Conclusions. A direct dependence was established between the integral index of favorable living conditions and the big city population: the integral indices increase, on average, from the cities with 100-250 thousand of inhabitants to cities with the population counting over 1 million. Search for geographical trends allowed to conclude about the deterioration of living conditions in big cities in the direction from western to central Ukraine and from central to south-eastern Ukraine. The best living conditions were found in big cities that have been historically established for more than five centuries, while in relatively young cities the living conditions were among the worst. This may be explained by the fact that older cities developed around the typical functions of the city–life, while new cities were built to settle populations for mining and mineral enrichment production.

REFERENCES


CHANGES OF MIGRATION TRENDS IN BRATISLAVA AND KOŠICE FUNCTIONAL URBAN REGIONS AND THEIR IMPACT TO THE REGIONAL DEMOGRAPHIC STRUCTURE CHANGES

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Abstract. The paper shows changes in migration trends in the functional urban regions (FUR) of two largest Slovak cities – Bratislava and Košice during the transformation and post-transformation period. The most significant is changing pattern of intraregional migration where the moderate centralization of population from the early 1990ies changed into the very intensive decentralization after 2000. While economically strong Bratislava FUR records concentration of population which means positive migration balance during whole monitored period, economically weaker Košice FUR is balancing between concentration and deconcentration of population. The impact of these processes can be seen in changing demographic structure of both regions, mainly in age and educational but the national (ethinc) and religious as well.

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Новотни Л. Зміни у міграційних трендах у Братиславському та Кошицькому функціональних урбанізованих регіонах та їх вплив на зміни у демографічній структурі регіонів. У статті показано зміни у міграційних трендах у функціональних міських регіонах (ФМР) двох найбільших міст Словаччини – Братислави та Кошице – протягом трансформаційного та пост-трансформаційного періоду. Найсуттєвіші зміни відбулися в моделі внутрішньорегіональної міграції, де помірна централізація населення на початку 1990-х років змінилася інтенсивною децентралізацією після 2000-го. В той час як в економічно потужному Братиславському ФМР спостерігається концентрація населення, в Кошицькому ФМР відбувається інтенсивна децентралізація, а в економічно слабшому Кошицькому ФМР спостерігається інтенсивна концентрація. Вплив цих процесів можна побачити у зміні демографічної структури обох регіонів, головним чином у віковій та освітній, а також національній (етнічній) та релігійній структурі.

Introduction. Overall transformation undergone by Central and Eastern European countries since the early 1990s has had significant impact to the dynamics of their populations. In Slovakia, a lot of attention has been paid to the research of lowering fertility and natural increase, ageing of population and other aspects of reproductive behavior and natural change of population but much less attention has been paid to the changes of migration trends in terms of economical, social, political as well as cultural transformation. Natural change has long been the key factor of the overall population change in majority of Slovak functional urban regions. Nevertheless, the research made by Bezák (2011) proved that the number of regions where migration is determining the overall population change has been continuously rising since the 1980s. Furthermore, even in the regions where natural change is determining overall population change on the regional level, it is possible the migration is the key factor of intraregional redistribution of population (Novotny 2012). Therefore, the aim of this paper is to describe the changes of migration trends in the functional urban regions of two largest Slovak cities – Bratislava and Košice as well as to examine the significance of migration’s impact into the spatial redistribution of population within these regions and to demonstrate its relation to the demographic structure changes using the example of the ethnic structure.

Spatial framework. Functional urban regions (FURs), in Slovakia delimited by Bezák (2000) were chosen for this research as they are based on the conception of daily urban systems respecting daily commuting from hinterlands to the regions’ core. This conception allows us to assume that interregional migration tends to be related to the change or relocation of migrants’ employment and intraregional migration occurs usually without changing of employment.

