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Innovation Policy as a New Development Driver of the Regions in Slovakia: Does Activity of Regional Self-government Matter?

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Abstract: Fundamental changes that occurred in Central and Eastern Europe (including Slovakia) in recent two decades have caused that regional policy as well as regional development has become one of the hottest national policy issues. If one connects this issue with the existence of regional disparities, there is no surprise that also the EU considers this topic an extra important one. Various scholars point out that innovation policy is the right path how to achieve sustainable regional development and how to improve competitiveness of less developed regions. This article is aimed particularly at the innovation policies of the Slovak self-government regions and their outcomes.
Keywords: *Slovakia, regional development, innovation policy, self-government regions.*

Introduction

Socio-economic changes brought about by recent developments in Eastern and Central Europe brought `new` topics or political and expert discussions like regional policy and regional development. Contents of such discussions, in addition to the decreasing of regional disparities, are also various approaches to the position and roles of various actors of this policy. A specific role is played by innovation policy, which became not only a `fashion trend` among developing concepts, but also internationally accepted policy that is implemented at various levels.

This article is aimed particularly at the innovation policies of the Slovak self-government regions and their performances. We would like to show that activities of the regional self-governments are not so important in terms of performance of the regional innovation policies. We provide a comparative analysis and use a few methods in order to develop our arguments. The article was completed in the first half of 2013. For the research purposes, we mainly utilized evaluation of relevant secondary data, and content analysis of relevant legal documents. However, part of the analysed data was reached through the interviews.

Differences in understanding and implementation of innovation policies on regional level in Slovakia

Since 1989, Slovakia has undergone many important changes. The first group of changes was purely political in nature, the second group was devoted to economic issues and the third one is concerned mainly with public administration and its reorganization (Nižňanský, 2002:9-10). In connection with the development of regional policy it is important to note the changes in all three groups, because the political, economic, as well as administrative changes introduced in terms of Slovakia had and still have a significant impact on regional development policies and their quantitative and qualitative characteristics (Klimovský, 2008: 56).

Establishment of regional self-government in Slovakia and beginnings of its functioning

In November 2000, the European Commission in its evaluation report criticized the Slovak Government for slow pace in adopting the legislation needed in implementation processes of public administration reform (Kling and Nižňanský, 2002). In this climate, the government acceded to the approval of modifications related

to the establishment of regional self-governing units and, as stated by Nižňanský (2005), in April 2001 approved bill proposals that anticipated establishing twelve regional self-governing units and twelve units of parallel state administration. Aside from the above mentioned, these proposals were on the upcoming parliamentary sessions repeatedly amended and on 4 July 2001 the Parliament passed crucial laws. The approved laws established an 8+8 model on the regional level – i. e. eight regional self-governing units and eight units of state administration (counties).

Regarding the transfer of powers, competences in the field of roads and railways maintaining, road transport, civil protection, social assistance, urban planning, education, theater activities, edifi-cation activities, libraries, health care, human pharmaceuticals, tourism and regional development were transferred to self-government regions. In the field of regional development the bodies of self-government regions:

- realize strategies of regional development;
- coordinate tasks related to ensuring economic and social development of the area;
- coordinate fulfillment of development conceptions of particular self-government region;
- provide materials, data, analyses and reports for state administration bodies and municipalities.

Concerning the further development, the Slovak Government in accordance with its own program statement took several important steps in 2003. Already in February 2003 the Government adopted Proposal for Further Progress of Decentralization of Public Administration (Kling and Pilát, 2003:199). Based on this document, the Government decided to carry out a large reduction of state administration.

As for regional autonomy, self-government regions we-re supposed to become the leading actors of development at regional level (Klimovský, 2006). Unfortunately, due to the cumbersome organization of rele-vant organizational units, lack of experience and inability to quickly develop and implement quality strategic documents related to their own development, they forfeited themselves from the opportunity to take the described position at that time. Part of the blame falls in this case also on the Ministry of Construction and Regional Development of the Slovak Republic, which prepared and published methodological guides for the development of programs of economic and social development of municipalities and self-governing regions as late as 2004 (Kling, 2004:580). However, regional self-government councils adopted their own programs of economic and social development in most cases in 2002 (Banská Bystrica Self-government region – BB and Košice Self-government Region – KE) or 2003 (Prešov Self-government Region – PO, Trenčín Self-Government Region – TN and Žilina Self-government Region – ZI). Councils of Trnava Self-government Region – TT and Nitra Self-government Region – NI had prepared drafts of these programs in 2003. At the same time, the Bratislava Self-government Region – BA council adopted its own development strategy.

Very important reform measure in this period was the implementation

of fiscal decentralization. Fiscal decentralization was not, however, implemented at the same time as the devolution and delegation of powers that had taken place during the term of office of the previous Government. And this state caused several problems. In particular, the self-government regions and their bodies were in a difficult situation and to a very large extent were dependent on the state budget (Palúš, 2004). For instance the self-government regions had only about six per cent of their total expenditures covered by own revenues in 2003 (Pilát and Valentovič, 2004:276).

A few important documents were adopted in this period, for instance the National Strategic Reference Framework 2007-2013, the Integrated Plan of Regional and Social Development of Slovakia, the National Regional Development Plan of the Slovak Republic and the National Development Plan of Slovak Republic. These documents were supposed to contribute to long-term economic and social development of the Slovak regions (Gáková and Sirák, 2006:470).

Selected context of regional policy after the year 2006

The Government 2006-2010 did not continue in important reforms as the previous Government, but nevertheless, in relation to the institutional framework of regional policy of Slovakia it prepared several important laws, such as Law on Investment Aid and Law on Support of Regional Development. From the view of conceptual actions of the Government, a document entitled Innovation Strategy of the Slovak Republic for the years 2007 to 2013 was approved. It states, that Slovakia is in terms of its innovativeness an underdeveloped economy (Table 1), and therefore it is important to develop a national innovation system, which would include regional innovation struc-tures. The regional innovation structures (incubators, innovation centers, schemes, counseling centers and other elements) should form the basic structure aimed at sustainable knowledge based development of Slovakia.

