



МАТИЦА СРПСКА
ОДЕЉЕЊЕ ЗА ДРУШТВЕНЕ НАУКЕ

ЗБОРНИК
МАТИЦЕ СРПСКЕ
ЗА ДРУШТВЕНЕ НАУКЕ

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SOCIAL SCIENCES QUARTERLY

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148
(3/2014)

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Тематску свеску *Зборника* „Људски ресурси и регионални развој”
уредили су др Бранислав С. ЂУРЂЕВ и Даниела АРСЕНОВИЋ

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ЗБОРНИК

МАТИЦЕ СРПСКЕ
ЗА ДРУШТВЕНЕ НАУКЕ

148
(3/2014)

НОВИ САД
2014

Илуcтpација на корици
гpавира Захарије Орфелина
Човек иице за cтoлом

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DEMOGRAPHIC CHALLENGES ACCORDING TO THE 2011 CENSUS
ДЕМОГРАФСКИ ИЗАЗОВИ ПРЕМА ПОПИСУ ИЗ 2011. ГОДИНЕ

UDC 314.74(100)
UDC 314.728(497.11)“2011”
DOI: 10.2298/ZMSDN1448383P
ORIGINAL SCIENTIFIC PAPER

EMIGRATION ZONES IN SERBIA:
2011 CENSUS RESULTS*

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ABSTRACT: In the last few decades there have been changes in the nature of international migration trends and spatial mobility of population on the world level. This was influenced by significant changes on the political scene of Europe and the world, globalisation, international capital flows, technical-technological progress, the IT revolution and so forth.

International migration trends are mainly analysed from the perspective of the recipient countries, while research from the perspective of the origin countries is much rarer, and especially those which include both aspects. At the same time, there is an evident lack of reliable information containing data on migration trends between countries of origin and destination, regional origin and demographic structures of migrants, which hinders a more detailed territorial analysis. Serbia does not have satisfactory statistics on international migration as well, even though it is a country with long emigration tradition. The census data on the Serbian nationals working or residing abroad, regardless of the relatively large census undercount, present the main sources of statistical information on the characteristics of Serbian emigration, and practically the only source of data on their regional origin and socio-demographic features.

Regional differences in view of the share of nationals abroad are very pronounced in Serbia. They were established as early as 1971 the Census and confirmed by every following census. The 2002 Census results indicated there

* This paper is a result of the project “Investigation of demographic phenomena in the function of public policies in Serbia” (No. 47006), funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

were three typical emigration zones. The aim of the paper is to determine whether there have been changes in the spatial distribution of the emigrants from the regional aspect of Serbia as an origin country, based on 2011 Census final results. The characteristics of the Serbian citizens abroad, according to age and sex, length of stay abroad, country of destination and ethnic composition, have also been analyzed in this paper.

KEYWORDS: international migration, emigration zone, Serbia, 2011 Census of Population in Serbia

INTRODUCTION

Different historical periods brought significant increases in migration flows and patterns and their implications have been multiply analysed. It is believed that Europe, at the beginning of the third millennium, experienced a new migration turnaround. The changed political maps of Europe and the world, inextricably linked with the turbulent economic changes and effects of globalisation, international capital flows, technological progress, along with the improvement of transport infrastructure, development of telecommunications and transportation and information revolution, have resulted in the so-called global migration era [Castles and Miller 2008]. The scope of migration flows has significantly increased, and the permanent settlement, as the most common immigration pattern, is being replaced by models of temporary, circular, transnational migration and intensification of spatial mobility of people in the most productive working age. Furthermore, the concealed, illegal forms of migration have become more complex, presenting an almost unsolvable problem for a growing number of economically developed countries.

At the beginning of the third millennium the public interest in the issue of international migration visibly increased. It was not conditioned only by its substantial intensification, because it had been present since the 1980s, but by the increasingly powerful immigration pressure faced by the most economically developed countries in the world. It is also one of the main reasons for migration, in the vast majority of studies, to be examined from the perspective of destination countries. The studies focussed on the countries of origin and complex research involving both aspects are much more uncommon. The closely related studies are devoted to the territorial aspect of studying international migration. They belong to the group of the least numerous [Skeldon 2008], and when viewed from the perspective of the countries of origin, it is practically negligible. What prevents more reliable consideration of theoretical approaches in revealing deterministic basis of migration is exactly the lack of reliable information containing data about the migration flow between countries of origin and reception, as well as regional origin, demographic and socio-economic structures of migrants. It also prevents a more detailed analysis of the complex relations between social development and migration, particularly in the sphere of finding a political response to the possibility of using migration (foreign currency remittances, transnational migrant networks, social and human capital) to improve the socio-economic development in both the destination countries and countries of origin [Predojević-Despić and Penev 2012].

As a country with a long tradition of emigration, specific economic and political emigration context, a significant number of its citizens abroad, as well as a very heterogeneous spatial distribution and differentiated structure of international migrants, Serbia lacks good statistics on emigrant stocks and flows [ISS and SORS 2013], as well as a sufficient number of studies on international, and above all, economic migration. Therefore, the aim of this paper is to examine the tendency in the number of Serbian citizens working or residing abroad based on the available census data, to territorially locate the “hot” emigration zones based on the final 2011 Census data, and determine whether there have been any changes in relation to the situation disclosed by the previous 2002 Census. This paper also analyses some important structural characteristics of the emigrant stock by zones and indicates the main countries of destination. Such an approach does not have only the research, but wider social significance, particularly because most of the population abroad covered by the census maintain ties with Serbia, often visit their hometowns and present an important resource for the socio-economic development of the country.

EMIGRATION FROM SERBIA: THE TERRITORIAL ASPECT

According to the 2011 Census results², slightly more than 313 thousand citizens of Serbia worked or resided abroad. It was the first population census that registered fewer people abroad than at the time of the previous one. The 2011 Census registered as many as 100 thousand people less, which is almost a quarter less than in the previous census. The causes of such large decrease are numerous, among the most important being: increased undercover as a result of putting the emphasis on the usually resident population and not on the family members living abroad, the boycott of ethnic Albanians, new remote destinations, significant number of asylum applicants, the so-called false asylum seekers, more intense departure of highly educated persons whose coverage is, as a rule, lower. However, despite the inadequate coverage and decrease in the emigrant stock, it is certain that in the last intercensal period 2002–2011 the international migration of Serbian population was less intense than in the last decade of the 20th century. Furthermore, their character has also changed. Forced migration, as well as the migration based on predominantly political reasons, is replaced by the so-called peacetime migration, mainly motivated by economic reasons. The causal connection with the migration of the 1990s continues, especially when observing the return flows, i.e. repatriation of refugees to Bosnia and Herzegovina and Croatia. In 2006, Montenegro became an independent state, so that the migration between the two former Yugoslav republics, previously registered as internal became international migration. According to the 2011 Census, Montenegro is among the 15 *top* countries of

² The paper used exclusively the official statistical data obtained by regular population censuses conducted in Serbia between 1971 and 2011. For 2002 and 2011 the data used were obtained by special additional processing of the final census results. The authors would like to thank the Statistical Office of the Republic of Serbia (SORS) for the data that represented the necessary statistical basis for writing this paper.

destination for the Serbian emigrants. Moreover, the progress in the EU accession process of Serbia is one of the most important triggers for emigration, which influenced the choice of destination country and length of stay abroad in the last intercensal period.

Significant regional differences in terms of emigration trends and characteristics of the Serbian emigrant stock, present back in the mid-1960s, and gradually developed and further intensified during the 1990s, are highlighted in the observed intercensal period 2002–2011, both at the lower (cities and municipalities) and the higher territorial levels (districts and macro regions). They are mainly related to different intensity of emigration and unequal share of the emigrant population in the total population. In addition, differences by areas are noticeable when considering the characteristics of emigration and the emigrant population (country of destination, length of stay abroad, age and sex structure, ethnic composition of migrants, etc.).

Table 1. *Serbian citizens working or residing abroad. Serbia, Central Serbia and Vojvodina, 1971, 1981, 1991, 2002 and 2011*

| Census | Serbia | | | Central Serbia | | | Vojvodina | | |
|--------|--|-------------------|-------------------------------|--|-------------------|-------------------------------|--|-------------------|-------------------------------|
| | Total population (in country and abroad) | Abroad | | Total population (in country and abroad) | Abroad | | Total population (in country and abroad) | Abroad | |
| | | Number of persons | Share in total population (%) | | Number of persons | Share in total population (%) | | Number of persons | Share in total population (%) |
| 1971 | 7,202,915 | 203,981 | 2.8 | 5,250,355 | 133,389 | 2.5 | 1,952,560 | 70,592 | 3.6 |
| 1981 | 7,729,246 | 269,012 | 3.5 | 5,694,464 | 203,421 | 3.6 | 2,034,782 | 65,591 | 3.2 |
| 1991 | 7,822,795 | 273,817 | 3.5 | 5,808,906 | 226,295 | 3.9 | 2,013,889 | 47,522 | 2.4 |
| 2002 | 7,893,125 | 414,839 | 5.3 | 5,794,346 | 344,151 | 5.9 | 2,098,779 | 70,688 | 3.4 |
| 2011 | 7,470,798 | 313,411 | 4.2 | 5,496,368 | 263,083 | 4.8 | 1,974,430 | 50,328 | 2.5 |

Source: Census data

Notes: 1) Data refer to the total number of Serbian citizens abroad (regardless of length of stay); 2) Data for 1991 include estimated number of citizens abroad in municipalities of Bujanovac and Preševo; 3) Data for 2011 do not include the estimated population of Bujanovac and Preševo.

Differences are present even when considering the two main areas of the country exclusively. The 2011 Census results indicate that the number of persons abroad also decreased in Central Serbia and Vojvodina (by 81 thousand and by 20 thousand respectively). However, although the decrease is greater in Central Serbia, it is relatively more pronounced in Vojvodina, both according to the negative growth rate (in Central Serbia, the decrease was 23.5%, while in Vojvodina it was 28.8%) and to the decreasing share in the total population (Table 1).

Regional differences are even more pronounced at lower territorial and administrative levels. It is at the municipal level that all the diversity of demographic and economic development can be clearly seen, as well as the hetero-

generality of ethno-social population structure [Penev and Predojević-Despić 2012]. This applies to the emigration flows, especially during the last two intercensal periods, i.e. after the dissolution of the former Yugoslavia, when the political and economic crisis and the war left serious consequences throughout the country and deepened regional differences.

In Serbia, there is a very heterogeneous spatial distribution of the emigrant stock. Besides the main urban areas – Belgrade (10 municipalities), Novi Sad (2 municipalities) and Niš (5 municipalities), there are only 15 municipalities and cities (out of 168) from which originate more than 50% of people living abroad in 2011. Out of this number, 10 are smaller municipalities with total population in the country and abroad under 40 thousand (of which 4 are very small – with less than 20 thousand inhabitants). These are mainly municipalities of the Braničevo, Pomoravlje, Podunavlje and Bor districts, as well as the Sandžak municipality of Novi Pazar. These are generally typical emigration municipalities which have had the above-average shares of the population abroad for decades [Penev and Predojević-Despić 2012]. In addition, by quantifying the relative numerical importance of the observed emigrant stock, expressed through the *population abroad participation ratio (APR)*³ in the 2011 Census, generally very high values of that indicator are obtained for these municipalities (over 5, and in two municipalities over 10). There are also a very large number of municipalities with a negligible share of persons abroad in the total population of the municipalities (in the country and abroad). In 2011, there were more than 50 municipalities in Serbia with an APR by 50% lower than the average for Serbia.

EMIGRATION ZONES: 2011 CENSUS

In Serbia, based on the concentration of the population abroad, and not only the relative one, as well as on the percentile share of persons working or residing abroad in the total population (in the country and abroad), several zones of pronounced emigration are clearly identified. For the purposes of this paper, with its main objective to assess the basic characteristics of the migrant population stock which, according to the 2011 Census, has the largest concentration of population abroad, as well as the direction and intensity of migratory flows from Serbia, two zones of pronounced emigration were established. In order for the zones to be spatially continuous, the emigration zones also include municipalities that cannot be considered pronouncedly emigrational (at least not in terms of external migration), but which by other demographic characteristics, primarily by geographic location, are similar to their neighbouring municipalities with a very high share of people working or residing abroad.

³ In this case, the *population abroad participation ratio (APR)* is the share of municipality population working or residing abroad in total Serbian population abroad per share of the same municipality population in the country in the total population of Serbia in the country. It shows the relative concentration of population abroad by municipalities [Penev and Predojević-Despić 2012].

The oldest emigration zone is the Central-East Serbia Zone (CES Zone in further text), which began to form as early as the first great emigration wave in the second half of the 1960s. It is located in the central-eastern part of Serbia. Persons from these regions immigrated mostly to the western countries. CES Zone covers a territory of 14 municipalities in three administrative districts (all the municipalities of Braničevo and Bor districts, and municipalities of Despotovac and Svilajnac belonging to Pomoravlje district). This zone, mainly due to its territorial continuity, also encompasses the municipality of Bor and Majdanpek, which have a significantly lower share of population abroad and constitute an exception to other municipalities of CES Zone [for more details see: Penev and Predojević-Despić 2012].

In this Zone, the number of residents abroad continuously increased until the early 2000s. In the last intercensal period there was a decrease in the number of persons abroad (6.0%), but it was slower than the decrease in other areas, i.e. much slower than the average for Serbia (24.4%). The 2011 Census results also point to the scope and numerical importance of the emigrant stock from CES Zone, according to which out of 18 municipalities with the absolute majority of people from Serbia abroad, as many as 10 belonged to the central-eastern emigration zone. Every fourth citizen of Serbia abroad (26%) originates from CES Zone, while at the same time its population accounted for only 5% of the total, usual residents of Serbia. The largest number of people abroad in this zone originates from the municipality of Negotin (12.7 thousand in 2011), which in previous censuses had the highest number of persons abroad within CES Zone. Moreover, in 2011, Negotin was the second municipality in Serbia by the size of the emigrant stock, immediately after 10 Belgrade municipalities observed together.

According to the last two population censuses, the largest number of municipalities from the oldest Serbian emigration zone had at least twice the share of the population abroad than the average for Serbia. The 2011 Census recorded the highest percentile share of the emigrant stock, where nearly every fifth citizen (18.7%) of the zone lived abroad (APR value was as high as 5.3). There are also municipalities with a record-high shares of persons abroad in the total population of the municipality, even over 30% in 2011 (three neighbouring municipalities – Žabari, Kučevo and Malo Crniće), which also have very high levels of APR – even over 10 (Table 2). These three small municipalities have a population of less than 38 thousand, which represents only 0.5% of the total population, while on the other hand, more than 17 thousand people originating from these municipalities live abroad, which is 5.5% of the total emigrant stock of Serbia.

According to the 2002 and 2011 censuses, five Sandžak municipalities of Priboj, Prijepolje, Sjenica, Novi Pazar and Tutin (in the south-western part of Serbia) also belonged to the group of municipalities with the highest share of people working or residing abroad. Unlike CES Zone, in 1991, the Sandžak municipalities had low or moderately high share of persons abroad. A sudden increase in the number of persons abroad in this South-West Emigration Zone (SWS Zone in further text) is linked to the crisis and the wars following the

Table 2. Serbian citizens working or residing abroad in two “hot” emigration zones, 2002 and 2011, by municipalities

| Zone / municipality | 2002 | | | | 2011 | | | |
|---------------------|-------------------|-------------------------------|-------------------|------|-------------------------------|---------|------|-------|
| | In the country | Abroad | | APR | In the country | Abroad | | APR |
| | Number of persons | Share in total population (%) | Number of persons | | Share in total population (%) | | | |
| Serbia | 7,477,974 | 414,839 | 5.3 | 1.00 | 7,157,387 | 313,411 | 4.2 | 1.00 |
| CES Zone | 395,834 | 86,748 | 18.0 | 3.95 | 351,532 | 81,516 | 18.8 | 5.30 |
| Bor | 55,695 | 1,445 | 2.5 | 0.47 | 48,502 | 1,018 | 2.1 | 0.48 |
| Despotovac | 25,463 | 7,392 | 22.5 | 5.23 | 23,065 | 5,840 | 20.2 | 5.78 |
| Golubac | 9,857 | 2,218 | 18.4 | 4.06 | 8,288 | 2,007 | 19.5 | 5.53 |
| Kladovo | 23,483 | 7,750 | 24.8 | 5.95 | 20,355 | 6,746 | 24.9 | 7.57 |
| Kučevo | 18,609 | 6,267 | 25.2 | 6.07 | 15,404 | 6,824 | 30.7 | 10.12 |
| Majdanpek | 23,579 | 1288 | 5.2 | 0.98 | 18,549 | 1,117 | 5.7 | 1.38 |
| Malo Crniće | 13,709 | 5074 | 27.0 | 6.67 | 11,247 | 5,519 | 32.9 | 11.21 |
| Negotin | 43,162 | 14,217 | 24.8 | 5.94 | 36,627 | 12,763 | 25.8 | 7.96 |
| Petrovac | 34,221 | 11,485 | 25.1 | 6.05 | 30,752 | 10,386 | 25.2 | 7.71 |
| Požarevac | 74,555 | 8,542 | 10.3 | 2.07 | 74,638 | 8,764 | 10.5 | 2.68 |
| Svilajnac | 25,355 | 7742 | 23.4 | 5.50 | 23,252 | 6,913 | 22.9 | 6.79 |
| Veliko Gradište | 20,489 | 5,854 | 22.2 | 5.15 | 17,459 | 5,839 | 25.1 | 7.64 |
| Žabari | 12,931 | 5,308 | 29.1 | 7.40 | 10,987 | 4,933 | 31.0 | 10.25 |
| Žagubica | 14,726 | 2,166 | 12.8 | 2.65 | 12,407 | 2,847 | 18.7 | 5.24 |
| SWS Zone | 214,550 | 30,968 | 12.6 | 2.60 | 218,464 | 24,232 | 10.0 | 2.53 |
| Novi Pazar | 85,700 | 10,560 | 11.0 | 2.22 | 99,186 | 9,925 | 9.1 | 2.29 |
| Priboj | 30,241 | 3,417 | 10.2 | 2.04 | 26,805 | 2,448 | 8.4 | 2.09 |
| Prijepolje | 40,962 | 4,709 | 10.3 | 2.07 | 36,430 | 4,560 | 11.1 | 2.86 |
| Sjenica | 27,834 | 5,935 | 17.6 | 3.84 | 25,899 | 2,751 | 9.6 | 2.43 |
| Tutin | 29,813 | 6,347 | 17.6 | 3.84 | 30,144 | 4,548 | 13.1 | 3.45 |

Source and note: see Table 1

dissolution of the former Yugoslavia, to the strengthening of inter-ethnic tensions and the great economic crisis that has affected the entire Serbia, and especially some of its peripheral parts. These municipalities are generally characterised by the majority of Bosniak/Muslim ethnicity, i.e. Islamic religion. It should be particularly emphasised that during the 1990s and 2000s as well, in the analysed municipalities the share of the largest ethnic group was markedly higher in the total emigrant population than in the total population of the municipality. Data of the last two censuses (2002 and 2011) indicate a complete turnaround in the analysed municipalities in terms of external migration. Between 1991 and 2002 the number of persons abroad increased by almost 6 times (from 5.4 to 31.0 thousand), and their share in the total population of SWS Zone from 2.3% to 12.6%. Between 2002 and 2011 there was a significant

decrease in the number of people abroad, of almost 21.8%, to 24.3 thousand persons. Although the decrease in this indicator is somewhat less than the Serbian average, it is significantly higher compared to CES Zone. This can be partially explained by the specific nature of emigration trends from this region during the 1990s and early 2000s, and by overcoming the causes of emigration, on the one hand, as well as the much less opportunity to obtain residence visas to Western countries, on the other hand. In addition, in the last intercensal period the process of return migration started on the basis of readmission agreements, and it is assumed that the census coverage of persons abroad from this region is slightly lower than in CES Zone.

Besides the two mentioned emigration zones CES and SWS, the 2011 Census did not register any other area of noticeable emigration that could be characterised as a pronounced emigration zone. It should be emphasised that there is an emigration zone consisting of two municipalities in southern Serbia – Bujanovac and Preševo. According to the 2002 Census and previous censuses, it is similar to CES Zone by the most important characteristics of the population abroad [Penev and Predojević-Despić 2012]. However, the paper does not analyse this emigration zone because the mass boycott of the 2011 Census by the ethnic Albanians caused the lack of even approximate data about the number and characteristics of persons working or residing abroad originating from the two municipalities.

LENGTH OF STAY

Data on length of stay abroad in *hot* emigration zones are the best indicators of the extent of regional differences in Serbia as far as the time is considered. According to the 2011 Census, out of the total number of Serbian citizens abroad, more than half (175 thousand or 56%) stayed outside the country for less than 10 years. The largest number of Serbian emigrants covered by the last census stayed abroad for less than five years: even one in four (79 thousand or 25%) less than a year, and between one and five years, 53.5 thousand persons or 17%.

One of the main causes of the huge emigration in the period immediately before the last census is the placement of Serbia on the Schengen “white” list in 2010, i.e. the long-awaited opportunity for Serbian citizens to travel visa-free and stay in the European Schengen area up to three months within a period of six months. Moreover, a large number of retirees returning from abroad belong to the group of the so-called transnational migrants, who have returned to live in Serbia but spend part of the year in the former country of residence. Therefore, the data of the last census are significantly different from the data of the previous census in 2002, when more than half (55%) people covered by the census resided abroad for more than 10 years. The largest number of people emigrated in the period between 1987 and 1997 (154 thousand or 37%), immediately before the dissolution of the former Yugoslavia and during the severe crisis that followed. In addition to the abovementioned reasons, certain methodological differences compared to the 2002 Census, such as a different way

of enumerating students abroad, putting the focus on enumerating usual residents of Serbia and obtaining information on persons abroad, also influenced the identified differences in the length of stay abroad between the last two censuses.

