Regional development in economic core regions

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Abstract. The paper analyzes the different approaches of authors to the theme of regional development, specifically in the economic core regions. It defines the basic terminology concepts as region and regional development, shows the factors influencing the regional development and its effects and summarizes existing research on the regional development with a focus on knowledge-based society. The authors discuss the importance of various institutions and impact of the institutional density on the regional development in the context of knowledge transfer.

Keywords: region, regional development, economic core region, factors of regional development.

JEL Codes: O18, R11, R58

1. Introduction

The term “region” is a terminological basis for a topic dedicated to regional development. When specifying the definition of the region, there exists a great diversity of opinions due to the different perspectives. However, for the purposes of our project only few of them are needed. Buček (1996 in Rajčáková, 2001) defines the region as a geographical object, which has the character of a spatial unit with properties of a system, for which is characteristic its integrity, relative isolation and functional organization. Furthermore, the region is defined as a dynamic spatial system, for which are typical specific natural and socio-economic characteristics, different from other areas. It is not only spatially, but also an economic and social unit. According to Pauličková (2005) in terms of marketing, it is not possible to define the region using only the criteria under its administrative organization and administrative division.

For the marketing aspect there are important specifics and mutual coordination among the subsystems, which include municipalities, cities, micro-regions, enterprises and associations. Matoušková (1997) has an interdisciplinary look at the region: she defines the region as a geographically defined area, which has common socio-economic, ethnic, geographical, historical, cultural and other characteristics.

We can use different aspects for the classification of regions - spatial aspect, demo-geographical aspect, territorial-statistical aspect, climate aspect, the significance for tourism, etc. In terms of the distribution of knowledge it is important the classification of regions as:

- metropolitan regions - with a high concentration of population and businesses, high GDP per capita and a strong focus on education, research and services;
- the economic core regions - they are characterized by a strong industrialization in the past, but this also caused problems and growth retardation by gradual de-industrialization. The employment in industry peaked in the U.S. and Canada in the 60's of the 20th century. In Europe it shifted about 20-30 years; The development in Central and Eastern Europe was besides de-industrialization also

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affected by a change in the political and economic system and privatization; Conservative population, cultural dependence, reduced rate of innovation of regional environment is typical for these regions; On the other hand, a high level of responsibility, perseverance and solidarity is observable in these regions; The key issue in these regions, as indicated by Buček – Rehák – Hudc, is an innovation dilemma and a lack of radical innovations; These regions can be found among the successful industrial centres today (Cremona, Poznan, Trnava), transformation poles and troubled de-industrialized centres (Ostrava, Kosice);

- peripheral, rural regions - arise as a result of long-term cumulative causation of several negative factors - unfavourable demographic structure, lack of economy, deteriorated social and economic indicators; despite the above, the life in these regions may also have its positives.

2. Factors influencing the economic level of regions

These regions differ mainly in the economic level, which is affected by the following factors:

- localization of enterprises in the region, their frequency, branch structure, economic stability, the intensity of intra-regional economic relations, types of organizational forms;
- quantitative and qualitative characteristics of the population and its movement;
- technical and social infrastructure in terms of complexity, quality and quantity;
- the available natural resources and their utilization rate;
- direct and indirect impacts of the state economic policy.

2.1. Localization of enterprises

Businesses located in the region have a decisive influence on the economic and social development of the region. They are a source of job opportunities, thereby affecting the level of employment in the region. They are also a source of income for the population and a source of income for the public and regional budgets as well. In relation to the economic development of the region it is important its frequency and size (due to a higher labour supply), branch and sector structure, economic stability, the level of GDP per capita of the region, the average amount of wages and skills of the labour force, and economic stability. The economy of the region is increased by the presence of secondary and tertiary sector. The economic core regions are mainly characterized by the presence of secondary sector and manufacturing companies focused on low-cost labour force. Many of the economic core regions are characterized by the branch specialization. On the one hand, it supports the innovation performance of the enterprises, but on the other hand, the dominance of one industry is a risky fact, because it creates a great dependence on this sector.

