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SOCIO-ECONOMIC DEVELOPMENT OF CZECHIA AT THE MICRO-REGIONAL LEVEL

ROZWÓJ SPOŁECZNO-EKONOMICZNY CZECH W SKALI MIKROREGIONÓW

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Summary: The research purpose of the present article was identification of regional differences in population development, and some socioeconomic characteristics at the micro-regional level, wherein the latter are the catchment districts of the municipalities with extended powers (hereinafter referred to as SO ORP). The method applied was the comparison of the population development, education structure, and unemployment in SO ORP, and monitoring of their correlation dependence. The analysis results show that there is rather strong correlation between the migration attractiveness of the micro-regions, their population growth, and transformation success behind which the growing share of the university graduates in the population and relatively very low unemployment rate are standing. The micro-regions at SO ORP level assist in distinguishing continuous territories with either positive or negative population and socioeconomic development.

Keywords: population development, micro-region, socioeconomic development, unemployment, education structures.

Streszczenie: Celem badawczym niniejszego artykułu była identyfikacja regionalnych różnic w rozwoju populacji oraz niektórych cech społeczno-ekonomicznych na poziomie mikroregionów, przy czym te ostatnie są dzielnicami powiatowymi gmin o rozszerzonych uprawnieniach (zwanych dalej SO ORP). Zastosowana metoda polegała na porównaniu rozwoju populacji, struktury edukacji i bezrobocia w SO ORP oraz monitorowaniu zależności ich korelacji. Wyniki analizy pokazują, że istnieje raczej silna korelacja między atrakcyjnością migracyjną mikroregionów, ich wzrostem populacji i sukcesem transformacyjnym, za którymi stoi rosnący udział absolwentów uczelni w populacji i relatywnie bardzo niska stopa bezrobocia. Mikroregiony na poziomie SO ORP pomagają w rozróżnieniu obszarów ciągłych z populacją dodatnią lub ujemną oraz rozwojem społeczno-gospodarczym.

Slowa kluczowe: rozwój populacji, mikroregion, rozwój społeczno-gospodarczy, bezrobocie, struktury edukacyjne.

1. Introduction

From the socioeconomic point of view, the time following the formation of the Czech Republic can be considered as very successful. The selective development accelerates successively whereas the regions in the background of the nuclei of decisive metropolitan area of the Czech Republic (Praha, Brno, and Plzeň) develop not only economically but their success increases also in the field of the population development. The migration attractiveness or unattractiveness of a territory is decisive either for population growth or slump.

The population migration is a rather complex process conditional on a broad spectrum of effects. Elsewhere in the world, and thereby in the Czech Republic as well, the social and economic conditions influence the character of migration. According to [Hampl, Gardavský, Kühnl1987] the population migration is the key mechanism of a concentration process. The migration is a structural regional process and therefore, monitoring thereof is tightly related to the regional development and regional policy [Kupiszewski, Durham, Rees 1998]. The assessment of the spatial structure of the migration processes can legitimately be called as the core of the geographical research of the migration [Hampl 2005]. The study of migration successively became inter-disciplinary [Čermák 1999]. In particular, attention is paid to more general problems of the spatial behaviour of the population and root causes or motives of the behaviour [Šašek 2011; 2016].

The population development and monitoring thereof is important for further development chances of the regions. These days, the migration is determinative for the population increase. The quantitative increase alone may not always be a plus for further development of the regions, e.g. the migration structures in the 1970s and 1980s in the area of mining districts of former Northern Bohemia Region, where the high share of unqualified and low qualified inhabitants immigration, and emigration of university and GCSE graduates, resulted in the deterioration of the education structure. To a certain extent, it is the phenomenon that significantly influences the social micro-climate in this region as well now [Šašek 2011].

Methodology

The analytical part of the contribution is based in particular on databases of ČSÚ aimed for one thing at the population development, which have been published each year down to SO ORP level since 2004, and shares of university graduates in 15+ population for another one based on 2011 census. The others are the unemployment rate (data from ČSÚ), total natural increase of inhabitants, and the share of university graduates.

