REGIONAL DISPARITIES
AND THEIR MITIGATION IN SLOVAKIA:
SELECTED FEATURES AND APPROACHES

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Abstract: The presented paper pays attention to the regional disparities, which are one the current issues faced not only by geographically large but also smaller countries. Even though our study discusses regional disparities only in Slovakia, its main goal is to provide some general conclusions and recommendations, which could initiate a potential international discussion in terms of exchange of good practices solving the presented issue. The first part of paper deals with basic terminology and justifies the meaning of the examination of regional disparities. In the second part, based on selected indicators, we identify the rate of regional disparities in Slovakia and we examine the trends in the development of the rate of regional disparities during the years 2000-2012. The last part of paper examines the use of regional policy as a tool for mitigation of regional disparities in Slovakia.

Key words: regional disparities, Slovakia, mitigation of regional disparities, regional policy

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INTRODUCTION

Regional disparities are quite frequently used term that is understood very differently in scholarly literature and social practice. In recent years, the issue of analysing regional development and regional disparities has become very popular in Slovakia. It is examined by geographers, economists and sociologists,

because it is a topic with high degree of social relevance (Matlovič, Matlovičová 2012). A number of theoretical and methodological papers based on empirical studies have been published; however, it seems that the research of regional disparities requires an interdisciplinary approach because existing approaches based on the dominant economic dimensions do not capture the full complexity of the issue.

In studying regional disparities, it is necessary to define two essential words: *region*, which even today is the topic for discussion relating to the definition of its nature and criteria for its geographic definition, typology and its qualitative characteristics, and *disparity,* which is very frequently used term of the last decade and which is used to denote the fact that its concept on the one hand contently narrows and on the other hand semantically diversifies, what makes its semantic interpretation often difficult to understand.

DEFINITION OF REGION AND REGIONALIZATION

Streimikiene (in Kilijoniene et al. 2010) defines region as a territory which differs by specific natural, demographic, social and economic features that characterize given territory and that are different from other neighbouring territories. The region is defined in various conceptions such as social, territorial, geopolitical, economic, etc., but according to Žítek (2002) the most significant interest in the concept of a region is centred in geography. The term region is the object of regional geography, which is according to Matlovič (2006) currently the best platform for the integration of geography and for the increase of its relevance to practice. Regional geography is profiled as an integrated, cross-disciplinary platform of explaining the processes of structuring space on one side and understanding the essence of identity and individuality of regional units of different taxonomic levels in the context of everyday human experience, on the other side (Matlovič 2006, Michálek 2009).

From the current definitions of the region, we consider the definition by Hudec et al. (2009), as the most eloquent one. They define the region as a complex, territorial, open, and dynamic system with a huge number of elements of different quality and thick linkages. It is richly structured and has a wide range of diverse features, such as: openness; flow character-transforming inputs into outputs; interaction with the surroundings; internal differentiation; hierarchy; and adaptability.

According to Ježek (2008 in Wokoun et al. 2008) regions cannot exist by themselves. They are the result of specific processes such as abstraction, generalization or construction, which is called regionalization. Regionalization is one of the elementary methods of regional geography.

Bašovský, Lauko (1990, p. 42) define it as: "*the process of dividing the territorial units which have a certain character(s) and their separation in the territory which this character(s) do not have."*

Nuts classification

In defining the regions in terms of the planning units of regional policy in the EU and its individual member countries, including Slovakia, institutional classification so called NUTS is preferred (Sloboda 2006). The name comes from the French La Nomenclature des Unités Territoriales Statistiques. At the beginning of 1970's, Eurostat launched the process of creating the NUTS classification in each member state based on bilateral agreements. The main

reasons for creating such classifications were on one hand constantly enlarging of the European Union and on the other hand the growing demand for statistical data according to a uniform methodology. For these reasons, the complete unification of the classification of territorial structures for statistical purposes was created.

According to Eurostat, NUTS classification was created for:
1. Collection, development and harmonization of regional statistics in the European Union,
2. Socioeconomic analysis of the regions,
3. Definition of regional policy in EU member states.

Table 1. NUTS classification in Slovakia
(Source: Statistical Office of the SR)

NUTS 1	NUTS 2	NUTS 3	LAU 1	LAU 2	Number of Population NUTS 2 (31.12.2012)	Number of Population NUTS 3 (31.12.2012)
Slovak Republic	Bratislava Region	Bratislava Region	8	73	612,000	612,000
	Western Slovakia	Trnava Region	7	251	1,838,136	556,577
		Trenčín Region	9	276		593,159
		Nitra Region	7	354		688,400
	Central Slovakia	Žilina Region	11	315	1,348,611	690,121
		Banská Bystrica Region	13	516		658,490
	Eastern Slovakia	Prešov Region	13	665	1,611,407	817,382
		Košice Region	11	440		794,025
TOTAL	4	8	79	2890	5,410,154	5,410,154

WHAT IS DISPARITY AND WHY IS IT IMPORTANT TO STUDY REGIONAL DISPARITIES?

The origin of the word dates from the 16th century of French disparié, based on the Latin origin disparitas which means split (Oxford dictionary). The Cambridge dictionary defines the word disparity as a lack of equality (Cambridge dictionary). Slovak dictionary of foreign words defines disparity as diversity and inequality (Slovník cudzích slov). What kind of inequality is it?

According to Hučka, Kutscherauer, Tománek (2008) it is inequality arising as a result of the basic trends of development, which is a considerable degree of its variability, resulting in uneven development. Consequently, they define the regional disparity as *"diversity, respectively inequality of characters, events, or processes, which have an explicit territorial location (they can be allocated in a defined territorial structure) and which identification and comparison has any rational sense (cognitive, psychological, social, economic, political)"* (2008, p. 5).

Examination of regional disparities is currently based on two basic approaches. The first one is based on the Neoclassical and Neoliberal (convergent) theoretical basic basis, which emphasizes the natural counterbalancing tendencies in the development of the region in the long term. Disparities between regions are understood as natural, given by different conditions and regional specificities of different origins. The emphasis is rather on the positive sides that regional disparities bring. Efficient allocation of resources is provided by market mechanisms and artificial state interventions into this mechanism are unacceptable, (excluding reinsurance of the legal framework for the market operation, maintaining the order and law enforcement, the freedom of information and the repression of cartels). The second approach

is based on Keynesian and Marxist (divergent) theories, according to which the main reason of regional disparities is the spontaneous nature of capitalism, which causes a social injustice and related social instability, concentrated in troubled regions. Without the intervention of the state, the trend towards deepening disparities would prevail, which would then exist a long time or permanently (Blažek, Uhlíř 2011). Based on divergent theories, regional policy was created.