In terms of the emigration zones there are apparent differences in the length of stay abroad (Table 3). As already pointed out, the residents of the central-eastern emigration CES Zone were the first to start going abroad, and after the initial wave their number was constantly rising. This affected the people of this zone to stay abroad longer compared to the country average, particularly in relation to the emigrant stock of the Sandžak municipalities, i.e. SWS Zone. According to the 2011 Census, the largest number of people from CES Zone stayed abroad for more than 10 years (44 thousand or 54%). In the 2002 Census, as many as two-thirds of people from this zone stayed abroad for more than 10 years, which shows that the last census covered significantly less the population that had emigrated abroad during the first emigration wave

Table 3. *Serbian citizens working or residing abroad by length of stay. Serbia and "hot" emigration zones, 2002 and 2011*

| Length of stay | Serbia | | CES Zone | | SWS Zone | |
|----------------|------------------------|---------|----------|--------|----------|--------|
| | 2002 | 2011 | 2002 | 2011 | 2002 | 2011 |
| | Number of persons | | | | | |
| Total | 414,839 | 313,411 | 86,748 | 81,516 | 30,968 | 24,232 |
| Up to 1 year | 20,027 | 79,006 | 2,754 | 18,254 | 1,257 | 9,068 |
| 1–4 | 69,617 | 53,528 | 10,656 | 9,208 | 8,502 | 4,432 |
| 5–9 | 74,953 | 42,487 | 13,192 | 10,099 | 8,952 | 3,055 |
| 10–14 | 78,982 | 40,432 | 18,526 | 10,386 | 5,684 | 3,318 |
| 15–19 | 28,822 | 28,776 | 8,232 | 8,217 | 841 | 2,408 |
| 20–24 | 26,991 | 30,297 | 7,901 | 10,942 | 553 | 1,206 |
| 25–29 | 22,831 | 9,619 | 6,848 | 3,810 | 428 | 230 |
| 30+ or unknown | 92,616 | 29,266 | 18,639 | 10,600 | 4,751 | 515 |
| | Structure (percentage) | | | | | |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Up to 1 year | 4.8 | 25.2 | 3.2 | 22.4 | 4.1 | 37.4 |
| 1–4 | 16.8 | 17.1 | 12.3 | 11.3 | 27.5 | 18.3 |
| 5–9 | 18.1 | 13.6 | 15.2 | 12.4 | 28.9 | 12.6 |
| 10–14 | 19.0 | 12.9 | 21.4 | 12.7 | 18.4 | 13.7 |
| 15–19 | 6.9 | 9.2 | 9.5 | 10.1 | 2.7 | 9.9 |
| 20–24 | 6.5 | 9.7 | 9.1 | 13.4 | 1.8 | 5.0 |
| 25–29 | 5.5 | 3.1 | 7.9 | 4.7 | 1.4 | 0.9 |
| 30+ or unknown | 22.3 | 9.3 | 21.5 | 13.0 | 15.3 | 2.1 |

Source: SORS (special census data processing requested by the authors of this paper)

in the late 1960s and early 1970s. In 2011, almost one in four emigrant from CES Zone stayed abroad for less than one year (22%), and every third emigrant (33%) less than five years, which represents a doubling of the share compared to 2002, when only 15% of persons stayed abroad for less than five years.

In SWS Zone, compared to CES Zone, there was a significantly higher share of individuals registered in 2011 who stayed abroad up to five years: 37% was abroad for less than a year, and 55% for less than five years. Only every fourth emigrant from this zone (5.7 thousand, or 23%) went abroad between 1992 and 2001. Given that in 2002 there were nearly 19 thousand people, i.e. 60% of the total number of emigrants from SWS Zone who had stayed abroad for less than 10 years, the 2011 Census registered a significantly smaller number of people who emigrated during the largest emigration wave of the 1990s.

RECIPIENT COUNTRIES

Germany and Austria are the two most important recipient countries for the population of Serbia, from the first emigration wave in the 1960s, to the last 2011 Census. Over time their “attractiveness” was losing its importance but nevertheless, these two countries registered the largest number of emigrants from Serbia in all the censuses. While in 1981, as much as 60% of Serbian people had worked or stayed in Germany and Austria, in 2011 the share of these two countries was reduced to 40%. It should be emphasised that for Germany, the census data are less realistic because the undercount is higher for people who reside abroad for a long time. At the same time, the share of other recipient countries such as Switzerland, and in the last two decades, Italy, has increased.

Observed by the zones, the heterogeneity of distribution of people abroad is less pronounced in countries of destination, as well as the difference in the structure of emigrants in countries in relation to the length of stay abroad (Table 4). Both zones have different countries with the largest number of emigrants from that area. According to the 2011 Census data, most emigrants from CES Zone resided in Austria (43%), and in Germany (46%) from SWS Zone. If in the recipient countries only the distribution of emigrants living abroad for ten years or less is observed, then it does not differ significantly from the distribution of the total number of emigrants from the said zone. This suggests that new migrants mostly go to the countries with already established migrant networks comprised of their relatives, friends, or members of similar groups. Compared to 2002, in CES Zone the number and share of persons residing in Italy increased (from 9% in 2002 to 12% in 2011), and in Germany decreased (from 13% in 2002 to 10% in 2011), which from the third place in 2002, fell to the fifth place of the list of “top” destination countries in 2011 for people from CES Zone. For emigrants from SWS Zone the number of persons and share in Germany decreased (by 8%), while it became increasingly popular to immigrate to Bosnia and Herzegovina (10%).

Table 4. *Serbian citizens working or residing abroad according to the length of stay and country of destination. Serbia and "hot" emigration zones, 2011*

| Length of stay (in years) | Total | Austria | Germany | Swiss | Italy | France | Sweden | Bosnia-Herzegovina | Other and unknown |
|---------------------------|---------|---------|---------|--------|--------|--------|--------|--------------------|-------------------|
| Number of persons | | | | | | | | | |
| Serbia | 313,411 | 70,488 | 55,999 | 41,008 | 23,340 | 20,231 | 10,925 | 6,514 | 84,906 |
| 0 | 79,006 | 16,465 | 14,485 | 8,406 | 5,614 | 4,423 | 2,480 | 2,127 | 25,006 |
| 1–9 | 96,015 | 18,621 | 13,761 | 9,421 | 8,971 | 5,198 | 3,565 | 3,097 | 33,381 |
| 10+ and unknown | 138,390 | 35,402 | 27,753 | 23,181 | 8,755 | 10,610 | 4,880 | 1,290 | 26,519 |
| CES Zone | 81,516 | 35,494 | 7,810 | 11,407 | 10,087 | 8,016 | 2,050 | 100 | 6,552 |
| 0 | 18,254 | 8,213 | 1,889 | 1,742 | 2,073 | 1,604 | 358 | 26 | 2,349 |
| 1–9 | 19,307 | 8,269 | 1,318 | 2,305 | 3,565 | 1,659 | 567 | 50 | 1,574 |
| 10+ and unknown | 43,955 | 19,012 | 4,603 | 7,360 | 4,449 | 4,753 | 1,125 | 24 | 2,629 |
| SWS Zone | 24,232 | 1,358 | 11,214 | 1,540 | 191 | 691 | 1,398 | 2,579 | 5,261 |
| 0 | 9,068 | 597 | 4,374 | 563 | 75 | 217 | 476 | 824 | 1,942 |
| 1–9 | 7,487 | 446 | 3,238 | 350 | 79 | 230 | 454 | 1,129 | 1,561 |
| 10+ or unknown | 7,677 | 315 | 3,602 | 627 | 37 | 244 | 468 | 626 | 1,758 |
| Structure (percentage) | | | | | | | | | |
| Serbia | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 0 | 25.2 | 23.4 | 25.9 | 20.5 | 24.1 | 21.9 | 22.7 | 32.7 | 29.5 |
| 1–9 | 30.6 | 26.4 | 24.6 | 23.0 | 38.4 | 25.7 | 32.6 | 47.5 | 39.3 |
| 10+ or unknown | 44.2 | 50.2 | 49.6 | 56.5 | 37.5 | 52.4 | 44.7 | 19.8 | 31.2 |
| CES Zone | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 0 | 22.4 | 23.1 | 24.2 | 15.3 | 20.6 | 20.0 | 17.5 | 26.0 | 35.9 |
| 1–9 | 23.7 | 23.3 | 16.9 | 20.2 | 35.3 | 20.7 | 27.7 | 50.0 | 24.0 |
| 10+ and unknown | 53.9 | 53.6 | 58.9 | 64.5 | 44.1 | 59.3 | 54.9 | 24.0 | 40.1 |
| SWS Zone | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 0 | 37.4 | 44.0 | 39.0 | 36.6 | 39.3 | 31.4 | 34.0 | 32.0 | 36.9 |
| 1–9 | 30.9 | 32.8 | 28.9 | 22.7 | 41.4 | 33.3 | 32.5 | 43.8 | 29.7 |
| 10+ or unknown | 31.7 | 23.2 | 32.1 | 40.7 | 19.4 | 35.3 | 33.5 | 24.3 | 33.4 |

Source: see Table 3.

Note: Top five countries of destination in one of the analyzed areas have been listed.

ETHNICITY

The ethnic structure of people abroad, as in the entire Serbia, in areas of pronounced emigration is predominantly determined by the ethnic structure of the total population. Moreover, the structure of emigrants by ethnicity essentially depends on the so-called propensity to migrate of members of ethnic communities, which is best shown in the results of the 2002 Census [Predojević-Despić and Penev 2012]. Observed by the zones, the 2011 Census data indicate that the trend of ethnic differentiation of emigrants continued in the last intercensal period, not only by shares of certain ethnicities in the total emigrant stock, but also by their number. In CES Zone, the most numerous among persons abroad are Serbs (59%), while in SWS Zone they are mostly Bosniaks/Muslims (86%). In both zones the inhabitants of these ethnicities make the absolute majority of the total usual residents. Similar to the situation registered in the 2002 Census, SWS Zone in 2011 shows that the share of members of the major ethnicity Bosniaks/Muslims is lower in population in the country (80%) than in the population abroad (86%), while the share of Serbs in the total number of persons abroad from SWS Zone is significantly lower (7%) than the share of the same ethnicity in the total usual residents from that region (28%). In 2002 in SWS Zone the share of Bosniaks/Muslims abroad was up to 91% and of the population in the country (68%), while that of the Serbs was (5% and 30% respectively).

Regarding CES Zone in 2011, a large number of persons of unknown ethnicity was registered in its emigrant stock (as many as 20.2 thousand, or 25%), and the persons who did not declare ethnicity (6.6 thousand or 8%). This is a big difference compared to the situation in 2002, when a significantly smaller number and lower share of these two groups was registered (10 thousand or 11%) in the entire emigrant stock from CES Zone. The most important reasons include the already mentioned differences in the way of enumeration of the population abroad compared to the previous 2002 Census. Since the only source of information on the emigrant stock are family members in the country, it is possible that the persons who lived abroad for many years, as well as their family members, avoided to provide information on ethnicity, which mostly focuses on personal sense of affiliation, and represents the so-called subjective topic.

CONCLUSION

Despite the fact that in the last intercensal period 2002–2011 international migration of population in Serbia was much less intense than during the 1990s [ISS 2013], the available 2011 Census data indicate the continuing trend of emigration. Although the structural characteristics of migration (sex, age, ethnicity, country of destination, etc.) have not essentially changed, there are clear indicators that there have been new forms of international migration. This is indicated by the high number of persons residing abroad for less than one year, which also presents a huge difference compared to the previous 2002

Census. Progress in the process of Serbia's EU accession and placement on the Schengen "white" list in 2010 can be counted among the most important causes. However, the publication of the final and more detailed census data by SORS will provide more precise conclusions.

The 2011 Census results show that no new zones of high emigration in Serbia appeared during the 2000s. The 2002 Census defined three emigration zones: zone in the central-eastern part of Serbia, zone of southern Serbia consisting of municipalities of Bujanovac and Preševo and zone of five Sandžak municipalities in the south-western part of Serbia [Penev and Predojević-Despić 2012]. In this regard, the available 2011 Census results do not indicate the emergence of new high emigration zones. These are still the Central-East Serbia Zone and South-West Serbia Zone, and despite unavailable census data (due to the boycott of the ethnic Albanians), it is assumed that the area of the municipalities of Bujanovac and Preševo is still the "hot" emigration zone.

The 2011 Census results indicate that there are still similar differences between the "hot" emigration zones and other areas in Serbia, primarily in terms of the share of the population abroad in the total population and the value of the APR. There are also differences among the emigration zones, predominantly related to the length of stay abroad, ethnic composition of emigrants and top destination countries. In addition, there are differences within zones, primarily according to the ethnic composition of emigrants and APR by ethnicity. However, for further research and a thorough analysis of current migration flows and causes of the changes in the zones of high emigration, we should certainly wait for the final results of the 2011 Census to be published, regarding Serbian citizens working and residing abroad, as well as returnees from abroad.

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ОРИГИНАЛНИ НАУЧНИ РАД

ЕМИГРАЦИОНЕ ЗОНЕ У СРБИЈИ: РЕЗУЛТАТИ
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РЕЗИМЕ: Међународни миграциони токови углавном се анализирају из перспективе земаља дестинације. Истраживања у чијем су фокусу земље порекла значајно су мање заступљена, а посебно она која истовремено обрађују оба аспекта. Очигледан је и недостатак поузданих информација које садрже податке о миграционим токовима између земаља порекла и земаља пријема, о регионалном пореклу и демографској структури миграната. Ни Србија, иако има дугогодишњу емиграциону традицију, још увек нема задовољавајуће статистичке податке о међународним миграцијама. Пописни подаци о грађанима Србије који раде или бораве у иностранству, без обзира на релативно велики необухват, представљају основни извор статистичких информација о карактеристикама српске емиграције, и практично једини извор информација о њиховом регионалном пореклу и социо-демографским карактеристикама.

Циљ рада је био да се утврде основне промене које се тичу обима и структуре контингента становништва Србије на раду или боравку у иностранству до којих је дошло у међуписном раздобљу 2002–2011, а посебно према њиховом регионалном пореклу.

И поред тога што су у периоду 2002–2011. спољне миграције становништва Србије биле знатно мање интензивне него током 1990-их, расположиви подаци Пописа из 2011. упућују на закључак о настављању интензивног иселавања. Иако се структурне карактеристике миграната (пол, старост, национални састав, земље дестинације и др.) нису битније мењале, присутне су јасне назнаке да је дошло до

појаве нових видова спољних миграција. На то упућује и велики број регистрованих лица која у иностранству бораве краће од годину дана, што уједно представља и велику разлику у односу на 2002. годину.

Резултати Пописа 2011. показују да се током 2000-их у Србији нису појавиле нове зоне наглашене емиграције. То су и даље подручја у централноисточним деловима Србије (тзв. ЦИС зона) и у југозападној Србији (тзв. ЈЗС зона). Уједно, претпоставља се да се општине Бујановац и Прешево, као и 2002. године, могу окарактерисати као трећа „врућа“ емиграциона зона, али су, због бојкота Пописа 2011. од стране становништва албанске националности, оне изузете из разматрања.

Регионалне разлике су веома наглашене када се посматра удео лица која раде или бораве у иностранству. Оне су присутне и у погледу дужине боравка ван земље. Најранији масовни одлазак становништва је забележен у ЦИС зони, а њихов број се у након почетног емиграционог таласа стално увећавао. Према Попису из 2011. године, сваки четврти грађанин Србије на раду или боравку у иностранству (26%) је пореклом из те емиграционе зоне, док је истовремено то подручје учествовало са свега 5% у укупном уобичајеном становништву земље. Уједно је и њихов боравак у иностранству дужи у односу на републички просек, а нарочито у односу на дужину боравка емиграционог контингента из ЈЗС зоне. Посматрано по зонама, разлике по земљама дестинације су мање изражене него разлике у погледу дужине боравка у иностранству. У време пописа из 2011. из ЦИС зоне највише емиграната је боравило у Аустрији (43%), а из ЈЗС зоне у Немачкој (46%). У односу на 2002, у ЦИС зони је настављено повећање броја и удела лица која бораве у Италији, док је у ЈЗС зони видно порасла „популарност“ емигрирања ка Босни и Херцеговини.

Резултати Пописа 2011. указују да је задржана битно другачија етничка структура емиграната по зонама. У ЦИС зони међу лицима у иностранству најбројнији су Срби (59%), док је у ЈЗС зони највише Бошњака /Муслимана/ (86%). У обе зоне становници тих националности чине изразиту апсолутну већину и укупном уобичајеном становништву.

КЉУЧНЕ РЕЧИ: међународне миграције, емиграциона зона, Србија, попис становништва Србије 2011

WOMEN AND FORCED MIGRATION IN SERBIA

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ABSTRACT: This article focuses on the impact of forced migration on women from the republics of former Yugoslavia in Serbia. It gives some background on refugee movements and continuity and change in women characteristics and needs after two decades of displacement. As one of the vulnerable groups recognized by UNHCR, women and especially elderly women are facing distinct economic and social problems. This research offers insight into gender differences in educational outcomes, the labor market and primary income sources of forced migrants in Serbia. Women who had families, single parent families and widows who are particularly vulnerable are briefly discussed in order to improve assistance and programs servicing the needs of female forced migrants.

KEYWORDS: forced migration, refugees, women, Serbia

Increase in the volume and complexity of forced migration raises numerous challenges for international and national institutions. Some of them are recognition of the specificity of women and adoption of gender perspective on forced migration, having in mind that needs, strengths and experiences of forced migrants are different for male and female population. Greater attention to women within the forced migration studies and practice has been paid since the mid 80s of the 20th century, after which the focus from women in forced migration shifted to gender in forced migration. Incorporation of gender dimensions into forced migration research and policy tackles the issue of harmonization of official refugee definition to the current migration processes and different types of forced migrants who need legal, humanitarian and other forms of protection and assistance. When considering the evolution of the international refugee regime, Barnett points out that traditional refugee definition of persecution prevents many women to seek or obtain refugee status [Barnett 2002: 257] while Doyle [2009] asks for understanding of gender-based persecution's place within the UN convention framework.

United Nations High Commission for Refugees indicated that, at the end of 2011, the total population of their concern was 35.4 million, a great number of which were women. According to available data broken down by sex (covering

24.4 million people in 155 countries or territories), on average, women and girls constituted 49 percent of persons of concern to UNHCR. They accounted for 48 per cent of refugees and half of all IDPs and returnees (former refugees) at the end of 2011 [UNHCR 2011: 46]. The demographic structure of refugees significantly affects the priorities of UNHCR policies, while UNHCR works to ensure equal access of women to protection and assistance. The need for specific UNHCR policy is highlighted, especially towards elderly women, since due to longer life expectancy they are usually more numerous in age groups above 60 years of life. 'The special needs of elderly women are particularly prominent in countries with aging refugee populations' [UNHCR 2001: 3].

Different needs regarding the protection and special programs for women are particularly important in protracted refugee situations when donor support decreases. Although more than twenty years have passed since the war in the former Yugoslavia, Serbia is still a European country with the highest number of refugees and one of the world's countries facing the phenomenon of extended exile. The refugees from Bosnia and Herzegovina and Croatia in Serbia are classified among the five priority protracted refugee situations [UNHCR Ex Com 2008]. The associates of the NGO Group 484 researched the position of female refugees and internally displaced women and they pointed to the need of developing gender sensitivity in the work of institutions which are concerned with the rights of forced migrants in Serbia. Their findings, obtained on the basis of focus group discussions, among others, implied particular vulnerability of elderly women and women with disabilities, as well as single mothers and mothers of children with disabilities. The above problems are related to difficulties in achieving retirement allowance and health care, sources of income, and child care with none or no sufficient or adequate support of their immediate and wider social environment [Pavlov *et al.* 2006].

Female forced migrants have been identified as a particularly vulnerable group in many of the strategic documents of the Republic of Serbia. The need to reduce gender inequalities in the refugee population is stressed in the National Strategy for Resolving the Problems of Refugees and IDPs for the period from 2011 to 2014 [Government of the Republic of Serbia, 2011a] in the framework of goals for increasing employment and inclusion of the most vulnerable categories of refugees in all levels of education. According to the Poverty Reduction Strategy in Serbia [Government of the Republic of Serbia, 2003], one of the women's groups having the highest risk of poverty are women refugees. The National Employment Strategy for the period 2011–2020 [Government of the Republic of Serbia, 2011b] particularly emphasizes women refugees within the implementation of the policy of equal opportunities for all in the labor market and creating conditions for employment of hard-to-employ and vulnerable groups in the labor market. Due to the differences in unemployment rate of women refugees in relation to the total population of women, the National Strategy for the Advancement of Women and the Promotion of Gender Equality for the period 2009–2015 [Government of the Republic of Serbia, 2008] stresses special programs aimed at this group to foster further empowerment of female forced migrants.

THE SOCIO-DEMOGRAPHIC CHARACTERISTICS OF FEMALE FORCED MIGRANTS

In the first waves of refugees who sought refuge on the territory of the Republic of Serbia, women made up more than two-thirds of the adult population. Therefore, the arrival of refugees had effect on slightly higher number of women in the population of Serbia. As early as 1996 the ratio of men and women in the refugee population was 47.2% versus 52.8% [UNHCR, Commissariat for Refugees and Migration, 1996]. Over time, the gender structure of the population became more uniform, so in 2002 men accounted for 47.6% of forced migrants¹, i.e. 49.3% in the year 2011. The population of Serbia in 2011, without forced migrants, was characterized by a slightly lower proportion of males (48.3%) compared to the population of forced migrants. The rate of masculinity of forced migrants was 973.8 in 2011, and for the first time it was larger than the value of 'domicile'² population (947.9). According to the 2011 Census, female population in the group of forced migrants who were over 70 was much more numerous (the masculinity rate was 706.9), while the number of men and women aged 35 to 60 years was almost equal. Findings of the study on refugees from Bosnia and Herzegovina in Belgrade showed that ten years earlier (2001), as a result of the war, the values of the specific coefficient of masculinity were extremely low, not only in the group of persons who were over 70, but also for the 35–39 (641.4) and 40–44 (635.7) age groups [Lukić 2005].

According to the 2011 Census data, the largest number of forced migrants in Serbia³ had secondary education. In the structure of female population of forced migrants, 51.6% accounted for persons with secondary education, 18.5% with high or higher education, 17.9% with primary education, 8.3% with incomplete primary education and 3.5% without any qualifications. The most favorable educational background of female forced migrants can be found in the Belgrade region, where 26.4% of these women have high or higher education, while the proportion of women without any education, incomplete primary or primary education are below the state average.

There are large differences in the level of education in relation to the gender of forced migrants, which are least pronounced in the group of individuals with high or higher education. A somewhat smaller proportion of women in the group of highly educated is primarily the result of smaller share of women with this level of education among the population over 60. The differences, with respect to the gender, in education level of forced migrants in the Republic of Serbia are also observed at regional level.

¹ The term *forced migrants* refers to forced migrants from the territory of former Yugoslav republics, regardless of the refugee status.

² The 'domicile' population refers to the population of Serbia excluding forced migrants.

³ The data in this paper refer to the Republic of Serbia without the data for the Autonomous Province of Kosovo and Metohija.