According to the total increase of inhabitants in two time periods, the typology of SO ORP was made. The results of the typology tightly correlate to the results of the typology by migration increases in the same period. This demonstrates that at present the migration is decisive for the total population development of the territorial

units. In addition, a typology of the micro-regions has been made from the point of view of the population development, the share of university graduates, and the unemployment rate. Three more typologies have been made based on the relations and correlations of the said phenomena.

2. Typology of SO ORP according to the total increase of inhabitants

According to the total increase of inhabitants in 2004–2007 and 2008–2011, the typology of SO ORP was made. Five types were defined. The first type is the significant population increas of SO ORPsIt includes the units with annual average natural increase reaching 0.50 per million or more in both periods in question. The second type of relatively significant population increase of SO ORPs includes the territorial units with the total increase of 0.50 per million in one of the periods in question and positive but lower increase in the other period in question. The third type (slight population increase) includes the territorial units with positive total increase under 0.50 per million in both periods in question; the fourth type (insignificant population increase) includes the units with one total population increase and one total decrease in either of the periods in question. The fifth type (population decrease SO ORPs) includes the territorial units reporting negative natural increase in both periods in question.

Table 1. Typology of SO ORP according to the total increase of inhabitants in 2004–2007 and 2008–2011

Region		Total				
	1	2	3	4	5	SO ORP
Praha	1	0	0	0	0	1
Středočeský	17	4	3	2	0	26
Jihočeský	1	2	6	5	3	17
Plzeňský	6	4	3	1	1	15
Karlovarský	0	1	1	2	3	7
Ústecký	1	1	10	4	0	16
Liberecký	1	2	4	1	2	10
Královéhradecký	1	0	7	5	2	15
Pardubický	2	2	6	0	5	15
Vysočina	0	0	4	6	5	15
Jihomoravský	6	4	3	5	3	21
Olomoucký	0	0	3	3	7	13
Zlínský	0	1	4	2	6	13
Moravskoslezský	0	1	7	2	12	22
Total	36	22	61	38	49	206

Source: inhabitants migration database, ČSÚ 2012, own calculations.

When comparing the migration development and natural change it can be seen that the number of units with adverse development in the natural change is much higher than the units with negative migration development. The total population development inevitably corresponds more with the migration development because the migration increase values are much higher, which confirms that the migration has a determinative impact on the population development of the regions in the developed countries [Čermák, Hampl, Müller 2009]. This is demonstrated by almost identical number of the SO ORP units in each type by the migration and total increase [Šašek 2016].

Table 2. Total increase, natural increase, migration increase (number of ORP units +/– in regions of the Czech Republic) between 2008 and 2013

Region	CP+	CP –	PP+	PP –	MP+	MP –
Středočeský	19	7	16	10	23	3
Jihočeský	4	13	6	11	5	12
Plzeňský	8	7	4	11	9	6
Karlovarský	1	6	1	5	1	6
Ústecký	5	11	2	14	7	9
Liberecký	3	7	4	6	3	7
Královéhradecký	2	13	5	10	5	10
Pardubický	5	10	6	9	5	9
Vysočina	5	10	6	9	5	10
Jihomoravský	15	6	11	10	15	6
Olomoucký	3	10	2	11	3	10
Zlínský	2	11	2	11	1	12
Moravskoslezský	7	15	6	16	7	15
total	79	127	72	131	89	115

Source: inhabitants migration database, ČSÚ, 2014, own research.

All mentioned above is supported by the increasing gap between east and west, where only Brno is an exception in the unfavourable Moravian social and economic, and therefore population development [Šašek 2016]. The differences between the population development at the regional level have constantly been increasing over the last fifteen years, and the development is selective also at the district and microregional level.

3. Typology of SO ORP by socioeconomic development

The evaluation of the total natural increase of inhabitants, the share of university graduates, and the unemployment rate is used for the SO ORP typology by the socioeconomic development.

