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DEVELOPMENT OF URBAN AND RURAL POPULATIONS IN SLOVAKIA BETWEEN 1970 AND 1995

Introduction

The aim of this paper is to gain some insights into the growth dynamics of urban and rural populations in Slovakia over the 1970–1995 period. In the introductory section some problems concerning the data and definition of urban population in Slovakia are briefly discussed. The section which follows focuses on the development of the Slovak population at the national level. Finally, in the last section regional aspects of the subject are treated in some detail.

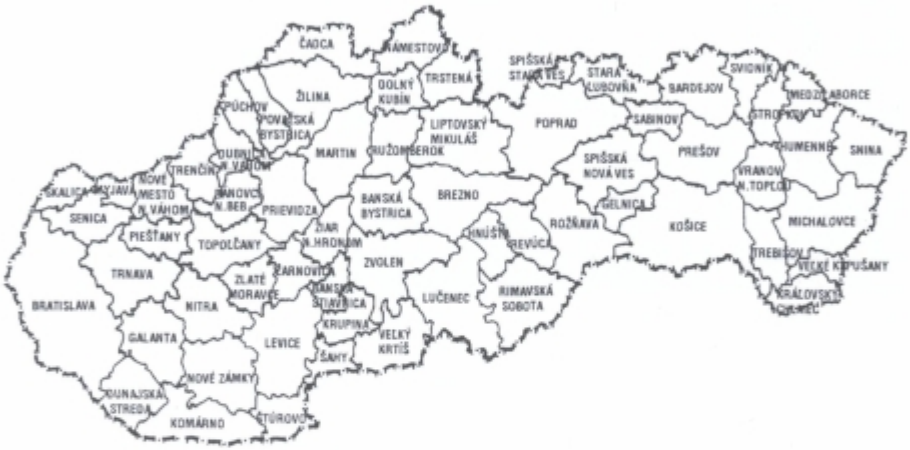
In studying population development, it soon becomes evident that any fruitful discussion on the growth of urban and rural populations requires a rigorous definition of both these terms. It should be noted in this context that Slovakia inherited from the former Czecho-Slovak federation a comparably well defined concept of urban place, suitable also for research purposes. It is generally known that after 1950 the Czecho-Slovak statistical service initiated a rather intensive work on the typification of communes and starting from 1961 every population census was accompanied by a separate classification discerning the communes of urban and rural type. Although each of these classifications was only intended for processing and presenting the results of a particular census, all of them were widely used in geographic and demographic literature.

Unfortunately, no such classification was made on the occasion of the last population census in former Czecho-Slovakia in 1991. For this reason, the classification of the 1980 census (cf. FSÚ, 1984, p. 1711) was chosen as the basis for identifying the urban and rural populations in this paper. Using this classification, 145 Slovak communes can be classed as urban (including the new commune of Vrútky which at the time of the 1980 census formed a part of the city of Martin and excluding the former commune of Tatranská Lomnica which is now a part of the commune of Starý Smokovec). All remaining communes can be considered rural. For the sake of time comparison all boundary changes and amalgamations after 1970 were taken into account by re-calculating the population data within the 1995 administrative limits of communes.

A set of 63 functional urban regions identified on the basis of journey-to-work data from the 1980 population census (Bezák, 1990) was used as the spatial frame-

work for analyzing the regional dimensions of population growth (see Fig. 1). The time period under investigation was divided into three intervals, namely 1970–1980, 1980–1991, and 1991–1995, as separated by the 1980 and 1991 censuses. All data used were obtained either from the results of the particular census or from the records of the current registration of population on 31 December 1995 (FSÚ, 1976, 1984; ŠÚ SR 1994, 1996).

Fig. 1: The set of 63 functional urban regions used for the analysis of population growth



The national trends

Basic information on the total growth of the Slovak population and the specific development of both its components in the three time periods is presented in Table 1. From these data four general conclusions can be drawn.

Table 1: Urban/rural components of population change in Slovakia, 1970–1991.

Period 1970–1980

	Total number (in '000)		Average annual change	
Population	1. 12. 1970	1. 11. 1980	Abs. (in '000)	Rate (in ‰)
Urban	1945.6	2508.9	56.8	25.50
Rural	2591.7	2482.3	–11.0	–4.35
Total	4537.3	4991.2	45.8	9.61

Period 1980–1991

	Total number (in '000)		Average annual change	
Population	1. 11. 1980	3. 3. 1991	Abs. (in '000)	Rate (in ‰)
Urban	2508.9	3001.9	47.7	17.32
Rural	2482.3	2272.4	–20.3	–8.54
Total	4991.2	5274.3	27.4	5.34

Period 1991–1995

	Total number (in '000)		Average annual change	
Population	3. 3. 1991	31. 12. 1995	Abs. (in '000)	Rate (in ‰)
Urban	3001.9	3100.9	20.5	6.71
Rural	2272.4	2266.9	–1.2	–0.51
Total	5274.3	5367.8	19.3	3.63

First, it is evident that the relative increase of the Slovak population was steady declining throughout the period under investigation. As shown, the average annual growth rate dropped almost linearly from 9.6 ‰ in the first decade to 3.6 ‰ in the first half of the 1990s. The declining rate of growth is related primarily to a long-term fall of the crude birth rates during the whole period. An additional factor lowering the rate of growth was the tendency of the crude death rate also to rise in the 1980s.