In Slovakia, the phenomenon of regional disparities is linked to the regional impacts of post-communist economic transformation after 1989. In the initial period of transformation, the dominance of neoliberal economic approaches prevailed and there was a general reluctance to planning and regional policy (Hampl, Müller 2011 in Matlovič, Matlovičová 2011). Investigative attitude towards regional disparities had been changed only gradually, and was conditioned by the group of impulses. According to Hampl, Müller (2011), and Sloboda (2006) it can be stated that the interest for regional disparities have increased in relation to the constitution and a growing role of regional governments and also the European integration, namely the accession of Slovakia into the European Union in 2004, which applies regional policy inspired by the group of divergent theories the objective of which is to mitigate regional disparities.

Methodological problems of the analysis of regional disparities

From the methodological point of view, in studying regional disparities, we have to take into consideration two issues. The first one is the use of proper territorial units and the second one the use of proper indicators.

In connection with the use of proper territorial classification, it can be stated that the definition of regions used in the EU for the statistical purposes (NUTS 2, NUTS 3) is often inappropriate. The regions are often markedly heterogeneous what is reducing their comparability. In many cases, regions are not internally integrated or their boundaries artificially divide natural units. They often have very different size parameters (number of inhabitants, size) what again complicates their comparability. Very well-known problem is the "effect of the capital city", which is demonstrated by statistical overestimation of observed indicators in the region of the capital city. It results from the fact that the capital cities benefit from metropolisation and significant concentration of capital, economic activities using agglomeration effects, saves from the extent a size of the market. In metropolitan areas, companies with a nationwide sphere of action reside which are obtaining the results in several regions, but statistically they obtain the results in the region of the capital city (Sloboda 2006). Another problem is that the capital cities usually belong to the most important centres of commuting, what makes the application of the indicator of regional GDP per capita problematic. On the other hand, the advantage of artificial statistical regions is good data availability (Matlovič, Matlovičová 2011).

We come to the problem of choosing the proper indicators of regional disparities. In general, we face the problem of limited database, available in comparable time lines for territorial units of different scale denominator level along the local-global/continental continuum. The GDP per capita is the most frequently used indicator. The main problem with the use of GDP per capita arises with the effect of commuting. It means that the creation of a regional GDP

involve also people who commute from another region. It is quite known that their incomes tend to be spent in their home regions. Therefore, regional GDP per capita is statistically overestimated in the target region and statistically underestimated in the region of commuting (Lapišáková 2002 in Matlovič, Matlovičová 2011).

Summarizing the mentioned facts, it can be stated that in the analysis of regional disparities, it is appropriate to take into consideration a number of relevant indicators which we will explain in the next part of the paper.

METHODOLOGY

In order to assess the rate of regional disparities in Slovakia, we were analysing several indicators of socioeconomic nature while each of them was given equal weight. We applied a multi-criteria evaluation of the NUTS 3 regions (8 units), which we consider to be more objective than evaluation on the basis of only one indicator (regional GDP per capita in case of EU). We share the idea that the use of several indicators has a potential to point at problematic regions and to reduce some of the above mention problematic features of the regional GDP. Accordingly, except of the regional GDP, also the following indicators were selected and analysed:

- Unemployment rate
- Average monthly wage
- Net disposable income per capita
- Net cash monthly costs per capita
- Incomes of the health insurance companies from the insurance payments per capita
- Foreign direct investments,
- Profit-oriented organisations
- Enterprises with 250 or more employees per 1000 inhabitants
- Tradesmen per 1000 inhabitants,
- Dwellings completed per 1000 inhabitants,
- Gross fixed capital per capita,
- Expenditures on research and development.

Consequently, the Gini coefficient and coefficient of variation were used as statistical tools for measuring of regional disparities. Gini coefficient, as a measure of statistical dispersion, was used in assessing the overall development of the regional disparities in terms of individual indicators during the years 2000 - 2012. The value of this coefficient was calculated according to the formula:

$$Gini = \frac{1}{2n^2 \bar{y}} \sum_{i=1}^{n} \sum_{j=1}^{n} |yi - yj|$$

Coefficient of variation, a measure of variability of the data, was used in examining the differences in the rate of increase or decrease of the regional disparities from 2000 to 2012. The higher value of coefficient of variation means that the data has high variability and less stability.

In the further part of the paper, we examine whether implemented regional policy after the adoption of this resolution aimed towards the declared gradual weakening of divergence and thus to reverse the trends of increase of regional disparities in Slovakia. The subject of our evaluation will be two examples of

financial aid in accordance with the principle of complementarity (the principle of complemantarity is based on the principle that funds of the state are not the major, but only additional source contributing to the support of activities emerging in the region):
- The state financial aid in the example of regional aid (so-called investment stimuli),
- The financial aid from EU structural funds.

        In the analysis, we observe percentage share of financial aid raised in the region of the total amount of allocated financial aid and also the amount of funding per capita.

ANALYSIS OF SELECTED INDICATORS

        The GDP per capita characterizes economic prosperity or backwardness of the region due to its productive potential (Regional Statistical Yearbook 2009). The Dynamics of development of the GDP in individual regions in the recent years shows that there is a reduction in lagging behind the EU average in all regions of the SR. Great improvement was recorded in Bratislava Region, which has the highest regional GDP in Slovakia. A relatively good situation is also in the Trnava Region. Other regions (the Trenčín, Žilina, and Nitra Region) are below the national average, while the Prešov Region and Banská Bystrica Region are the most deprived. However, according to the development of the Gini coefficient (Figure 2), there is a constant increase in regional disparities since 2000 and GDP per capita is significantly differentiated on the regional level (Figure 1). The year 2008 was the only exception, when the mitigation of regional disparities was recorded. Thus, the above facts indicate that despite the overall convergence is taking place, regional disparities in the SR are growing to the detriment of southern and eastern NUTS 3 regions in Slovakia.
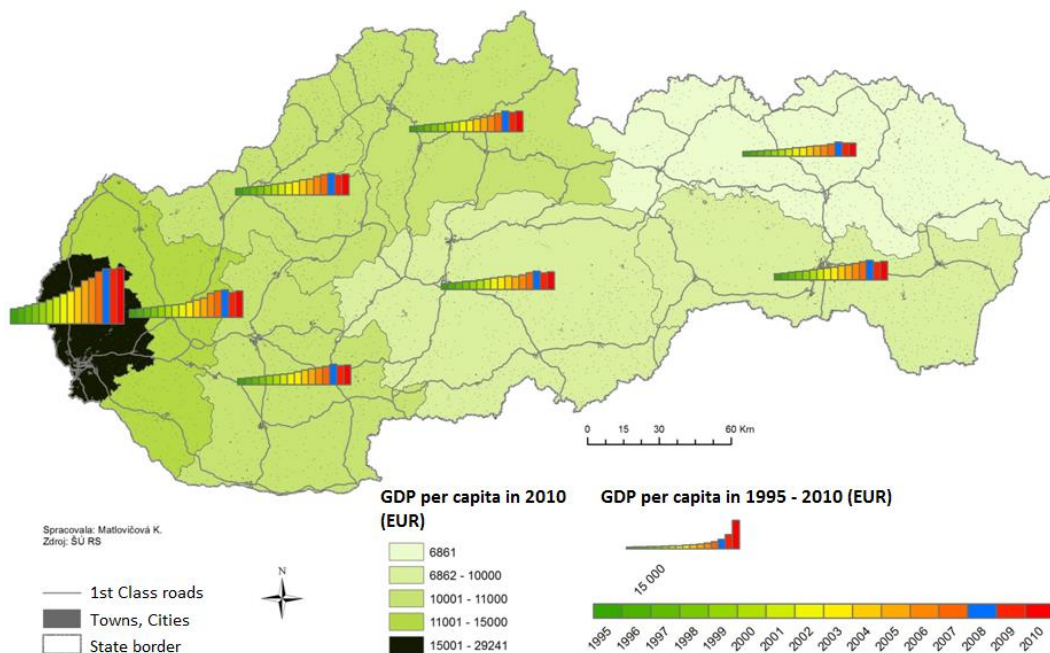

