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REFLECTIONS ON APPROACHES TO (REGIONAL) ECONOMIC DEVELOPMENT OF SLOVAKIA[1]

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Introduction

Slovakia is characterised not only by differences between urban and rural areas but also by spatial dichotomy between the west and east, as well as the centre and periphery of the country. These differences sometimes exceed the acceptable limits and call for an efficient regional policy based on a widely elaborated theoretical knowledge of causes, manifestations and possible ways to reduce the unwanted level of spatial differentiation. In principle, there are two kinds of theoretical conceptions of regional development: those based on the conviction that regional disparities diminish under the effect of development (convergent conceptions based on the theory of regional balance) and those that lean on the assumption that regional disparities increase under the effect of development – divergent conception or the theory of regional imbalance.

Approaches to the (regional) economic development of Slovakia in this study are reviewed from the point of view of the National Strategic Reference Framework 2007–2013 (hereafter NSRF, website of the Ministry of Construction and Regional Development of the SR www.build.gov.sk). However, only some key points of this material are analysed and scrutinized in the light of theoretical conceptions concerning the regional development.

It is necessary to bear in mind that a kind of eclectic period in regional policy where several theoretical conceptions meet, is talked about. Eclectic period is the product of a distinct opinion plurality concerning the issue of regional development. This plurality of opinion though has one common denominator: that conceptions as a rule agree in emphasizing the importance of human initiative and human resources for the regional development and its stimulation. Support to the opening of small and medium firms, support to dissemination of technical innovations, decentralizing measures in public administration, support to local initiatives, deregulating measures, networking of actors at the regional manufacturing or consumer markets, programmes caring after foreign investors (*Blažek–Uhlíř*, 2002) are the currently preferred. The NSFR is also evaluated in an electing way.

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Economic performance and competitiveness of localities and regions

One of the strategic aims of the economic and social development of the SR until 2013 is a distinct increase of competitiveness and performance of regions and consequently the Slovak economy with the due respect to sustainability. Let me reflect upon the term *regional competitiveness* that (just like the term sustainable development) is according to theoreticians of regional development one of the least definite ones (see for instance Kitson et al 2004). Likewise, representation of the *regional economic performance* by the GDP per inhabitant is also generally considered outdated and it is normally replaced by other appropriate measures. On the other side, in an effort to capture and express the socio-economic situation in a more comprehensive manner, other synthesising indicators, which contain along with the indispensable economic dimension also a social dimension and/or environmental dimension (for instance, the human development index) are searched.

With regard to regional development of Slovakia and identification of regional disparities in economic performance one thing has to be mentioned. The question how to delimit suitable regional units that would represent functional relationships in space is a problematic one not only in Slovakia but also in many other European states. Analyses focused on identification of regional disparities in Slovakia are as rule linked to the region, which is the product of the territorial/administrative division. Bezák (2001) believes that the territorial/administrative units cannot take over the function of spatial or regional units because instead of scientific criteria according to which the territorial/administrative division is made, other unscientific (mainly political) reasons are respected. Based on his analysis, he reports that "*as far as the number of administrative regions, selection of their centres and outlining of regional boundaries are concerned, there are serious disproportions between the present regional structure and the new territorial/administrative division of Slovakia*". Although one can agree with this assertion, the practical life has shown, that the regional statistics bound to administrative units quite distinctly determine the regional analysis. Study of literature and official governmental documents lead to the conclusion that in spite of its rationale the problem pointed at by Bezák is being overlooked at all levels. It also is the reason why the position of administrative region Bratislava is erroneously emphasized. This position is the result of incorrect collection of statistical data and of its spatial delimitation and consequently incompatibility with other spatial units of the NUTS III level. Unfortunately, the issue of forming functional regions to which also the regional statistics would be naturally bound remains unsolved.

Economic performance can be explored from many aspects while the use of selected indicators leads to different results. Categories like wages, growth of wages, GDP or its growth, number of employees, growth of employment, number of un-

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employed, unemployment rate or its development, etc. are used as indicators which in synthesised form represent the interaction of the determinants of local and regional competitiveness. Each of selected indicators is more or less spatially differentiated. The fundamental question for the basic research and the decision-making sphere at varied hierarchic levels is why the localities (above all those of urban type) and regions differ in their economic performance. Why one region or locality, now seen as a significant source of external effects, is more successful than the other.

The basic elements of the regional competitive advantage are: production capital (high-performing production of regional economy), human capital (quality and qualifications of labour forces), socio-institutional capital (the extent, depth and orientation of social networks and institutional forms), cultural capital (range and quality of cultural opportunities and assets), infrastructural capital (scale and quality of public infrastructure) and the capital inherent to society's knowledge and creativity in interaction with the aim to increase the regional productivity and living standard (*Kitson* et al. 2004).