2.2. Demography

The population is an integral part of the production and value processes in the region. In relation to the development, the quantitative and qualitative characteristics of the population are important. From the quantitative characters it is frequency (concentration) of the population and a dynamics of the evolution. It is also important its settlement structure. From the qualitative characters the development of the regions is affected by the age structure and educational level of the population. The level of education is directly related to the production structure and dynamics of businesses. Educated population is, according to some studies, more quickly adaptable to changes, more informed and faster finds the solutions even in crisis situations.

2.3. Technical and social infrastructure

It is a conditional factor of the regional development. The technical infrastructure (transport, energetic, telecommunication networks, water and waste management) directly influences the allocation of the companies and their performance. The technical infrastructure is needed by the enterprises as well as by the households, but in a different range and combination. The development of technical infrastructure is a highly
expensive investment, it is financed mainly from public sources, by which on the one hand it affects the
development and on the other hand it reflects the development rate of the region.

The distribution of the social structure (apartments, educational, medical, cultural, recreational, sports,
administrative and social facilities) is mainly associated with the structure and the size of settlements. Social
infrastructure is concentrated and easier to develop in the urban settlements. Responsibility for the condition
and the development of the social infrastructure is divided between the government, regional government
and private institutions.

2.4. Natural and geographic conditions

Natural and geographic conditions (area size, geomorphology and geology of the territory, vegetation,
condition of the environment) substantially affect the development of the region - they create prerequisites
for the utilization of land, for the existence of specific industries in the region and affect the formation of the
settlement structure and along with it also the lifestyle of citizens. The region cannot affect its position in the
broader limited space, but its size and position is, however, closely linked to the social and economic
activities in the region. What is important is the degree of conservation of nature in the region, which acts
somewhat restrictive. The impacts of industrialization in the economic core regions are also reflected
negatively on the state of the environment in it.

2.5. Economic policy of the government

The regional development is influenced by the monetary, fiscal and sector policies of the government.
Through the state budget, there are interregional redistribution of the taxes and income on the one hand and
the costs on the other. Economically stronger regions, which include the economic core regions, contribute to
the state budget with higher amounts, while the higher amount of resources goes to the peripheral regions
through social grants.

3. Effects of regional development

The development has many forms - depending on location and conditions, which we take into account,
from the goals that people set themselves, from an institution or a social group that set the goals. The
development also has a number of dimensions - from multinational, through regional to a local level. The
development cannot be separated from the economic and social policy of the area.

The effects of the regional development are difficult to express in value and are not clear. Unlike
businesses, in which the effect can be exactly economically quantified, the regional development is created
by the public benefits for individuals and groups in the given region. They can be expressed as external and
agglomeration economies. External economies arise from the development of the economic base and the
interconnectedness of industries in the region as a result of technological innovation or as the effects of
urbanization (the concentration of population and built infrastructure). Agglomeration economies flow from
complexly built technical and social infrastructure in the area.

The Act on regional development support no. 503/2001 Coll. defines the regional development as a
sustainable growth of the economic and social potential of the region, which increases its economic level,
performance, competitiveness and the standards of living of its population. An important prerequisite for the
regional development is an effective regional policy, which creates an appropriate institutional and
regulatory environment to support cooperation among the public, private and non-profit sectors, including
educational institutions.

4. Institutions and regional development

According to several studies (Gibbs et al. 2001) the regional development is also affected by its
institutional facilities - from traditional institutions at the regional level, such as government organizations,
regional and local governments through research and educational institutions, financial institutions,
businesses, to various interest and professional associations, support and mediatory institutions and NGOs. These institutions have a supporting character in order to ensure smooth information flow between the subjects in the region and stimulate the innovative activities.

In terms of describing the impact of institutions on the regional development, it is worth noting Benneworth’s (2008) dimensions of the region:

- the so-called hardware equipment (hardware) of the region that are tangible and visible elements of the region, such as technical infrastructure, production factors;
- the so-called software package (software) of the region, which can be classified as institutional structure, social infrastructure;
- the so-called intellectual equipment of the region (mindware), which includes cultural identity and image of the region.

These components of the regional development have different ability to respond to the changes carrying out in the region, while it can be claimed that the most flexible is the hardware equipment.