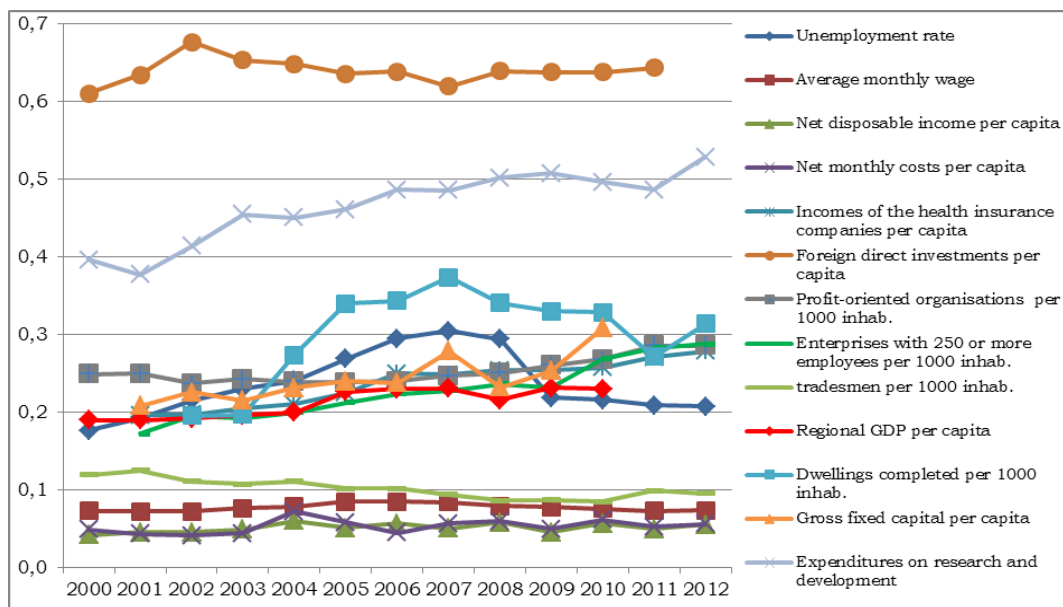**Figure 1.** Regional GDP in Slovakia during the years 1997-2010

Figure 2. Development of the Gini coefficient
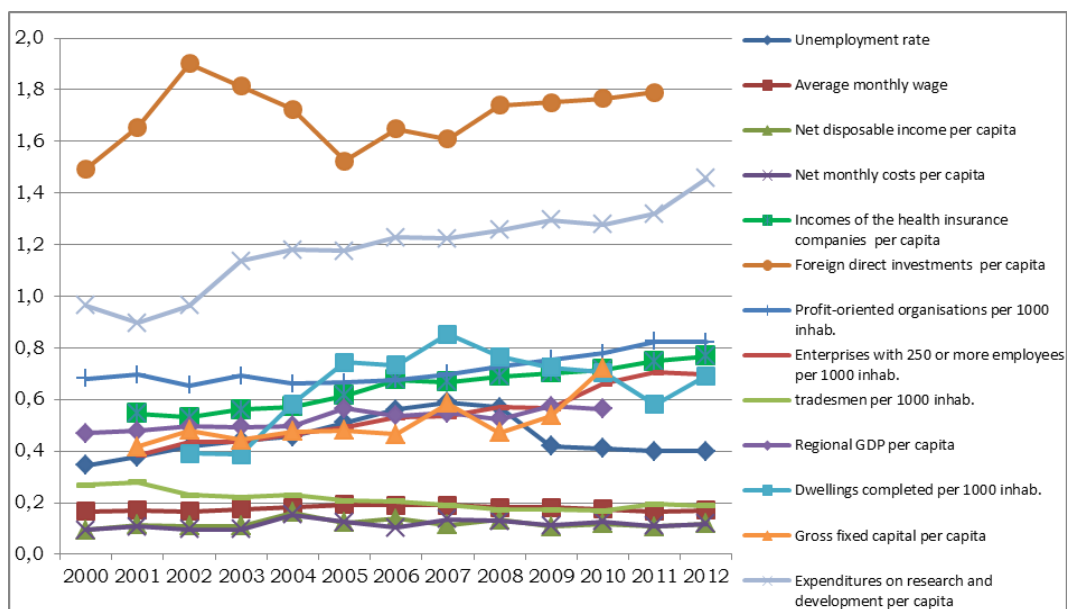in terms of the analysed indicators in 2000-2012

Figure 3. Development of the coefficient of variation
in terms of the analysed indicators in 2000-2012