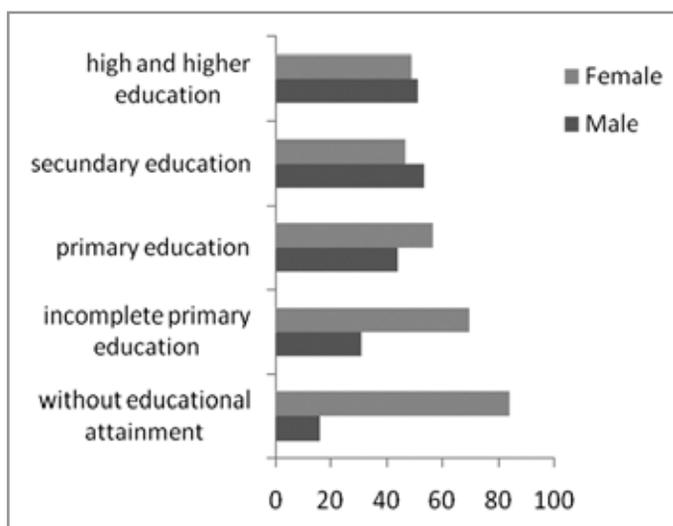


Figure 1. *Educational attainment of forced migrants aged 15 and more in Serbia by gender, presented as % of males / females associated with given levels of educational attainment, the 2011 Census.*

In comparison to 2002 Census, the Census data from 2011 show noticeable increase in the share of female forced migrants in Serbia with secondary and tertiary education, while at the same time, the share of women without any education, incomplete primary education and primary education is reduced. In comparison 'domicile' women, female forced migrants have a somewhat more favorable educational structure characterized by a higher proportion of women with secondary and tertiary education, as well as a significantly lower percentage of women with incomplete primary education.

The illiteracy rate of female forced migrants in 2011 (2.6%), although slightly less than the rate of illiteracy of 'domicile' women (3%) was significantly higher compared to male forced migrants (0.5%), which is consistent with the gender ratio of the 'domicile' population illiteracy rate. However, in the age structure of illiterate forced migrants, there are great differences between the two genders. Over 90% of illiterate women are over 60 years of age, while the share of men of the same age accounts for 52% of illiterate persons. For example, the share of illiterate persons aged 10 to 19 years is 5.7% for male forced migrants, compared to 0.9% for female forced migrants. According to the 2011 Census, the data on computer literacy, which were collected in Serbia for the first time, showed that, in the group of forced migrants who were not computer literate, women (53.1%) were more numerous, which is similar to the values of the 'domicile' population (54.0%).

The population of female forced migrants belongs to socially vulnerable groups, at risk of poverty and social exclusion. According to the 2011 Census in Serbia, there were 42.1% of economically active female forced migrants,

which is more compared to the 'domicile' female population (34.2%). Although male forced migrants remain economically more active than female, the increase in the proportion of economically active women in the total female population of forced migrants (39.3% in 2002) is noticeable. The unemployment rate of female forced migrants was 24.8% in 2011, and was slightly higher than that of the male forced migrants (23.7%) but also in relation to the 'domicile' female population (23.6%). According to a survey of social vulnerability of the Roma people, refugees and internally displaced persons in Serbia conducted in 2006, the ratio of employed women to employed men was 10:18 among refugees/ IDPs, 10:12 among the domicile non-Roma population, while in the Roma community there were four times less employed women than men [UNDP, 2006]. Similar to the 'domicile' population, the unemployment rate of female forced migrants in 2011 had the highest value in the Region of Southern and Eastern Serbia (33.2%).

As a result of adjustments to the labor market in Serbia in the circumstances of transition and non-restructured economy, it is noticeable that in the structure of unemployed female forced migrants the proportion of persons who used to work and persons seeking their first job was 67.9% to 32.1%, while for the domicile female population this ratio was 60.8% to 39.2%. In the Region of Southern and Eastern Serbia, which is the region with the highest unemployment rate in Serbia, within unemployed female forced migrants there is a slightly higher proportion of women seeking their first job (34.3%) compared to the state average. The position of female forced migrants in the labor market in Serbia was indicated by earlier findings, according to which in the period before the exile or displacement 52% of the female respondents were employed, while after the exile/displacement this percentage was only 25%, out of which 4% were women who had just entered the labor market. The female respondents pointed out that some of the problems in finding employment were lack of information and social networks, difficulties in finding a well-paid job or a job they are professionally competent for [Pavlov *et al.* 2006].

If we look at gender differences with respect to occupation, according to the 2011 Census data the groups of occupations in which women predominate are the same for both forced migrants and the 'domicile' population (administrative, service and trade workers, professionals and artists and elementary occupations). While some occupational groups engage women more, male forced migrants are more evenly represented in different occupations. From the aspect of some occupational groups, the professional group of experts and artists forced migrants is comprised of nearly two-thirds of women. In the group of service and elementary occupations women are also the majority, 59.2% and 55.8%, respectively.

When creating and implementing programs servicing the needs of female forced migrants, particular attention should be paid to the category of female forced migrants with disabilities. According to the 2011 Census data, there are more than 10 000 female forced migrants with disabilities in Serbia, which accounts for 53% of all forced migrants with disabilities in Serbia. Most female forced migrants with disabilities live in the Region of Vojvodina.

Analysis of data on the marital structure implies that programs targeting female forced migrants should consider the specificity of widows, having in mind that representation of widows by age indicates that, as a result of the war, the proportion of widows at the age of 40–49 and 50–59 years is higher in the case of forced migrants, than in the 'domicile' population of Serbia (5.9% versus 3.2%, and 17.6% versus 12.5%). The municipalities with the highest number of forced migrant widows at the age of 40–49 years are Novi Sad, Zemun, Stara Pazova and Indija.

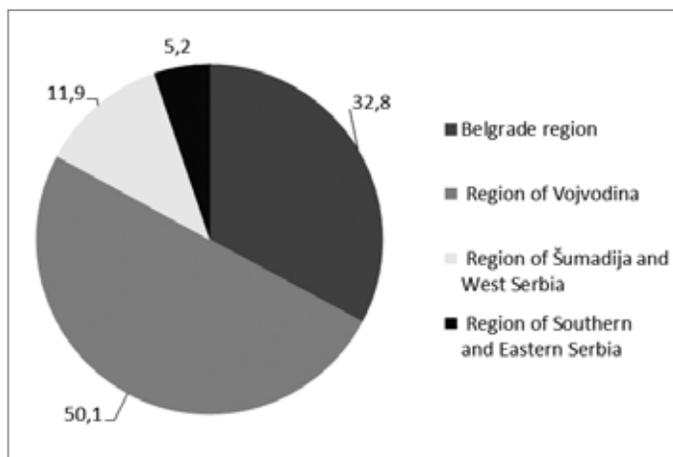


Figure 2. *Families of forced migrants of the 'mother with children' type by regions in Serbia (%)*, 2011 Census

Families of forced migrants of the 'mother with children' type account for 13.8% of all forced migrant families. On average, this type of family has two members and they are most common in the Region of Western Serbia and Šumadija. However, the absolute values show that, in accordance with the territorial distribution of the population of forced migrants in Serbia, most of these families (as many as 12,048) live in the Region of Vojvodina. Over 2,600 families of forced migrants of the 'mother with children' type (6,311 members) live in Novi Sad, 1,530 (3,552 members) in Zemun, and 1,254 (2,935 members) in the municipality of Novi Beograd.

Changes in social environment, loss of social networks and possible loss of male members of a household, or family separation are all factors influencing the new role of women in the household of forced migrants. Therefore, female headed households particularly encounter various difficulties. The Census of 2011 recorded 30,916 households with at least one forced migrant in which the head of the household is a woman. These are mostly family households (68.3%), and non-family households are significantly less numerous (31.7%). In the case of family households, the households with one family are dominant (91.3%), followed by households with two families (8.3%).

Table 1. *Female headed households of forced migrants in Serbia, according to the sources of income, 2011 Census*

| | Total | Sources of income of the household | | | | | | |
|---|--------|--|----------------------|----------------------|----------------|--------------|-------|-----------|
| | | Earnings or other income based on work | | Other income | | | Mixed | No income |
| | | From agriculture | From non-agriculture | Retirement allowance | Social benefit | Other income | | |
| Households in which at least one member is a forced migrant | | | | | | | | |
| THE REPUBLIC OF SERBIA | 30,916 | 220 | 10,333 | 7,878 | 808 | 1,314 | 8,666 | 1,697 |
| Belgrade region | 11,235 | 12 | 4,491 | 2,488 | 117 | 400 | 3,218 | 509 |
| Region of Vojvodina | 14,870 | 141 | 4,531 | 3,986 | 490 | 680 | 4,138 | 904 |
| Region of Šumadija and West Serbia | 3,217 | 53 | 864 | 964 | 136 | 156 | 837 | 207 |
| Region of Southern and Eastern Serbia | 1,594 | 14 | 447 | 440 | 65 | 78 | 473 | 77 |
| Households in which all members are forced migrants | | | | | | | | |
| THE REPUBLIC OF SERBIA | 20,611 | 145 | 6,531 | 6,670 | 694 | 1,001 | 4,125 | 1,445 |
| Belgrade region | 7,372 | 10 | 2,854 | 2,089 | 101 | 310 | 1,556 | 452 |
| Region of Vojvodina | 10,188 | 97 | 2,905 | 3,435 | 416 | 519 | 2,037 | 779 |
| Region of Šumadija and Western Serbia | 2,121 | 30 | 527 | 802 | 123 | 117 | 366 | 156 |
| Region of Southern and Eastern Serbia | 930 | 8 | 245 | 344 | 54 | 55 | 166 | 58 |

Source: Data from additional data processing of the 2011 Census in Serbia, SORS, Belgrade

The greatest number of female headed households, mostly single-member or two-member households, had sources of income from non-agricultural activities or mixed sources of income. The number of female headed households in which all members are forced migrants, is much lower than those of female headed households in which at least one member is a forced migrant and the predominant source of income for these households are retirement allowances. Female headed households in which all members are forced migrants in larger scope have sources of income from social benefits, or have no income, compared to households with at least one forced migrant who are less vulnerable. Economically vulnerable female headed households of forced migrants are the most numerous in the Region of Vojvodina; thus, there are over 300 of these households without any income in the municipality of Novi Sad.

Broken down by household members, the 2011 Census data on the main sources of livelihood of female headed households of forced migrants indicate that most of these people are economically dependent persons (37.8%), while for 32.4% and 21.1% of the members of these households, main sources of income are salaries or other income based on work or retirement allowance. For as much as 2,105 members of these households main sources of income are social benefits, for 329 of them it is a loan/savings and for 94 of them it is scholarship/student loan.

Elderly female forced migrants are a vulnerable social group, especially if they live alone. According to the 2011 Census data, 20,986 female forced migrants older than 65 years lived in Serbia. The number of members of elderly households of forced migrants⁴ was over 14,000 out of which nearly two-thirds were women. Within the elderly households of forced migrants, the ratio of members by gender was the most even in the Region of Southern and Eastern Serbia.

According to the 2011 Census data, the structure of elderly households of forced migrants based on a household type shows that the majority of these people live in households with two members (61.7%), followed by a single-member households (35.4%), with a very small number of households with three or more members (2.9%). While the gender structure of the elderly forced migrant households with two members is almost uniform, female single-person elderly households, as a result of differences in life expectancy by gender of the aged population, are considerably more numerous than the male ones, and account for 69.3% of the total number of one-member elderly households. Most of these female one-member elderly households (1,915) live in the Region of Vojvodina.

In single-member elderly households of forced migrants in Serbia, the greatest number of women has income from retirement allowance (85.2%). A number of them have no income at all (8.8%) or live on social benefits (3.1%), and these households are the most numerous in the Region of Vojvodina. The analysis of the sources of income of single-member elderly households of forced migrants, according to the representation of individual sources of income between men and women, suggests that 82% of all people with no income and 69% of those with social benefits are women.

* * *

Female forced migrants are a vulnerable social group which has only recently gained increased attention from the governments of recipient countries and international and national humanitarian organizations and donors. Awareness of the necessity of recognizing needs but also capacities of specific vulnerable groups within the population of female forced migrants has also recently began to develop in the Republic of Serbia. The analysis of the female population of forced migrants in Serbia, based on the 2011 Census data, enables understanding of specific needs of this population and its subgroups, and it

⁴ which members are more than 65 years of age.

Table 2. *Elderly single-member households of forced migrants by gender and income sources, 2011 Census*

| | Total | Sources of income of the household | | | | | | |
|---------------------------------------|-------|--|----------------------|----------------------|----------------|--------------|-------|-----------|
| | | Earnings or other income based on work | | Other income | | | Mixed | No income |
| | | From agriculture | From non-agriculture | Retirement allowance | Social benefit | Other income | | |
| THE REPUBLIC OF SERBIA | 5,184 | 16 | 26 | 4,447 | 164 | 122 | 24 | 385 |
| Men | 1,593 | 10 | 19 | 1,387 | 51 | 47 | 10 | 69 |
| Women | 3,591 | 6 | 7 | 3,060 | 113 | 75 | 14 | 316 |
| Belgrade region | 1,502 | 0 | 7 | 1,359 | 14 | 22 | 13 | 87 |
| Men | 424 | 0 | 5 | 390 | 4 | 7 | 5 | 13 |
| Women | 1,078 | 0 | 2 | 969 | 10 | 15 | 8 | 74 |
| Region of Vojvodina | 2,738 | 11 | 15 | 2,281 | 111 | 83 | 8 | 229 |
| Men | 823 | 8 | 12 | 691 | 37 | 30 | 3 | 42 |
| Women | 1,915 | 3 | 3 | 1,590 | 74 | 53 | 5 | 187 |
| Region of Šumadija and Western Serbia | 637 | 4 | 4 | 538 | 26 | 14 | 1 | 50 |
| Men | 212 | 1 | 2 | 185 | 5 | 8 | 0 | 11 |
| Women | 425 | 3 | 2 | 353 | 21 | 6 | 1 | 39 |
| Region of Southern and Eastern Serbia | 307 | 1 | 0 | 269 | 13 | 3 | 2 | 19 |
| Men | 134 | 1 | 0 | 121 | 5 | 2 | 2 | 3 |
| Women | 173 | 0 | 0 | 148 | 8 | 1 | 0 | 16 |

Source: Data from additional data processing of the 2011 Census in Serbia, SORS, Belgrade

provides necessary elements for the development of principles and objectives of relevant policies and programs of support and protection, with a focus on this group of forced migrants. Women are heads of households in one quarter of households of forced migrants in Serbia, partly due to a significant number of widows in middle-aged female population. Female headed households in which all members are forced migrants are more vulnerable compared to households who have 'domicile' members. There is large number of forced migrant families of the 'mother with children' type, where female forced migrants are to support their families economically under conditions of high unemployment rate of 'domicile' population. Considering the large number of unemployed

female forced migrants who used to work, there is definitely a need for re-qualification programs and programs for improvement of their knowledge and skills.

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ЖЕНА И ПРИСИЛНЕ МИГРАЦИЈЕ У СРБИЈИ

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РЕЗИМЕ: Жене присилни мигранти чине осетљиву друштвену групу којој се у последње време све више посвећује пажња, како од стране влада земаља пријема тако и од стране међународних и хуманитарних организација и донора. Свест о нужности препознавања потреба али и капацитета специфичних рањивих група у оквиру популације жена присилних миграната развија се одскора и у Републици Србији. У једној четвртини домаћинстава присилних миграната жене су носиоци домаћинства, делимично и због знатног броја удовица код средовечног женског становништва. Велики је и број породица типа „мајка с децом“, где се жене присилни мигранти економски старају о породици у условима високе незапослености и „домицилне“ популације. Анализа популације жена присилних миграната у Србији на основу пописних резултата из 2011. године омогућава разумевање специфичних потреба ове групе становништва и њених подгрупа, те даје неопходне елементе за развој принципа и циљева одговарајућих програма и политика подршке и заштите са фокусом на ову групу присилних миграната. Имајући у виду велики број незапослених жена присилних миграната које су некад радиле, намеће се потреба за програмима преквалификације и унапређења њихових знања и вештина.

КЉУЧНЕ РЕЧИ: присилне миграције, избеглице, жена, Србија

ETHNICALLY HOMOGENEOUS SETTLEMENTS IN ETHNICALLY HETEROGENEOUS ENVIRONMENT

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ABSTRACT: Ethnic homogeneity of settlements, or in other words, formation of ethnically homogeneous settlements in ethnically heterogeneous environment, such as Vojvodina, as well as the regions of Raška and Pčinja, is the issue which will be discussed in this paper. The analysis involves total population according to their ethnic affiliation (the 2011 Census), at the level of settlements. The estimates on the number of Albanian population at the level of settlements were made for the needs of this paper considering the fact that the census was not successful on the entire territory of the Republic because the ethnic Albanian boycotted it. Spatial distribution analysis and the determination of majority of population at the level of settlements represent the research focus of the paper. Furthermore, the aim of this paper was to point out certain ethnic characteristics of Serbian population (excluding Kosovo and Metohija), with the emphasis on the continuous trend of increasing number of people who do not want to declare their ethnic affiliation.

KEYWORDS: Ethnic structure, Serbia, the 2011 Census, ethnic homogeneity, settlements, nationally undeclared

ETHNICALLY HOMOGENEOUS SETTLEMENTS IN ETHNICALLY HETEROGENEOUS ENVIRONMENT

The question about ethnicity falls into the category of highly personal questions in the census. Subjectivity in answering hinders scientific objectivity in the analysis, and carries in itself a number of open questions. The existence of the so-called ethnic mimicry (a change in declaration) and increasing non-declaring of population greatly complicate the work of researchers. The importance of this issue varied in previous censuses in Serbia and was always quite dependent on the socio-political situation in the country. The environment in which the last census (2011) was prepared, considering the issue of ethnicity, implied that once again it would be one of the most important questions in the list. The public, especially scientific circles, were particularly concerned with the announcement that this question was going to be of the so-called

closed type¹, and not an open type as it used to be (when all nationalities were listed, without the privileged). After much controversy, the changes were abandoned and the traditional way of posing that question was kept.

Changes in the ethnic composition of the population of Serbia² in the first decade of the 21st century were heavily influenced by the turbulent events during the 1990s. The war in the former Yugoslavia and its consequences, primarily in the form of a large number of refugees and internally displaced persons (IDPs) significantly mitigated depopulation tendencies and influenced the formation of the current national structure of the population. When comparing the data from the last two censuses, it should be noted that different concepts for total population were applied, as well as that the Albanians from Southern Serbia boycotted the 2011 Census [Penev and Marinković 2012].

For the purpose of national structure research, the estimates of the population in the settlements where the census was boycotted were made, as well as the assessment of their national affiliation. Due to non-availability of the data on migration balance at the settlement level, estimates were made without the migration component and they were based on the 2002 Census data, i.e. the data about the 'population in the country' which were added with the assessment of internally displaced persons from Kosovo and Metohija, and vital events in the period 2002–2011 (interval between censuses, from April 1, 2002 to September 30, 2011). In this way the data on the total number of residents in settlements that boycotted the census was acquired. Estimates of the ethnicity of the population that boycotted the census were based on an equal distribution of the Albanian population in settlements, as it was at the time of the 2002 Census. Addition of the absolute value at the settlement level produced the estimated number of Albanians at higher territorial levels at the time of the 2011 Census.

POPULATION OF SERBIA IN 2011 BY NATIONALITY

Ethnic structure has not changed much over the last intercensal period 2002–2011 (Table 1).

The Serbs are the majority with a share of 83.3%, and despite the fact that their number decreased by 225 thousand, a relative increase of 0.4% was noticed. After them, the most numerous are the Hungarians, whose share is 3.5% (previously they had 3.9%, while the absolute reduction amounted to 39 thousand). The aforementioned are followed by ethnic groups that did not have depopulation in the inter-census period 2002–2011: the Bosniaks and Muslims³ who jointly have a share of 2.3% (there are 11 thousand more of them than at

¹ There would be the following option: nationality – Serbian, and other nationalities would be entered in writing.

This method posed risk of census clerks influencing the declaration of population, because he/she would have to enter nationalities manually and write them down, compared to circling a nationality printed and offered in the census list.

² The data refer exclusively to the territory of Serbia, without data for the Autonomous Province of Kosovo and Metohija.

³ The Bosniaks and Muslims will be jointly analyzed in this paper, because, basically, they are one ethnic group [Raduški 2013].

Table 1. *Ethnic structure of population of Serbia, 2002 and 2011*

| Ethnicity | Population | | Structure (%) | | Increase/decrease |
|----------------------|------------|-----------|---------------|-------|-------------------|
| | 2002 | 2011 | 2002 | 2011 | 2002–2011 |
| Total | 7,498,001 | 7,186,862 | 100.0 | 100.0 | -311,139 |
| Serbs | 6,212,838 | 5,988,150 | 82.9 | 83.3 | -224,688 |
| Albanians | 61,647 | 5,809 | 0.8 | 0.1 | -55,838 |
| Bosniaks | 136,087 | 145,278 | 1.8 | 2.0 | 9,191 |
| Muslims | 19,503 | 22,301 | 0.3 | 0.3 | 2,798 |
| Bulgarians | 20,497 | 18,543 | 0.3 | 0.3 | -1,954 |
| Croats | 70,602 | 57,900 | 0.9 | 0.8 | -12,702 |
| Hungarians | 293,299 | 253,899 | 3.9 | 3.5 | -39,400 |
| Macedonians | 25,847 | 22,755 | 0.3 | 0.3 | -3,092 |
| Montenegrins | 69,049 | 38,527 | 0.9 | 0.5 | -30,522 |
| Roma people | 108,193 | 147,604 | 1.4 | 2.1 | 39,411 |
| Romanians | 34,576 | 29,332 | 0.5 | 0.4 | -5,244 |
| Slovaks | 59,021 | 52,750 | 0.8 | 0.7 | -6,271 |
| Slovenians | 5,104 | 4,033 | 0.1 | 0.1 | -1,071 |
| Vlachs | 40,054 | 35,330 | 0.5 | 0.5 | -4,724 |
| Yugoslavs | 80,721 | 23,303 | 1.1 | 0.3 | -57,418 |
| Other | 66,263 | 68,491 | 0.9 | 1.0 | 2,228 |
| Undeclared | 107,732 | 160,346 | 1.4 | 2.2 | 52,614 |
| Regional affiliation | 11,485 | 30,771 | 0.2 | 0.4 | 19,286 |
| Unknown | 75,483 | 81,740 | 1.0 | 1.1 | 6,257 |

Note: Most of the members of the Albanian ethnic community boycotted 2011 Census.

