slovakia where the developed central regions and the less developed rural regions caused that phenomenon.

The author investigated the determinants of the spatial disparities on behalf of the following available figures:

- activity rate
- high level educated population rate
- patent number per 1 million inhabitants
- employment rate in the tertiary sector

The investigated figures represent the human resource potential of the economy, the scientific-technological progress and the modernisation level of the economy.

The relation between the income level and the investigated figures show only a loose connection measured with the correlation coefficient. A cluster analysis divided the EU-27 regions in more and less developed regions proved that high activity rate, high rate of educated population, high patent number per 1 million inhabitant and high employment rate in the tertiary sector are necessary for achieving a high income level in the regions.

In the developed region's cluster that consists the regions with the best figure on behalf of all 4 coefficients there are only 29 western-European regions. No one of the eastern-European regions could be member in the developed region's cluster.

This fact shows that the elimination of the development disparities between the EU-15 and the east-European countries is possible only in a longer historical process.

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