The unemployment rate is another indicator, which reflects the socioeconomic development in the regions. It is calculated as a proportion of the disposable registered number of unemployed to the number of economically active population. The cartodiagram on the figure 4 for individual regions shows that the development of the unemployment rate in the SR was constantly decreasing till 2008. However, according to the Gini coefficient (Figure 2) (as well

as coefficient of variation), during the same period, the regional disparities in unemployment rates were increasing. Since 2008, the unemployment rate in SR has been growing (this change in development can be attributed to the impacts of the crisis) and at the same time the regional disparities has been mitigated. In other words, we can say that during the period of decline in the unemployment rate, the regional disparities were exacerbated and the rise in the unemployment rate has led to the elimination of regional disparities. Till 2008, the most significant was a gradual deepening of lagging of the Banská Bystrica Region. Since 2009, such a tendency has been more characteristic of the Košice Region, which currently has the highest unemployment rate (19.7 % in 2012). In terms of unemployment rate in 2012, the SR can be divided into 2 sub-regions. The first one is the region of developed north-western Slovakia (Bratislava, Trnava, Trenčín, and Žilina Region), where the unemployment rate is below the national average (14%). The second sub-region includes the marginal NUTS 3 regions of the Southeast Slovakia (i.e. Nitra, Banská Bystrica, Košice, and Prešov Region), where the unemployment rate is above the national average. The unemployment rate points significantly at the uneven regional development in the country and at the deepening of regional disparities. The lagging of the Prešov and Banská Bystrica Region is becoming more significant.
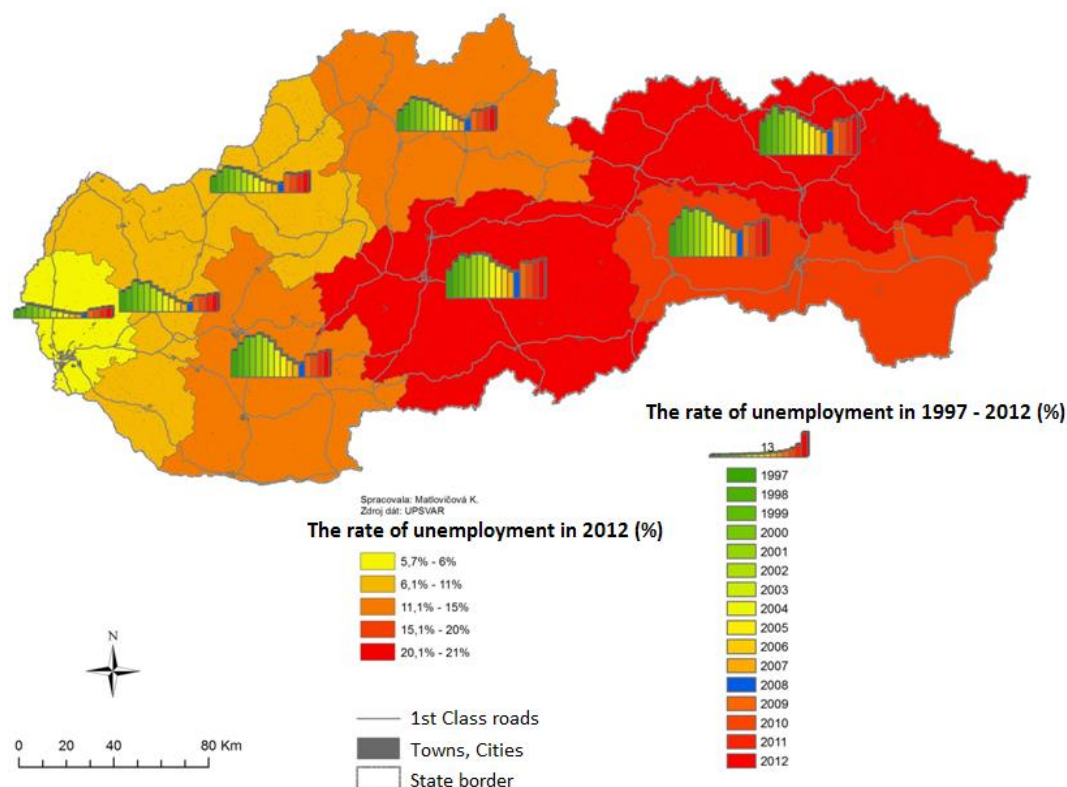

Figure 4. Unemployment rate in the regions of the SR in 1997-2012

The value *of average monthly wage also* reflects a differentiated development in the regions. In general, we can state that a more rapid growth of average wages till 2007 was also linked to the increase in regional disparities.

The polarization between the Bratislava Region and the rest of Slovakia was deepened during the years 2000-2007. Since 2008 the increase of average monthly wage has been less significant and the elimination of regional disparities has occurred. However, significant regional disparities still exist. Only the dominant Bratislava Region has its average monthly wage 1029 EUR above the national average (805 EUR). All other regions didn't reach the national average. The second highest average monthly wage was in Trnava Region. The lowest average wage was in the Nitra Region (661 EUR) and Prešov (613 EUR) region. The Prešov Region permanently has had the lowest wage since the beginning of the analysed period.

Net disposable income and *net monthly costs per capita* are economic indicators of regional disparities, which provide reliable information about the total incomes and consumption expenditures of inhabitants. They are indirect indicators of the purchasing power, which may be used in the analysis of the business environment. During the analysed period, the development of the both indicators was rather changeable, with increasing and decreasing periods. However, comparing the years 2000 and 2012, in terms of the Gini coefficient (Figure 2), we can observe the increase of regional disparities. The best results, i.e. the highest net income per capita as well as the higher expenditures throughout the analysed period were recorded in the Bratislava Region. On the other hand, the poorest values of indicators were recognized in the Prešov region.

The *incomes of the health insurance companies per capita* represents the payments from the insurance payments of payers under the generally applicable law. It includes the levies paid by employers, workers, self-employed people, self-payers, levies paid for insured people to the state. This indicator thus provides a certain picture of the economic situation of residents and subjects located in the region (Regional Statistical Yearbook 2008). According to this economic indicator, regional disparities were growing during the whole analysed period. The only exception was the year 2007, when the decrease was recorded, as shown by the Gini coefficient (Figure 2). During the analysed period, the best results, i.e. the highest incomes of the health insurance companies per capita, were recorded in the Bratislava Region. On the other hand, the lowest incomes of the health insurance companies per capita were recorded in the Prešov Region. Similarly as in the case of the previous indicator, also this one is strongly influenced by the effect of the capital city, which indicates the distance between Bratislava and all other regions. There are relatively low disparities between the remaining regions.

The amount of foreign direct investments per capita (to the end of the calendar year) reflects the investment attractiveness of regions and their development dynamics. Direct Foreign investments bring a number of effects to the region and act as an impuls for economic development. During the analysed period, the Gini coefficient increased from 0.611 in 2000 to 0.644 in 2011 (Figure 2). Even the increase of regional disparities in foreign direct investments was not significant, they are on the high level oscillating around the value of 0.62. In the last analysed year 2011, the highest share of the total foreign direct investments was made in the Bratislava Region (67.6 %) followed by the Trnava Region with a share of 7%, the Košice Region (6.6 %), the Žilina Region (6.6 %), the Trenčín Region (4.7%), and the Nitra Region (4%). The lowest proportion of the total investments in Slovakia was made in the Banská Bystrica Region (2.5%) and in the Prešov Region (only 0.9%).