The Government was also able to approve particular operational programs and their planned drawing was as shown in the Table 2.

Even despite the fact that Slovakia lacks an official cluster policy, the 2007-2010 period can be considered as a boom of clusters in Slovakia. The first cluster was officially established in 2004, but 13 other cluster initiatives were launched in the above mentioned period. According to the Innovation Strategy of Slovak Republic for the years 2007-2013 clusters are considered to be a tool that aims at sustainable development, increasing competitiveness and innovation potential of the involved entities. Some of the currently existing clusters joined in the Cluster Union of Slovakia in 2010. This organization should represent the interests of clusters and should also serve as an intermediary in the exchange of experience and knowledge.

Development after 2010 was affected by political tensions and the effects of global financial crisis. Neither the Government that was in the office from 2010-2012 nor the present Government came (so far) with any major change in the field regional policy.

Table 1. Evaluation of innovativeness of the Slovak economy according to the Innovation Strategy of the Slovak Republic for the period of 2007-2013

Weaknesses	**Strengths**
• Absence of a strategic policy for innovation support. • Prevailing low emphasis on applied research. • Low number of explicit innovation tools in comparison to EU countries. • Lack of pro-active and system tools in innovation policy. • Lack of support tools to stimulate innovation. • Low and decreasing share of research and development expenditures on GDP. • Insufficiently developed system of science and technology financing. • Non-existent strong relationship between research and education system and business sector, resulting in an extremely low level of private investment in research and development. • Prevailing low mobility of research and development personnel. **Low innovativeness of companies and low private investment in research and development**	• Relatively educated and qualified labor force representing potential for innovation - its creation and broader utilization. • The prevailing trend of broader implementation of ICT in all areas of life. • Long-term intensive international cooperation in the field of research and development. • Existence of a central coordination body for the development of knowledge based society. **Educated and qualified labor force representing potential for innovation**
Threats	**Opportunities**
• State support system will not be attractive for private sector. • Particular incentives will not support active investment in innovation. • A national innovation strategy and regional innovations strategies will not be developed. • Low utilization of state and public (university) research and development results by the private sector in practice. • Insufficient quality of educational level of human resources participating on innovation development. **Unstable economic growth and behind the EU lagging living standards**	• Motivation oriented system of innovation support from public resources. • Development of life-long learning education of human resources. • Increased share of public expenditures of GDP allocated to support of innovation. • Highly active market oriented cooperation of R&D and private sector. • Unified approach to and implementation of third generation innovation. • Using international cooperation, experience exchange and know-how in the field of innovation and support tools in stimulating innovation. **Sustainable economic growth through the third generation innovation**

Source: Innovation Strategy of the Slovak Republic for the years of 2007-2013.

Table 2. Operational programs of the National Strategic Reference Framework for the period of 2007-2013

Operational program	Financing fund	Contribution of European Communities (EUR)	Approval	Monitoring Committee meeting
Infrastructure	ERDF CF	877,409,097 2,329,495,498	13 Sep 2007	22 Jan 2008
Society informatization	ERDF	993,095,405	17 Sep 2007	21 Jan 2008
Technical support	ERDF	97,601,421	24 Sep 2007	17 Dec 2007
Regional operational program	ERDF	1,445,000,000	24 Sep 2007	5 Dec 2007
Employment and social inclusion	ESF	881,801,578	26 Oct 2007	28 Nov 2007
Education	ESF	617,801,578	7 Nov 2007	14 Nov 2007
Environment	ERDF CF	230,756,935 1,569,243,065	8 Nov 2007	19 Dec 2007
Health service	ERDF	250,000,000	8 Nov 2007	28 Jan 2008
Research and development	ERDF	1,209,415,373	28 Nov 2007	28 Jan 2008
Competitiveness and economic growth	ERDF	772,000,000	28 Nov 2007	21 Jan 2008
Bratislava region	ERDF	87,000,000	3 Dec 2007	21 Feb 2008
Total	ERDF+ESF+CF	11,360,619,950		

Legend: ERDF – European Regional Development Fund, ESF – European Social Fund, CF – Cohesion Fund.
Source: Report on the preparedness of the Slovak Republic on drawing of structural funds and Cohesion fund for the programming period of 2007-2013: 2.

Regional disparities in Slovakia and their reasons

As mentioned earlier, the Slovak regions represented by their own self-governing units were constructed in a way that highlighted the existing differences and socio-economic disparities (Buček, 2002). Although Slovakia is in the context of the EU a relatively small country, it shows high inter-regional differences (Table 3). This is related to the fact that the territory of Slovakia was until 1993 (except for a short period during World War II) a part of a larger state entity. As a result, this area was never regarded as an integral unit and the regional structure has not been developed in terms of its priority interests (Kling, 2002a:116-117). In the Slovak regions, particularly in the period after World War II, only industrial activities with a very low rate of completion and low added value were introduced. Complex geomorphological conditions (Lukniš, 1985) also contributed to the fact that socialist industrialization with the aim of rapid job creation in regions has created single-sector and single-structure regions fully dependent on production of implanted enterprises (regions often depended on a single major industrial company with low adaptive potential). Thus, after the collapse of the bearing industrial companies after the year 1989 these regions encountered serious economic

and social problems (Kling, 2002b:175), which, in various permutations, persist to the presence (Halás, 2008).

The key indicator for measuring regional disparities is regional gross domestic product (Table 3 and Table 4). While according to the indicator of regional gross domestic product

Table 3. Basic differences between regions (NUTS 3) in Slovakia

NUTS 3	Area (km²)	Population	Population density	Number of municipalities		Urbanization scale (%)
				Total	Towns	
BA	2,053	616,578	300.4	73	7	82.30
TT	4,147	559,934	135.0	251	16	48.57
TN	4,502	599,859	133.2	276	18	56.80
NI	6,344	706,375	111.3	354	15	46.80
ZI	6,809	696,347	102.3	315	18	50.30
BB	9,454	653,697	69.1	516	24	53.47
PO	8,974	803,955	89.6	666	23	49.25
KE	6,755	775,509	114.8	440	17	55.72
Slovakia	**49,037**	**5,412,254**	**110.4**	**2,891**	**138**	**55.03**

Source: Statistical Office of the Slovak Republic.