Economic performance is connected with productivity, which as many authors believe, decisively controls the living standard of population in towns and regions. Materials forming the contemporary regional policy in Great Britain report that as much as about 60% of differences existing in regional GDP values per inhabitant are due to differences in productivity. Five "drivers" of productivity were identified: skills, investment, innovation, enterprise and competition. Authors of materials among which representatives of economic sciences dominate, believe that the improvement of regional economic performance requires work with these five "drivers". This approach is absolutely new in the regional policy of Great Britain and the geographic community has subjected it to certain revision (*Fothergill*, 2005). Total ignoring of physical environment, which undoubtedly influences location of production activities and concentration of population, has been subject of most criticisms. (The NSFR does not mention the factor of physical-geographical differentiation of Slovakia in connection with the economic performance and competitiveness in regions in spite its evident impact relevance).

A distinctly increased interest in study of regions (subregions or localities) and their competitive advantages is now observed due to formation of higher territorial units and establishment of regional (local) self-governments in Slovakia. Improved competitiveness of less developed regions in official materials of the European Commission seems to be the indispensable condition of social cohesion. Various ratings of spatial units based on selected indicators of economic performance are prepared. Spatial units are compared and subsequently their order is compiled. The order serves to identification of absolute and relative positions of spatial units in the framework of a higher hierarchic system. Each spatial unit in an effort to attract people and capital amidst strong competitive environment is striving to be included

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among "winners". But the number of "losers" is always higher as number of "winners". Attractive investments, which ensure new jobs, economic growth, prosperity and increased living standard of local and regional populations, are only going to a small number of localities attractive for potential migrants. It is a paradox that no univocal opinion concerning interpretation and measurement of the concept "regional competitiveness" exists at the theoretical level and in studies involved with the basic research. It is generally considered as a complex and questionable term.

Science parks as tools for improvement of regional competitiveness (?)

The aim **„***to increase considerably the competitiveness and performance of Slovak economy by the year 2013 while paying respect to sustainable development"* will be pursued by means of three strategic priorities: 1) Infrastructure and regional accessibility, 2) Innovation, informatization and knowledge society, 3) Human resources and education. The strategic priority "innovation, informatization and knowledge economy" includes at least two specific priorities and three operational priorities (2.1 Support to competitiveness of firms and services by innovations, 2.1.1 Innovation and technology transfers, 2.1.2 Support to common services for entrepreneurs, and 2.3 Research and development, 2.3.3 Support of cooperation between R&D institutions and business sphere and knowledge or technology transfer into practice) where support to science parks as tool for reaching the objectives of economic and social development of the SR is both explicitly or implicitly mentioned.

The concept of science parks (SP) appeared for the first time by the end of the 1950s in the USA. The principal argument for their establishing was to fulfill aspirations of economically thinking academic workers who were aware of the commercial potential both of developed technologies and research results. The proximity of universities as the natural sources of inventve thinking and concentration of highly quialified labour was one of the decisive location factors in estabilishment of the SPs (*Vedovello,* 1997).

Terminological heterogeneity in denoting the investigated phenomenon on the one side and the idea what SP represents (see for instance Lazzeroni 1995, or Storey, Tether 1998) on the other in individual studies is evident at the first glance. Shearmur a Doloreux (2000) point to the problem of defining the SP saying that definition of SP is rather unclear as in its description various terms are used: research and technological parks, technopoles (term used in Francophone area) and technopolis (term used for instance in Japan). As no universal definition of SP ex-

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ists, the use of different terms for spatial concentration of producers of high-technology products and services in parks and provision of opportunities for institutional cooperation between universities and industry is only natural.

From the 1950s until now, the meaning and tasks of SP has been changing. While at the beginning until about the 1980s, the priority of SPs was revaluating of scientific research and support to transfer of research achievements to industries, the SPs of today are tools (or they should be) of local and regional economic development supporting innovation and the subsequent increase in competitiveness of companies and regions.

As Massey et al. 1992 assert (see *Shearmur–Doloreux,* 2000), objectives of SPs can be classified into three main groups: as) objectives associated with economic development b) objectives associated with transfer of technologies, and c) objectives associated with local (*or regional*) benefits (*Table 1*).

It is generally known, that SPs provide or should provide numerous advantages and supporting services tailored for smooth functioning of above all small independent technology-based firms. Their presence in SP is desirable so that the park administrators strive for offering them attractive conditions.

However, it seems that in some cases the scope and quality of services provided are not necessarily decisive for the location or relocation decisions of firms. Results of empirical research prove it. For instance, Westhead and Batstone (1998) studied the perception of positives in independent technology-based firms that were supposed to emerge as results of their location in SP. The conclusion was that the decision to locate the firm in a SP was determined above all by the generally adopted image of high prestige ascribed to such location as a result of shrewd and purposeful promotion of parks in entrepreneur circles. Shearmur and Doloreux (2000) even report that numerous new and small technology-based firms that lacked complete information for an economically rational location decision and wanted to seat in a SP were even prepared to pay a surplus to the rent, in order to improve their technological and commercial reputation.