In terms of further development of the regions in the SR and efforts to balance regional disparities, it is necessary to pay attention also to the development of the entrepreneurial structure which is characterized by the profit-oriented organizations per 1000 inhabitants, enterprises with 250 or more employees per capita, as well as tradesmen per 1000 inhabitants.

Profit-oriented organizations are profit-making organisations registered under the Commercial Code and contributory organizations whose turnovers exceed more than 50% of the reporting cost. The number of profit-oriented organizations in Slovakia rose from 93,072 in 2000 to 164,771 in 2012. As indicated by the Gini coefficient (Figure 2), there exist regional disparities in the above indicator across the regions in the SR. Since 2006 the regional disparities have been exacerbated in terms of given indicator. In 2012 the value of Gini coefficient was 0.285. The highest number of the profit-oriented organizations per 1000 inhabitants is again in the dominant Bratislava Region. In 2012, there were 95.32 profit-oriented organizations per 1000 inhabitants. In all other regions, there were recorded significantly lower numbers oscillating around 20-30 profit-oriented organizations per 1000 inhabitants. The fact that all other regions are below the national average can be reasoned by the generally high concentration of organisations in the capital city.

In terms of enterprises with 250 or more employees per capita, again the increase in regional disparities has occurred during the analysed period. The best results, i.e. the highest number of enterprises with 250 or more employees per capita was recorded in the Bratislava Region, which was followed by the Trenčín Region. Both of these regions occupied the leading positions over other regions during the whole analysed period. A worse situation is in the rest of the regions. Since 2001, the regional disparities were strongly exacerbated. Increase in regional disparities is documented also by the Gini coefficient (Figure 2), which moved from 0.172 in 2001 to 0.287 in 2012 and coefficient of variation (Figure 3) which moved from 0.383 in 2001 to 0.698 in 2012.

The other important indicator of business structure is *tradesmen* and its number *calculated per 1000 inhabitants.* Tradesman is a person who is doing business based on the Trade Act. The number of tradesmen in Slovakia during the period of years 2000-2012 increased from 279,597 to 387,452. The Gini coefficient shows, that there are regional differences in terms of this indicator. However, the positive fact is that from 1999 till 2010, regional disparities were reduced. The Gini coefficient (Figure 2) decreased from 0.119 in 1999 to 0.0847 in 2009. The coefficient of variation (Figure 3) also decreased from 0.264 in 1999 to 0.173 in 2009. The increase appeared again in 2010. The trend of reduction in regional disparities was apparent from the increased number of tradesman per 1000 inhabitants in less developed regions (Prešov, Banská Bystrica, and Košice) and less intensive growth in the developed regions (Bratislava, Žilina). However, during the whole analysed period, the weakest positions have been occupied by the Kosice region, the Banská Bystrica Region and the Prešov Region. On the contrary, the strongest position has been occupied by the dominant Bratislava region, followed by the Žilina Region and the Trnava Region.

The quality and affordable housing is an important factor influencing labour mobility, which is a serious problem in the Slovak economy. According to the analysis, housing conditions are considerably varied within regions of the SR. In terms of *dwellings completed per 1000 inhabitants*, there was a continual

deepening of regional disparities until the year 2007. This situation was reflected also by the increasing value of the Gini coefficient (Figure 2), which icreased from 0,196 in 2002 to 0.374 in 2007, and the coefficient of variation (Figure 3) from 0.391 to 0.853. This increase was primarily caused by the fact that in the regions with significant foreign investments (i.e. Bratislava, Trnava, and Žilina) also the construction of flat buildings was of great importance. In 2007, 63% of the total amount of completed dwellings in Slovakia were in above mentioned three regions. On the contrary, Prešov and Košice regions accounted only for 13,3%, although there are the 2nd and 3rd largest cities in Slovakia. At the beginning of the analysed period (in 2002) the above proportion was only 49.2 % and 22.8 %. During the years 2008-2011, there was a period of mitigation of regional disparities in the number of completed dwellings per 1000 inhabitants. In the 2012, the above regional proportion was 56.6 % and 17.3 %, which confirms the new increase of regional disparities in dwellings.

The indicator of *gross fixed capital per capita* reflects the acquisition of long-term assets, which are deducted by the reduced long-term assets by producers - residents during the year. The formation of the gross fixed regional capital is the sum of gross capital, which was formed in the various sectors in the region (Regional Statistical Yearbook, 2009). In terms of this economic indicator of regional disparities, the regional disparities were exacerbated during the analysed period, which is confirmed by both Gini coefficient (Figure 2) and coefficient of variation (Figure 3). The most significant increase occurred in the years 2007 and 2010. In the last analysed year, the value of Gini coefficient was 0.309 and coefficient of variation 0.722. The best results, i.e. the highest production level of the gross fixed capital per capita were recorded in Bratislava Region throughout the whole analysed period. On the contrary, the poorest situation is permanently in the Prešov region.

Expenditures on the research and development is another indicator within which the increase in regional disparities was observed during the analysed period. The value of Gini coefficient (Figure 2) changed from 0.396 in 2000 to 0.529 in 2012 and coefficient variation (Figure 3) changed from 0.965 in 2000 to 1.4557 in 2012. The substantial amount of the total expenditures on research and development were directed to the Bratislava region. The all other regions have been significantly below the national average since 2000. In 2012, Bratislava region accounted for 57% of the total expenditures provided for research and development. There were recorded relatively low disparities between the remaining regions.

REGIONAL POLICY AS A TOOL FOR MITIGATION OF REGIONAL DISPARITIES

Výrostová (2010) defines regional policy as: *"a part of the state policy which represents a set of objectives, tools and activities to improve the spatial organization of economic activities to reduce regional disparities and to ensure economic, social and territorial development of the regions."*

It was based on divergent theories which consider the spontaneous nature of capitalism to be the cause of regional disparities influencing social injustice and related social instability concentrated in undeveloped regions. The beginning of regional policy is associated with the United Kingdom, where during the Great Depression in 1930's, the socioeconomic disparities between regions deepened. EU regional policy began to develop gradually, depending on the different stages

of building a common market, from which it was expected that can provide spontaneous mitigation of regional disparities (Žítek, Klimová 2008).

In 1987, the Single European Act entered into force, which is considered one of the most important milestones in the development of regional policy. In this document, a separate section titled "Economic and social cohesion" was devoted to the regional policy. This article declares the effort that the EU will focus on the reduction of regional disparities between the individual regions, which should contribute to the overall strengthening of its economic and social cohesion. To achieve these goals, the EU will benefit funds (ESF, AEGGF ERDF) (Čajka, Rýsová, Pešout 2005).