Table 4. Differences between regions in terms of regional GDP

NUTS3	NUTS2	Regional GDP (2007)	
		mil EUR	%
BA	Bratislava (25,875.113 mil EUR)	25,875.113	28.03
TT	Western Slovakia (29,968.691 mil. EUR)	10,640.667	11.52
TN		9,036.328	9.78
NI		10,291.696	11.14
ZI	Middle Slovakia (18,355.822 mil. EUR)	10,271.933	11.12
BB		8,083.888	8.75
PO	Eastern Slovakia (18,158.841 mil EUR)	7,869.032	8.52
KE		10,289.809	11.14
Slovakia		**92,358.467**	**100.00**

Source: Statistical Office of the Slovak Republic.

Table 5. Differences between regions in terms of regional GDP per capita

NUTS 3	GDP per capita				
	1997	2001	Index 2001/1997	2009	Index 2001/2009
BA	7,524	9,839	1.31	25,875	2.63
TT	3,733	4,331	1.16	10,641	2.46
TN	3,199	3,986	1.25	9,036	2.26
NI	2,943	3,628	1.23	10,292	2.84
ZI	2,846	3,511	1.23	10,272	2.93
BB	2,891	3,624	1.25	8,084	2.23
PO	2,203	2,601	1.18	7,869	3.03
KE	3,087	3,991	1.29	10,290	2.58
Slovakia	**3,474**	**4,316**	**1.24**	**11,545**	**2.67**

Source: Statistical Office of the Slovak Republic.

per capita the Bratislava region (unit at NUTS II) shows in long-term values above the EU average (the performance in this field is at nearly 148 per cent of EU average), the performance of the other Slovak regions in this indicator is only 40 to 50 per cent of the average performance of the EU regions. The most underdeveloped in this respect (at NUTS II) is the region of Eastern Slovakia (Valentovič, 2008:448) involving the Košice and Prešov regions, whose performance is around 43 per cent of the EU average, closely followed by the region of Central Slovakia, which includes Banská Bystrica and Žilina regions, whose performance is at less than 47 per cent of the EU average (Slovakia reaches 60.6 per cent of the EU average).

Obviously, taken into account the states of individual regions, we can clearly identify an existence of intra-regional disparities, which have also its dynamics (Rajčáková and Švecová, 2010). Economic transformation and the independence of Slovakia brought in the last 30-year run a high development dynamics in the Bratislava region and the Považie region (North-Western part of the Slovak territory), and on the other hand, highlighted the economic stagnation in the southeastern and North-Eastern parts of the territory of Slovakia (Baláž, 2004; Bezák, 1990; Buchta, 2003; Falťan and Pašiak, 2004; Gajdoš and Pašiak, 2006; Gajdoš and Pašiak, 2008; Gajdoš, Moravanská and Falťan, 2009; Hauliková and Benč, 2001; Kling, 2003; Korec, 2004, 2005; Krivý, 1997; Matlovič, Klamár and Matlovičová, 2008; Matlovič and Matlovičová, 2005, 2008; Želinský, 2010a, 2010b).

Slovak regions according to the Regional Innovation Scoreboard (2012)

In the evaluation of regional innovation policy and its perfor-mance we can reach for many existing sources. One of the most respected is the Regional Innovation Scoreboard, which, however, monitors innovation policy, its assumptions and performance on the NUTS II level.

The Slovak regions (in this case we refer to regions at NUTS II regions, namely Bratislava, Western Slovakia, Central Slovakia and Eastern Slovakia) are except of the Bratislava region among the least developed EU regions. This not only confirms the importance of paying attention to regional disparities, but also to regional innovation policy, which could lead to their gradual reduction and also to increasing of competitiveness of the whole country.

Bratislava region belongs from this perspective among the significantly more developed regions, as it benefits not only from the fact that it is the administrative and political, economic and socio-cultural center of the country, but also from the fact that it has a relatively good position, which creates a kind of imaginary synergetic effect. The region of Central Slovakia shows better results in the facilitation elements. In all other monitored indicators dominates the Bratislava region.

As the aim of this study is to map the conditions and performance of innovation policy in the Slovak regions at the NUTS III level, the attention of

the following section will be devoted precisely to the mentioned mapping and its results.

Method

Before we proceed to the results of the mapping of assumptions and performance of innovation policy in the Slovak regions, it is necessary to pay attention to the used method.

Determination of comparative indicators and their groups

In search of an appropriate structure of comparison groups of indicators it was important to become familiar with the existing studies that are devoted to this issue, yet it was also important to take into account that many necessary data are either not available at all or are only available for significantly earlier period.

As for the studies that served as an inspiration and guidance material for the selection of the appropriate indicators, the most important were: Hollanders, Loschky and Tarantola, (2009), Hollanders, Rivera Léon and Roman, (2012), and the Monitoring the Competitiveness of Regions in the Slovak Republic, which was elaborated by Morvay and Marušinec (2009). Alongside these materials were, of course, also other sources used, such as the Šebová and Džupka (2013), Vaňová (2006), M.E.S.A.10 (2007) project `Benchmarking of Cities` and its outputs, project of the Communal Research and Consulting Centre (2008) called `Benchmarking of Cities` and a joint project of the Union of Slovak Towns and M.E.S.A.10 (2013) named `Benchmarking of Cities 2011-2012`. In addition, in the selection of appropriate indicators were also various expert and scientific works taken into account, for example Aralica et al. (2008), Bavec (2009), Bezák (2001), Bojnec and Fertő (2011), Cooke (2001), Cooke (2007), Edquist (1997), Hippel (1998), Hollanders (2009), Hollanders et al. (2009), Hollanders and Esser (2007), Hollanders and Van Cruysen (2008), Hudec (2007), Lundvall (1992), Maskell and Malmberg (1999), Nelson (1993), Pandiloska-Jurak and Pinterič (2010), Pinterič (2010), Porter (2003), Tödling and Triple (2005), and Vaňová and Petrovičová (2009).

