

БЕЛОРУССКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ

**ГЕОГРАФИЧЕСКИЕ НАУКИ
В ОБЕСПЕЧЕНИИ СТРАТЕГИИ УСТОЙЧИВОГО РАЗВИТИЯ
В УСЛОВИЯХ ГЛОБАЛИЗАЦИИ**

(к 100-летию со дня рождения
профессора Н. Т. Романовского)

**GEOGRAPHICAL SCIENCES
IN REALIZATION OF SUSTAINABLE DEVELOPMENT STRATEGY
IN GLOBALIZING WORLD**

(to the 100th anniversary
of Professor N. T. Romanovskij)

Материалы

Международной научно-практической конференции
25—28 октября 2012 г., Минск, Беларусь

Минск
Издательский центр БГУ
2012

УДК 33:911.3(100)(06)

ББК 65.049я431

Г35

Редакционная коллегия:

декан геогр. факультета БГУ д-р геогр. наук, проф. *И. И. Пирожник* (гл. редактор);

проф. каф. экон. географии зарубежных стран

д-р геогр. наук, проф. *Е. А. Антипова* (отв. редактор);

зав. НИЛ озераведения БГУ д-р геогр. наук, доц. *Б. П. Власов*;

зав. каф. геогр. экологии БГУ д-р геогр. наук, проф. *А. Н. Витченко*;

зав. каф. почвоведения и земельных информационных систем БГУ

д-р с.-х. наук, доц. *Н. В. Клебанович*;

канд. геогр. наук, доц. каф. экон. географии Беларуси

и государств Содружества *Г. С. Смоляков*;

канд. геогр. наук, доц. каф. экон. географии зарубежных стран

Л. В. Фокеева (ученый секретарь)

Рецензенты:

зам. директора Ин-та природопользования НАН Беларуси д-р геогр. наук *В. С. Хомич*;

чл.-кор. НАН Беларуси, д-р экон. наук, проф. *В. Ф. Медведев*

Географические науки в обеспечении стратегии устойчивого
Г35 **развития в условиях глобализации (к 100-летию со дня рождения**
профессора Н. Т. Романовского) = Geographical sciences in realiza-
tion of sustainable development strategy in globalizing world (to the
100th anniversary of Professor N. T. Romanovskij) : материалы Меж-
дунар. науч.-практ. конф., 25—28 окт. 2012 г., Минск, Беларусь /
редкол. : И. И. Пирожник (гл. ред.) [и др.]. — Минск : Изд. центр
БГУ, 2012. — 362 с.

ISBN 978-985-553-057-3.

В издании отражены научно-методические и прикладные результаты научных исследований в области современных структурных и региональных сдвигов в мировом хозяйстве, социально-экономической модернизации стран, регионов СНГ и Беларуси в условиях глобализации, демографического развития и социально-демографических рисков стран, современных проблем развития туризма, природно-ресурсного потенциала стран и регионов, геоэкологических аспектов стратегии устойчивого развития.

Адресуется преподавателям, научным работникам, студентам и аспирантам вузов, сотрудникам органов управления.

УДК 33:911.3(100)(06)

ББК 65.049я431

ISBN 978-985-553-057-3

© БГУ, 2012

**POPULATION AGEING AND CHANGES
IN THE AGE STRUCTURE OF SLOVAKIA**

Bucher S.

*Department of Geography, Faculty of Humanities and Natural Sciences,
University of Prešov, Slovakia*

Slovak population attained to the fourth stage of population ageing. For this stage is significant stabilization of fertility and mortality level occur. Stabilization of fertility takes place at replacement level or below. Population structure becomes stable with preserving both – high number of the aged population and relatively high proportion of the aged.

Population structure by 2009, highlighted by the population pyramid, indicates the drastic drop of young age groups, or their ultimate absence – compared with population pyramid in 1945. Overall, we can claim, that all parameters of age structure shows that population in Slovakia is ageing. According to data from 2009, the old aging index was more than 3 times higher related with the beginning of observed period (1945).