Source: [SORS, 2012].

the time of the 2002 Census) and Roma with 2.1% (there are 39 thousand more of them). It should be marked that in the period 2002–2011 the Muslims had a higher relative increase in population than Bosniaks (14% vs. 7%). This was unexpected given that, based on the previous census, it was predominantly elderly population who declared themselves as ethnic Muslims, while averagely younger population of this ethnic group declared as Bosniak [Penev and Marinković 2005]. Among other ethnic groups the Albanians who boycotted the census in 2011 stand out (in 2002 there were 0.8% of them). According to the authors' estimate, the number of Albanians in Serbia in 2011 was about 68 thousand (67,790 or 0.9%), which is 6,143 more residents than in the previous census. All other nationalities have a share of less than one percent of the total population of Serbia. It is also important to point out the large number of 'undeclared' who account for 2.2%, i.e. as many as 160 thousand (60% more than in 2002). In the last 20 years, Serbia has experienced a trend of increasing number of those who do not wish to declare their ethnicity. The disintegration

of Yugoslavia and the crisis of the 1990s caused a reduction in the number of people who identified themselves as Yugoslavs, while at the same time, the number of those who do not wish to declare their ethnic affiliation increased [Marinković 2006]. If the census data on the number of the 'undecided', Yugoslavs, persons who declared for regional ethnicity and unknown are added up, this leads to the fact that the census did not determine ethnicity for nearly 300 thousand people, or 4% of the total population.

ETHNIC STRUCTURE OF SETTLEMENTS IN SERBIA IN 2011

The national and spatial structure can be best seen at the settlement level (Map 1). Ethnic groups have been forming for centuries and organized themselves within the settlements and only this territorial organization of the population provides a realistic picture of the situation. Some nationalities who achieved a high level of ethnic tolerance form ethnically mixed settlements. The coexistence of different nationalities is not a common condition in most settlements though, especially in communities where population is fewer than 1,000 inhabitants (in Serbia they account for more than 80% of the total number of settlements). Great influence on the formation of ethnic composition of a specific settlement is in environmental factors (proximity to the border, ethnic composition of neighboring settlements and government policy).

The Serbs are absolute majority⁴ in 86.6% of settlements in Serbia, based on the 2011 Census. There is high degree of ethnic homogeneity when this nationality is concerned, in as much as 72.6% of settlements, i.e. the share of Serbs in these settlements is over 90%. Settlements in which the entire population declared as ethnic Serbs account for 16% or 774 settlements. Based on the results of the last census, the Serbs are the most numerous population in 87.8% of settlements. With the Hungarians, who are the largest ethnic group after Serbs, settlements with absolute majority are significantly smaller and their total number on the territory of the Republic is 64 or 1.3% of the total number of settlements in Serbia. The Hungarians are the most numerous or the majority population in 75 settlements. An ethnic group that in population terms dominates in a greater number of settlements, when compared to the Hungarians, is the Bosniak-Muslim group. Like the Hungarians, who are territorially located almost exclusively in the north of the country, the Bosniaks and Muslims form the majority population in the settlements toward the south, in Raška and Zlatiborska counties. They have an absolute majority in 127 settlements (2.7%) and are the majority in 205 settlements (4.3%). The Roma people, although the fourth largest ethnic group, because of their great territorial dispersion and higher concentration within major cities, form a majority in only 7 settlements (they are an absolute majority in 6 settlements). On the basis of the 2002 Census, the Albanians are the majority population in 59 settlements, while they have an absolute majority in 57 settlements. Among other groups, the Bulgarians should also be mentioned who, despite the small proportion of the total population

⁴ Share of more than 50%.

Map 1. *Ethnic structure (majority population by settlements) of Serbia (excluding Kosovo and Metohija) in 2011*



Source: Prepared by the authors based on the SORS data [SORS, 2012]

(0.3%) make up the majority population in 79 settlements (1.7%), as well as the Vlachs with a share of 0.5% and a majority in 38 settlements.

Analysis of the national structure by settlements should also include other ethnic groups that have a significant share in Vojvodina: the Croats, Slovaks and Romanians. According to the 2011 Census, the Croats had a share of 0.8% in the Republic, but this share is significantly higher at the level of the autonomous province of Vojvodina which is 3.0%. Despite the relatively large share, their concentration is primarily in larger settlements (Subotica, Sombor, Apatin), so they are the majority of the population in 10 settlements only. The population that identified themselves as ethnic Slovaks makes the majority in 14 settlements, with the share of 2.7% in Vojvodina and 0.7% at the level of the whole country. The Romanian community in Serbia has half the population of the Croatian community, but they are located in predominantly smaller population areas, so they make the majority in 17 settlements.

ETHNICALLY HOMOGENOUS AND HETEROGENEOUS ENVIRONMENT IN SERBIA

Numerous ethnic groups live in Serbia (14 ethnic groups with a population of over 10 thousand), but we cannot say that it is, in terms of ethnicity, a heterogeneous area. More than four fifths of the total population consists of one nationality, so this may be identified as a homogeneous environment. The Vojvodina region, which is considered to be an ethnic mosaic within Serbia, based on the census from the beginning of the 21st century, is also becoming a relatively homogeneous environment because the Serbs have an absolute majority, accounting for more than two thirds of the total population of the Province. However, at lower administrative levels, the situation is quite different. Significant differences are noticed at the level of counties, the number of which is 25 in Serbia. On the basis of the presence of a greater number of nations, which account for over 1% of the total population of the counties, six areas of Vojvodina and one county on the territory of Southern and Eastern Serbia are more noticeable. This criterion has shown that ethnically most heterogeneous counties are West and South Bačka, because a relatively large number of nationalities, as many as seven, take part in the formation of ethnic composition (the Serbs, Hungarians, Croats, Montenegrins, Rusyns, Roma and Bunjevci, as well as Slovaks in another county). These are followed by South and North Bačka counties, which have six, and Central Banat and Srem counties, which have five ethnic groups whose share in these counties is greater than 1%. The only area with a significant number of various nationalities outside Vojvodina is Pčinjska county with four ethnic groups (the Serbs, Albanians, Roma and Bulgarians).

If the share of majority Serbian population below the national average is introduced as an additional criterion for determining ethnically mixed counties, then four other counties may be considered as relatively heterogeneous environments (North Banat, Zlatibor, Raška and Bor). The smallest share of Serbs is in the North Bačka county, 27.0%, and North Banat county with 42.7%. In

other counties, the Serbs have an absolute majority: in Pčinjska county (based on estimates) they form 60.4%, in Raška county 60.9%, while in other counties this share is higher but still below the national average.

In comparison to counties, the municipalities have a smaller number of ethnic groups that participate with more than 1% of the total population of the municipalities. This finding is true for most municipalities, but there are exceptions, too. Some municipalities in Vojvodina have an extremely heterogeneous ethnic composition. Above all, they are Plandište, Vrbas and Kula with six nationalities, and of more populous municipalities those are Subotica and Sombor with five ethnic groups. In other municipalities in Serbia, outside the territory of Vojvodina, not more than three nationalities (with more than 1% share in the total population of the municipality) may occur in the formation of the ethnic composition, but such cases are rare. These municipalities are primarily located in Eastern Serbia, and nationalities that coexist in them are the Serbs, Vlachs and Roma. It should be noted that a large spatial dispersion of the Roma population conditions that this ethnic group is, after the Serbs, most common in the municipalities in Serbia. The only, relatively heterogeneous counties i.e. municipalities in which the Roma are not a significant ethnic group are those in which the majority population is Bosniak-Muslim and Albanian. Otherwise, in these municipalities only the Serbian population has a significant share in the total population.

Out of 168 municipalities in Serbia, the Serbs are not the majority in only 15 of them. They have the lowest share in Tutin (3.5%), Kanjiža (7.2%), Senta (10.9%) and Bosilegrad (11.0%). Settlements in which no one declared as a Serb are located mainly in the municipalities of Pčinjska and Raška counties. The greatest number of settlements without Serbs belong to the municipalities of Tutin (63), Sjenica (31) and Preševo (20). At the level of the whole country, there are 12 municipalities with settlements without Serbs. Also, in municipalities with settlements without Serbian population, there are settlements where the Serbs make one hundred percent of the population. Thus, in Bujanovac, there are 15 such settlements, in Medveđa there are 7, and in Preševo there are only two settlements exclusively populated by the Serbs. The ratio of settlements with 100% of Serbs and without any Serbs puts the accent on the following municipalities: Sjenica (33 settlements with 100% share of Serbs and 31 settlements without Serbs), Bujanovac (15-16), Novi Pazar (39-8), Preševo (2-19) Tutin (1-63), Prijepolje (17-5), Medveđa (7-2). The ratio of the four municipalities with a predominantly Bosniak/Muslim population is 90-77, i.e. there are 90 settlements inhabited exclusively by Serbs, while in 77 settlements no one declared as a Serb. In three municipalities with significant Albanian population, the ratio is 24 to 37. Nowhere on the territory of Serbia, where municipalities are ethnically mixed, is ethnic homogeneity of the settlement so clearly expressed as in south Serbia in the municipalities where the Albanians or Bosniak/Muslim population are the majority. In contrast to the situation in the south, in the north of the country, in the ethnically most heterogeneous region, Vojvodina, in only two municipalities, i.e. in three settlements, not one Serb was registered in Bačka Topola (2) and Kanjiža (1), and those are small settlements.

* * *

The 2011 Census did not register any significant changes in the ethnic composition of the population compared to the previous census. However, one specificity could be noted and it is the continuation of the trend of increasing number of people who do not wish to declare their ethnicity. Number of Serbs continues to reduce in the territory of the Republic, but due to the fact that the population decline is even more pronounced in other ethnic groups, the proportion of Serbs in the total population has increased. Depopulation is generally present, but there are national minorities that still do not have a decline in population. Above all, they are the Roma people who have extremely high population growth, but a high degree of ethnic mimicry among them should be taken into account. They are followed by the Bosniaks/Muslims and Albanians, with population growth compared to the previous census.

The aim of this study was primarily to point out some basic characteristics of the ethnic composition of the population of Serbia. Another aim was to display data at the settlement level, which are not easily available and are not published by the Statistical Office of the Republic of Serbia. The estimate of the number of the population that boycotted the census, and the determination of spatial distribution of the majority of population in settlements are main contributions of this paper to the study of ethnic structure in our country.

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INTERNET SOURCE

- Републички завод за статистику /РЗС/ (2012). *2011 Попис становништва, домаћинства и стана у Републици Србији – Национална припадност* (преузето 4.3.2013): http://popis2011.stat.rs/?page_id=1103 (Open Document). [2011 Census of Population, Households and Dwellings in the Republic of Serbia – Ethnicity, Statistical Office of the Republic of Serbia, retrieved 4 March 2013]

ЕТНИЧКИ ХОМОГЕНА НАСЕЉА У ЕТНИЧКИ
ХЕТЕРОГЕНОМ ОКРУЖЕЊУ

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САЖЕТАК: У овом раду разматра се етничка хомогеност насеља, или другим речима, формирање етнички хомогених насеља у етнички хетерогеном окружењу као што су Војводина, Пчињски и Рашки округ. Анализом је обухваћена целокупна популација на нивоу насеља и она је заснована на њиховој етничкој припадности [Појис 2011]. За потребе овог истраживања направљена је процена броја припадника албанске популације на нивоу насеља, узимајући у обзир и чињеницу да Цензус није био успешан на целокупној територији Републике јер су га етнички Албанци бојкотовали. Овај рад бави се анализом просторне дистрибуције и утврђивањем већинске популације на нивоу насеља. Такође, циљ овог рада је да издвоји неке етничке карактеристике српског становништва (не рачунајући Косово и Метохију) и нагласи тренд раста броја људи који не желе да се изјасне о својој етничкој припадности.

КЉУЧНЕ РЕЧИ: етничка структура, Србија, Попис 2011, етничка хомогеност, насеља, национално неизјашњени

CONSENSUAL UNIONS IN SERBIA: 2011 CENSUS RESULTS¹

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ABSTRACT: The rise of cohabitation is one of the most noticeable changes in partnership behavior in the past several decades, present throughout Europe, with great variation of prevalence across countries. Until now, the extent of consensual unions in Serbia has not been known due to the lack of data, except some very scarce information emanated from a very few surveys. The 2011 Census, for the first time, included the question on the *de facto* marital status. This enables insight into the prevalence of consensual unions, as well as on the characteristics of union members. The paper analyzes frequency of consensual unions, as well as characteristics of persons living in them, according to the sex, age, education, legal marital status, ethnicity, religious affiliation and type of settlement. Most of the consideration has been given to the regional level (NUTS 2).

The paper also analyzes families of cohabiting couples with and without children. This is possible because the data for the families of cohabiting couples without children and cohabiting couples with children were shown separately for the first time in the 2011 Census.

KEYWORDS: consensual unions, families of cohabiting couples, Serbia, 2011 Census

In the last forty years, the rise and spread of cohabitation has been one of the most noticeable changes in the partner and family behavior taking place across Europe. Research has shown that cohabitants are a heterogeneous group and that cohabitation has different meanings; thus, it should be viewed as a process, whereas the age of partners is a very important variable that determines its meaning [Hiekel *et al.* 2012]. Three different groups of cohabitants have been identified. The first group sees their union as a stage in the marriage process, and can be divided into three subgroups (for the first subgroup, cohabitation is a prelude to marriage; in the second subgroup people see it as a

¹ This paper is a result of the project 'Investigation of demographic phenomena in the function of public policies in Serbia' (N^o. 47006), funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

trial marriage, and for the third subgroup cohabitation is considered 'poor people's marriage', i.e. a solution for partners who, faced with persistent economic obstacles, are not yet ready to commit to marriage). The second group of cohabitants considers their union an alternative to marriage, and they are the people who reject conventional marriage or believe that marriage is irrelevant. For the third, quite small group of cohabitants, cohabitation is an alternative to solitary life. The first group is the largest, and for the majority of cohabitants in Europe, marriage is still a priority, and cohabitation is usually a stage in the marriage process and not an alternative to marriage [Hiekel *et al.* 2012]. Qualitative research has also shown different meanings of cohabitation but also different meanings ascribed to marriage and cohabitation – marriage is an ideal for long-term commitment of partners [Perelli *et al.* 2014].

Prevalence of cohabitation is very different. At present, the cohabitation rate, i.e. the proportion of people living in cohabitation in the total population over 18 is the largest in Sweden with 24%. According to this indicator, European countries can be divided into three groups. The first group encompasses countries with a relatively high rate of cohabitation (over 10%), and besides Sweden it includes Finland, Norway, Denmark, Germany, the Netherlands and France. The second group includes countries with the medium rate of cohabitation (6–10%), such as Austria, Great Britain, Switzerland, Hungary, Czech Republic, Belgium, Latvia and Slovenia. The third group includes countries with low rate of cohabitation (under 6%), such as Spain, Ireland, Portugal, Northern Ireland, Slovakia, Poland [Gubernskaya 2008].

The second indicator, the percentage share of couples living in cohabitation in relation to all couples who live in the union, also reflects large differences among European countries [Gamundi *et al.* 2009]. It is the lowest in countries of Southern Europe, outside the circle of the Protestant religion; the prevalence of cohabitation is almost zero in Greece and very low (2.5%) in Spain, Italy and Ireland. In Austria, Germany, Luxembourg, Belgium and the Great Britain, the prevalence of cohabitation is assessed as medium (5–10%), whereas in the Scandinavian countries it is the highest (20–30%). The variables associated with higher probability of couples living in cohabitation rather than marriage are their age, presence of children, economic model, age difference, housing situation. The most important variable is age, cohabitation being by far the most common in the young age group, suggesting that it is mostly a 'trial marriage'. Furthermore, cohabitation is not an appropriate 'milieu' for raising children, so among cohabitants many more couples are without children [Gamundi *et al.* 2009]. Marriage remains the dominant institution for raising children [Perelli-Harris *et al.* 2012]. Even in Sweden, where cohabitation is most widespread, and where more than half of children are born outside marriage, marriage is not an outdated institution. Couples rarely remain in cohabitation their entire life, especially when they have children [Bernhardt 2002].

PREVALENCE OF COHABITATION IN SERBIA AND CHARACTERISTICS OF PERSONS LIVING IN IT

Low prevalence of cohabitation in Serbia has been pointed out by a number of surveys. A more complete insight into the prevalence of cohabitation and characteristics of people living in it was enabled in the 2011 Census which, for the first time, contained the question of de facto marital status. According to the Census, 236,063 people live in cohabitation in Serbia, accounting for 3.8% of the population over 15 (Table 1). There are certain differences by sex, the percentage share of men being slightly higher (4.0%) than of women (3.7%), which applies to all regions.

Table 1. *Persons aged 15 years or more living in consensual union, by sex and type of settlement. Serbia, 2011 (by region)*

| Type of settlement | Sex | Serbia | Belgrade region | Vojvodina region | Šumadija and West Serbia region | South and East Serbia region |
|---|---------|--|-----------------|------------------|---------------------------------|------------------------------|
| | | Number of persons living in consensual union | | | | |
| Total | Total | 236,063 | 60,029 | 78,240 | 42,938 | 54,856 |
| | Males | 117,893 | 30,023 | 39,082 | 21,395 | 27,393 |
| | Females | 118,170 | 30,006 | 39,158 | 21,543 | 27,463 |
| Urban | Total | 148,268 | 49,797 | 47,724 | 21,474 | 29,273 |
| | Males | 74,076 | 24,917 | 23,850 | 10,690 | 14,619 |
| | Females | 74,192 | 24,880 | 23,874 | 10,784 | 14,654 |
| Other | Total | 87,795 | 10,232 | 30,516 | 21,464 | 25,583 |
| | Males | 43,817 | 5,106 | 15,232 | 10,705 | 12,774 |
| | Females | 43,978 | 5,126 | 15,284 | 10,759 | 12,809 |
| Share in total population aged 15 years or more (%) | | | | | | |
| Total | Total | 3.8 | 4.2 | 4.7 | 2.5 | 4.1 |
| | Males | 4.0 | 4.5 | 4.9 | 2.5 | 4.2 |
| | Females | 3.7 | 4.0 | 4.6 | 2.4 | 4.0 |
| Urban | Total | 4.1 | 4.3 | 4.9 | 2.6 | 4.2 |
| | Males | 4.3 | 4.7 | 5.2 | 2.8 | 4.4 |
| | Females | 3.9 | 4.0 | 4.6 | 2.5 | 4.1 |
| Other | Total | 3.5 | 3.9 | 4.5 | 2.3 | 3.9 |
| | Males | 3.5 | 3.9 | 4.6 | 2.3 | 3.9 |
| | Females | 3.5 | 3.8 | 4.5 | 2.4 | 4.0 |

Note: Persons with unknown marital status are not included

Low proportion of people in consensual unions is most prominent in the region of Šumadija and West Serbia (2.5%), while in other three the prevalence is above the average for the Republic of Serbia, the largest being in Vojvodina region (4.7%). This applies to both sexes. With respect to the settlement, the proportion of persons in consensual unions is higher in urban areas (4.1%) than in other areas (3.5%), for both sexes and in all regions. The differences between the two types of settlements are less pronounced in women than in men. The

percentage share of men living in consensual unions is in urban settlements and in all regions higher than that of women, while in other settlements the shares of men and women are almost identical. The difference between the share of men and women is somewhat more pronounced in the urban settlements of Belgrade and Vojvodina region.

In the total population over 15 years of age, who are not legally married (never married, divorced and widowed) the share of persons living in consensual unions is 8.5% (Table 2). The difference in the share of men and women is slightly higher than in the overall population (9.2% of men and 7.9% of women). At the regional level, the share is the same as in the overall population, the lowest share being in Šumadija and West Serbia region (5.9 %) while in other regions it is above average, the highest being in Vojvodina region (10.0%). Differences based on the type of settlement are not high (8.8% in urban and 8.2% in others). The share of men in urban settlements is by one-fifth higher than that of women, while in other settlements, the percentage share of both sexes is equal. The biggest difference is in the urban areas of Belgrade region, where the share of men is by a quarter higher.

Table 2. *Persons aged 15 years or more living in consensual union, by sex and type of settlement, and proportion in total number of not married persons, Serbia, 2011 (by region)*

| Type of settlement | Sex | Serbia | Belgrade region | Vojvodina region | Šumadija and West Serbia region | South and East Serbia region |
|--------------------|---------|---|-----------------|------------------|---------------------------------|------------------------------|
| | | Number of not married persons living in consensual union | | | | |
| Total | Total | 233,791 | 59,540 | 77,579 | 42,429 | 54,243 |
| | Males | 116,714 | 29,749 | 38,749 | 21,133 | 27,083 |
| | Females | 117,077 | 29,791 | 38,830 | 21,296 | 27,160 |
| Urban | Total | 146,960 | 49,405 | 47,360 | 21,240 | 28,955 |
| | Males | 73,364 | 24,692 | 23,650 | 10,567 | 14,455 |
| | Females | 73,596 | 24,713 | 23,710 | 10,673 | 14,500 |
| Other | Total | 86,831 | 10,135 | 30,219 | 21,189 | 25,288 |
| | Males | 43,350 | 5,057 | 15,099 | 10,566 | 12,628 |
| | Females | 43,481 | 5,078 | 15,120 | 10,623 | 12,660 |
| | | Proportion in total number of not married persons aged 15 years or more (%) | | | | |
| Total | Total | 8.5 | 8.8 | 10.0 | 5.9 | 9.5 |
| | Males | 9.2 | 10.2 | 10.8 | 6.2 | 9.9 |
| | Females | 7.9 | 7.8 | 9.3 | 5.6 | 9.2 |
| Urban | Total | 8.8 | 8.8 | 10.2 | 6.1 | 9.6 |
| | Males | 9.9 | 10.4 | 11.4 | 6.8 | 10.4 |
| | Females | 7.8 | 7.6 | 9.2 | 5.5 | 8.9 |
| Other | Total | 8.2 | 9.0 | 9.8 | 5.7 | 9.5 |
| | Males | 8.2 | 9.1 | 10.0 | 5.7 | 9.5 |
| | Females | 8.1 | 8.8 | 9.6 | 5.7 | 9.5 |

Note: Persons living in consensual union who are legally married, but live separately from their spouse are not included.

In the total population, the percentage share of persons living in consensual unions varies by age (Table 3). The share of persons from the youngest age group is low (1.4%), similar to the group of over 65. The largest share is in the group of 30–34 and amounts to 7.7%. As the age increases, the proportion of people living in consensual unions decreases and in the group of 70–74 it is 1.1%, and in the age group of over 75 it is only 0.6%. There are also differences by sex. The share of persons from younger age groups living in consensual unions, in the total population, is higher among women: in the youngest age group by as much as four and a half times, and in the age group of 20–24 twice as high. The largest share of women is in the 25–29 age group and decreases with increasing age. In the next age group of 30–34, with the highest share of men, the differences in terms of sex almost disappear. In the group of 35–39 and in each subsequent one, the share of men is always higher, mostly by half than that of women, except in the oldest group of over 75, where the difference is almost three times higher.