Four groups of indicators were identified. The first of the identified groups consists of indicators of major macro-economic characteristics (Table 6). In essence, the group reflects the use of preconditions for the development of innovative policies of the particular region in respect of wider socio-economic development. The variables are defined as the ratio of regional indicator to the Slovak average.

The second of the identified groups of indicators includes indicators on education, science and research (Table 7). They were chosen to reflect the conditions for the development of innovative policies in respect of wider socio-economic development, and the preconditions that affect the creation of knowledge, which is the driving force of any innovation policy.

The third group of the identified indicators is comprised of indicators related to business and support environment (Table 8). It expresses

the evaluation of the preconditions for the development of innovative policy of particular region and indicators of innovation performance.

Data for indicators involved in these three groups were obtained mainly through the database of the Statistical Office of the Slovak Republic (especially the RegDat database) and the Central Office of Labor, Social Affairs and Family of the Slovak Republic.

The fourth group of indicators is related to the elaboration of innovation policies from the view of actors' integration and tools utilization intensity (Table 9). This is a set of preconditions characterizing the

Table 6. Indicators of the group „Macro-characteristics"

Indicator name	Expression (calculation) as a ration of two values	Rationale for use
GDP per capita	GDP per capita in region to GDP per capita in Slovakia	Capturing regional economic growth
State of the educational level	Share of university educated employees in regions to average national number of university educated employees	Capturing the actual usage of labor force with higher education
Employment	Number of employed people in region to total number of economically active population with residence in the region	Capturing the attractiveness of a region from the view of employees.
Unemployment	National unemployment rate to regional unemployment rate (the ratio of regional/nationwide is reversed, because the higher the unemployment rate, the worse the outcome)	Capturing the problems with finding vacant job opportunities.
Average wage	Regional average gross wage to average gross wage in Slovakia	Capturing one of the dimensions of regional attractiveness from the view of potential investors
Average wage change	Change of regional gross average wage to change of average gross wage in Slovakia	Capturing one of the dimensions of regional attractiveness from the view of potential investors
Added value per employee	Regional added value per employee to average added value per employee in Slovakia	Capturing one of the dimensions of regional attractiveness from the view of potential investors
Added value change	Change in regional added value to change in added value in Slovakia	Capturing one of the dimensions of regional attractiveness from the view of potential investors
Household computer and the Internet accessibility	The proportion of households with a computer connected to the internet in the region to the share of households with a computer connected to the internet in Slovakia	Capturing the possibility of the Internet connection utilization
Transport infrastructure	The share of kilometers of highways and I. class roads in the regions to the share of kilometers of highways and I. class roads in Slovakia	Capturing the state of the existing road network, which significantly affects the mobility of labor

Table 7. Indicators of the group „Education, research and development“

Indicator name	Expression (calculation) as a ration of two values	Rationale for use
Quality of the secondary school education	The proportion of high school graduates entering university education to the national average high school graduates entering university education	Capturing the attractiveness of higher education from the view of high school students
First and second stage university education	Number of university students accounted for 1,000 people in the region to the number of university students accounted for 1,000 people in Slovakia	Capturing the scale of tertiary education
Graduates perspective	The proportion of colleges located in the region with the highest interests of employers of their graduates in ARRA (Academic Ranking and Rating Agency) ranking of top 20 colleges of interest to the average number of such colleges in Slovakia (Slovakia = 2.5)	Capturing the quality of higher education from the perspective of potential employers
Research and development expenditures	Expenditure on R & D in the region to the nationwide average expenditure on R & D in regions of Slovakia	Capturing the support for knowledge creation
Ability to obtain EU funds	The volume of grants (in EUR) obtained through the Operational Program Research and Development by universities in the region to the average volume of grants (in EUR) obtained through the Operational Program Research and Development by universities in regions of Slovakia	Capturing skills of university institutions to obtain resources for their own research and development activities
Research and development capacity	The share of researchers on total regional population to the share of researchers on total population of Slovakia	Capturing the research capacity in the region
Quality of university institutions	The share of faculties rated 50.0+ according to ARRA ranking in the region to the share of faculties rated 50.0+ according to ARRA ranking in Slovakia	Capturing quality of university research and education capacity in the regions
Quality of university research and development	The share of publications and citations in WoS attributable to the region to the average share of publications and citations in WoS attributable to regions in Slovakia	Capturing the quality of research capacity in regions

development of innovative policies from two selected views.

The data for these indicators were obtained through the structured interview method. Members of the research team conducted interviews with representatives of departments or other organizational units at the self-governing regions, which are responsible for strategic planning and analysis of prognostic character. Values are on a scale from one to five based on expert estimates according to data collected through the interviews.

Indicators are in general expressed to assign a more favorable position to regions showing higher values for the monitored indicators, where the position is viewed in terms of preconditions or performance of innovation policy of particular regions.

Table 8. Indicators of the group „Business and support environment“

Indicator name	Expression (calculation) as a ration of two values	Rationale for use
Regional self-government economics	Regional income to regional costs	Capturing the ability to create own resources for possible support of innovation
Regional self-government expenditure volume in transportation	The share of the volume of regional government spending on transportation to the regional average expenditure on transport in Slovakia	Capturing the rate of activity of support institutions in the field of transport
Regional self-government expenditure volume in education	The share of the volume of regional government spending on education to the regional average expenditure on education in Slovakia	Capturing the rate of activity of support institutions in the field of education
Tertiary sector	The share of businesses operating in the tertiary sector in the region to share of business entities operating in the tertiary sector in Slovakia	Capturing the scale of tertiary sector
Quaternary sector	The share of businesses operating in quaternary sector in the region to share of business entities operating in the quaternary sector in Slovakia	Capturing the scale of quaternary sector
Micro-enterprise sector	The share of businesses employing up to 19 people (excluding self-employed) in the region to the average share of businesses employing up to 19 people in Slovakia	Capturing the scale of micro-enterprise sector
SME sector	The share of employees in SME (20 to 249 employees) in the region to the average share of employees in SME in Slovakia	Capturing the scale of SME sector
Labor costs	The average total labor costs per employee in the region to the average total labor costs per employee in Slovakia	Capturing one of the dimensions of regional attractiveness from the view of potential investors
Employee quality – labor productivity	Regional GDP/number of employees to national GDP/number of employees in Slovakia	Capturing one of the dimensions of regional attractiveness from the view of potential investors
Foreign support	Foreign direct investment into the region to the average volume of foreign direct investments in regions Slovakia	Capturing regional attractiveness from the view of existing foreign investors