Throughout 2001 – 2009, the average proportion of the 65 + group in Slovakia increased from 11.4 to 12.3 %, whilst the proportion of 0 – 19 decreased from 27.0 % to 22.1 %. The elderly-to-youth coefficient variability dropped (i.e. the age structure became younger) in 13 units located in northern and eastern Slovakia. The youngest population was detected in following regions – evaluation according elderly-to youth coefficient variability (2009 – 2001): Stará Ľubovňa (-23.1 %), Spišská Nová Ves (-18.4 %), Tvrdošín (-13.3 %), Námestovo (-10.9 %) and Kežmarok (10.3 %). The drops amid 0 % and minus 5 % have been attained in Žilina, Čadca, Skalica, Senec, Sabinov, Stropkov, Košice-okolie and Levoča. On the other hand, the fastest ageing population was found in the western regions of Slovakia – Púchov (20.8 %), Turčianské Teplice (19.8 %), Zvolen (19.7 %) and Bratislava I (19.4 %).

Studying the works which deal with regional ageing processes in Slovakia, all the authors agree that different capability of regions to adapt social and economic transformation is the main reason for emerging and deepening of ageing disparities in Slovakia. This allows us to present a classification of regions of Slovakia according to their ageing condition (table 1).

The first category (types I. and II.) includes districts predominantly positioned in eastern and northern part of Slovakia (Table 1 and Figure 1). In stated category are districts with high level of crude live birth rate, high level of natural increase of population. For this category are distinctive lower values of average age – compare with Slovakia, high level of young population dependency ratio and higher share of 0 – 19 year old in total population compare with Slovakia.

Instead we have a lot of districts mainly in western part of Slovakia (types IV. and V.) with the highest values of crude death rate, mean age, ageing index and old population dependency ratio. These regions exemplify units with the oldest population in Slovakia.

Synthesis of population ageing in districts of Slovakia, 2009

TYPE	Name of district (level NUTS IV)
I. (very low level of ageing)	Námestovo, Kežmarok, Košice III, Stará Ľubovňa, Tvrdošín, Spišská Nová Ves, Sabinov, Levoča, Bratislava V, Vranov nad Topľou, Gelnica, Bardejov, Košice-okolie, Čadca, Michalovce, Dolný Kubín (16).
II. (low level of ageing)	Prešov, Bytča, Trebišov, Poprad, Revúca, Svidník, Senec, Stropkov, Humenné, Ružomberok, Rimavská Sobota, Malacky, Pezinok, Kysucké Nové Mesto, Rožňava, Košice II (15)
III. (average level of ageing)	Považská Bystrica, Krupina, Snina, Šaľa, Púchov, Žilina, Skalica, Dunajská Streda, Senica, Bánovce nad Bebravou, Lučenec, Banská Štiavnica, Košice I, Ilava, Galanta, Veľký Krtíš (16)
IV. (high level of ageing)	Brezno, Hlohovec, Martin, Trnava, Banská Bystrica, Nitra, Sobrance, Prievidza, Zvolen, Poltár, Liptovský Mikuláš, Levice, Topoľčany, Detva, Žarnovica, Žiar nad Hronom (16)
V. (very high level of ageing)	Košice IV, Bratislava IV, Trenčín, Zlaté Moravce, Komárno, Partizánske, Nové Zámky, Turčianske Teplice, Piešťany, Medzilaborce, Nové Mesto nad Váhom, Myjava, Bratislava II, Bratislava I, Bratislava III (16)

Source: Statistical Office of Slovakia, 2011

In Slovakia there are two greater regional entities with different population ageing grade. Pronounced region in the south and southwest of Slovakia is described by a higher ageing grade. The second entity, spreading in the north and east of Slovakia is the region with relatively lower ageing grade and with younger population (fig 1).