The following type of SO ORPs has been defined based on the analysis:

- 1) micro-regions with highly favourable projection of the socioeconomic development,
 - 2) micro-regions with good projection of the socioeconomic development,
 - 3) micro-regions with average projection of the socioeconomic development,
 - 4) micro-regions with poor projection of the socioeconomic development,
- 5) micro-regions with highly unfavourable projection of the socioeconomic development.

Five types of SO ORPs by the education level were defined based on the share of university graduates in 15+ age group: the first type of SO ORP with a high share of university graduates (share of 11% and higher in 15+ age group), the second type of SO ORP with a rather high share of university graduates (share between 9.5% and 10.99%), the third type of SO ORP with an average share of university graduates (share between 8% and 9.49%), the fourth type of SO ORP with a low share of university graduates (share between 6.5% and 7.9%), and the fifth type of SO ORP with a very low share of university graduates (share 6.4% and lower).

Table 3. Typology of SO ORP based on the analysis of share of university-graduated inhabitants in 15+ age group

Region		Typology of SO ORP						
	1	2	3	4	5	SO ORP		
Středočeský	7	6	11	2	0	26		
Jihočeský	3	1	8	4	1	17		
Plzeňský	1	1	5	3	5	15		
Karlovarský	0	0	2	1	4	7		
Ústecký	0	1	4	5	6	16		
Liberecký	1	2	3	2	2	10		
Královéhradecký	1	2	8	2	2	15		
Pardubický	1	2	6	5	1	15		
Vysočina	2	4	5	4	0	15		
Jihomoravský	7	4	6	4	0	21		
Olomoucký	1	5	4	3	0	13		
Zlínský	5	5	2	1	0	13		
Moravskoslezský	6	7	3	5	1	22		
total	35	40	67	41	22	205		

Source: SLDB 2011, ČSÚ, own calculations.

In total, 35 territorial units were included in the first type of SO ORP with the high share of university graduates, most from the Central Bohemia Region and Southern Moravia Region (7 micro-regions each), followed by the Moravia-Silesia region (6 SO ORPs) and Zlín Region (5 SO ORPs). None of the SO ORP falls in the first type in the Ústí Region and Karlovy Vary Region. Of these 35 micro-regions,

9 are regional cities and 10 are district towns. Of the other SO ORPs, the regional cities Ústí nad Labem and Jihlava fall under the second type, and SO ORP Karlovy Vary falls under the third type. The other 16 unites are either SO ORPs in the metropolitan area of Prague or Brno, or the centres are relatively big towns that were district centres before the administrative reform in 1960. Fifteen of 22 SO ORPs with very a low share of university graduates are located in the Ústí Region, Plzeň Region, and Karlovy Vary Region, wherein in the latter there are 4 SO ORPs of 7 that form the region. Most of these SO ORPs are the border regions of Krušné hory and Český les.

Five types of SO ORP were defined based on the unemployment rate. The first type of SO ORP with very low unemployment rate (under 7%), the second type of SO ORP with rather low unemployment rate (between 7% and 9%), the third type of SO ORP with average unemployment rate (between 9.01% and 11.0%), the fourth type of SO ORP with a higher unemployment rate (11.01% to 13.0%), and the fifth type of SO ORP with a high unemployment rate (13.01% and higher).

Table 4. Typology of SO ORP based on analysis of the unemployment

Region		Typology of SO ORP						
	1	2	3	4	5	SO ORP		
Středočeský	11	6	9	0	0	26		
Jihočeský	7	6	4	0	0	17		
Plzeňský	7	5	1	2	0	15		
Karlovarský	0	2	2	2	1	7		
Ústecký	0	0	0	8	8	16		
Liberecký	2	3	4	0	1	10		
Královéhradecký	7	4	4	0	0	15		
Pardubický	3	6	4	1	1	15		
Vysočina	3	5	2	4	1	15		
Jihomoravský	3	6	6	1	5	21		
Olomoucký	0	2	4	5	2	13		
Zlínský	1	6	4	2	0	13		
Moravskoslezský	0	1	8	4	9	22		
total	44	52	52	29	28	205		

Source: MPSV, own calculations.