Table 9. Indicators of the group „Innovation policy creation from the view of actors integration and tools utilization intensity“

Indicator name	Expression (calculation)	Rationale for use
Initiation phase	Qualitative scale from 1 to 5 (1 = very low; 5 = very high)	Capturing the potential involvement of actors by regional self-government in the identification of problems
Formulation phase	Qualitative scale from 1 to 5 (1 = very low; 5 = very high)	Capturing the potential involvement of actors by regional self-government in the formulation of possible solutions to identified problems
Selection phase	Qualitative scale from 1 to 5 (1 = very low; 5 = very high)	Capturing the potential involvement of actors by regional self-government in the selection of actual solutions to identified problems
Implementation phase	Qualitative scale from 1 to 5 (1 = very low; 5 = very high)	Capturing the potential involvement of actors by regional self-government in the implementation of selected solutions to identified problems
Evaluation phase	Qualitative scale from 1 to 5 (1 = very low; 5 = very high)	Capturing the potential involvement of actors by regional self-government in the evaluation of implemented solutions and their impacts
Forecasting and planning tools	Qualitative scale from 1 to 5 (1 = very low; 5 = very high)	Capturing the variety and intensity of tools utilization by regional self-government in the field of forecasting and planning
Economic tools	Qualitative scale from 1 to 5 (1 = very low; 5 = very high)	Capturing the variety and intensity of tools utilization by regional self-government in the field of economy
Legislative tools	Qualitative scale from 1 to 5 (1 = very low; 5 = very high)	Capturing the variety and intensity of tools utilization by regional self-government in the legislative field
Information tools	Qualitative scale from 1 to 5 (1 = very low; 5 = very high)	Capturing the variety and intensity of tools utilization by regional self-government in the field of informing
Organizational and administrative tools	Qualitative scale from 1 to 5 (1 = very low; 5 = very high)	Capturing the variety and intensity of tools utilization by regional self-government in the organizational and administrative fields

Comparison of assumptions and performance of regional innovation policies in the Slovak regions

In this part of the study we present the empirical findings. Concerning the macro-characteristics (Table 10), the following can be stated. BA dominates in the majority of monitored indicators and shows either the highest or nearly the highest values, e.g. in case of indicators such as the GDP per capita, state of education level etc. The worst results in the monitored indicators are presented by the self-government regions, which are located in the Eastern part of Slovakia, namely PO, KE and BB. While ZI shows high values for the transport infrastructure indicator, the TT shows higher values for indicators of the employment and GDP per capita.

As for the indicators education, research and development (Table 11), the following can be stated. BA dominates in this group even more

Table 10. Indicators related to macro-characteristics in the Slovak regions

Region	Indicators									
	A	B	C	D	E	F	G	H	I	J
BA	2.241	2.056	1.152	2.904	1.373	1.899	1.122	0.977	1.004	1.435
TT	0.922	0.790	1.533	1.513	0.948	0.893	0.924	0.922	1.002	0.880
TN	0.783	0.748	1.238	1.250	0.886	0.506	0.925	0.824	1.094	0.990
NI	0.891	0.784	1.068	1.080	0.877	0.465	1.032	0.656	0.968	0.967
ZI	0.890	0.947	0.885	1.163	0.894	0.749	1.007	0.807	1.013	1.378
BB	0.700	0.888	0.828	0.660	0.853	0.339	0.874	0.868	0.906	0.919
PO	0.682	0.945	0.578	0.692	0.821	0.826	1.086	0.925	0.995	1.029
KE	0.891	0.843	0.970	0.732	0.961	0.546	1.030	1.021	1.040	0.746

Legend:
A. GDP per capita
B. State of the education level
C. Employment
D. Unemployment
E. Average wage
F. Average wage change
G. Added value per employee
H. Added value change
I. Household computer and internet accessibility
J. Transport infrastructure

significantly, than in the previous group and its indicators and shows the highest values of indicators especially in the case of quality of university graduates, expenditures on R&D, the ability to obtain EU funds and scientific research capacity. TN shows the highest values in the case of expenditures on R&D indicator, and KE, along with ZI, excel especially in the indicator of an ability to obtain EU funds. Very poor performance in the fields of education, science and research is significant for the PO, but also for BA, NI and TT (while in PO only one university is located, in BA, NI and TT there are more universities located).

The indicators related to business and support environment (Table 12) show that BA excels only in foreign support, which expresses the volume of foreign direct investments. However, it shows also higher values in case of labor costs and labor productivity. TN and KE show the highest values in the case of transport expenditures indicator.