The reason is that this "improvement" was perceived as automatic with mere location of the firm in such park. Both authors are convinced (like Lazzeroni 1995) that the "local SP" often becomes a showcase for the regional economic development while promotion and financial support to the park by the local institutions is again the reflection of an effort to create a favourable image of the particular commune in the eyes of a potential investors. Location of the firm in such "local SP" is definitely the question of prestige. It is the reason why Shearmur a Doloreux believe that SPs can easily become glorified parks, which attract firms simply because they are sites of prestige properties.

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Table 1

Objectives of SPs

Economic development
– Stimulate the formation of start-up new-technology-based firms (NTBFs)
– Encourage the growth of existing NTBFs
– Commercialise academic research
– Foster the technologies of the future
– Counter the regional imbalance of R&D capability, investment, innovation
– Attract inward investment, mobile R&D
Transfer of technology
– Encourage spin-off started by academics
– Encourage and facilitate links between higher education institutes and industry
– Facilitate technology transfer from academic institution to firms on park
– Increase the "relevance" to industry of the research and higher education institutes
– Give academic institutions access to leading-edge commercial R&D
– Increase the appreciation of industry's needs by academics
– Stimulate science-based technological innovation
Local benefits
– Create employment and consultancy opportunities for academic staff and students
– Create synergy between firms
– Create new jobs for the region
– Improve the performance of the local economy
– Stimulate a shift in perceptions
– Build confidence
– Engender an entrepreneurial culture
– Generate income for academic institutions
– Improve the image of academic institutions in the eyes of central government

Source: Shearmur, Doloreux, 2000, p. 1067 (adapted from Massey et al. 1992).

Those who doubt about the real impact of SP on generation of synergy effects between the scientific institutions and industrial firms and on their effect on local (regional) development lean on several empirical studies. For instance, Bakouros et al. (2002) analysed operation of three SPs in economically less developed Greece through relationships between universities and industry. Authors wanted to find out whether the widely used term "high-tech fantasies" is also adequate for the Greek SPs. *(the term "high-tech fantasies" is associated with the study of British geographers led by D. Massey who pointed to the limited possibilities of SPs in support the technology transfer and creation of important synergy effect among firms located in parks and also between firms and academic centres (universities))*. The

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questionnaire survey revealed that the relationships between firms and local universities are above all informal (personal contacts, access to specialized literature, to equipment, to results reached in research, attendance to seminars, conferences and training programs). More developed formal relations (common research or contracts, agreements about consultations, analysis and testing in academic centres) have been successfully established only in one park while in other two parks formal relations have been only introduced. It is interesting that the synergy among companies in individual parks is in form of commercial transaction or social links while research discovered the total absence of scientific/research links in the three parks confirming the assumptions of British geographers.

Absence of links does not have to be necessarily a general one. For instance, the research of companies located in the Western Australian Technology Park carried out by Phillimore (1999) confirms it. It is remarkable that in spite of quoting the studies pointing to unused opportunities of cooperation, he obtained (while he also pinpointed qualitative and quantitative reserves in networking companies and scientific institutions) quite different results from those of Bakouros et al. (2002).

What kind of SP should be established in Slovakia? The survey of literature concerned with different specific forms and operations of SPs shows that no universal model of park capable to fulfil the established objectives exists just like there are no universal predictions of its impact on formation and improvement of regional (local) structure and labour market or on establishment and increase of competitiveness and prosperity of industrial companies. It seems that the specific success depends on the concrete environment, rate of engagement of people concerned with high business sensibility and the particular time. It is supposed that taking into account the specific features of Slovakia, the most rational environment for the establishment of a SP is the agglomeration of Bratislava with its scientific/research base appropriate for copying the British and American models where the principal initiative is that of universities cooperating with the business sphere and local and regional self-governments.

Conclusion

The detailed analysis of NSRF inevitably leads to the conviction that the ambition of the SR is to realize the "*high road*" developmental strategy in close future, aim of which is the competitiveness based on high rate of innovation, cooperation, developed networks and the supporting institutions. It is the strategy typical for the highly developed states; the SR does not belong to as yet. On the other side, there also exists the "*low road*" developmental strategy leaning on comparative advantages in form of competitive prices, low wages and standard employment. This strategy is typical for less and moderately developed states. The past economic and

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social development of the SR suggests that precisely this type of strategy may dominate in Slovakia in the nearest future in spite of declared ambitions to change from the "*low-road*" to "*high-road*". Such a change is, after Paulov (1999), a highly demanding matter requiring long-term concentrated and consistent efforts.

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