According to the Government Resolution from 13th September 2000, no. 725/2000, regional policy was defined. It is understood as conceptual and executive action of the state, local government and other subjects which aim is:

- to contribute to the harmonious and balanced development of regions,
- to mitigate disparities between the levels of development of individual regions,
- to promote economic and social development of individual regions, particularly in terms of their activation of underused economic and social potential and to promote the rational use of nature and natural resources, including environmental protection, i.e. to promote sustainable regional development.

State financial aid

The state financial aid as a tool of regional policy has started to function since 2002, based on the Law no. 565/2002 collection of laws about the Investment stimuli and in accordance with the map of regional aid for Slovakia. Since 2008, the investment stimuli have been provided under the Law no. 561/2007 collection of laws about the Investment stimuli and on amendments to certain laws. On the basis of this law, the investment assistance and unemployment assistance are used for investment projects, projects of expansion of industrial production, technology centres, centres of strategic services and centres of tourism.

From the analysis of the allocation of financial funds from the State financial aid (investment stimuli), approved by the Slovak government, it results the strong spatial non-uniformity. In the period 2002-2013, the highest proportions of allocated financial funds (table 2) reached the Žilina Region (23.99%), the Trnava Region (23.65%) and the Nitra Region (14.77%). Paradoxically, the least supported regions, which received the lowest proportion of allocated financial funds, were the Banská Bystrica Region (5.85%), the Bratislava Region (4.35%) and the Prešov Region (2.94%). In the case of the Bratislava Region, it is understandable as it is the most economically developed region in Slovakia, but the lower proportion also reached the Banská Bystrica Region and the Prešov Region which belong to the least developed regions in Slovakia. It is paradoxical that even the Bratislava Region has obtained greater support from the state than the least developed Prešov Region. Three most problematic regions (the Prešov, Košice, Banská Bystrica Region) reached a total share of 20.93 % (i.e. less than obtained separately the Žilina and Trnava Region). While one inhabitant of the Trnava Region obtained through the state aid 614.72 EUR, on the other hand, one inhabitant of the Prešov Region obtained only 52.94 EUR. The range of disparities (the ratio between the best

and worst region) in the allocation of state aid per capita reached in the period from 2002 to 2013, 1,161.1 % which is eleven times more.

Table 2. Received state financial aid (investment stimuli)
in the SR according to the NUTS 3 regions in 2002-2013
(Source: Calculated according to the results of the report about the state financial
aid of the Ministry of Economy)

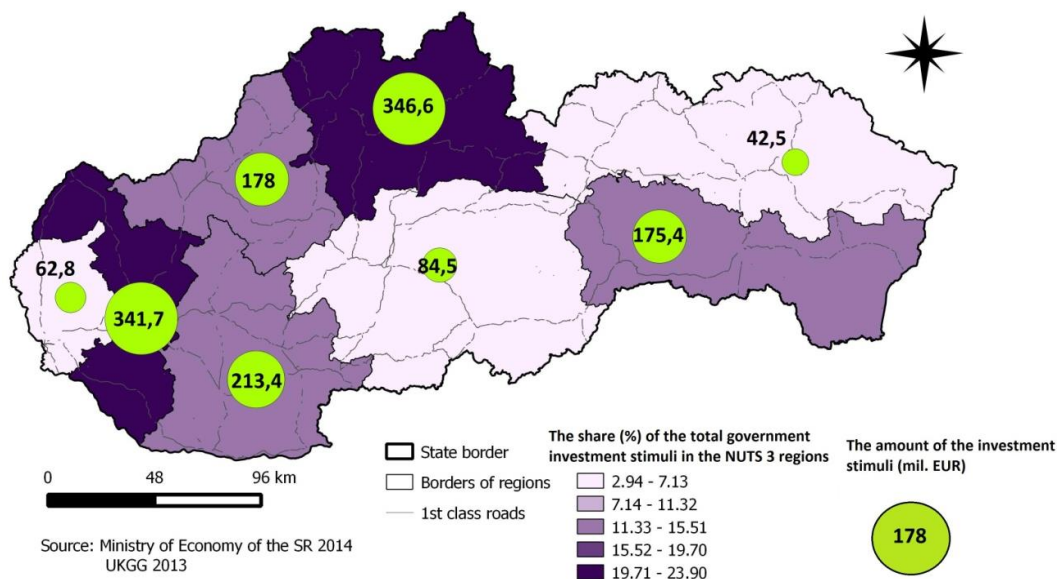| NUTS 3 region	The number of projects	The amount of the government investment stimuli (EUR)	The amount of the government investment stimuli per capita (EUR)	The share of the total government investment stimuli in the NUTS 3 regions (%)	The number of planned working places according to the government investment stimuli	The share of the total number of planned working places in the NUTS 3 regions (%)
Bratislava Region	8	62,779,914	103.08	4.35	3,399	6.89
Trnava Region	10	341,687,737	614.72	23.65	7,502	15.21
Trenčín Region	24	177,992,231	296.77	12.32	9,834	19.94
Nitra Region	23	213,406,394	302.71	14.77	7,238	14.67
Žilina Region	18	346,567,876	499.21	23.99	6,891	13.97
Banská Bystrica Region	17	84,525,752	128.65	5.85	3,307	6.70
Prešov Region	8	42,488,951	52.94	2.94	1,145	2.32
Košice Region	31	175,388,531	225.98	12.14	10,014	20.30
Slovakia	139	1,444,837,386	267.59	100.0	49,330	100,0

Figure 5. The amount of the government investment stimuli (mil. EUR)
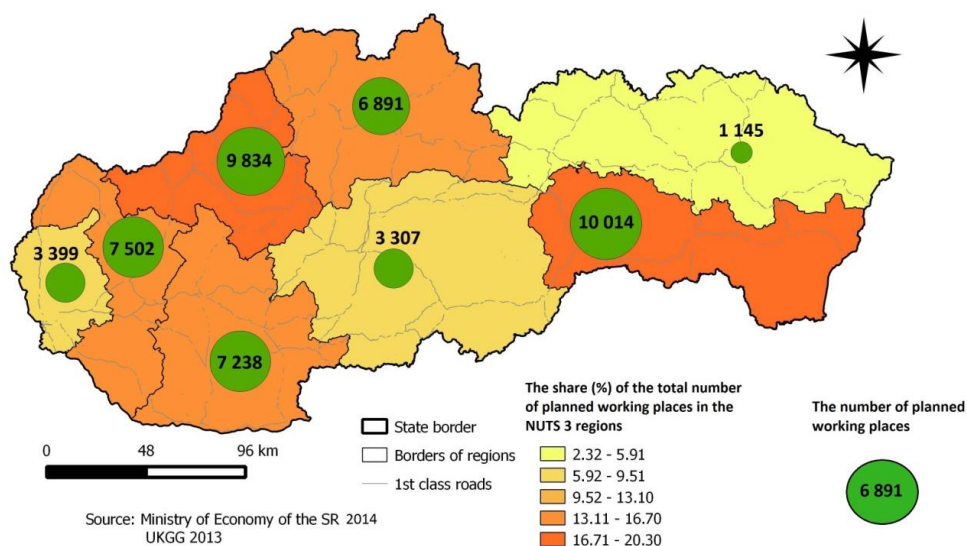in the NUTS 3 regions in the SR during the years 2002-2013