From perspective of the indicators that characterize innovation policy creation from the view of actors' involvement and tools utilization intensity, one can mention that the BA does not excel in comparison to other regions - on the contrary, in terms of monitored indicators it only shows average or even below average results. The most active from the view of regional self-governments behavior

Table 11. Indicators related to education, research and development in the Slovak regions

Region	Indicators							
	A	B	C	D	E	F	G	H
BA	2.795	2.915	4.800	4.118	3.094	4.539	1.354	2.680
TT	0.789	0.992	0.400	0.265	0.021	0.475	0.150	0.972
TN	0.858	0.570	0.400	1.169	0.010	0.331	0.000	0.074
NI	0.915	0.881	0.800	0.378	0.347	0.654	0.226	1.042
ZI	0.646	0.656	0.800	0.518	1.614	0.531	0.226	0.342
BB	0.803	0.723	0.000	0.435	0.419	0.518	0.226	0.981
PO	0.599	0.487	0.000	0.324	0.602	0.268	0.226	0.425
KE	0.595	0.986	0.800	0.792	1.894	0.963	0.376	1.484

Legend:
A. High school education
B. First and second stage university education
C. Quality of university graduates
D. Research and development expenditures
E. Ability to obtain EU funds
F. Research and development capacity
G. Quality of university institutions
H. Quality of university research and development

Table 12. Indicators related to business and support environment in the Slovak regions

Region	Indicators									
	A	B	C	D	E	F	G	H	I	J
BA	0.922	0.661	0.906	1.129	0.815	1.026	1.098	1.263	1.379	4.932
TT	1.015	0.831	1.013	0.927	0.951	0.974	0.930	0.982	1.196	0.815
TN	0.960	1.528	1.140	0.964	0.851	0.961	1.058	0.882	0.897	0.386
NI	0.910	0.820	0.527	0.935	1.083	1.026	1.098	0.860	0.940	0.321
ZI	0.937	0.761	1.129	0.928	1.115	1.019	1.019	0.916	0.874	0.548
BB	0.871	0.884	1.075	0.927	1.125	0.960	0.888	0.854	0.863	0.208
PO	0.864	1.241	1.074	0.840	1.307	0.873	0.991	0.822	0.708	0.061
KE	0.897	1.273	1.138	1.011	1.235	1.161	0.918	1.020	0.907	0.729

Legend:
A. Regional self-government economics
B. Regional self-government expenditure volume in transportation
C. Regional self-government expenditure volume in education
D. Tertiary sector
E. Quaternary sector
F. Micro-enterprise sector
G. SME Sector
H. Labor costs
I. Employee quality – labor productivity
J. Foreign support

Table 13. Indicators related to innovation policy creation from the view of actors integration and tools utilization intensity

Region	Indicators									
	A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**
BA	2.000	1.000	2.000	2.000	2.000	4.000	3.000	3.000	3.000	4.000
TT	5.000	5.000	2.000	3.000	4.000	5.000	3.000	3.000	4.000	4.000
TN	2.000	3.000	2.000	2.000	2.000	3.000	2.000	3.000	3.000	2.000
NI	3.000	4.000	3.000	3.000	3.000	4.000	3.000	3.000	3.000	3.000
ZI	4.000	4.000	1.000	2.000	2.000	3.000	2.000	3.000	3.000	3.000
BB	2.000	3.000	1.000	2.000	2.000	2.000	2.000	3.000	3.000	2.000
PO	3.000	4.000	2.000	2.000	3.000	4.000	3.000	3.000	4.000	3.000
KE	5.000	4.000	2.000	3.000	4.000	5.000	3.000	2.000	4.000	4.000

Legend:
A. Initiation phase
B. Formulation phase
C. Selection phase
D. Implementation phase
E. Evaluation phase
F. Forecasting and planning tools
G. Economic tools
H. Legislative tools
I. Information tools
J. Organizational and administrative tools

are TT, KE and ZI. TT and KE show almost identical values for the monitored indicators.

Conclusion

As mentioned in the previous part, there are many significant differences between the Slovak regions. Concerning the performance of innovation policy, it seems that activities (including support activities) of the regional self-governments are not so important. On the other hand, research, education and quality of related infrastructure seem to be the crucial determinants of successfulness of innovation policies.

The values of indicators included in the macro-characteristics group express the utilization of premises for innovation-oriented policies development. While peripheral regions show in principle the lowest values of the monitored indicators, the center and its surroundings (in this case especially TT) show, on the contrary, the highest values observed in all these indicators. The indicators related to education, science and research are crucial in relation to knowledge creation. Even this case confirms, that the BA is far more developed and more successful than the other Slovak regions observed. The support environment does not have to play such an important role in reducing the inter-regional disparities. Although

the BA in comparison to other regions in the evaluation of innovation policy in absolute terms clearly dominates, in the case of business and support environment this dominance is not so noticeable. Therefore, in this context we can also consider the thesis, that the support environment cannot adequately influence the quality and development of innovation policies in the Slovak regions. The behavior of the regional self-government does not necessarily have to lead to a significant influence on innovation policy in particular regions of Slovakia. If we look for example at the values of the BA one can see that the integration of other actors in the development of innovation policies is more sporadic and lags far behind the previously mentioned the TT or KE. Despite that, the BA is clearly and undisputedly the leader in the field of innovation policy in the Slovak regions. These facts confirm the thesis previously formulated by Hudec and Klimovský (2011) that the support environment cannot adequately influence the quality and development of innovation policy because, concerning Slovakia, it is quite clear that there is a lack of regional research and development capacities, undeveloped culture of innovation, and a lack of regional accountability and willingness to be engaged at the side of potential innovation policy actors in the regions of Slovakia. The last but not least problem is linked with a fact that formal involvement prevails often over a real cooperation.

References

Aralica, Z., D. Račić and D. Redžepagić (2008) `Research and development activity as a growth factor of foreign owned SMEs in selected Central and Eastern European countries´. *Zbornik Radova Ekonomskog Fakulteta u Rijeci*, 26(2):279-300.

Baláž, V. (2004) `Trendy v regionálnom vývoji Slovenskej republiky: ekonomická teória a prax´. *Ekonomický časopis*, 52(7):783-800.

Bavec, C. (2009) `On the creative climate and innovativeness at the country level´. *Zbornik Radova Ekonomskog Fakulteta u Rijeci*, 27(1):9-30.

Bezák, A. (1990) `Funkčné mestské regióny v sídelnom systéme Slovenska´. *Geografický časopis*, 42(1):57-73.

Bezák, T. (2001) `O regionálnych trhoch práce, nových krajoch a tokoch nezamestnanosti´. *Geografický časopis*, 53(4):295-305.

Bojnec, Š. and I. Fertő (2011) `Impacts of research and development on manufacturing trade´. *Zbornik Radova Ekonomskog Fakulteta u Rijeci*, 29(1):65-88.