Bratislava FUR and Košice FUR are both located at the southern border of Slovakia (fig. 1). Bratislava FUR is bordering with Austria and Hungary and Košice FUR with Hungary. While Košice is the centre of region with high unemployment rate and relatively low wages, Bratislava region is economically most developed in Slovakia. The population of Bratislava FUR is over 600,000 and of Košice FUR over 300,000 people. In both regions, roughly two thirds of inhabitants live in the core (urban centre) and one third in the ring (hinterland).
Migration trends. Considering regions as a whole, Bratislava FUR was recording positive migration balance during whole observed period. It means that the process of concentration of population continued from previous era. The intensity of concentration (represented by the FUR curve in fig. 2) diminished during 1990s, but with the economic boom of the region it started to rise continuously after 2000. From the World War II till the 1980s, the population of Košice region was growing rapidly, especially because of migration into the Košice city that was considered to be the fastest growing city in former Czechoslovakia. However, intensity of concentration started to decrease in 1980s and in the early 1990s, net migration of the Košice FUR became balanced (it means recorded migration gains or losses were very low). When intensity of concentration started to grow in the Bratislava FUR, the Košice FUR as whole was, due to the collapse of iron-producing industry (that was the key-sector of regions’ economy), recording negative migration balance, which means the process of concentration changed into the process of deconcentration, although its intensity is very low.

Before 1990, centralization of population was characteristic process for all functional urban regions in Slovakia (Bezák 1999), which means the growth of the regions’ cores was stronger than the growth of the rings (also if the migration balance was negative). In the Bratislava FUR, this process continued till the mid 1990s (fig. 2), probably due to some block-buildings neighborhoods. Their construction started in 1980s but was finished just after 1989. After this period, development of migration balance of the core and the ring became dichotomic. The core of Bratislava FUR started to lose population by migration while the ring started to record continuously rising migration gains. After 2005, migration balance of the region’s core became also positive.

In the early 1990s, very low migration gains and migration losses were changing in the Košice FUR as well as in its core and the ring. After this period, the development was very similar with the Bratislava FUR, although the core has been losing its population by migration till the end of the observed period and migration gains in the ring has been lower than those in the Bratislava FUR’s ring (fig. 2).
This means, at the mid 1990s, the process of population decentralization took place in both regions. The intensity of the centralization/decentralization process has been increasing continuously in both regions, although some fluctuation was recorded (fig. 3).

The role of migration. While process of centralization changed into decentralization at the intraregional level, also the roles of migration and natural increase in the total population growth of the individual communes in the FURs’ rings changed. During the period 1991 – 2000, the roles of migration and natural increase were generally equal. However, in the period 2001 – 2010 migration became the key factor of total population change in both regions but much more in the Bratislava FUR. To express this shift we apply the chart first used by Webb (1963) that distributes communes into eight categories created by interrelation of net migration and natural increase gains or losses.

As seen at the fig. 4, in 1991 – 2000 the variation of the net migration rate and natural increase rate values of individual communes in the FUR’ rings were similar, but in 2001 – 2010 significant majority of the communes (especially in the Bratislava FUR) falls within the categories C and D, where the immigration has a decisive role in total population growth. Thus migration in general has become key factor of population redistribution at the local level within both FURs after 2000 and we also expect it to have a decisive role in the changes of population structures at the same level.
Demographic structure changes (example of ethnic structure). Populations of both FURs have similar ethnic structure. Share of Slovaks is approximately 90 % in the cores and 80 % in the rings. However, there are many communes in the regions’ ring, where majority is Hungarian and the share of Slovaks is much lower. If decentralization of population is the most significant migration process in the regions and migration is a key factor of population redistribution (in 2001 – 2010), it is likely that share of Slovaks will increase in the communes that were destinations for migrants from the core and where the share of Slovaks was lower than in the core in 2001.

The strength of correlation (expressed by the correlation coefficient R) between the difference in the share of Slovaks and the migration was higher than the one with natural increase in both regions. And in this kind of phenomena, any correlation with the R value over 0,5 is considered to be large correlation (Cohen 1977). The correlation with the natural increase was lower in the Košice FUR and much lower in the Bratislava FUR, where it was negative. This proves in general that the role of migration became the key factor in
the changes of demographic structure of population in the both observed regions after 2000.

**Conclusion.** This paper shows the main transformation processes of migration and some spatial structures of population are very similar in the Bratislava and Košice FURs, although the economical and social situation in both regions is different. During the 1990s, process of population centralization into the cores of the regions changed into the decentralization with rising intensity after 2000. While the natural change of population used to be key factor of total population change before 1989, after transformation during 1990s, migration gained the decisive role. In general, after 2000, migration became decisive also in the population spatial redistribution and the changes of demographic structure of population in the both observed regions that was shown on the example of ethnic structure. Dominant economic position of the Bratislava FUR among Slovak regions is highlighted by the process of population concentration with rising intensity, while the Košice FUR is experiencing migration losses which represent the process of deconcentration, although its intensity is very low.

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