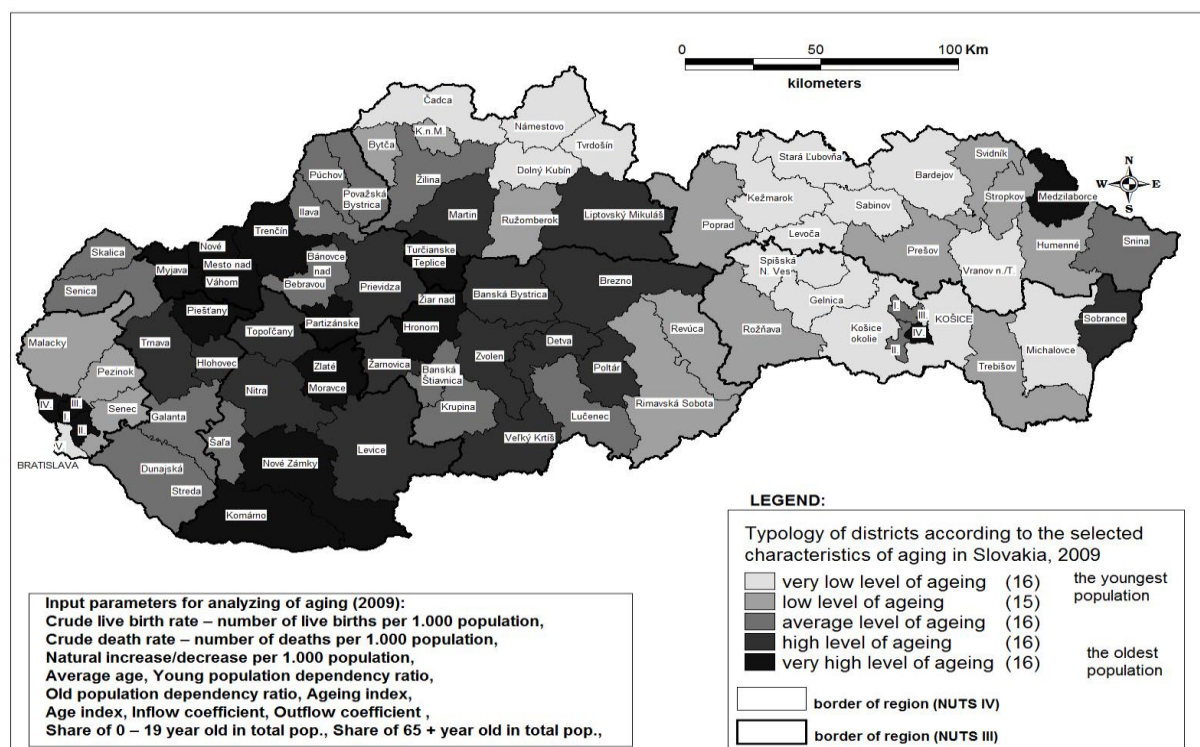


Fig. 1. Typology of districts according to the selected characteristics of ageing in Slovakia, 2009

Source: Statistical Office of Slovakia, 2011

Slightly more sophisticated measures of social and familial dependency provide a better picture of changes in the dependency of the young and the older generations.

These measures, in contrast to the age ratios, take into account certain changes in the social circumstances, more specifically in the length of education and in labor force participation, besides shifts in the age distribution.

The measures which relate various groups of the economically inactive population to the active population describe changes in the support burden more accurately, and also indicate that, while demographic ageing necessarily involves an increase in the proportion of the aged inactive population, this increase is more or less compensated for by the decreasing burden imposed by the young generations.

The structure of the current by age suggests that in the near future the pace of demographic ageing will soon quicken due to changes in the level of fertility, mortality, migration as well as natural shifts in the age structure of population. As we can see in age structure diagrams of Slovakia large cohorts currently of productive age will gradually grow old but they will not be replaced in middle age by generations numerically equal in size. The numerically small cohorts that will soon enter productive age will not be able, nor evidently even willing (according to polls on attitudes towards reproduction), to increase reproduction in order to raise the expected fertility rate, thus there will be a further decrease in the share of children in the population. In further, there will be a lot of consequences of population aging for society in the field of education system, labor supply, productivity and employment, social services, intergeneration transfers, health and health care, age structure of population and level of fertility, mortality and migration. The expected further improvement of mortality conditions will serve to quicken the pace of demographic ageing and the Slovakia will gradually join the ranks of countries in which a high proportion of the population is of post-productive age.

Population ageing and the postponement or rejection of marriage by some young people will lead to a continuous increase in the share of one-person households and family households of young childless people. This will gradually lead to a change in the way of life of an increasingly greater part of the population less, "encumbered" by the need to care for children and the costs that involves. This will certainly be made apparent with stronger consumer tendencies in the population of productive age, but also in continuing consumption among the population of post-productive age.

In accordance with similar findings in other cases, the development of all characteristics of the burden on the productive population in NUTS IV level of Slovak regions is very negative. When there are some more favorable values found in the northern and eastern regions, at the state level Slovak population slowly getting older in all parameters of demographic ageing. Due to rising number of inhabitants at the post-productive age and, in contrast, the falling number of the inhabitants at the productive age in spite of a temporary increase, the negative trend is reflected in the increasing coefficient of the burden on the productive population imposed by the post-productive population (the old people dependence coefficient). Population ageing processes cause needs to solve a whole line of social problems, which recently meet especially developed countries.