Second, the development of both components of the Slovak population was not smooth or uniform. Clearly, the two periods 1970–1980 and 1980–1991 can be characterized as periods of extraordinarily rapid growth of urban population in Slovakia. The total number of persons residing in communes classified as urban increased by about 0.5 million in each decade. It is interesting, however, that the average annual growth rate of urban population in the first decade was one third higher than in the following one.

Third, the rapid growth of urban population was accompanied by a considerable loss of population in rural areas. But in contrast with intensive urbanization, the decline of rural population was a much less massive process. Moreover, it reached remarkable dimensions, in absolute and relative terms, only in the 1980s. As a result of the different development of the two components of the Slovak population, the proportion of total population living in the urban communes increased from 43 % in 1970 to 57 % in 1991.

Finally, the table reveals that in the early 1990s dramatic changes were occurring in the growth dynamics of both components of the Slovak population. Between 1991 and 1995 the growth rate of the urban population suddenly dropped to a quarter or a third of its level in the two previous decades. Analysis shows that the fall coincided with a sharp decline in housing construction, so restricting the spatial mobility of population. Consequently, the loss of rural population appeared to have stopped in

comparison with the preceding period. As a result, the proportion of urban population increased only slightly to 58 % in 1995.

Dobšiná is a mining settlement in northern part of Slovakian Rudohorje.

Regional differences

The changes in the whole Slovak population, however, mask a high degree of variability at the regional level. In order to examine how the overall trends observed at the national scale varied spatially, a simple classification method was applied. The method was proposed by Dutch spatial economist Leo Klaassen (cf. Klaassen and Scimeni, 1981) and used by numerous authors in Western European countries for the examination of population dynamics in urban regions and urban agglomerations (cf. Klaassen et al., 1981, van den Berg et al. 1982).

Klaassen's method is based upon a comparison of the differential population growth rates between two zones of a functional urban region: urban *core* and rural *ring*. When this comparison is considered in the context of entire region growth or decline, each urban region can be assigned to one of eight types by the dichotomous treatment of the three pairs of variables: entire region gain/loss, urban core gain/loss, and rural ring gain/loss (see Table 2). In practice absolute or relative population figures could be used. However, as urban cores generally have a larger population than the rings, the use of absolute values might just reflect this imbalance and not the relative importance of change in each zone. For this reason, the classification should be based upon relative change values (cf. Drewett and Rossi, 1981).

Table 2: Classification of functional urban regions (adapted from Drewett and Rossi 1981).

Type	Growth pattern			Growth phase
	Urban core	Rural ring	FMR	
1	+	–	+	Absolute centralization
2	+ +	+	+	Relative centralization
3	+	+ +	+	Relative decentralization
4	–	+	+	Absolute decentralization
5	–	+	–	Absolute decentralization
6	– –	–	–	Relative decentralization
7	–	– –	–	Relative centralization
8	+	–	–	Absolute centralization

It should be noted that four important phases of growth are identified in Table 2. The first is a phase when the urban core grows while the rural ring declines. This process will be referred to as *absolute centralization*. Second, we shall speak of *relative centralization* if the growth in the core is faster than that in the ring or population loss is less serious in the core than in the ring. Third, in regions where population losses in the core are accompanied by population gains in the ring we speak of *absolute decentralization*. Finally, we talk of *relative decentralization* when the population of the ring grows faster than that of the core or the growth in the core is more strongly negative than that in the ring.

Table 3 shows the distribution of the 63 functional urban regions identified in Slovakia among the eight types for three time periods. As pointed out, the classification was based on the average annual growth rates calculated for each of the three periods and separately for the urban core, rural ring and entire urban region. Note that in any case the urban core consists of all urban communes belonging to the given region and the rural ring comprised all the remaining communes of the region.

Table 3: Classification of functional urban regions in Slovakia, 1970–1995.