SO ORP Říčany has the lowest unemployment rate (3.67%) and SO ORP Litvínov has the highest one (18.23%). In total, 44 units were included in the first type of SO ORP with a very low unemployment rate; most from the Central Bohemia Region (11) followed by Southern Bohemia Region, Plzeň Region, and Hradec Králové Region (7 units each). No micro-region of the first type is located in the Ústí Region, Karlovy Vary Region, and Moravia-Silesia Region. Twenty eight SO ORPs fall in the fifth type of SO ORP with a high unemployment rate. The vast majority of

them (24) is located in the Moravia-Silesia Region (9), Ústí Region (8) and Southern Moravia (5). The fact that the first type includes 40 of 44 units in Bohemia and 4 in Moravia, and the fifth type includes 17 units in Moravia and 11 in Bohemia (of which 8 from Ústí Region), confirms east-west zoning in the success of transformation.

In the long-term run there were increasing differences at the unemployment rate in the Czech Republic where there were Prague, the Central Bohemia Region, Southern Bohemia Region, and Plzeň Region on the first hand as the lowest unemployment rate, and Ústí Region, Moravia-Silesia Region, and Olomouc Region as the regions with the highest unemployment rate on the other. Just as the migration the unemployment rate has a delayed response to the onset of the crisis. Hence in 2008, the unemployment rate over 7% was recorded in 85 micro-regions only. Early in 2011 during the culmination of the crisis, 148 SO ORPs recorded the unemployment rate over 10%. The depth of the crisis and long duration thereof hit significantly all regions of the Czech Republic including the Central Bohemia Region. Whereas no catchment area of SO ORP of the Central Bohemia Region had the unemployment rate over 7% in 2008, more than one half of the units reported the unemployment rate over 10% in 2011. The Ústí Region, which traditionally has the highest unemployment rate, reported unemployment rate above the levels in both years in all SO ORPs.

Whereas in 2008 maximum unemployment rate in SO ORP Nový Bydžov was 12.1%, maximum unemployment rate for 2011 was found in Bruntál (19.5%). On the other hand, its minimum level was reported in Říčany (2.1%) in 2008 and in 2011again in the same (5.7%).

Table 5. Typology of SO ORP based on the analysis of total increase of inhabitants

Region		Total				
	1	2	3	4	5	SO ORP
Středočeský	13	5	4	4	0	26
Jihočeský	2	2	5	7	1	17
Plzeňský	2	5	3	3	2	15
Karlovarský	0	1	0	2	4	7
Ústecký	1	1	6	4	4	16
Liberecký	0	3	1	4	2	10
Královéhradecký	2	0	4	6	3	15
Pardubický	0	5	4	4	2	15
Vysočina	1	2	3	6	3	15
Jihomoravský	8	6	4	3	0	21
Olomoucký	0	2	2	7	2	13
Zlínský	1	0	1	10	1	13
Moravskoslezský	1	6	2	6	7	22
total	31	38	39	66	31	205

Source: Databáze údajů o migraci obyvatelstva, ČSÚ 2014; own calculations.

Five types of SO ORPs by the population development were defined based on the total increase of inhabitants in the period of question 2004–2014 (average annual increases in relative values). The first type of SO ORP showed significant population growth (5.1‰ and more average annual growth), the second type of SO ORP showed slight population growth (average increase 1.1–4.5‰), the third type of SO ORP showed indistinctive population growth (from +0.9‰ to -1‰), the fourth type of SO ORP showed relative slight population decrease (-1.1‰ to -4.9‰), and the fifth type of SO ORP showed significant population decrease (-5‰ and more).