Buček, J. (2002) `Regionalization in the Slovak Republic—from Administrative to Political Regions´ In Marcou, G. (ed.) *Regionalization for Development and Accession to the European Union: A Comparative Perspective,* pp. 141-178. Budapest, OSI/LGI.

Buchta, S. (2003) `Slovenský vidiek na konci dvadsiateho storočia´. *Sociológia*, 35(2):125-140.

Communal Research and Consulting Centre (2008) *Benchmarking miest – nástroj komunálneho manažmentu*, http://www.komunal.eu/subory/Benchmarking_miest___n__stroj_komun__lneho_mna__mentu.pdf (31, January, 2014)
Cooke, P. (2001) `Regional innovation systems, clusters, and the knowledge economy´. *Industrial and Corporate Change*, 10(4):945-974.
Cooke, P. (2007) `Regional Knowledge Capabilities and Open Innovation: Regional Innovation Systems and Clusters in the Asymmetric Knowledge Economy´ In Breschi, S. and F. Malerba (eds.) *Clusters, Networks, and Innovation*, pp. 80-109. Oxford: Oxford University Press.
Edquist, C. (1997) (ed.) *Systems of Innovation: Technologies, Institutions and Organizations.* London: Routledge.
Falťan, Ľ. and J. Pašiak (2004) (eds.) *Regionálny rozvoj Slovenska – východiská a súčasný stav.* Bratislava: SAV.
Gajdoš, P., K. Moravanská and L'. Falťan (2009) *Špecifiká sídelného rozvoja na Slovensku. Typologická analýza sídel.* Bratislava: SAV.
Gajdoš, P. and J. Pašiak (2006) *Regionálny rozvoj Slovenska z pohľadu priestorovej sociológie.* Bratislava: SAV.
Gajdoš, P. and J. Pašiak (2008) *Sociálne zdroje lokálneho a regionálneho rozvoja. Sociologická sonda.* Bratislava: SAV.
Gáková, Z. and M. Sirák (2006) `Regionálna hospodárska politika´ In Bútora, M., M. Kollár and G. Mesežnikov (eds.) *Slovensko 2005: Súhrnná správa o stave spoločnosti,* pp. 461-488. Bratislava: IVO.
Halás, M. (2008) `Priestorová polarizácia spoločnosti s detailným pohľadom na periférne regióny Slovenska´. *Sociologicky časopis*, 44(2):349-369.
Haulíková, L. and V. Benč (2001) `Disparity krajov v Slovenskej republike´. World Bank: *Slovenská republika: štúdia o životnej úrovni, zamestnanosti a trhu práce. Správa Svetovej banky č. 22 351-SK. Štúdia č. 5, zv. II.* Washington: Svetová banka.
Hippel, E. von (1998) *The sources of innovation.* Oxford: Oxford University Press.
Hollanders, H. (2009) `European Innovation Scoreboard (EIS): Evolution and Lessons Learnt´ Paper presented at the *Innovation Indicators for Latin America Workshop*, March 19, 2009.
Hollanders, H., and F. C. Esser (2007) *Measuring innovation efficiency*, http://proinno.tuxe.es/node/admin/uploaded_documents/eis_2007_Innovation_efficiency.pdf (31, January, 2014)
Hollanders, H., A. Loschky and S. Tarantola (2009) *Regional Innovation Scoreboard 2009.* Brussel: PRO INNO Europe.
Hollanders, H., L. Rivera Léon and L. Roman (2012) *Regional Innovation Scoreboard 2012.* Brussel: PRO INNO Europe.
Hollanders, H. and A. Van Cruysen (2008) `Rethinking the European Innovation Scoreboard: A revised methodology for 2008-2010`. Output paper from the *Workshop on Improving the European Innovation Scoreboard methodology*, Brussels, June 16, 2008.
Hudec, O. (2007) *Regionálne inovačné systémy: Strategické plánovanie a prognózovanie.* Košice: Ekonomická fakulta TU.

Hudec, O. and D. Klimovský (2011) `Innovation policy in the Slovak regions´ In Žúborová, V., D. C. Iancu and U. Pinterič (eds.) *Social responsibility in 21st century,* pp. 116-135. Ljubljana: Vega.
Klimovský, D. (2006) `Regionálna samospráva v rokoch 2002 – 2005: Skúsenosti a súvislosti v politickej reflexii´ In Mesežnikov, G. (ed.) *Regionálne voľby 2005. Súvislosti a výsledky,* pp. 29-56. Bratislava: IVO.
Klimovský, D. (2008) `Politics and its Impact on the Reform Processes: the Case of Public Administration Reform in Slovakia (1989 – 2006)´ In Musil, J. (ed.) *Space and Historical Time as Dimensions of Social Change,* pp. 45-64. Prague: Matfyzpress.
Kling, J. (2002a) `Regionálna politika a regionálny vývoj´ In Kollár, M. and G. Mesežnikov (eds.) *Slovensko 2002. Súhrnná správa o stave spoločnosti II,* pp. 109-126. Bratislava: IVO.
Kling, J. (2002b) `Regionálny vývoj´ In Gál, F., M. Kollár and G. Mesežnikov (eds.) *Vízia vývoja Slovenskej republiky do roku 2020,* pp. 173-184. Bratislava: IVO.
Kling, J. (2003) `Regionálna politika´ In Kollár, M. and G. Mesežnikov (eds.) *Slovensko 2003. Súhrnná správa o stave spoločnosti,* pp. 493-510. Bratislava: IVO.
Kling, J. (2004) `Regionálna politika` In Kollár, M. and G. Mesežnikov (eds.) *Slovensko 2004. Súhrnná správa o stave spoločnosti,* pp. 567-583. Bratislava: IVO.
Kling, J. and V. Nižňanský (2002) `Verejná správa` In Kollár, M. and G. Mesežnikov (eds.) *Slovensko 2002. Súhrnná správa o stave spoločnosti I.* pp. 249-269. Bratislava: IVO.
Kling, J. And J. Pilát (2003) `Verejná správa` In Kollár, M. and G. Mesežnikov (eds.) *Slovensko 2003. Súhrnná správa o stave spoločnosti.* pp. 193-209. Bratislava: IVO.
Korec, P. (2004) `Faktory podmieňujúce regionálnu diferenciáciu Slovenska`. *Acta Universitatis Mathiae Belii: Geografické štúdie*, 12:76-90.
Korec, P. (2005) *Regionálny rozvoj Slovenska v rokoch 1989 – 2004.* Bratislava: Geografika.
Krivý, V. (1997) `Slovakia's Regions` In Bútora, M. and P. Hunčík (eds.) *Global Report on Slovakia: Comprehensive Analyses from 1995 and Trends from 1996,* pp. 287-308. Bratislava: Sándor Márai Foundation.
Lukniš, M. (1985) `Regionálne členenie Slovenskej socialistickej republiky z hľadiska jej racionálneho rozvoja`. *Geografický časopis*, 37:51-64.
Lundvall, B.-Å (1992) *National Systems of Innovation: Towards a Theory of Innovation and Interactive Learning.* London: Frances Pinter.
Maskell, P. and A. Malmberg (1999) `Localised learning and industrial competitiveness`. *Cambridge Journal of Economics*, 23(2):167-186.
Matlovič, R., R. Klamár and K. Matlovičová (2008) `Vývoj regionálnych disparít začiatkom 21. storočia na Slovensku vo svetle vybraných indikátorov`. *Regionální studia*, 2:2-12.
Matlovič, R. and K. Matlovičová (2005) `Vývoj regionálnych disparít na Slovensku a problémy regionálneho rozvoja Prešovského kraja`. *Acta Facultatis Studiorum Humanitatis et Naturae Universitatis Prešoviensis: Prírodné vedy, Folia*