Table 3. *Persons aged 15 years or more living in consensual union by sex and age, Serbia, 2011*

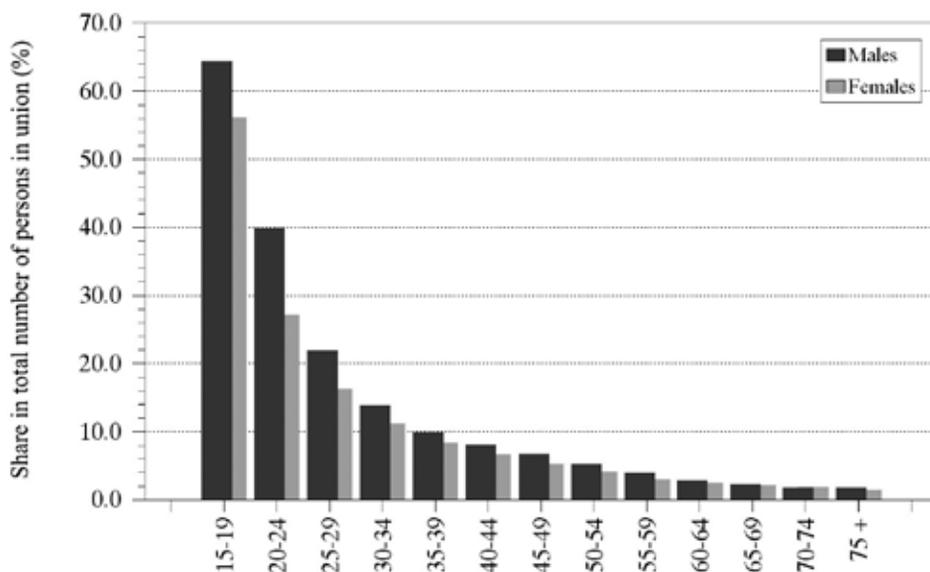
| Age | Number of persons | | | Share in total population (%) | | | Share in total number of not married persons* (%) | | |
|-------|-------------------|---------|---------|-------------------------------|-------|---------|---|-------|---------|
| | Total | Males | Females | Total | Males | Females | Total | Males | Females |
| Total | 236,063 | 11,7893 | 11,8170 | 3.8 | 4.0 | 3.7 | 8.3 | 9.0 | 7.7 |
| 15–19 | 5,498 | 1,002 | 4,496 | 1.4 | 0.5 | 2.3 | 1.4 | 0.5 | 2.4 |
| 20–24 | 1,953,4 | 6,671 | 12,863 | 4.4 | 3.0 | 6.0 | 5.0 | 3.1 | 7.2 |
| 25–29 | 3,4658 | 15,443 | 19,215 | 7.2 | 6.3 | 8.2 | 10.7 | 8.2 | 14.3 |
| 30–34 | 3,8119 | 19,112 | 19,007 | 7.7 | 7.6 | 7.8 | 17.1 | 14.5 | 20.7 |
| 35–39 | 3,2544 | 16,843 | 15,701 | 6.6 | 6.8 | 6.4 | 19.6 | 18.0 | 21.6 |
| 40–44 | 2,6201 | 14,015 | 12,186 | 5.6 | 6.0 | 5.2 | 18.9 | 18.6 | 19.2 |
| 45–49 | 2,2101 | 12,018 | 10,083 | 4.6 | 5.0 | 4.1 | 16.5 | 17.3 | 15.6 |
| 50–54 | 1,8926 | 10,598 | 8,328 | 3.6 | 4.2 | 3.1 | 13.8 | 16.4 | 11.5 |
| 55–59 | 1,5693 | 9,053 | 6,640 | 2.6 | 3.1 | 2.2 | 9.9 | 14.1 | 7.0 |
| 60–64 | 1,0356 | 5,795 | 4,561 | 2.0 | 2.3 | 1.6 | 6.8 | 11.8 | 4.4 |
| 65–69 | 5,092 | 2,857 | 2,235 | 1.5 | 1.8 | 1.2 | 4.4 | 9.3 | 2.6 |
| 70–74 | 3,821 | 2,156 | 1,665 | 1.1 | 1.4 | 0.8 | 2.5 | 5.9 | 1.5 |
| 75 + | 3,520 | 2,330 | 1,190 | 0.6 | 1.1 | 0.4 | 1.0 | 2.6 | 0.5 |

* Including legally married persons who live separately from their spouse.

In the total population of those who are not legally married, the largest percentage share is in the age group of 35–39, where every fifth person (19.6%) not legally married, cohabits (Table 3). Among women, the highest shares are in this age group and among men in the group of 40–44. From the age group of 45–49 onwards, the trend of greater participation of women changes and the shares of men are consistently higher.

In the total population living in the union (both marital and consensual), the share of persons living in consensual union is 6.7% (Figure 1). The highest is in the youngest age group (57.5%), the only one in which it exceeds the percentage of people in marriage, then it abruptly decreases, and in the age group of 25–29 it is reduced to a third of the maximum value. In the age group of 55–59, the share is only 3.5% and in the group of over 70 it is twice less. The share is consistently higher among men, more pronounced in the younger age groups, and almost equal among the oldest population. In urban settlements, the share is higher (7.3%) than in others (5.9%). This applies to all age groups. The differences are largest in the two youngest age groups, especially among women, whose share is pronouncedly higher in urban settlements. With increasing age, the differences are smaller. Regional differences are pronounced, and the lowest share of persons cohabiting in the total population living in the union is in Šumadija and West Serbia region (4.2%), and twice as high, and at the same time the highest is in the region of Vojvodina (8.4%). In all age groups the share is consistently higher among men, being more pronounced in the younger age groups.

Figure 1. *Share of persons living in consensual union in total number of persons in union, by age and sex, Serbia, 2011*



Spatial assessment of the share of cohabitants in the total population living in the union provides an insight into large differences in the prevalence of consensual unions. In approximately half of the municipalities the share values are above or below the average for Serbia. The low and very low prevalence is observed in western Serbia, and medium and, in some municipalities high prevalence, in the east of the country and in Vojvodina. At the level of mu-

nicipalities and towns, the shares are very different and vary in a wide range from 1.1% in Sjenica and Nova Varoš, to 16.7% in Kostolac. For example, among persons living in the union, only every hundredth in Sjenica and Nova Varoš live in consensual union, every fiftieth in Užice and Bajina Bašta, every twentieth in Doljevac and Bačka Palanka, every ninth in Bojnik and Subotica, and every seventh in Majdanpek and Kovin. It is obvious that the origin of similarities and differences lies in the complex interaction of a number of socio-demographic impacts distinctive for a particular environment.

AGE STRUCTURE OF COHABITANTS

The age structure of cohabitants is characterized by a low percentage of persons from the youngest age group (2.3%), followed by an increase up to the age group of 30–34, when the share is the highest (16.1%), and then by a decrease and a very low share among the oldest population (1.5%). The largest difference between men and women is in the youngest age groups; thus, in the 15–19 age group, the share of women is almost four times, and in the group of 20–24 two times higher. In other age groups, shares of men and women are generally equal. Only in the oldest age group (over 75) the share of men is twice as high as that of women.

In the age structure of people living in the union there are important differences according to whether it is a marital or consensual one. Two-thirds of people living in a consensual union are aged 15 to 44 and one-third are over 45. In a marital union, however, it is the opposite. One-third of people living in a marriage are aged 15 to 44 and two-thirds are over 45 years old.

LEGAL MARITAL STATUS

According to the legal marital status, among persons living in consensual union, the majority i.e. four-fifths have not been married, followed by the divorced (11.8%), and the widowed (2.8%). The smallest percentage is of the persons who are legally married, but live separately from their spouses (1.0%). The situation is similar for both sexes, except that the share of widows is by a half higher than the share of widowers. The difference between urban and other settlements exists in the share of the divorced, in urban settlements being by less than half higher than in other areas.

EDUCATIONAL STRUCTURE

Among cohabitants, the majority have completed high school or less, the least people having tertiary education, which is consistent with the educational structure of the total population, as well as the total population living in some kind of union.

Regularity has been observed and regardless of sex or type of settlement – in the total number of persons living in the union, the highest share of cohabitation is among the least educated population, i.e. among persons without education

or with only primary education completed (7.5%), and lowest in persons who have a college or university degree (5.6%). The same sequence of share is in both sexes, and differences between three major educational groups are much more pronounced in men. Specifically, among men without education or with only primary education, the proportion of those living in cohabitation is 8.2%, while in the group of the most educated, with college or university degrees, the proportion is significantly lower (4.9%). The same sequence is in women, but the differences between the groups according to educational level are minimal (6.9% and 6.4%, respectively). The same conclusion applies to the type of settlement, only the differences are more pronounced in urban population than in other settlements. Differences between the share of the least educated group and the group with the most education in the urban population is 4.4 percentage points (10.2% vs. 5.8%). Among the population of other settlements, the difference is only 1.6 percentage points (6.1% vs. 4.5%). The higher prevalence of consensual unions with the population of lower social status is also contributed by a large number of cohabitants in the population of Roma ethnic background, with by far the largest proportion of persons living in consensual union, and also with the most unfavorable educational structure.

ETHNICITY AND RELIGION

Among the members of certain ethnicities, there are pronounced differences in the share of people in consensual unions caused by a variety of demographic, socioeconomic and cultural characteristics of members of particular ethnicities. The Roma are distinguished by an extremely high share of persons living in consensual unions, with traditionally widespread customary marriages. A quarter (24.6%) of the total Roma population lives in consensual unions, or more than a third (36.3%) of all Roma living in the union. A high share of people in consensual unions in the overall population, as well as in the total population living in the union is recorded with the undefined and non-declared (5.7% and 11.1%, respectively), Muslims (5.7% and 9.2%, respectively) and Romanians (6.5% and 10.1%, respectively). On the other hand, the low share of people in consensual unions in the overall population, as well as in the total population living in the union, is the characteristic of members of the Bosniak (1.8% and 2.8%, respectively) and Slovak ethnicity (2.1% and 3.4%, respectively).

The share of persons in consensual unions higher than average, both in the overall population and in the total population living in the union, is observed with members of the Islamic (6.1% and 9.5%, respectively) and Catholic religion (5.0% and 8.5%, respectively). The high share is also among those who have not expressed their religious affiliation (5.9% and 11.4%, respectively) or have declared as atheist (5.1% and 9.6%, respectively).

All the above presented data obtained by the 2011 Census show that the prevalence of consensual unions in Serbia is low, compared to other European countries. According to the share and age of persons in consensual unions, as well as according to a very high share of never married persons, it can be assumed that consensual unions largely precede marriage, constitute a stage in

the marriage process and not an alternative to marriage, which has been recorded in the majority of European countries, too. Furthermore, the census results show that cohabitation is more present in the population of lower social status than in the persons of better educational level, which indicates that Serbia has not experienced a major modernization of marital relations.

FAMILIES OF COHABITING COUPLES

In the 2011 Census, for the first time, the data related to cohabiting couples with and without children were presented separately from the data of married couples, allowing access to a number of characteristics of families of cohabiting couples.

According to the Census, in Serbia there are 116,914 families of cohabiting couples, which is a share of 5.5% in the total number of families, while the share of members of these families in the total number of family members in Serbia is slightly higher (5.7%) (Table 4). The families of cohabiting couples without children are fewer, there are 48,943 of them and their share is 2.3%, while the total number of families with children is 67,971 and their share in the total number of families is 3.2%. Average number of children in families of cohabiting couples is 1.03, while in families of married couples it is 1.06. Average number of children in families of cohabiting couples with children is 1.8 and it is slightly higher than that of married couples with children which is 1.7. It should be noted that children may be common, or of one or both partners.

Vojvodina region has the largest share of families of cohabiting couples (6.8%), almost two times higher than Šumadija and West Serbia region (3.5%) which has the lowest share. In three regions, the percentage share of families with children is higher at least by half, compared to the participation of families without children. In Belgrade region the representation of these two types of families is almost equal (3.0% without children and 3.2% with children), and the largest difference is in the South and East Serbia region, where the share of families with children is almost twice as high (2.0% without children and 3.7% with children). Consequently, in these two regions the average number of children in families of cohabiting couples is both the smallest and the largest (0.90 in Belgrade region and 1.16 in the South and East Serbia region).

In urban settlements of Serbia, the share of families of cohabiting couples in the total number of families is higher (5.8%) than in other areas (5.0%). However, in other areas the share of families of cohabiting couples with children is significantly higher than those without children, and is equal to that of the urban areas. At the regional level, certain differences are observed by the type of settlement in the share of families of cohabiting couples without children. In the regions of Belgrade and Vojvodina, the share of families of cohabiting couples without children is by about a half higher in urban settlements, while there are no differences by the type of settlement in the proportion of families with children. In Šumadija and Western Serbia region, and the South and East Serbia region, however, there are no differences by the type of settlement in any family type.

Table 4. *Families and number of family members of cohabiting couples with and without children, Serbia, 2011 (by region)*

| | Number of families | Number of family members | Number of children (family members) | Average number of children per family | Percentile share in total number of | |
|--|--------------------|--------------------------|-------------------------------------|---------------------------------------|-------------------------------------|----------------|
| | | | | | families | family members |
| Serbia | | | | | | |
| Total | 116,914 | 353,799 | 119,971 | 1.03 | 5.5 | 5.7 |
| Cohabiting couples without children | 48,943 | 97,886 | – | – | 2.3 | 1.6 |
| Cohabiting couple with children | 67,971 | 255,913 | 119,971 | 1.77 | 3.2 | 4.1 |
| Belgrade region | | | | | | |
| Total | 29,732 | 86,125 | 26,661 | 0.90 | 6.2 | 6.1 |
| Cohabiting couples without children | 14,330 | 28,660 | – | – | 3.0 | 2.0 |
| Cohabiting couple with children | 15,402 | 57,465 | 26,661 | 1.73 | 3.2 | 4.1 |
| Vojvodina region | | | | | | |
| Total | 38,867 | 117,525 | 39,791 | 1.02 | 6.8 | 7.1 |
| Cohabiting couples without children | 16,476 | 32,952 | – | – | 2.9 | 2.0 |
| Cohabiting couples with children | 22,391 | 84,573 | 39,791 | 1.78 | 3.9 | 5.1 |
| Šumadija and West Serbia region | | | | | | |
| Total | 21,197 | 64,398 | 22,004 | 1.04 | 3.5 | 3.6 |
| Cohabiting couples without children | 8,523 | 17,046 | – | – | 1.4 | 1.0 |
| Cohabiting couples with children | 12,674 | 47,352 | 22,004 | 1.74 | 2.1 | 2.7 |
| South and East Serbia region | | | | | | |
| Total | 27,118 | 85,751 | 31,515 | 1.16 | 5.7 | 6.3 |
| Cohabiting couples without children | 9,614 | 19,228 | – | – | 2.0 | 1.4 |
| Cohabiting couples with children | 17,504 | 66,523 | 31,515 | 1.80 | 3.7 | 4.9 |

The average number of children in families of cohabiting couples with children is slightly larger (1.8) in other than urban settlements (1.7). This applies to all regions, except for the South and East Serbia, where the average number of children in families of cohabiting couples is the same in urban and rural areas.

According to the number of children, the majority (48.8%) of the families of cohabiting couples are with one child. Slightly more than a third (34.9%) are families with two children, one in ten (10.6%) is with three children, and

the share of families with four children is 3.7%, and with five or more children is only every fiftieth family of cohabiting couples with children (2.0%). Belgrade region leads by the share of families with one child and the lowest share is in South and East Serbia, with the highest proportion of families with two, three and four children. The share of cohabiting couple families with five or more children is the highest in Vojvodina region, and in Šumadija and West Serbia regions the share of families with four or five children is the lowest. The family structure of married and cohabiting couples according to the number of children is different. The difference is especially pronounced in the proportion of families with three or more children – the share of families with four children is by three and a half times higher in cohabiting couples, and the share of families with five or more children is almost seven times higher.

In the families of cohabiting couples with children, the share of younger children is the highest and makes nearly three-quarters (36.0% of children under 5 and 37.7% between 6 and 14). A fifth of children (20.6%) belong to the age group of 15–24, and only one in seventeen children (5.7%) is over 25. The structure of children by age is changing with the increasing number of children in the family. The share of the youngest children aged 0 to 5 decreases and the share of children aged 6 to 14 increases, and the most significant decrease is in the share of children over 25. While in the family with one child, the share of the youngest children (under 5) is the highest (46.4%) in families with two or more children, the highest share is of children aged 6 to 14 (38.2%). In the family with one child, one in ten children (10.7%) is over 25, in the family with two children one in twenty (5.4%), and the family with four or five children only one in hundred (1.3% and 0.9% respectively). The structure of children by age in the family of cohabiting couples is similar in all regions. Only in the share of children over 25 the significant difference is observed between the highest share (6.8%) of families of Belgrade region and the lowest (4.4%) in the South and East Serbia region.

Compared with the families of married couples, in the families of cohabiting couples the share of younger children is considerably higher and the share of older children is lower. Thus, the share of children aged 0 to 5 is twice as high, the share of children aged 6 to 14 is higher by a third, while the share of children aged 15 to 24 is lower by a third. The difference between these two types of families is the largest in the prevalence of children over 25, which in the families of cohabiting couples is only slightly more than a quarter of the share of children that age in the families of married couples.

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ОРИГИНАЛНИ НАУЧНИ РАД

ВАНБРАЧНЕ ЗАЈЕДНИЦЕ У СРБИЈИ:
РЕЗУЛТАТИ ПОПИСА ИЗ 2011. ГОДИНЕ

БИЉАНА СТАНКОВИЋ

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САЖЕТАК: Пораст распрострањености кохабитација је једна од најочљивијих промена у партнерском понашању у протеклих неколико деценија. Ширење ванбрачних заједница одвија се у свим европским земљама, али су присутне велике разлике у нивоу њихове заступљености. О раширености ванбрачних заједница у Србији знало се само на основу ретких анкетних истраживања. У садржај Пописа 2011. године први пут је укључено питање о *de facto* брачном статусу, што је омогућило увид у распрострањеност ванбрачних заједница и карактеристике њених чланова. У раду се анализира заступљеност ванбрачних заједница и карактеристике лица која живе у њима, према полу, образовању, брачном статусу, етничкој и верској припадности, типу насеља. Већина разматрања односи се и на регионални ниво (НСТЈ 2).

Рад такође садржи анализу карактеристика породица ванбрачних парова без деце и са децом. У Попису 2011. године су први пут подаци о породицама типа ванбрачни пар без деце и ванбрачни пар са децом исказани посебно од података за породице брачних парова.

КЉУЧНЕ РЕЧИ: ванбрачне заједнице, породице ванбрачних парова, Србија, Попис 2011

DEMOGRAPHIC CHARACTERISTICS OF SLOVENIANS IN VOJVODINA AT THE BEGINNING OF THE XXI CENTURY

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ABSTRACT: According to the results from the 2011 Census, in Autonomous Province of Vojvodina (hereinafter referred to as 'Vojvodina') there were 1,815 Slovenians, or 45% of the total number of Slovenians in the Republic of Serbia. Slovenians make up only 0.09% of the total population in Vojvodina. All demographic indicators show a profound demographic decline in the population based on biological depopulation that began in the late 1960s. Furthermore, a negative trend in natural increase was further strengthened by inverse migrations that started several years after they had colonized Vojvodina, especially south Banat. Slovenians in Vojvodina, at an average age of 52.1 years, were ranked second place in the rank of ethnicity by age, which clearly indicates to intense process of population ageing and inability to achieve positive effects of natural movement. Although this population is statistically small in number, this paper clarifies the underlying causes of extremely unfavorable demographic trends that characterized Slovenian population in Vojvodina over the last several decades.

KEYWORDS: Slovenians, Vojvodina, biological depopulation, demographic ageing, migrations.

INTRODUCTION

A differential demographic change according to ethnicity has been the focus of demographic research for a long time. Remarkable historical and political events during the XX century significantly changed the political and physical map of the South-Slavic area by creating new political and territorial units which became independent states at the end of XX century. Considering the fact that, starting from 1918, all South-Slavic countries were ethnically heterogeneous, in contemporary political-geographical circumstances, a number of ethnic communities remained beyond their current state borders. According to legal regulations, they became national minorities or ethnic groups. This led to an increasing interest in the study of ethno-demographic processes and phenomena in the newly created countries.

The ethnic structure of population in Autonomous Province Vojvodina (hereinafter referred to as 'Vojvodina') shows its multinational character that has been formed under the influence of many factors that can be classified into: demographic (changes in the ethnic structure due to differential ethnic population growth), and non-demographic (change in attitude to national declaration in censuses, and changes in methodological solutions of censuses). As a result of these factors, over the time, certain ethnic communities increased their total number of population and their share in total population, while others experienced negative trends in population dynamics which had direct impact on ethnic structure. This type of ethnic heterogeneity was shown in the results of the 2011 Census when Serbs had a share of 66.8%, and 20 national and ethnic minorities had a share of 33.2% in the total population. According to the same results, the overall number of Slovenians in the Republic of Serbia (excluding the data for Autonomous Province of Kosovo and Metohija) was 4,033 or approximately 0.06% of the total population. Out of the total number of Slovenians in the Republic of Serbia, 45% of them live in Vojvodina, and 55% live in central Serbia (approximately 69.4% in Belgrade). The share of Slovenians in the total population of Vojvodina is only 0.09% and all demographic indicators point to a profound demographic decline based on biological depopulation that began in the late 1960s. When observing the regions, more than a half (55%) of Slovenians in Vojvodina live in South Bačka and South Banat. When observing municipalities and cities, the highest number of Slovenians is recorded in the city of Novi Sad (412) or 22.7% of the total number of Slovenians in Vojvodina. Slovenians also live in the municipalities of Subotica (9.3%), Vršac (8%), Pančevo (6.6%), Zrenjanin (5.2%), and in the municipalities of Beočin, Sombor, Irig, Sremska Mitrovica, Plandište, Bačka Topola, Vrbas and Kula, which number ranges from 1–5% of the total number of Slovenians in Vojvodina.