In total, there are 31 micro-regions included in the first type of SO ORP with the significant population growth. Most of them come from the Central Bohemia Region and Southern Moravia Region (13 and 8, respectively). Fourteen of these SO ORPs showed average annual increase over 10% with Říčany having the highest value (31‰), 7 of them come from the Prague metropolitan area, 4 from Brno area, and 2 from Plzeň area. The only SO ORP outside the territory of three most important metropolitan areas is SO ORP Frýdland nad Ostravicí with "good neighbourhood" for Ostrava region citizens – Čeladná municipality. The fifth type includes 31 SO ORPs, of which 7 from the Moravia-Silesia Region, 4 SO ORPs in the Ústí Region and Karlovy Vary Region. High share of SO ORPs from the Moravia-Silesia Region and more than one half of SO ORPs of the Karlovy Vary Region of this type confirm the long-term and significant negative migration balance of these regions that significantly influence the value of total natural increase of inhabitants.

Table 6. Typology of SO ORP based on the analysis of share of university-graduated inhabitants in 15+ age group and unemployment

Region		Typology of SO ORP						
	1	2	3	4	5	SO ORP		
Středočeský	6	14	6	0	0	26		
Jihočeský	3	8	3	3	0	17		
Plzeňský	1	5	3	5	1	15		
Karlovarský	0	1	1	2	3	7		
Ústecký	0	0	1	5	10	16		
Liberecký	3	2	1	3	1	10		
Královéhradecký	3	7	2	3	0	15		
Pardubický	1	6	4	3	1	15		
Vysočina	1	6	4	3	1	15		
Jihomoravský	8	3	2	7	1	21		
Olomoucký	1	2	4	5	1	13		
Zlínský	3	7	2	1	0	13		
Moravskoslezský	0	8	4	3	7	22		
Total	30	69	37	43	26	205		

Source: SLDB 2011, MPSV, own calculations.

Based on the share of university graduates in the 15+ age group and average unemployment rate between 2004 and 2015, 5 types of SO ORPs were defined by chances of the socioeconomic development. The first type of the micro-region with highly favourable projections of the socioeconomic development includes 30 SO ORPs. Most of them come from Southern Moravia Region and Central Bohemia Region (8 and 6, respectively). The Karlovy Vary Region and Ústí Region have no SO ORP falling to this type. The second type of the micro-regions has good projection of the socioeconomic development. This type includes 69 micro-regions; most in the Central Bohemia Region (14), Southern Bohemia Region and Moravia-Silesia Region (both 8). The Ústí Region as the region with the highest long-term unemployment rate from all regions of Czechia has neither representative in any of the second type of SO ORP. On the contrary, the region has 10 SO ORPs of total 26 followed by the Moravia-Silesia Region with 7 SO ORPs in the fifth type of SO ORP with highly unfavourable projections of the socioeconomic development. None of the fifth type of SO ORP comes from the Central Bohemia Region, Zlín Region, Southern Bohemia Region, and Hradec Králové Region.

Based on the share of university graduates and total increase of inhabitants, 5 types of SO ORPs were defined by chances of the socioeconomic development. The first type of SO ORP includes 28 SO ORPs according to this definition, of which 10 from the Central Bohemia Region and 8 from the Southern Moravia Region. The Ústí Region and Karlovy Vary Region with the worst education structure have no

Table 7. Typology of SO ORP based on the analysis of total increase of inhabitants and share of university graduated inhabitants in 15+ age group

Region		Typology of SO ORP						
	1	2	3	4	5	SO ORP		
Středočeský	10	10	1	5	0	26		
Jihočeský	2	4	3	6	2	17		
Plzeňský	1	5	1	5	3	15		
Karlovarský	0	0	0	3	4	7		
Ústecký	0	0	6	5	5	16		
Liberecký	1	2	0	5	2	10		
Královéhradecký	1	3	2	7	2	15		
Pardubický	1	2	7	3	2	15		
Vysočina	0	4	4	5	2	15		
Jihomoravský	8	4	7	2	0	21		
Olomoucký	1	3	3	4	2	13		
Zlínský	1	1	7	4	0	13		
Moravskoslezský	2	6	5	4	5	22		
Total	28	44	46	59	29	205		

Source: Databáze údajů o migraci obyvatelstva, ČSÚ 2014, SLDB 2011, ČSÚ, own calculation.

their representatives in the first and second type of SO ORP, and the Karlovy Vary Region in the third type either. In the fifth type where 29 units are found, the Karlovy Vary Region, Ústí Region, and Moravia-Silesia Region (4 SO ORPs and both 5 SO ORPs, respectively) are represented most.