A key element in the regional development is knowledge, their creation, transfer and management. In connection with this theme and institutions Šebová sets out (2009) the following trends:

- the institutional isomorphism - the growing homogeneity of organizations involved in the regional development, influenced by a desire to obtain money from the same sources and under the same conditions, which leads to an imitation and mutual learning;
- the transition to decentralized organizations, private sector input and creation of joint public-private organizations of the regional development;
- the specific role of intermediary agencies and organizations to support small and medium-sized enterprises;
- increasing role of universities as a “knowledge interface” between the local and the global economy;
- growing importance of the European structural policy in the creation of networks of regional development agencies.

Institutional density itself can have supportive as well as braking character, so its coordination and interaction is highlighted mostly. This is very difficult in the economic core regions, which is shown in the studies of authors (Hassink, 2005; Benneworth, 2006; Hudson, 2004). National and regional governments in order to support the industry create a network of different organizations, which over time becomes overlapping and confusing, without the ability to initiate and promote changes in the region; institutional inertia can then slow down the development processes.

One of the key factors of the regional development is the ability to upgrade the old, dysfunctional institutional connections, to realize a shift from traditional regional government to multi-level governance, which leads to a coordination of the network of the different subjects of the regional development in order to reach consensus.

Regional self-government has a specific character – established institutional units for management of the regional development – self-governing regions (SGR) – do not have their own citizens or an area that belongs solely to the administration of the SGR. The area belongs to the municipal cadastral government; the citizens are involved in the government indirectly through elected representatives and various partnership organizations. According to the study led by Bauer (2010), the regional government today is not, as much as it should be, a key player in the development of their area. This is caused by several factors – particularly, unsatisfying territorial-administrative division of regions in terms of the regional development management, high fragmentation of the settlement structure; the lack of tools for SGR to promote the regional development; insufficient legal framework of inadequate quality for the execution of the regional government; and also low quality of regional development management.

5. Education and research vs. regional development

Education and qualification are closely related to the absorption of new knowledge. Education, research and innovations create a knowledge triangle that enables business growth, thus contributing to the overall
growth of the region. Increasing the level of education contributes to the acceleration of technological progress, to a more efficient use of physical capital and a greater flexibility of businesses and their productivity. Universities have an irreplaceable role in creating a knowledge society; however, it is not just in a provision of education and research activities, but also in a collaboration of universities with the business environment. Education in the region should be connected to the business activities of the enterprises.

The coordination is important within the interactions between the business and education sectors in the region. The model of the transformation process in relation to the universities, public and private sectors created by Etzkowitz and Leydesdorff as a “triple helix model” is based on an interactive dialogue. If the dialogue is interrupted, all three sectors are losing.

The economic core regions are characterized by lower expenditure on R&D than in the metropolitan regions; the cooperation between the enterprises and educational institutions of university type is also weaker due to a lower trust and mutual connections. Education was in the past focused on technical courses, management courses were absent. Today, the situation is rather the opposite, universities have responded to the increased demand for management courses, but nowadays the companies are lacking skilled employees in technical fields.

6. Conclusions
From the research, which sought to answer the question to what extent is the future of the region affected by its past, can be drawn the following conclusions:

- changes in the central and eastern European countries do not have the same character as the changes in the countries where the market principle worked also after world war ii;
- institutional density in the regions of central and eastern Europe is both qualitative and quantitative at lower levels than in the original European Union countries and this affects their economic stagnation and rigidity;
- established mechanisms of the existing economic and social relations are likely to prevent new changes.

The ability to generate the so-called structural advantage will be important for the long-term regional development; this ability is in contrast to the competitive and comparative advantage much more based on the interaction of public and private forces. Economic core regions should try to break the dependence on traditional industries. This means, innovate the industrial focus, strengthen the transition to the new industries and stimulate the innovative processes and products for new markets.

According to the forecast of regional development in 2030, the regions of Western Slovakia, which also includes the Trnava region, will specialize in industries with higher added value, while the effect of the spread of the development will reflect in the services sector too. The inflow of investments with higher added value will open the space for increased engagement of domestic enterprises in the international networks. According to the above forecast the regions should concentrate their activities in order to achieve the competitive advantage, which will be relevant at least in Central Europe.

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8. References


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