So far, no special scientific interests have been generated in demographic research on Slovenians in Vojvodina, since they were usually observed only partially within studies on the total population of Slovenians in the Republic of Serbia. However, a remarkable contribution to the study of the Slovenian population in Vojvodina was made by professor Mirko Pak in his work entitled 'The colonization of Slovenians in Banat' (1963) in which he presented basic demographic characteristics of the post-war Slovenian colonists in five settlements in South Banat (Vršac, Gudurica, Velika Greda, Banatsko Plandište and Dužine).

Although there are no reliable data on Slovenians in Vojvodina before 1921, we discovered that Slovenians had lived in Vojvodina in the late XIX century, precisely in 1880, when they were mentioned as miners in Vrdnik and some settlements in Fruška Gora, all in relation to economic migration and seasonal jobs.

The first significant migrations of Slovenians to Vojvodina began in the period between two world wars. The next wave of immigration was after the World War II, during the 'agrarian colonization'. In the period between 1945 and 1946, an overall number of 801 Slovenian families moved to five villages

in South Banat, and 30.8% of colonists came from Ljubljana and Celje [Pak 1963: 404]. This process of immigration to Banat was completed by the end of 1946 and it was the last wave of migration because in the second half of the XX century there were no significant immigration waves of Slovenians to Vojvodina.

Nowadays, although small in number, Slovenian population is specific in many ways, and very interesting for demographic studies. An average age of 52.1 years places Slovenians in Vojvodina on the top rankings of nationality by age, but also according to other indicators of demographic ageing they are faced with serious biological depopulation.

METHODOLOGICAL PROBLEMS OF ETHNO-STATISTICAL AND ETHNO-DEMOGRAPHIC RESEARCH ON THE SLOVENIAN POPULATION IN VOJVODINA

Although the main focus of this paper is current demographic characteristics of Slovenians in Vojvodina, we are not able to arrive at correct conclusions without referring to long-term trends in the population dynamics. Demographic research in Vojvodina has been possible since the organization of regular statistical surveys of the population, first of all, censuses and vital statistics. However, until the 1948 Census, data on ethnic structure could only be obtained indirectly, through questions about mother tongue and religion. Ethno-statistical data about population of Vojvodina, which were obtained from the Austro-Hungarian census before the World War II and two censuses conducted in the Kingdom of Serbs, Croats and Slovenians in 1921 and the Kingdom of Yugoslavia in 1931, are included in the very important statistical database, but they are also scarce and have limited distribution. Methodological solutions for collecting information about ethnic features, uneven time periods of censuses, as well as different socio-political circumstances under which censuses were conducted, led to the fact that results varied in degree of reliability, inability to compare data and lack of uniformity of population features, which substantially complicates demographic research [Radovanović 2005: 38].

The focus of censuses conducted in 1921 and 1931 were questions about mother tongue and religion, and the information about ethnic structure was obtained indirectly. In the Kingdom of Serbs, Croats and Slovenians, without Slovenia with Prekomurje, in 1921, 39,775 inhabitants with Slovenian mother tongue were recorded, out of which 8,916 or 22.4% were registered in Vojvodina [preliminary results of the census in the Kingdom of Yugoslavia on January 31, 1921, 1924: 30–31, 34–36]. The results obtained from census in 1931 showed that the 55,805 inhabitants of the Kingdom of Yugoslavia, without the Drava Banovina, declared Slovenian as their mother tongue, out of which 5,896 were from Belgrade and Pančevo, and 3,745 lived in Danube Banovina [Kržišnik-Bukić 1992: 178].

Direct data on the national structure of population in Vojvodina can be obtained from all eight censuses which were conducted after the World War II.

The data about nationality were collected in terms of constitutional principles that guaranteed full freedom of national declaration to all citizens of Serbia using the 'subjective declaration criteria'. Therefore, when we discuss current national structure of population in Vojvodina we should keep in mind that we use only the number of 'nationally declared population', which may not always coincide with their ethnic origin [Knežević 2011: 132]. According to the Conference of European Statisticians Recommendations for Censuses of Population and Housing of the United Nations, questions about ethnicity, religion and mother tongue belong to the group of the so-called 'complementary features' and, in some western European countries, they are considered as personal or private matters [Raduški 2006: 181]. It is important to mention that in the former Yugoslavia, ethnic features were regarded as essential, during the entire period of its existence, especially in difficult socio-economic and political circumstances.

Besides characteristics regarding the nationality, mother tongue was also important for ethno-demographic research. The question about language was less influenced by subjective criteria, and it was included in all census questionnaires in Serbia (excluding 1948).

Vital statistics (statistics on natural movement – birth, death, marriage and divorce) represent a very important source of information for analytical and ethno-demographic research. The first data on the number of births of Slovenians in Vojvodina were published in 1957, when 110 births were registered. Methodology of vital statistics was also changed, especially from 1965 to 1970, when collecting and publishing data on vital records of ethnicity were stopped, and made ethno-demographic research more difficult. This was very important for the research on Slovenians in Vojvodina who had negative rate of natural increase in that period. Also in the period from 1991–2002, Slovenians in Serbia were not in narrow statistical classification of nationalities which have their data on vital statistics continuously and fully published [Knežević 2012: 175].

However, it should be noted that the lack of current methodology in registration of vital records of nationality leads to the fact that data about births are collected based on mother's nationality, which may not reflect the real ethnic origin of a child.

THE NUMBER OF SLOVENIANS IN VOJVODINA DURING THE XX AND EARLY XXI CENTURY

Not all ethnic communities participated at the same time, with the same proportion and intensity, in the increase of total population of Vojvodina. Slovenians, as well as Czechs and Russians are characterized by continual and linear decline in number throughout the entire post-war period, while the Serbs, Croats, Hungarians and Slovaks are characterized by decline in intensity of growth at first, and then decline in the population until the end of this period [Knežević 2011: 139–140].

Data on population of Slovenians in Vojvodina in the period 1948-2011 shows that their number decreased approximately four times, and the first significant decline was recorded in the first inter-census period (Table 1, Graph 1).

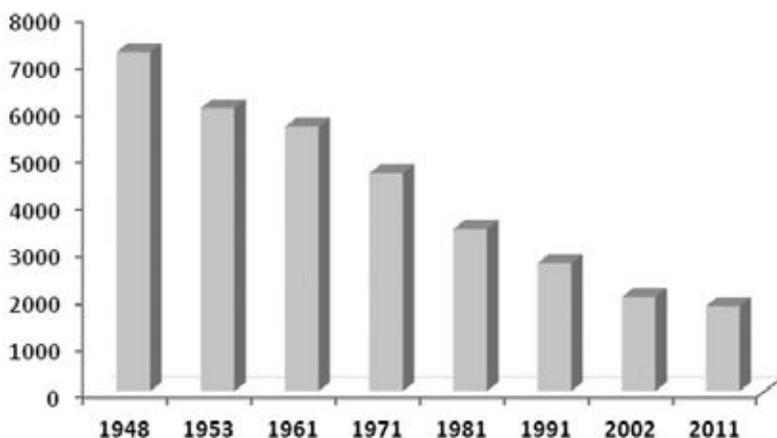
Table 1. *The number of Slovenians in the Republic of Serbia (1948 to 2011)*

| | 1948 | 1953 | 1961 | 1971 | 1981 | 1991 | 2002* | 2011* |
|-----------------|--------|--------|--------|--------|--------|-------|-------|-------|
| SERBIA | 20,998 | 20,717 | 19,957 | 15,957 | 12,006 | 8,261 | 5,104 | 4,033 |
| Central Serbia | 13,492 | 14,281 | 13,814 | 10,926 | 8,207 | 5,271 | 3,099 | 2,218 |
| Vojvodina | 7,223 | 6,025 | 5,633 | 4,639 | 3,456 | 2,730 | 2,005 | 1,815 |
| Kosovo and Met. | 283 | 411 | 510 | 392 | 343 | 260 | / | / |

* Note: For 2002 and 2011, without data on Autonomous Province of Kosovo and Metohija

Source: Census of population in Serbia, (1948–2011), FSO and RSO, Belgrade.

Figure 1. *The number of Slovenians in Vojvodina (1948–2011)*



According to the 1948 Census data, approximately 2/3 of Slovenians (64%) lived in Central Serbia (mostly in Belgrade), and 34% were registered in Vojvodina. It is also evident that the decline in the number of Slovenians was higher in Vojvodina than in Central Serbia. Change in the number of Slovenians in Vojvodina in the period from 1948 to 2011 shows a constant trend of decline which was particularly marked until the 1980s (Table 2). The decline in the number of Slovenians in Vojvodina coincides with the period when their negative natural increase began, which is still evident. It should also be noted that the process of colonization of Vojvodina was completed in the 1950s. Since that time, there have been no significant migrations of Slovenians to Serbia, but in the 1960s slow process of inverse migrations, mainly to Slovenia, started.

Table 2. *Indicators of increase/decline in the number of Slovenians in Vojvodina (1948–2011)*

| | 1953/48 | 1961/53 | 1971/61 | 1981/71 | 1991/81 | 2002/91 | 2011/02 |
|----------------------------|---------|---------|---------|---------|---------|---------|---------|
| absolute growth | -1198 | -392 | -994 | -1183 | -726 | -725 | -190 |
| average annual growth | -240 | -49 | -99 | -118 | -73 | -66 | -21 |
| average annual growth rate | -3.6 | -0.8 | -1.9 | -2.9 | -2.4 | -2.8 | -1.1 |
| index of growth | 83.4 | 93.5 | 82.3 | 74.5 | 79.0 | 73.4 | 90.5 |

Source: Calculation is based on the results of censuses in Serbia (1948–2011)

Data presented in Table 2 show that in the period from 1948–2011 increase in the number of Slovenians in Vojvodina had negative values, and in this regard the biggest change occurred during the 1970s. Besides Slovenians in Vojvodina, the decline in population during the entire observation period was also recorded for the ethnic communities of Czechs and Russians. It is also evident that there were no significant fluctuations in the declining trend which indicates clear demographic explanation of the cause, and also that the influence of subjective criteria in declaring of nationality, as well as the changes of the census methods were not relevant to the population dynamics of Slovenians in Vojvodina.

THE NATURAL MOVEMENT AND INDICATORS OF DEMOGRAPHIC AGING OF SLOVENIANS IN VOJVODINA

Slovenian population in Vojvodina is faced with long-term changes in fertility due to low birth rates which are below the replacement level, and the vital statistics data has recorded biological depopulation of Slovenians in Vojvodina since the 1960s (Table 3, Graph 2).

Negative value of natural increase of Slovenians in Vojvodina was first recorded in 1972, which coincided with a significant decline in the number of Slovenians during the seventies, when the average annual growth rate was -2.9‰. There are several reasons for early biological depopulation. The first reason is related to inverse migrations of Slovenians that were colonized in Vojvodina just after the World War II. Many of them soon returned to Slovenia, but selectivity of migrants by age directly influenced the age structure and reproductive potential of the remaining population. In fact, as defined by previously applicable laws, houses and farming land that had been given to colonists in Vojvodina could not be sold in the following ten years, which resulted with the return of primarily young Slovenians to Slovenia, while their parents mostly stayed to save properties which they could sell later [Pak 1962: 417]. Absolute decline in the number of Slovenians in Vojvodina during the period 1971–1981 amounted to 1,183 residents (Table 2), while the natural increase during the same period amounted to -36 residents. In the period 1981–1991, the number of Slovenians in Vojvodina declined for 726 residents, and natural increase during the same period amounted to -193 residents. It means that the

share of net migration in the absolute decline in the number of Slovenians in Vojvodina during the seventies amounted to 97%, while in the eighties it was 73.4%. It is interesting that according to the census results from 2011, in the South Banat region, 358 Slovenians were recorded, and only 175 in the municipalities of Vršac and Plandište which also includes five settlements that were colonized by the Slovenian population after the World War II (Vršac, Gudurica, Velika Greda, Banatsko Plandište and Dužine).

Figure 2. *Trends in fertility and mortality of Slovenians in Vojvodina (1957–2011)*

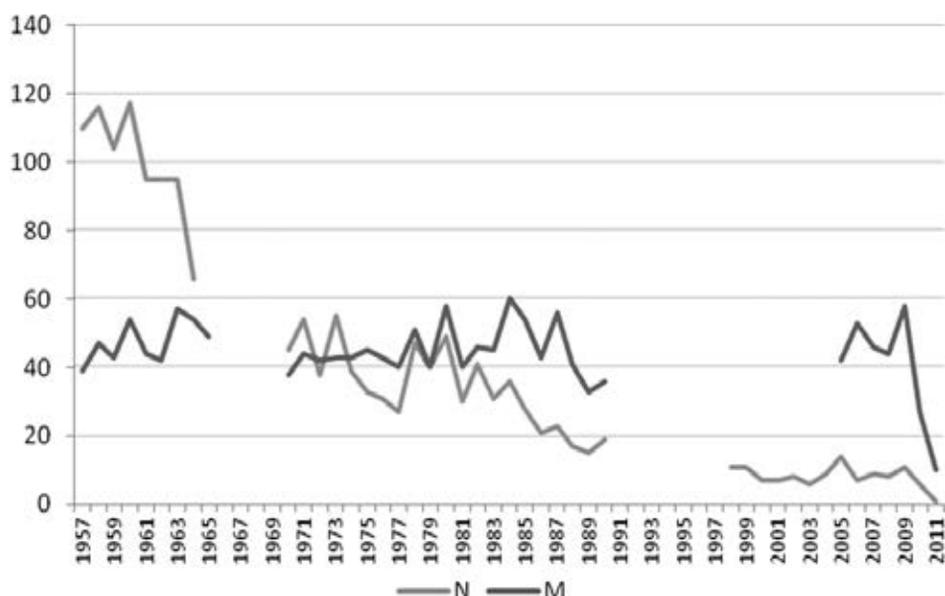


Table 3. *Crude birth rate (n), Crude death rate (m) and the Rate of natural increase (j) of Slovenians in Vojvodina (1961–2011)*

| | 1961 | 1971 | 1981 | 1991 ¹ | 2002 ² | 2011 |
|---|------|------|------|-------------------|-------------------|------|
| N | 18.2 | 9.8 | 11.6 | 7.0 | 3.5 | 1.9 |
| M | 8.3 | 8.9 | 13.9 | 13.2 | -13.5 | 10.2 |
| J | 9.9 | 0.9 | -2.3 | -6.2 | -10.0 | -8.3 |

Notes: ¹ The calculation according to vital statistics from 1990; ² Crude death rate of Slovenians in the Republic of Serbia, without data for the Autonomous Province of Kosovo and Metohija

Source: Calculations are based on data from vital statistics and censuses (1961–2011), FSO and RSO, Belgrade.

Reasons for the decline in the births of Slovenians in Vojvodina may be found in their spatial distribution and large share in urban population (in 2011, 72.2% of Slovenians lived in urban areas). It should be noted that the Slovenians, Hungarians and Romanians in Vojvodina previously had a reproduction model which was characterized by low birth and low mortality rates [Rašević, 2006, 67].

The long-term trend of negative natural increase and negative values of net migration, especially of young population, have resulted in extremely unfavorable indicators of demographic aging, which suggests that the Slovenians in Vojvodina have been continuously exposed to an intense process of aging over a longer period (Table 4).

Table 4. *Indicators of demographic aging of Slovenians in Vojvodina (2002 and 2011)*

| Year | average age | share of large age groups (%) | | | aging index |
|------|-------------|-------------------------------|-------|------|-------------|
| | | 0–15 | 20–64 | 65+ | 65+/0–15 |
| 2002 | 49.1 | 7.8 | 65.7 | 26.1 | 3.3 |
| 2011 | 52.1 | 7.1 | 61.5 | 31.4 | 4.4 |

Source: Census of Population, Households and Dwellings 2002 and 2011, RSO, Belgrade.

The average age of the population in Vojvodina in 2011 was 41.8 years. With an average age of 52.1 years, the Slovenians took the second place in the rank of nationality by average age in Vojvodina (the average age of the Germans in Vojvodina was 53 years). Compared to census data from 2002, the average age of Slovenians in 2011 was increased for 3 years. Although indicators of demographic aging of Slovenians in Vojvodina are somewhat better than those living in Central Serbia (particularly in relation to Belgrade, where the average age of Slovenians in 2011 was 63.7 years, and the aging index amounted to 3.1 years), they still clearly show the consequences caused by emigration processes and long-term trend of negative natural increase.

CONCLUSION

Proximate ethno-statistical data about Slovenians in Vojvodina, which allow continuous ethno-demographic research, are available in census statistics from 1948, while data on vital statistics are available from 1957, but there was no regular collection and publishing of certain data in the periods from 1965–1970 and 1991–2001. Dynamics in the number of Slovenians in Vojvodina does not differ from the trends of continuous decline that was recorded for most of the nationalities. Decline in the number of Slovenians in Vojvodina is almost linear and without oscillations, but slower in comparison to that in Central Serbia. In the period from 1948–2011, the number of Slovenians in Vojvodina declined for about four times, and most significant decrease was during the 1970s. Natural increase of Slovenians in Serbia shows negative trend from the

1970s, and it caused extremely negative indicators of demographic aging; it also shows that the Slovenian population in Vojvodina is faced with pronounced biological depopulation and profound demographic aging. In the period from 1948 until today there have been no significant immigration waves of Slovenians to Vojvodina, although there have been several waves of emigrations of Slovenians (since the 1960s) characterized by selectivity of migrants by age due to emigration of young reproductive and working-age population. Unfavorable indicators of natural movement in combination with prominent emigration from 1948 onwards gives clear explanation of present demographic situation relating to Slovenians in Vojvodina, and the average age of 52.1 years in 2011 (which ranked the Slovenians at the top three national or ethnic communities based on average age in Vojvodina) best describes the demographic potential of this population.

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ДЕМОГРАФСКЕ КАРАКТЕРИСТИКЕ СЛОВЕНАЦА
У ВОЈВОДИНИ НА ПОЧЕТКУ XXI ВЕКА

АЛЕКСАНДАР КНЕЖЕВИЋ

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САЖЕТАК: Иако малобројна, популација Словенаца у Војводини је по много чему специфична и врло интересантна за демографска проучавања. Према резултатима Пописа становништва из 2011. године број Словенаца у Војводини је износио 1.815, или 0,09% од укупног броја становника Војводине, односно 45% од укупног броја Словенаца у Републици Србији. Сви демографски показатељи указују на дубоку демографску ерозију ове популације, у чијој основи се налазе негативни трендови природне и миграционе компоненте популационе динамике. У периоду 1948–2011. број Словенаца у Војводини је опао за приближно 4 пута, при чему је најинтензивнији пад забележен током седамдесетих година XX века. Вишедеценијски тренд негативног природног прираштаја и селективност емиграната по старости условили су изузетно неповољне вредности показатеља демографског старења на основу којих можемо закључити да је словеначко становништво у Војводини суочено са изразитом биолошком депопулацијом, дубоком демографском старошћу и трајним губитком репродуктивног потенцијала. Са просечном старошћу од 52.1 године, уделом младог становништва од свега 7% и индексом старења од 4.4, не постоји више ни теоријска могућност рехабилитације фертилитета који би обезбедио просту замену генерација Словенаца у Војводини, али ни демографски потенцијал који би био неопходан за њихов биолошки опстанак.

КЉУЧНЕ РЕЧИ: Словенци, Војводина, биолошка депопулација, демографско старење, миграције

UDC 314.15(497.11 Beograd)''1971/2011''
UDC 314.117(497.11)
DOI: 10.2298/ZMSDN1448443Z
ORIGINAL SCIENTIFIC PAPER

TYPES OF POPULATION DYNAMICS OF THE SETTLEMENTS IN BELGRADE REGION

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ABSTRACT: The aim of this paper was to present the main features of spatial redistribution of the population in the Belgrade region in the period from 1971 to 2011, by following the ratio between natural and migration components of population change in residential areas. The analysis was conducted using the modified Clarke's model. According to the 2011 Census, the Belgrade region is inhabited by 1,659,440 residents living in 157 settlements. As the most developed part of Serbia, for a long time Belgrade has been the destination of the majority of those who changed their place of permanent residence within national boundaries. During the observed forty-year period, the immigration significance of certain settlements in Belgrade region changed in accordance with the socio-economic and demographic circumstances. This paper explores how the type of the population dynamics of settlements transformed, the most important changes and new problems that have arisen concerning the settlement structure in the Belgrade region.

KEYWORDS: Belgrade, population dynamics, migration, population growth, typology of population dynamics

The aim of the paper was to present main features of the spatial redistribution of the population within administratively defined boundaries of the Belgrade region, and how development policies, as well as some uncontrolled processes influenced the demographic restructuring of the city.

The main characteristic of demographic development of Belgrade in the late 20th century was constant and distinct population growth, which led

quickly to the formation of a particular demographic concentration pole in Serbia. Growth in Belgrade agglomeration was faster than increase in the population of Serbia, as disproportionality of regional development in Serbia and strong centralization of activities caused equally strong demographic centralization. Territory and population of Belgrade grew following the urban, functional, political and socio-economic development trends, as well as the cause and effect regularity of demographic development thus creating specific inter-agglomeration spatial structure of the population dynamics. Migration in Belgrade, and in case of large urban systems, exerted special influence on the growth and demographic development of the city, but the impact of this component was not equal at different periods and in different parts of Administrative Region of Belgrade. At this point, and with the aim of clarifying the process of territorial redistribution of the population, the authors monitored the changes of the main components of demographic growth of settlements (and municipalities) that are part of the Administrative Region of Belgrade. The last four intercensal periods were analyzed, i.e. from 1971, when Belgrade spread reaching the present boundaries of 3,222 km², which represents 3.6% of the total area of the Republic of Serbia.

The change in population of certain territorial entities of Belgrade was analyzed using Clarke's model [1973] of population dynamics and distribution, modified by Friganovic [1990], i.e. based on the interrelationship and importance of natural and migration components of growth. Thus, two types (immigration and emigration) and eight subtypes of population dynamics were specified¹.

Given the specificity of the Belgrade region, its complexity and its role in the territorial organization of the Republic of Serbia as the largest urban agglomeration and complex functional system of urban and rural settlements, but also qualitative differences between urban and peri-urban areas, the analyzed territory was divided into three parts:

- Urban unit, consisting of parts of the city municipalities of Voždovac, Vračar, Zvezdara, Zemun, Novi Beograd, Palilula, Rakovica, Savski Venac, Stari Grad and Čukarica.