Should we conduct typology based on the links among the share of the university graduates, unemployment rate, and total increase of population, only 16 units can be included in the first type of SO ORP, i.e. the micro-regions with highly favourable projections of the socioeconomic development. Five regions have no representation in the first type of SO ORP, and the Ústí Region and Karlovy Vary Region have no representation in the second type of SO ORP either. The Southern Moravia Region and Central Bohemia Region have the most micro-regions with the most favourable conditions for socioeconomic development (6 and 5, respectively). Nine of these 16 SO ORPs have all three assessment parts included in the first type. They include 5 micro-regions from the Prague metropolitan area (Benešov, Beroun, Brandýs, Černošice, and Říčany), two micro-regions from the Brno metropolitan area (Kuřim and Šlapanice), and SO ORPs České Budějovice and Pardubice.

The second type of SO ORP with good projections for the socioeconomic development includes 52 units, of which 40 in Bohemia and 12 in Moravia. Thirteen of them are in the Central Bohemia Region, 7 in the Southern Bohemia Region, and 5 in the Plzeň Region, and only 4 in the Southern Moravia Region. Most regions

Table 8. Typology of SO ORP based on the analysis of total increase of inhabitants, share of university-graduated inhabitants in 15+ age group and unemployment

Region		Тур	ology of SO	ORP		Total
	1	2	3	4	5	SO ORP
Středočeský	5	13	8	0	0	26
Jihočeský	1	7	6	3	0	17
Plzeňský	1	5	5	4	0	15
Karlovarský	0	0	3	1	3	7
Ústecký	0	0	5	4	7	16
Liberecký	0	3	3	2	2	10
Královéhradecký	1	4	8	1	1	15
Pardubický	1	3	6	4	1	15
Vysočina	0	5	7	2	1	15
Jihomoravský	6	4	7	4	0	21
Olomoucký	0	1	7	3	2	13
Zlínský	1	2	9	1	0	13
Moravskoslezský	0	5	9	1	7	22
Total	16	52	83	30	24	205

Source: Databáze údajů o migraci obyvatelstva, ČSÚ 2014; vlastní výpočty, SLDB 2011, ČSÚ, MPSV, own calculation.

have the highest share in the third type of SO ORP where there is an average projection of the socioeconomic development. This type covers 40% of all SO ORPs of Czechia. The fifth type of SO ORP includes 24 units only, mostly from the Ústí Region (7) and the Moravia-Silesia Region (7), i.e. the regions with long-term highest unemployment rate (the Ústí Region is the country with a very low share of university graduates, and the Moravia-Silesia Region has long-term negative population development due to the highest migration loss of all regions in Czechia if expressed in absolute values for the reviewed period in question).

From the socioeconomic development point of view, all typologies mentioned above demonstrate the "transformation success" generally higher in Bohemia than in Moravia, where there is a continuously interconnected territory, including the Plzeň metropolitan area and Prague metropolitan area, which includes most of the SO ORPs of the Central Bohemia Region, and is connected with SO ORPs of the adjoining parts of the Liberec, Hradec Králové, and Pardubice regions.

Regarding Moravia, the "transformation successful" is the Brno metropolitan area, however, its territorial area is much smaller than the area adjoining the Prague metropolitan area. As a whole, Moravia has negative population development due to the migration. Should we compare the regions of Czechia by all mentioned typologies, the worst results can be seen for the Moravia-Silesia Region, Ústí Region, and Karlovy Vary Region, where there is a high share of SO ORPs included in the fifth type by various criteria.

4. Conclusions

The population development has been influenced by the migration movements most over the last years. The analysis of the SO ORPs units with respect to the natural change and migration supports the statement. The migration development has significantly influenced the structure of inhabitants of each region not only at the micro-regional level but also at the district and regional one. The structures of migrants show that they are considerably younger and more educated than population average of the Czech Republic and regions. The development over about the last20 years has significantly changed the structures of the population of both migrationactive SO ORP, districts, regions as well as de-population units.