Figure 6. The number of planned working places according to the government investment stimuli (mil. EUR) in the NUTS 3 regions in the SR during the years 2002-2013

It is also interesting to examine the official support for the creation of new working places. From the total number of the planned working places (49,330) in the period 2002-2013, 10,014 working places were planned in the Košice Region (20.30%), which is followed by The Trenčín Region (19.94%), the Trnava Region (15.21%) and the Nitra Region (14.67%). The Lowest number of planned working places was planned in the least developed regions the Banská Bystrica Region (6.70%) and the Prešov Region (2.32%). It is paradoxical that in the regard of planned working places, in the most developed Bratislava Region (6.89%) higher number of working places was planned than in the Banská Bystrica and Prešov Region.

Structural Funds

After the accession into the European Union in 2004, Slovakia got the opportunity to use the Structural Funds, which represent an instrument of regional policy to promote regional development. Each fund defines its domain. Determination of the amount of the Structural Funds depends on the severity of the regional problems, the financial strength of a Member State, the interest of the Community, as well as on the regional interest in the appropriate activity (Čajka, Rýsová, Pešout 2005). Nowadays, we entered into the fifth programming period of the EU for the years 2014-2020. For each programming period, a particular amount of funds is allocated which has been increasing since the first programming period (1988-1993) as well as with increasing number of new Member States.

The analysis of the allocation of the Structural Funds in the period 2004-2006 (Figure 6) shows a more even allocation of finance to individual regions as it is in the case of state financial aid (Table 3). The highest proportions of the Structural Funds were reached by the Banská Bystrica Region (26.51%), the Prešov Region (16.51%) and the Nitra Region (12.15%). Three least developed regions (Banská Bystrica, Košice and Prešov) obtain 53.9% of the total allocated funds. The highest absorption of the Structural Funds per capita obtained the Banská Bystrica Region (409.23

EUR), the Prešov Region (209.63 EUR) and the Trnava Region (201.92 EUR). The Nitra Region (174.03 EUR) was below the average. Significantly behind the average, there were the Košice Region (143.12 EUR), the Bratislava Region (147.54 EUR) and the Žilina Region (125.61 EUR). The lowest support was received by the Trenčín Region (93.14 EUR). The range of disparities (the ratio between the best and worst region) in the allocation of the Structural Funds per capita reached 439.6% in the programming period 2004-2006.

Table 3. Received Structural Funds in the SR
according to the NUTS 3 regions in 2004-2006
(Source: Calculated according to ITMS, www.nsrr.sk)

| NUTS 3 region	The number of supported projects	The amount of received Structural Funds (EUR)	The amount of received Structural Funds (EUR) per capita	The share of the total amount of received Structural Funds (%)
Bratislava Region	899	89,091,187.92	147.54	8.78
Trnava Region	582	111,892,029.89	201.92	11.03
Trenčín Region	433	55,934,473.90	93.14	5.51
Nitra Region	810	123,276,784.24	174.03	12.15
Žilina Region	584	87,266,940.49	125.61	8.60
Banská Bystrica Region	734	268,897,873.84	409.23	26.51
Prešov Region	781	167,410,545.72	209.63	16.51
Košice Region	744	110,469,405.83	143.12	10.89
Slovakia	5,567	1,014,239,241.84	188.20	100.0
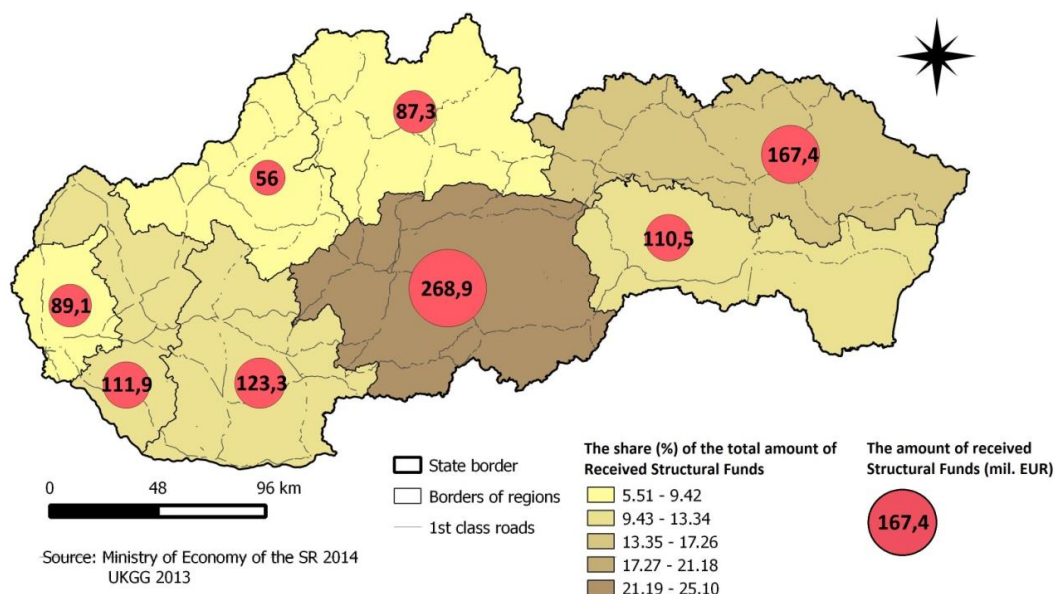
Figure 7. Received Structural Funds (mil. EUR) in the SR
according to the NUTS 3 regions in 2004-2007

The highest proportions in the Structural Funds during the second programming period (2007-2013) (Table 4, Figure 8) reached the Trenčín Region (19.59%), the Žilina Region (17.10%), the Prešov Region (15.52%), and the Banská Bystrica Region (13.29%). Above the average in spending Structural Funds per capita were the Trenčín Region (1,440.14 EUR), the Žilina Region (1,081.85 EUR),

the Banská Bystrica Region (891.14 EUR) and the Prešov Region (842.64 EUR). The Košice Region (677.41 EUR), the Bratislava Region (560.18 EUR) and the Trnava Region (526.94 EUR) were below the average. The lowest support per capita was in the Nitra Region (493.50 EUR). The range of disparities (the ratio between the best and worst region) in the allocation of the Structural Funds per capita reached 291.8 % in the programming period 2007-2013.