Geographica, 8:66-88.
Matlovič, R. and K. Matlovičová (2008) `Regionálne disparity a regionálny rozvoj na Slovensku s osobitným zreteľom na Prešovský kraj` In Rydz, E. and A. Kowalak (eds.) *Świadomość ekologiczna a rozwój regionalny.* pp. 125-143. Słupsk: Wydavnictwo Naukowe Akademii Pomorskiej.
M.E.S.A.10 (2007) *Benchmarking miest*, http://www.mesa10.sk/index.php?action=module&id=mod_content&content_id=36&rand=10 (31, January, 2014)
Morvay, K. and J. Marušinec (2009) *Monitoring konkurencieschopnosti regiónov Slovenskej republiky.* Bratislava: M.E.S.A.10.
Nelson, R. (1993) *National Innovation Systems: A comparative analysis.* Oxford: Oxford University Press.
Nižňanský, V. (2002) `Spoločenský, historický a európsky kontext reformy verejnej správy na Slovensku` In Mesežnikov, G. and V. Nižňanský (eds.) *Reforma verejnej správy na Slovensku (1998 – 2002): súvislosti, aktéri, voľby,* pp. 9-28. Bratislava: IVO.
Nižňanský, V. (2005) (ed.) *Decentralizácia na Slovensku. Bilancia nekonečného príbehu (1995 – 2005).* Bratislava: Úrad vlády SR.
Palúš, I. (2004) `Malá preciznost kompetenčného zákona` *Verejná správa*, 59(10):22-23.
Pandiloska Jurak, A. and U. Pinterič (2012) `Assessment of Municipalities' Performances in Slovenia`. *Transylvanian Review of Administrative Sciences*, 35E:121-137.
Pilát, J. and M. Valentovič (2004) `Verejná správa` In Kollár, M. and G. Mesežnikov (eds.) *Slovensko 2004. Súhrnná správa o stave spoločnosti,* pp. 257-282. Bratislava: IVO.
Pinterič, U. (2010) `Development of e-government services for citizens in Slovenia: theory and practice`. *Eastern European Economics*, 48(3):88-98.
Porter, M. E. (2003) `The economic performance of regions`. *Regional Studies*, 37(6-7):549-578.
Rajčáková, E. and A. Švecová (2010) *Regionálne disparity v kontexte regionálnej politiky Slovenskej republiky*, http://is.muni.cz/do/1456/soubory/katedry/kres/4884317/14318877/Rajcakova_Svecova.pdf (31, January, 2014)
Šebová, M. and P. Džupka (2013) `Meranie ekonomického a finančného vplyvu majstrovstiev sveta v hokeji 2011 na mesto Košice`. *E+M Ekonomie a Management*, 16(2):41-53.
Tödling, F. and M. Tripl (2005) `One size fits all? Towards a differentiated regional innovation policy approach`. *Research Policy*, 34(8):1203-1219.
Union of Slovak Towns and M.E.S.A.10 (2013) *Benchmarking of Cities 2011-2012*, http://www.unia-miest.sk/VismoOnline_ActionScripts/File.ashx?id_org=600175&id_dokumenty=2254 (31, January, 2014)
Valentovič, M. (2008) `Regionálny rozvoj a vidiek` In Bútora, M., M. Kollár and G. Mesežnikov (eds.). *Slovensko 2007: Súhrnná správa o stave spoločnosti,* pp. 447-466. Bratislava: IVO.
Vaňová, A. (2006) `Inovácie v území a marketing územia`. *Inovace v rozvoji obcí,*

měst a regionů s důrazem na marketingové řízení: sborník z mezinárodní vědecké konference. Ostrava: Ostravská univerzita.
Vaňová, A. and J. Petrovičová (2009) `Importance and Quality of Relationship among Local Self-Governments and Their Stakeholders`. *3rd Central European Conference in Regional Science. International Conference Proceedings,* pp. 868-878. Košice: TUKE.
Želinský, T. (2010a) `Analysis of Poverty in Slovakia Based on the Concept of Relative Deprivation`. *Politická ekonómie*, 58(4):542-565.
Želinský, T. (2010b) `Regions of Slovakia from the View of Poverty` In Pauhofová, I., O. Hudec and T. Želinský (eds.) *Sociálny kapitál, ľudský kapitál a chudoba v regiónoch Slovenska. Scientific Conference Proceedings,* pp. 37-50. Košice: TUKE.