Rejuvenation could be seen in the migration-attractive SO ORP and on the other hand, fewer migration-unattractive SO ORPs report ageing. Total values for the regions and districts support that. For example, drop in the average age of Praguezápad and Prague-východ districts inhabitants between census in 2001 and 2011 by about 1 year was noticed, whereas average age of citizens of the Czech Republic increased by 0.9 during the same period. Prague-východ and Prague-západ districts have the highest share of child component of all districts of the Czech Republic (almost 4% higher than Czech average).

The migration also significantly influenced the education structure of SO ORP in the background of Prague. In the period between census in 1991 and 2011, the number of university graduates in Prague grew from 16% to 20.7%, in Prague-západ from 6.9% to 17%, and in Prague-východ from 4.6% to 13.6%.

10 SO ORPs only have the highest number of university graduates (over 15%), of which 3 in the Central Bohemia Region and 3 in Southern Bohemia Region, which is demonstrated by a strong position of the metropolitan areas of Prague and Brno in the system of settlement and socioeconomic links within the Czech Republic. In addition to the micro-regions specified above, Plzeň, České Budějovice, Olomouc, and Zlín micro-regions in which nuclei seats of universities are located have as such high value.

The socioeconomic drop of Ostrava area is also evidenced by the fact that the micro-region of the third population largest city with two universities falls to the lower interval of university graduate share where the nuclei of Liberec, Hradce Králové and Pardubice are located.

The micro-regions included in the first type are in particular located in the metropolitan areas of three most significant Bohemian cities (Prague, Brno, and Plzeň), with more than one half of the SO ORPs belongingto the most successful ones. From the point of view of the socioeconomic development the SO ORPs of the Ústí Region and Karlovy Vary Region show the least favourable development. No single SO ORP of these two regions falls to the first type. Also in the assessment of the development of said indicators, the east-west zoning is seen where most of the regions to the east of Central Bohemia Region have their micro-regions in the fourth and fifth type. The only significant pole projecting from this assessment is the Brno metropolitan area.

The micro-regions being called successful in the transformation have both positive population development as well as the socioeconomic one, and one can expect that the new tendencies shall further strengthen the asymmetry in the development processes at the regional level [Hlaváček 2013].

References

Čermák Z., 1999, Migrační aspekty dlouhodobého vývoje Prahy se zvláštním zřetelem k transformačnímu období devadesátých let, Geografie – sborník České geografické společnosti, vol. 104, no. 2, pp. 122-132.

Čermák Z., Hampl M., Müller J., 2009, Současné tendence vývoje obyvatelstva metropolitních areálů v Česku: Dochází k významnému obratu?, Geografie – sborník České geografické společnosti, vol. 114, no. 1, pp. 37-54.

Hampl M., 2005, Geografická organizace společnosti v České republice: transformační procesy a jejich obecný kontext, DemoArt, Praha.

- Hampl M., Gardavský V., Kühnl K., 1987, Regionální struktura a vývoj systému osídlení ČSR, UK, Praha
- Hlaváček P., 2013, *Economic and Innovation Adaptability of Regions in the Czech Republic*, 11th International Conference Liberec Economic Forum 2013, Technical University of Liberec, pp. 194-203.
- Kupiszewski M., DurhamH., Rees P., 1998, *Internal migration and urban change in Poland*, European Journal of Population/Revue *Européenne de Démographie*, vol. 14, no. 3, pp. 265-290.
- Šašek M., 2011, The Changes of Internal Migration in the Czech Republic (with the Focus on Analysis of the Changes in Ústí nad Labem Region, UJEP, Ústí nad LabemŠašek M., 2013, Migrace obyvatelstva v České republice a regionální rozvoj, UJEP, Ústí nad Labem.
- Šašek M., 2016, Population development and its typology in the Czech Republic at the level of micro-regions, Geoscape, vol. 10, no. 2, pp. 53-61.