Table 4. Received Structural Funds in the SR
according to the NUTS 3 regions in 2007-2013
(Source: Calculated according to ITMS, www.nsrr.sk)

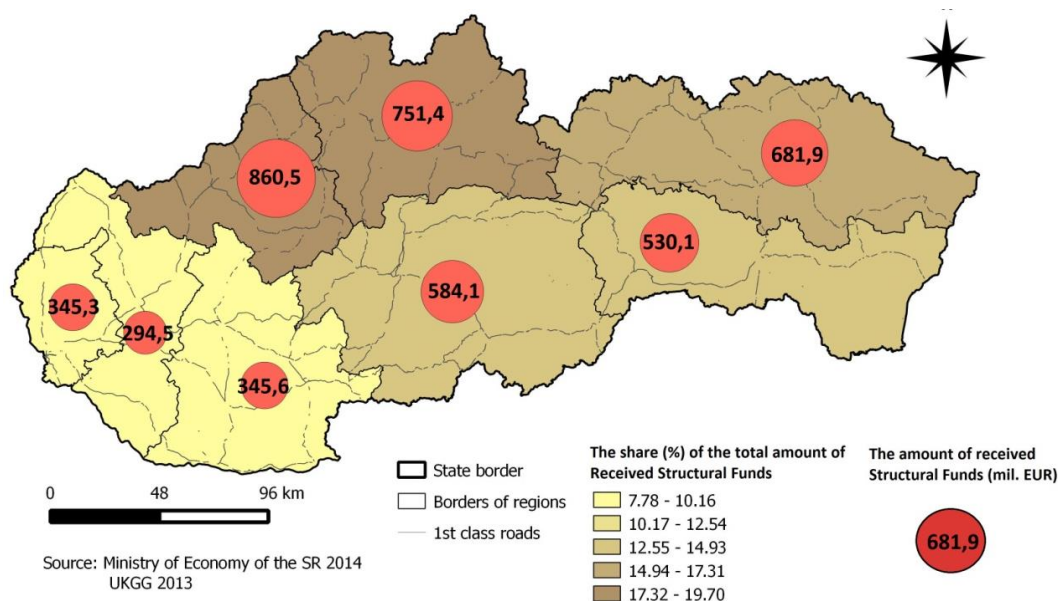| NUTS 3 region	The amount of the Contracted Funds (EUR)	The amount of received Structural Funds (EUR)	The share of used Structural Funds of the total Contracted Funds (EUR)	The amount of received Structural Funds (EUR) per capita	The share of the total amount of received Structural Funds (%)
Bratislava Region	881,001,585.54	345,259,765.77	39.19	560.18	7.86
Trnava Region	516,640,389.09	294,539,858.79	57.01	526.94	6.70
Trenčín Region	1,452,430,920.29	860,499,114.54	59.25	1,440.14	19.59
Nitra Region	572,342,901.68	345,577,441.67	60.38	493.5	7.87
Žilina Region	1,194,293,448.99	751,443,156.99	62.92	1,081.85	17.10
Banská Bystrica Region	1,151,716,808.33	584,054,343.52	50.71	891.14	13.29
Prešov Region	1,170,938,597.96	681,908,553.68	58.24	842.64	15.52
Košice Region	869,891,157.11	530,042,495.63	60.93	677.41	12.06
Slovakia	7,809,255,808.99	4,393,324,730.59	56.26	811.36	100

Figure 8. Received structural funds (mil. EUR)
in the SR according to the NUTS 3 regions in 2007-2013

In this programming period, it is interesting to examine the share of used Structural Funds of the amount of the Contracted Funds. The highest success in obtaining Structural Funds in this programming period reported the Žilina

Region (62.92%) followed by the Košice Region (60.93%) and the Nitra Region (60.38%). The lowest percentage reported the Bratislava Region (39.19%) and the Banská Bystrica Region (50.71%).

The analysis of the allocation of the Structural Funds in the programming period 2004-2006 shows more even allocation of financial aid to individual regions as it is in the state financial aid; however, in comparison of the first programming period with the second programming period the allocation of financial aid is less even. When in the first programming period, the share of the Structural Funds for the least developed regions (Prešov, Banská Bystrica, Košice Region) was 53.91%, in the second programming period, it was only 40.87 %. Is a decrease of more than 13 %.

CONCLUSIONS

Analysis of the selected indicators of regional disparities in the SR demonstrates a differentiated development in individual regions. As confirmed by the development of the Gini coefficient for individual indicators, socioeconomic development permanently has a strong east-west gradient. A strong economic core is formed in the Bratislava Region and in its neighbouring regions (Trnava, Trenčín, and Žilina Region) and the economic periphery includes the southeast regions of the republic (Prešov, Banská Bystrica, Košice and Nitra Region). In terms of individual regions, the best results were recorded in the Bratislava Region throughout the whole analysed period. On the other hand, Prešov region shows the worst results in the nine out of thirteen analysed indicators. This means that it has the worst positions in the regional structure of Slovakia. What is more, the gap between the economically prosperous regions and the economic periphery is growing also during the past few years which confirm the fact that since 2009 the Gini coefficient has been growing in the case of eight out of thirteen analysed indicators.

The current situation in the peripheral regions is linked to the marginal eccentric location of given regions, a lower accessibility through the major transport infrastructure (especially highways), the concentration of population with a low social status and last but not least, to the incorrect settings of regional policy with the localization of foreign investment in economically advanced regions of Slovakia. Summarizing the evaluation of the regional policy in Slovakia through three financial schemes, it can be stated that the regional policy did not reflect the full priority to soften polarization of Slovakia in the developed west/northwest and the lagging southeast/east. A west - east gradient was reinforced. It is interesting to compare in these three schemes the share of the financial aid which gained two eastern regions (the Košice and Prešov Region) in relation to their share of the number of population. In the case of the state financial aid in 2002-2013, the ratio was 15.08% (29.2%), in the case of the Structural Funds in the programming period 2004-2006, 27.4% (29.2%), and the Structural Funds in the programming period of 2007 -2013, 27.58% (29.2%). This means that eastern Slovakia in any scheme did not receive the level of share of the financial aid above the level of their share in the number of population. Analysed regional policy instruments did not mitigate but rather exacerbated regional disparities in Slovakia. For this reason, effective approaches to mitigation of regional disparities not only in Slovakia, but also in other V4 countries and countries in different parts of the world are the challenging issue for the future.

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