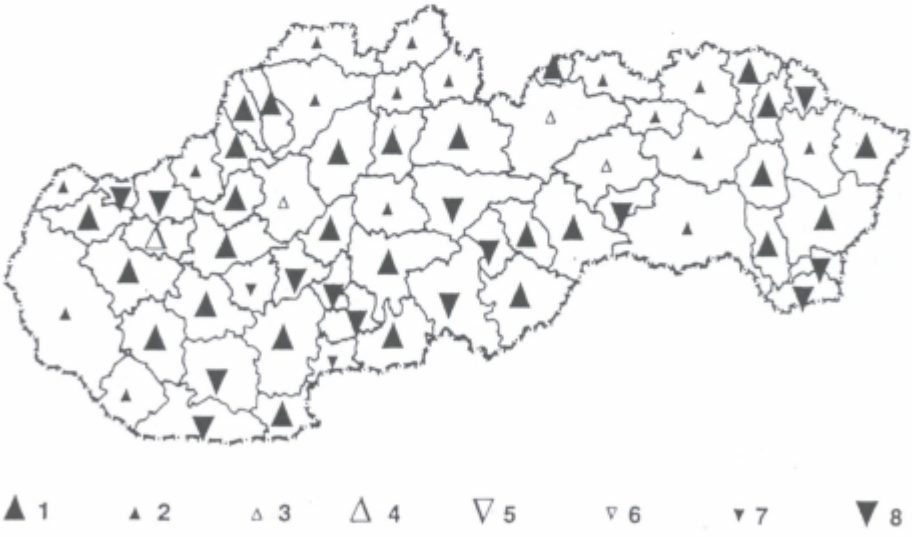
Period	Number of functional urban regions included in type							
	1	2	3	4	5	6	7	8
1970–1980	49	7	–	–	–	–	–	7
1980–1991	43	4	–	–	–	–	1	15
1991–1995	26	16	3	1	–	–	2	15

From the table it is clear that the whole period considered consists of two different stages separated by the census year 1991. In the two decades 1970–1980 and 1980–1991 only four types of urban regions (types 1, 2, 7, and 8) emerged, while in

each of them — generally speaking — the growth in urban cores prevailed over that in rural rings. This means that the processes of centralization undoubtedly dominated in the population development of all urban regions. Moreover, the greatest number of regions belong to types 1 and 8 which are characterized by the growth of urban and decline of rural population. Thus, the result was a process of absolute centralization of population in urban cores.

The second stage covering the five-year period 1991–1995 differs from the preceding one not only by the greater number of types but also by the more even distribution of regions among them. As shown, type 1 also prevails in this period, but this time it includes only 40 % of urban regions. The second most frequent type is type 2 reflecting only relative centralization of population in the region due to the positive growth of rural population. Another interesting fact is an occurrence of types 3 and 4 which were totally absent in the previous stage. Both types are characterized by the shift of growth from cores to rings and in type 4 even a loss of population in the core is observable. Hence, the processes of relative or absolute decentralization of population should be manifest in these urban regions.

Fig. 2: Types of population growth in functional urban regions, 1991–1995



The spatial distribution of the types of urban regions for the 1991–1995 period is depicted in Fig. 2. It is evident that the regions characterized by absolute centralization of population are situated in two extensive areas. The first area covers the north-western and middle-southern part of Slovakia, the second one occupies its easternmost periphery. On the contrary, the regions with relative centralization of population occur predominantly in the northern part of Slovakia. It is worth mentio-

ning, however, that relative centralization of population is also a feature of the regions centred on the greatest Slovak cities (namely, the urban regions of Bratislava, Košice, Prešov, Banská Bystrica, and Žilina), as well as two regions located in the immediate neighbourhood of the metropolitan region of Bratislava. The process of population decentralization is so far observable only in four regions (the urban regions of Nové Mesto nad Váhom, Prievidza, Poprad and Spišská Nová Ves).

Conclusion

In this paper the population data for the period 1970–1995 were examined to throw light on recent features of population growth in Slovakia. Analysis showed that the early 1990s brought a substantial change in patterns of population growth, as observed both at the national and regional scales. Concluding this paper, some critical comments concerning the population development in the first half of the 1990s must be given. First of all, it is worth mentioning that our findings refer only to a comparably short time span of five years. In addition, they were derived from the growth characteristics based on preliminary data obtained from current population registration. Evidently further investigation is needed before definitive conclusions can be reached.

Finally, another important point should be emphasized. The changes identified in the preceding sections might indicate that Slovakia is approaching a phase of deconcentration of population which is typical of the mature stages of urbanization and well documented in several highly-urbanized countries. Such conclusions, however, would be premature. Slovakia still appears to be distant from the point at which population deconcentration becomes the dominant trend at both the national and regional scale. The changes observed are probably only short-term reflections of the adjustment to the socio-economic transformation of Slovak society in the early 1990s. Only time can tell if the changes observed after 1990 indicate an established trend or are merely a temporary perturbation in population development.

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