¹ **Emigration types:**

E1 Emigration: natural increase, census show population increase, the rate of natural increase is higher than the rate of increase specified by census

E2 Depopulation: natural increase, census show population decrease, the rate of natural increase is higher than the rate of decrease specified by census

E3 Excessive depopulation: natural increase, census show population decrease, the rate of natural increase is lower than the rate of decrease specified by census

E4 "Dying out": natural decrease, census show population decrease, the rate of natural decrease is lower than the rate of decrease specified by census

Immigration types:

I1 Expansion by immigration: natural increase, census show population increase, the rate of natural increase is lower than the rate of increase specified by census

I2 Regeneration by immigration: natural decrease, census show population increase, the rate of natural decrease is lower than the rate of increase specified by census

I3 Weak regeneration by immigration: natural decrease, census show population increase, the rate of natural decrease is higher than the rate of increase specified by census

I4 Very weak regeneration by immigration: natural decrease, census show population decrease, the rate of natural decrease is higher than the rate of decrease specified by census

- Peri-urban belt, which consists of other settlements of municipalities of Voždovac, Zemun², Palilula and Čukarica.
- Other urban municipalities, Barajevo, Grocka, Lazarevac, Mladenovac, Obrenovac and Sopot

CITY OF BELGRADE

Until the seventies of the 20th century the City of Belgrade had the dynamics of population growth in relation to the total territory of the City of Belgrade – the greatest period of growth were the sixties and population augmented per year for 24 thousand people. In those years, the inner-city area of Belgrade had the share of 90% in the total population growth in the city [Vojković and Devedžić 2010].

Subsequently, during the census period 1971–1981 there was a polarization of population dynamics, since 10 municipalities (or parts of municipalities) were marked by census as part of Belgrade, seven of them had concentrated population, while the city core consisting of Savski Venac, Stari Grad, and Vračar reported population decline. In the most urbanized and densely populated area of the city, depopulation process started when in other parts of city growth and population concentration were intense. This can be related to the conversion of residential area in a commercial, which in turn directly affected the reduction of demographic capacity of the settlements in question. The concentration of large number of functions in the central city core caused a growing need for commercial area which led to the inevitable transformation of residential buildings into commercial, given the limited space at disposal.

In the context of applied typology, strong polarization within the City of Belgrade was reflected in the existence of only two types of population dynamics: excessive depopulation in central municipalities and expansion by immigration in other parts of the settlement, when numerous post-war generations generated the majority of participants in relocation to the capital, particularly to some parts with industrial buildings. The next intercensal period brought greater diversification of the urban parts of the city by the type of population change. The main changes indicated the expansion of depopulation process, as the population decline was recorded in urban parts of the municipality of Palilula, as well as a slowdown in growth or stagnation in other municipalities. For the first time, some parts of the City of Belgrade, particularly the central urban core of the city, were marked with negative population change which is why Belgrade has the status of extinct territory in the observed typology, which is sort of terminological paradox, given the extreme urbanity and the importance of these parts of the city. Therefore, the observed spatial and demographic structure of large settlements such as Belgrade should be placed in the context of functional significance of individual urban units, which in some periods for residential purposes ceded administrative and commercial. It is

² Although the municipality of Surčin was established in 2004, thus separating the 7 settlements from the municipality of Zemun, the analysis will be performed based on the former administrative division.

also to be related to the deployment of industry and immigration (dis)advantages affected by construction and price of the residential area. Natural decrease in the last decade of the 20th century (or very low positive balance) in most of the municipalities reflects the social crisis, postponement of childbearing, international emigration, and decline of the demographic reproductive potential and aging of population. As many as 6 municipalities in the urban region of Belgrade had decreased number of inhabitants both by natural decrease and migration. Territories of the City of Belgrade affected by depopulation are expanding largely, and Stari Grad and Vračar have recorded minimum annual change in the population rate and rate of annual natural population change in the post WWII history.

Table 1. *Annual population change rate, annual natural population change rate, and type of population dynamics in urban parts of the municipalities that comprise the City of Belgrade, 1971–1981; 1981–1991; 1991–2002 and 2002–2011*

| | apcr (%) | anpcr (%) | tpd |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1971–1981 | | | 1981–1991 | | | 1991–2002 | | | 2002–2011 | | |
| Voždovac | 19.49 | 8.31 | I1 | 1.34 | 3.69 | E1 | -3.03 | -1.54 | E4 | 4.35 | -5.83 | I3 |
| Vračar | -6.66 | 0.51 | E3 | -12.36 | -3.42 | E4 | -11.23 | -7.69 | E4 | -3.77 | -5.04 | I4 |
| Zvezdara | 13.09 | 8.75 | I1 | 8.71 | 3.26 | I1 | -1.69 | -0.84 | E4 | 14.20 | -6.12 | I2 |
| Zemun | 20.98 | 11.12 | I1 | 4.74 | 6.54 | E1 | 5.59 | 0.54 | I1 | 8.07 | -6.25 | I2 |
| N. Beograd | 61.22 | 9.25 | I1 | 25.57 | 5.49 | I1 | 0.47 | -0.24 | I2 | -1.59 | -5.44 | I4 |
| Palilula | 12.69 | 7.52 | I1 | -1.90 | 3.41 | E2 | -3.54 | -0.95 | E4 | 7.26 | -7.62 | I3 |
| Rakovica | 52.62 | 9.47 | I1 | 11.56 | 7.30 | I1 | 4.06 | 1.31 | I1 | 9.77 | -5.48 | I2 |
| Savski Venac | -17.38 | 3.81 | E3 | -11.27 | -0.53 | E4 | -6.15 | -2.47 | E4 | -8.73 | -6.09 | E4 |
| Stari Grad | -12.67 | 0.77 | E3 | -4.12 | -3.45 | E4 | -16.92 | -7.83 | E4 | -14.36 | -5.26 | E4 |
| Čukarica | 17.67 | 14.81 | I1 | 16.82 | 6.32 | I1 | 10.84 | 3.48 | I1 | 7.31 | -6.39 | I2 |

Note: apcr – annual population change rate, anpcr – annual natural population change rate, tpd – type of population dynamics

Source: Census 2011 – Book 20, Database of Statistical Office of the Republic of Serbia

The beginning of the 21st century, introduced with the last inter-census interval, has been characterized by an unfavorable homogenization of natural population change, which is uniformly negative for the entire territory of the City of Belgrade, and the net migration has become the major modifier of the total population dynamics. Thus, the new morphology of polarization recognizes only two municipalities of emigration types (Savski Venac and Stari Grad) which have had that status during the 40 years of observations. Immigration in other municipalities no longer provides expansive growth, but only regeneration of varying intensity. For the first time since 1971, the natural loss of population in the municipality of Vračar is regenerated through immigration,

but not to an extent which is sufficient to counteract depopulation, which can be interpreted as the renewal of the residential funds and the period of intense demand for premises in this part of town, but also the exclusivity of the location which price the potential immigrants cannot afford. There is an interesting twist regarding the natural population change of this municipality which has taken a new position in the inter-settlement relations. Unlike the previous period, when its rate was among the lowest, the new rate values, although negative, are the highest among the municipalities of Belgrade (Table 1).

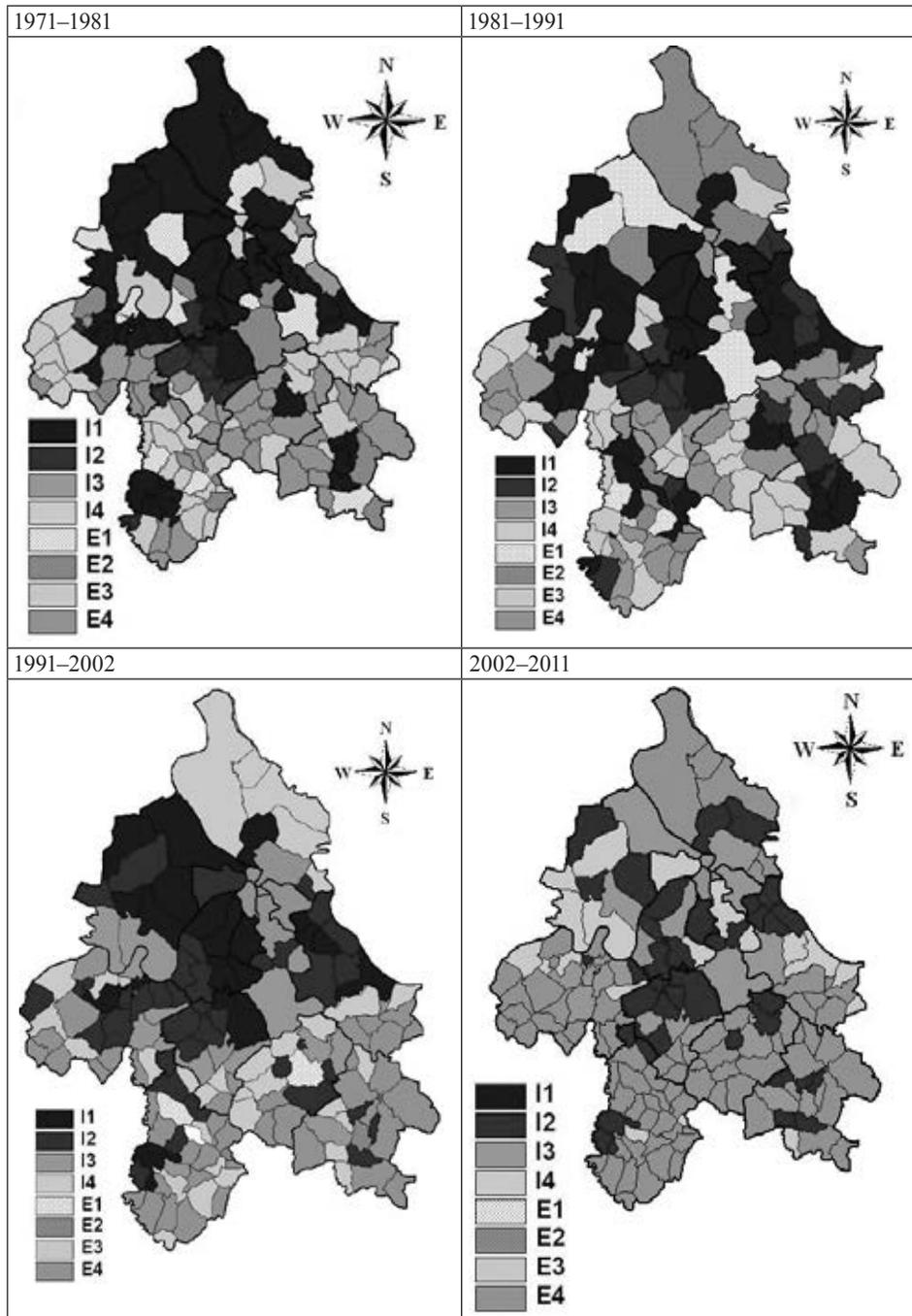
The transition from emigration subtypes of 'dying out' (total depopulation) to immigration type is evident in the municipalities of Novi Beograd, Palilula and Zvezdara, but only the last two are followed by increase of the total population. At the beginning of the 21st century Zvezdara had the highest regeneration by migration due to low prices of housing construction, which provided the highest population growth rate in Belgrade. Given that the population system of a large city is very sensitive and relatively quickly responds to functional changes in the environment, in terms of economic transition and devastation, spatial and demographic changes are usually caused only by a residential factor. It should be noted that the number of inhabitants is affected also by methodological changes. The concept of total population differs in the last three censuses, but the observed processes are evident, regardless of the changes.

PERI-URBAN BELT

Peri-urban belt comprises other parts of urban municipalities: Voždovac (4 settlements), Zemun (8 settlements), Palilula (7 settlements) and Čukarica (6 settlements), due to the fact that the municipalities of Vračar, Zvezdara, Novi Beograd, Savski Venac, Stari Grad and Rakovica are officially parts of the City of Belgrade (in the Census – Belgrade-part). Industrial development and construction of residential areas with a satellite character were launched by intense demographic changes of the peri-urban belt, which consequently had different directions, depending on the development policies of the City and direction of its expansion [Vojković and Devedžić 2010]. During the eighties, peri-urban belt even took the precedence in the dynamics of growth.

In the period 1971–1981, the intense concentration of population took place in the areas of municipality of Palilula, on the left bank of the Danube, which was in accordance with the policy of development of the City of Belgrade and strategic orientation of expansion of the city. Consequences of cancellation of the development policy became evident in the following ten years, when the decline in population was recorded in most areas across the Danube, caused by inadequate living conditions that characterized this area: high level of ground water, high humidity, poor connection to the city due to congestion on Pančevo bridge which is the only link of these settlements with the City, etc. In addition to unfavorable geographical conditions which in turn did not allow establishment of settlements in that area, the establishment of the Agricultural Conglomerate Belgrade (Poljoprivredni kombinat Beograd – PKB) occupied

Map 1. *Types of population dynamics of the settlements in the Administrative Region of Belgrade*



a huge space which was used exclusively for the purpose of meeting the needs of this property [Živanovic 2008]³.

Another reason for the demographic discharge of these settlements can be found in the fact that, administratively speaking, this is a border area which is conditionally 'handicapped' for faster development. The development of a central settlement in this area in which the population and activities would be concentrated was disabled by the vicinity of Belgrade, on the one hand and Pančevo on the other. However, Borča and Krnjača recorded significantly different demographic development. These settlements, in terms of positive natural change, have, for decades, concentrated population and gradually grown together with Belgrade into an urban continuum. Krnjača is administratively attached to Belgrade, and Borča remained administratively separate settlement within Palilula. In the last inter-census period, increase of population continued but with a slightly negative rate of natural population change.

The concentration of population in the settlements along the direction Zemun-Batajnica-Nova Pazova was also noted. Areas around the Ibarska motorway are also characterized by the strengthening of demographic capacity. A number of ancillary buildings on this road which provided employment opportunities, good infrastructure connecting it with both the north and the south of the state, the proximity of Belgrade, etc. acted as the pull factors and caused demographic strengthening of the surrounding settlements.

The process of population concentration included wider area, or greater number of settlements in the municipalities of Čukarica, Zemun and Voždovac, which resulted in the formation of a group of settlements of immigrational character around these two roads. The character of demographic trends in these settlements is determined largely by migration component of population growth (net migration), while the natural component (natural population change) is less present and in most cases negative.

OTHER URBAN MUNICIPALITIES

Administrative region of Belgrade in 1972 expanded by merging six suburban municipalities: Barajevo, Grocka, Lazarevac, Mladenovac, Obrenovac and Sopot, which gained the status of urban settlements in 2005. Analysis of demographic trends and processes characteristic for this territory was conducted at levels of municipality and settlement.

In the early stages of post-war development of Belgrade, numerous settlements in its immediate hinterland and suburban municipalities were losing population due to the relocation of population to the City of Belgrade. However, more rapid growth of suburban municipalities began in the 1970s. Thus, the analysis of the population in the first two observed intercensal periods showed that all municipalities, in general, achieved the expansive growth of

³ Typical for all agricultural conglomerates is, on the one hand, to reserve a huge area for current use or for any subsequent expansion of existing facilities, or on the other hand to prevent any other use of land. This reduces the possibility of expansion of construction land or intensive formation of settlements in this part of the Belgrade area.

immigration. On the other hand, only the municipality of Sopot was characterized by natural loss of population, and the immigration was not sufficient to ensure the population increase (Table 2).

The municipal centers were generators of the urbanization process and they concentrated the population in terms of positive natural population change. Based on the population dynamics, the municipal, city and industrial headquarters were distinguished, as well as their suburban zones, from the rest of the settlement. For example, with the development of industrial activities in Obrenovac and Lazarevac, as the most significant energy resources in the country, and due to the proximity of Belgrade, the central settlement of these municipalities achieved expansive growth of immigration, since they became more attractive for immigration in comparison to all parts of the former Yugoslavia [Vojković *et al.* 2010]. This was particularly emphasized in the municipal center of Lazarevac in which, during the eighties, the population increased up to 68.6%, while the surrounding area became deserted. Specifically, on the territory of Lazarevac, the extraterritorial effect of Mining energy complex Kolubara is evident. It gained land by expropriation and turned it into coal-pits which resulted in the displacement of the family owners of the land. Such a process often covers vast areas and leads to the disappearance of entire settlements. Developmental effects of this complex are not felt or expressed in the area of its immediate location, but its positive effects are evident at higher territorial levels. As these are capital-intensive plants, which require large investments in facilities, as well as in the production process, they require certain number of experts. Professional staff, as a rule, requires better living conditions, which are usually not located near their workplace, but in the immediate neighborhood.

However, population growth in the period 1981–1991 in most municipal centers was low, whereas in other settlements, demographic increase was more evident. This particularly referred to urban settlements of Mladenovac and Sopot, mainly due to their poor functional capacity which was unable to provide satisfactory social and economic needs of immigrants. Insufficient number of jobs, lack of propulsive economy, deindustrialization and privatization, few cultural educational institutions, underdeveloped service sector, underdeveloped transport that would make existing centers more accessible and encourage the emigration.

At the municipal level, the highest growth rate was achieved in the municipality of Grocka, and it owed this enormous growth to informal colony of Kaluderica which was intensively expanding and grew together with Belgrade. Main traffic communications between Belgrade and Smederevo integrated this area and contributed to its attractiveness regarding settlement, and the concentration of population in settlements along the route. In the municipality of Obrenovac, the constructed part of the highway increased the gravitational power of the settlement around it and caused the concentration of population along the highway, while the south-west part of the municipality was demographically discharging.

Table 2. *Annual population change rate, annual natural population change rate, and type of population dynamics of suburban municipalities for periods 1971–1981; 1981–1991; 1991–2002 and 2002–2011*

| | apcr | anpcr | tpd |
|------------|-----------|-------|-----------|-----------|-------|-----------|-----------|-------|-----------|-----------|-------|-----------|
| | (‰) | (‰) | | (‰) | (‰) | | (‰) | (‰) | | (‰) | (‰) | |
| | 1971-1981 | | | 1981-1991 | | | 1991-2002 | | | 2002-2011 | | |
| Barajevo | 12.80 | 1.13 | I1 | 14.00 | -1.89 | I2 | 16.14 | -3.73 | I2 | 10.04 | -4.97 | I2 |
| Grocka | 43.00 | 4.99 | I1 | 23.94 | 6.29 | I1 | 13.14 | 1.39 | I1 | 11.15 | -5.65 | I2 |
| Lazarevac | 11.15 | 5.23 | I1 | 14.21 | 5.76 | I1 | 2.00 | 0.51 | I1 | 0.20 | -5.54 | I3 |
| Mladenovac | 10.75 | 4.99 | I1 | 7.16 | 2.46 | I1 | -2.00 | -1.74 | E4 | 1.21 | -5.33 | I3 |
| Obrenovac | 16.14 | 5.87 | I1 | 11.47 | 4.02 | I1 | 4.85 | -0.59 | I2 | 2.27 | -5.38 | I3 |
| Sopot | -1.46 | -2.14 | I4 | -1.61 | -3.26 | I4 | 3.13 | -5.10 | I3 | -0.12 | -4.48 | I4 |

Note and source: Same as in Table 1

During the last decade of the 20th century significant changes at the municipal level were recorded. Mladenovac was marked with the emigration subtype 'dying out', while in other municipalities immigration alleviated the effects of the below replacement level of reproduction, and/or still produced expansive growth (Table 2). At that time, population growth around Belgrade was significantly slowed down, a shift in the direction of immigration occurred, and almost 90% of the migration flow in those years was directed towards settlements of peri-urban ring and suburban municipalities [Vojković and Devedžić 2010]. Previously initiated process of redistribution of population in the suburban municipalities continued, the border settlements of municipal center became more attractive for settlement than the center, and one might even say that some municipalities (Mladenovac, Lazarevac and Sopot) entered a phase of suburbanization.

In the last analyzed period, similar to the situation in the City of Belgrade, all the observed municipalities recorded negative natural change at a very similar rate values (app. 5‰). Unlike in urban municipalities, the immigrant population in the suburban municipalities can provide population growth or it can at least ensure its stagnation by 'covering' the effects of biological depopulation (Table 2). All municipalities have immigration character which is uneven though. Grocka and Barajevo still have the highest growth although slower in comparison to the previous period. However, in this period, number of settlements that are designated as E4- 'dying out' by the applied methodology, is increasing (Map 1). Only the municipal centers and their immediate environment show higher values of tested indicators.

* * *

The observed period of four decades of demographic trends and population redistribution in Belgrade show that the city shifted from one level of polarization in the seventies to another level of polarization. During the first decade of the 21st century, in the spatial structure of the population dynamics

of AR Belgrade, the depopulation-emigration territory of three settlements in northern AR was outlined, as well as large southern territory of the same type with smaller areas of population growth. Polarization processes are obvious, since 'the central part' of Belgrade agglomeration is almost 'homogeneously attractive' for immigrants which is why most settlements are still in the demographic growth (Map 1). Unfavorable homogenization is reflected in the predominance of deaths over births. Thus, net migration has become the dominant component in defining the number of total population and type of change. Polarization of immigration and emigration settlements in the first observed period had similar territorial patterns, but the latest data shows weakening of the gravitational influence of the northern border of Belgrade, as well as reduction of immigration settlements from the south. In Belgrade, there are no more settlements with expansive growth, which guarantees only two positive components of population dynamics by the applied typology. On the other hand, all types of emigration settlements indicate that the emigrations are 'merged' with the negative biological component, which is the reason why depopulation is complete and revitalization opportunities are limited. Earlier factors of spatial distribution of population, such as industrialization and the construction of roads, lose their importance and give way to new factors, primarily investment in construction of residential areas.

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ТИПОВИ ПОПУЛАЦИОНЕ ДИНАМИКЕ НАСЕЉА
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РЕЗИМЕ: Циљ рада је да укаже на основне карактеристике процеса просторног преразмештаја становништва београдског региона у периоду од 1971–2011. године, праћењем односа природне и миграционе компоненте промене броја становника по насељима. Анализа је урађена применом Кларковог модела. Београдски регион по *Појису* из 2011 године насељава 1.659.440 становника у оквиру 157 насеља. Посматране четири деценије демографских кретања и преразмештаја становништва у Београду, показују да је из једног нивоа поларизације седамдесетих година, град прешао у други ниво поларизације у последњем периоду. Током прве деценије 21. века у просторној структури динамике становништва АП Београда испрофилисала се депопулационо-емиграциона територија од три насеља на северу АП, као и већа јужна територија истог типа са мањим зонама популационог раста. Поларизациони процеси су очигледни јер је „средишњи део” београдске агломерације готово „хомогено атрактиван” за имигранте, због чега је већина насеља у њему још увек у демографском порасту (Карта 1). Неповољна хомогенизација се огледа у преваги умрлих над рођенима. Тако миграциони салдо постаје доминантна компонента у дефинисању бројности укупног становништва и типа промене. Поларизација имиграционих и емиграционих насеља из првог посматраног периода има сличне територијалне обрасце, али најновији подаци показују слабљење гравитационог утицаја северног обода Београда, као и редуковање имиграционих насеља с југа. У Београду више не постоје насеља са експанзивним порастом, коју према примењеној типологији гарантују само обе позитивне компоненте динамике становништва. Са друге стране, сва насеља емиграционог типа указују да су се иселавања „удружила” са негативном биолошком компонентом, због чега је депопулација потпуна а могућности ревитализације су ограничене.

КЉУЧНЕ РЕЧИ: Београд, популациони раст, миграције, типологија популационе динамике

DISABILITY AND CENSUSES: METHODOLOGICAL CHALLENGES AND EXPERIENCE IN MEASURING DISABILITY¹

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ABSTRACT: The present article has the primary objective of displaying stances about the role, the reach and limitations of a Census as a means of collecting data on disability in different countries. It will present the purpose of the Recommendation from the Washington Group on Disability Statistics in the context of introducing disability-related questions in national censuses from the year 2010 onwards. Furthermore, the article will inspect the limitations regarding measuring disability and functional difficulties through the means of a census, relying on the experience from other countries and scholarly research. This part will strongly focus on the formulations made by the Washington Group on Disability Statistics and the set of short questions presently used in national censuses. Finally, the article will briefly observe the experience from the Serbian national census in 2011 in measuring functional difficulties for the first time.

KEYWORDS: measuring disability, census, methodology, survey

INTRODUCTION

In the year 2001, an international gathering, organized by the United Nations, officially recognized an urgent necessity to reach a methodological structure in measuring disability that would ensure wide application throughout the international community and provide internationally comparable data on disability of populations in national censuses [Madans *et al.* 2011].

Consequently, the Washington Group on Disability Statistics was formed, as an expert body under the umbrella of the UN, comprising of experts from national statistical offices, NGOs and disability organizations. Its main objective and function was defining 'disability' for the purposes of comparable

¹ The present article is to be attributed as a result to the project N^o 179023, financed by the Serbian Ministry of Education and Science.

measurement, developing methodology that was simple and applicable in diverse national contexts and culturally neutral. The Group was to achieve precise recommendations concerning measuring disability in national censuses, therefore ensuring as wide as possible application in the member countries of the UN [Madans *et al.* 2011].

Recommendations of the Washington Group. The result of the Group's work on finding a set of questions that would address functional difficulties/disabilities throughout a nation was a group of six short questions that aim at the basic living performances or actions. These include sight, hearing, walking, memory/concentration, independence in self-care and communication. These were included in the Recommendation that was to influence national censuses occurring around the year 2010.

Six short questions are very simple. They require answers on the presence and severity of difficulties in the given areas, as seen by the census interviewee. The given answers are an indication of disability, i.e. if a person reports serious difficulties or total incapability in a certain area, he or she would be considered a person with a (particular kind of) disability in the census data.

The questions formulated by the Washington Group have the objective to ensure international comparability between populations from different cultural, traditional and economic conditions, by focusing on basic functions and areas. These functions have been chosen in accordance with the principles of simplicity, conciseness, universality and comparability. There is a presumption that these areas represent the space where the limitations of participation most usually occur [Mont 2007].

Limitations of the proposed methodology. The present article addresses some of the main issues that could be seen as limitations or shortcomings of the WG methodology for measuring disabilities. Some of them are not only caused by such an approach, but are resulting from the census methodology itself. These issues must be taken into account when using census data as a source for analysing the status of persons with disabilities in a given context.

Perceiving disability. The questions foreseen to identify disability in census activities are not identity-related. Whereas many other methods outside the census methodology would base themselves on personal identification of an interviewee ("Do you perceive yourself as a person with disabilities?"), these census questions do not aim at identifying the number of people in a single country (or on a lower level) who think of themselves to be a person with a disability, since that particular term is indeed very subjective, followed by a serious level of stigma, misunderstanding or misuse. Their aim is to identify persons who perceive their own functioning as limited, and to derive from that a number and structure of people who are heavily or entirely unable to function in certain basic areas of life. The label used for that purpose is 'persons with disabilities'. The main method is therefore not identifying oneself as a person with disabilities, but self-reporting on personal health restrictions and functional difficulties.

Identifying social interaction and inclusion. The methodology set out by the Washington Group does not dive into the issues concerning the influence

of the reported difficulty on a wider course of life of the interviewee, the level of social participation and their inclusion in a society. Even though it was possible to create such an approach, it would have been challenging and somewhat contrary to the overall aims in at least two ways. First, the form in which a census is performed and the structure of the census sheet itself do not allow for open, detailed or very specific questions that are solely based on the subjective perception of the interviewee. Therefore, the set of six short and basic questions were considered a more appropriate solution. Second, such an approach would compromise and potentially undermine the international comparability of the census data [Mont 2007].

If one is to reach conclusions on the levels of social interaction, inclusion and participation of persons with disabilities that are based on census data, further analysis is in order. Namely, only through cross-analysis between the data obtained in chapters concerning education, employment and labour, means of support, etc. will one be able to put information on disabilities/difficulties in context and perspective. The main approach to this regard is making a differentiation between the values and data found in the population with and without disabilities (or general population as an alternative).

Identifying groups and types of disabilities. It was the Washington Group itself that pointed out quite explicitly in their Recommendations that there are obvious and anticipated limitations to the given methodology of measuring disability through census activities [Washington Group, 2008]. It is a sort of general identification of disabilities that this methodology is aiming to achieve, recognising the large group of persons whose functional capacity is perceived as limited or non-existent, certain obvious limitations result from such objectives, particularly in regard to specific types of disability.

Namely, as stated above, six question address six basic functions (areas) – sight, hearing, walking, concentration (memory), self-care and communication (ability to understand and be understood). This would practically mean that disabilities regarding walking (physical disability), hearing and seeing are easily detectable according to the census data. Where the problem occurs is in identifying persons with mental disabilities – intellectual and psycho-social impairments [Washington Group, 2008]. The Group has underlined that it should not be expected from the given methodology to perform identification by types of disabilities as we know them. There are several reasons for this and we will name only a few. Firstly, the methodology itself offers criteria for identifying disability – only persons reporting higher level of difficulties are considered persons with disabilities. Moreover, the methodology also offers descriptive illustrations of difficulties, explaining who and what should go under the umbrella of disabilities in the census data.² The problem in identification occurs due to the fact that certain descriptions of difficulties in the methodological instructions for census interviewers are vague and too inclusive. For instance, a person shall have a difficulty in communication or under-

² See the Recommendation of the Washington Group on Disability Statistics, or in Serbian the book “Invaliditet”, published by the State Statistical Office of Serbia.

standing if any of the many stated causes is present (brain damage, severe speaking difficulties, intellectual impairments, non-communicative state, etc.). In practice, this would prevent us from being able to identify a specific cause or type of disability in a population group based on the census data, since in that very group we would find people with several different types of impairment, functional difficulty or health problem, or those who are simply harder to understand through usual means of communication. Almost the same problem can be found in the category of persons with difficulties regarding concentration and memory. As a result, particular groups of persons with intellectual and psycho-social disability are the hardest to identify through census data, because they appear to get “lost” in the larger groups. Also, another problem with identifying these specific types of disabilities could be in the unwillingness to report them in direct interviews, as a part of census activities, due to the obvious burdens of labels and social stigma. Therefore, the census data on disability is least accurate when it comes to detecting groups of people with difficulties related to mental health issues [Mont 2007].

As Mont [2007] noted, there are four common questions or areas when addressing difficulties in the mental health area of functioning in *screening* activities over a population – learning, making decisions, memory/concentration and understanding. For *census* purposes, the Group chose to use the latter two, due to the reasons of pragmatism, efficiency and cultural universality of meaning (the former two could differ in meaning across regions).

To conclude, although the given methodology offers solid grounds for general identification of disabilities of all kinds, it leaves a significant gap in identifying persons with mental disabilities. It can often result in overlapping between intellectual, psycho-social and other disabilities, and it focuses only on some of the aspects and dimensions that mental disability as a whole might include. At the same time, persons with mental disabilities remain the most marginalized, ignored and the least participatory of all the groups of people with disabilities [Marković 2012].

Answering the census questions – original and proxy answers. When we approach analysing and evaluating data obtained through census activities, the difference made by those who gave the answers to the census questions on disability and functional difficulties could be of a particular relevance in measuring disability.

Namely, a high possibility exists that a person with certain difficulty will be incapable or more likely considered incapable by others (family member, care-giver, etc.) of answering the census questions herself. Therefore, it might happen that another person answers questions on the levels of difficulties and disabilities on behalf of the person in question, and the census methodology usually allows it.

Again, such a possibility is higher in cases of persons perceived as having a difficulty in the area of mental health than in other cases. It can be seen as a result of technical issues (lack of time to communicate adequately with people whose means of communication is slower or unorthodox), social and other presumptions or stigma, and general prejudice.

Whatever the reason may be, this doing could influence the end result. There are some authors³ who illustrate findings that support the possibility that the results concerning disability occurrence and other disability-related data in census are directly influenced by the ones who gave the answers to the questions, i.e. whether the answer-giver was the person with a disability or someone who acted on their behalf.

This particular phenomenon also plays a relevant role in measuring disability through census in institutional surroundings. In practice, it should be expected that the interviewer or the statistical office does not perform full and precise census activities (interviews) with each resident at a psychiatric institution or residential institution for persons with disabilities, for instance. Even though the human rights standards require full enjoyment of all rights and full equality and respect for every person with disabilities, in reality most of the institutions shall fill in the given census forms without even communicating it with its residents. As a result, we could encounter thousands of census forms with answers on disability that did not even come in contact with the person in question. Such a scenario undermines the 'social model' that underlines the methodology of disability measurement and could impair the final results to a large extent, when it comes to people with disabilities living in residential contexts. It also contributes, as a practice, to the ongoing objectification of persons with disabilities, especially those who do not live in a community but in secluded and/or closed institutions.

Measuring disability in 2011 Serbian Census. Serbian Statistical Office included the set of short questions on functional difficulties and disability for the first time in the national census 2011. It followed the Washington Group Recommendations quite precisely.

Since the continuous data on disability is non-existent in the Republic of Serbia, the census data on persons with disabilities could be used as a primary source of such information, with all the reservations that the use of census data impose, due to the reasons given in the previous sections of this article.

The author of this article has been appointed the sole author by the Statistical Office of a study focusing on census data on disability in Serbia. The book in question performs the needed combining of different data regarding main aspects of social and personal functioning of persons with disabilities in Serbia based on census data, and reveals the relevant information on persons with reported difficulties for the first time in Serbia.

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ОРИГИНАЛНИ НАУЧНИ РАД

ИНВАЛИДНОСТ И ПОПИСИ СТАНОВНИШТВА: МЕТОДОЛОШКИ
ИЗАЗОВИ И ИСКУСТВА У МЕРЕЊУ СТЕПЕНА ИНВАЛИДНОСТИ

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РЕЗИМЕ: Овај чланак има за циљ да, пре свега, прикаже становишта о улози, достигнућима и ограничењима једног пописа становништва као начина да се прикупе подаци о инвалидности у различитим земљама. Чланак ће приказати и смисао препорука од стране Вашингтонске групе за статистику у области инвалидности када је реч о увођењу питања у вези са инвалидношћу у националне пописе од 2010. године на овамо. Надаље, чланак ће испитати ограничења која се односе на мерење степена инвалидности и функционалних сметњи путем пописа, а све ослањајући се на искуства из других земаља и научних истраживања. Овај се део посебно фокусира на формулације које су изнели у Вашингтонској групи за статистику у области инвалидности, као и на низ кратких питања која се тренутно користе у националним пописима. На крају, рад ће укратко да се осврне на искуства из националног пописа у Србији у 2011. години, а у вези са мерењем функционалних сметњи по први пут.

КЉУЧНЕ РЕЧИ: мерење степена инвалидности, попис, методологија, истраживање

SPATIAL CONCENTRATION OF POPULATION IN SERBIA 1981–2011 MEASURED WITH THE HOOVER INDEX

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ABSTRACT: Population distribution reflects the integrity of natural, social, economic and historical factors of the geospace, relevant both for fundamental and applied research. Complex spatial structure of the contemporary distribution of population in the world, and Serbia as well, during history was determined by human migrations of complex scope and determinants. The aim of this paper was to describe and analyze the geographical redistribution of the population by using the Hoover index as a measure of the redistribution. This measure was introduced by Edgar Hoover in 1936 and it has been widely used in geography. By computing this index, we can allocate the region of population concentration and deconcentration in Serbia. General conceptual framework of concentration and dispersion of population at different geographical levels is presented here. These differences in the achieved level of concentration in Serbia are correlated with the historical development of population, transition from an agrarian into industrial society, and process of urbanization and migration in the last sixty years.

KEYWORDS: Hoover index of concentration, population, distribution, Serbia

INTRODUCTION

The model of population distribution, as well as the factors that affect it, has been launched by the American school of regional science in the 50s and 60s, and it was first accepted by the geographers in Sweden and England. That caused the beginning of 'quantitative revolution' or the so called new geography [Grčić 1990]. Bunge [1962] points out that the processes of distribution and redistribution form a unified whole that reflects the spatial structure of the research phenomena. Redistribution, which arises from the spatial processes and spatial structure, represents different spatial properties of events. Hooson [1961] believes that knowledge of population distribution is the key to understand the individuality of geographic region. Old models of distribution

generally treated dispersion, and the newer models, mainly from the 70s, treated polarization, that is, clustering of the population through spatial concentration.

The questions of population concentration and dispersion are the core of geographic access to the condition and development of population systems that can be viewed by spatial-analytical approach [Ягельский 1980]. The aim is primarily to test the spatial aspects of population phenomena through distribution characteristics, forms of spatial structures, connections and relationships between demographic elements and other spatial systems as dynamic and temporal variable categories. Distribution is a result of the changes that have occurred in the past and transitional conditions of demographic and overall development. Development of the spatial-analytical approach in population science is correlated with the use of modern quantitative methods and technical research, and mathematical and statistical methods facilitate consideration of the flow and the determinants of population phenomena.

Great number of geographers agrees that the population has been an active factor of redistribution, especially in the last 200 years, due to the great territorial expansion, mass migration, and development of urban settlements. Therefore, due to the size, complexity and variability of the causes which determine it, the distribution should be perceived as a result of the process which involves systematic factors (technical, organizational, cultural progress) and the case factors, manifested in the specific distribution of certain human groups. By analyzing the characteristics of concentration and deconcentration, we can understand the impact of systematic or random factors and their role in the formation of a complex distribution of population at national, and even more importantly, at global level.

Proceeding from all foregoing, the studies on the spatial patterns of population distribution are very important. The redistribution of population has undergone several major phases during recent decades with a strong urbanization process, followed by the rural-urban migration, depopulation and population ageing. Therefore, it is not surprising that the population distribution has been among the most studied issues in the world, especially in response to new demographic developments in the 1980s. There have been numerous studies treating the spatial distribution of populations for various countries of the world, especially the United States [e.g. Hoover 1941; Vining and Strauss 1977; Lichter 1985; Long and De Are 1989; Otterstrom 2001; Roger and Plane 2013], China [Huang and Leung 2000], Malesia [Rainis and Shariff 2003], Switzerland [Kahsai and Schaeffer 2009], Sweeden [Borgegård and Håkansson 1997]. In Serbia, the subject of population concentration and dispersion can be found in the papers written in the second half of the XX century by the geographers: Radovanović, Nikolić, Spasovski, Grčić, Todorović, Ratkaj, Šantić and others [Šantić 2013].

In this paper, the analysis of the population distribution and redistribution was performed at different levels of the territorial structure of Serbia which demographic processes and population potentials were unevenly spatially distributed. The empirical analysis results in a spatial model of population redistribution in Serbia at different geographical levels. This study examines the

redistribution of Serbian population at the municipal level between 1981–2011. It is important to point out that population figures after 2000 are based on a different method than the one used in the previous censuses. This study did not analyze the causes of population deconcentration; it provides descriptive statistics which have allowed us to identify the regions where concentration, deconcentration and urbanization occurred.

The territory of Serbia is characterized by extreme polarization of demographic characteristics which is caused by distribution of elements and their spatial relations and links, as well as the relationships and connections with other territorial systems which determine the mode of functioning of the elements, as well as their spatial organization. Therefore, the application of quantitative analysis, which is comparable with the ratios of other structural characteristics of the studied territorial system, is essential.

METHODOLOGY

Various measures have been used in the study of population concentration and dispersion at global, regional, national and local levels. Duncan [1957], Nutenko [1971], Biraben and Duhourcau [1974], Ягельский [1980], Plane and Rogerson [1994] made the classification of those measures of spatial distribution according to certain characteristics. They can be combined as follows: population density, measures of distribution, measures of concentration, centrophobic measures, and population potential. Various methods could be used to measure the distribution of population. These include the Hoover index, entropy index, Gini index. As population data is collected based on areal spatial unit, the level of spatial aggregation might affect the results by using such methods. However, so far, little study has been carried out to determine the sensitivity of data aggregation upon the uses of such methods, especially in the context of Serbia. This kind of analysis is important because data is usually collected at a specific areal unit (such as municipalities), but it can be used for various purposes at much broader level of spatial unit (such as state, region or at national level). This study has discovered that, in general, data aggregation affects the measure of spatial concentration of population distribution. The more aggregated the data is, the lower the measure of population concentration, and vice versa.

The Hoover Index [Hoover 1936, 1941] is the most widely used measure for assessing the concentration or deconcentration tendencies of a country's evolving population distribution. This index is a timeworn measure which gives an easily comparable, relative value of concentration among various sizes of geographic units [Otterstrom 2001]. Hoover concentration index is the most widely used measure for assessing the (in) equality of distribution of the population over a given territory. It treats percentage of the total population to achieve an equal distribution of the population. It is based on an index and represents Gini version index of diversity (index dissimilarities). It compares the percentage of the population of each municipality with a proportional share of the municipality, and measures the degree of correspondence between the

population and territory. This measure can be calculated according to the following formula:

$$H = \frac{1}{2} \sum_{i=1}^n \left| \frac{x_i}{X} - \frac{a_i}{A} \right| 100$$

where x_i is the country's population residing in region i , X is total country population, a_i is country's area covered by region i and A is total country's area. n is the total number of districts, and i is the region. The index is 0 if, in every region i , the share of the country's population and country's territory are identical. This indicates a perfectly dispersed pattern of population distribution. The measure approaches 1 or 100 if everyone lives in just one area which is small in size (perfect concentration). Thus, high values of H indicate highly uneven population distribution, and vice versa. Clearly, the choice of geographic unit of analysis affects the value of H , as the index is 0 if the unit of analysis is the whole country. Neither extreme is likely, but the relative change in the value over time can be used to track spatial changes in the population. The increase of H indicates a pattern of increasing population concentration in time, whilst a decreasing H suggests the dispersal or deconcentration of population. A value of 50 would imply that 50% of the population would have to live elsewhere if the population is to be evenly distributed. A change from 50 to 40 shows that the population had increased more in more sparsely populated regions than in more densely populated regions. The following classification can be made based on the previously said: values of index more than 80 (0.8) suggest the highest concentration, values between 60 and 80 (0.6–0.8) suggest average concentration, values between 40 and 60 (0.4–0.6) suggest low level of concentration, and values below 40 (0.4) suggest population dispersion [Hoover 1936, 1941; Wright 1937; Grčić 1990; Plane and Rogerson 1994; Long and Nucci 1997; Rogerson and Plane 2012; Santić 2013].

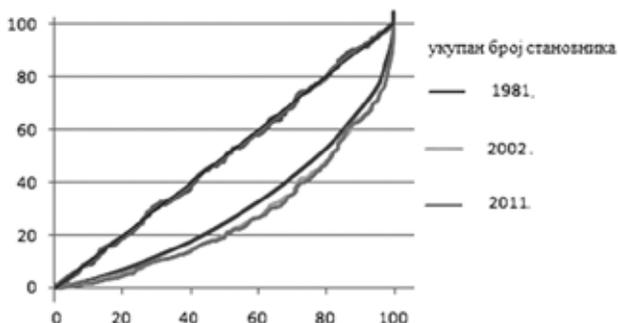
RESULTS

Depending on the spatial level of analysis, the concentration or dispersion of population is different. In Serbia, the concentration is at regional level, and dispersion at local level during the first phase, and then, dispersion on regional and local level during the second phase. Recently, the third phase could be recognized with concentration of population to some attractive regions such as the largest cities, in the first place. However, attention must be paid to the deviations from the national pattern within macro regions, and differences in the concentration/dispersion continuum with regard to the distance from major urban centers to central or peripheral location in the country.

The population redistribution among Serbian municipalities was characterized by an increased concentration between 1981–2011. When measured with the Hoover index, this increase was about 7%. The results of censuses in 1981 and 1991 indicated that it was necessary to redistribute 30% of the total population in order to obtain most appropriate correspondence between population and

area. In the first decade of the XXI century, it was necessary to redistribute 33% (2002) and 37.14% (2011) of the total population in Serbia [Šantić 2013].

Figure 1: Hoover index of concentration of total population in Serbia, 1981–2011



Source: SORS, 1981–2011

Taking into consideration the effects of migration and natural population change, it can be concluded that the concentration of the population in the XX century was primarily related to regional differences in migration processes and, at the beginning of the XXI century, it was related to the regional differences in fertility and mortality rates. It also implies that the natural population change has concentrated the population at a constant rate during the whole period, whereas the impact of migration on the Hoover index fluctuated over time. In the periods between 1971–1981 and 1988–1990 the migration contributed to the dispersion of the population. The concentration of the population in the second half of the XX century has high correlation with the changes in the migration patterns. However, an overall conclusion is that natural population change affects the long term trend towards concentration, and migration affects the short term fluctuations over time.

The data related to lower territorial units i.e. municipalities show the trend of population concentration in 29 municipalities in the period from 1981–2011. On the other hand, a trend of population dispersion was recorded in 132 municipalities. Increase in the population concentration due to natural population change is characteristic for the municipalities of Novi Pazar and Bujanovac; the population increase due to migration patterns is typical of Belgrade, Novi Sad and Niš regions, and the increase due to important functions of municipalities is typical of Vrnjačka Banja (tourism) (Table 1).

The highest index of concentration with values of more than 80 (or 0.8) was recorded in 17 municipalities in Serbia in 1981, and in 19 municipalities in 1991. The trend of increasing values of index of concentration was typical until the beginning of the XXI century. In the analyzed period, besides the Belgrade municipality, large concentration of population was in the municipalities with large regional and industrial centers such as Kragujevac, Niš,

Table 1: *Hoover index of concentration, municipality level, 1981–2011*

| Values | Years | | | |
|----------------|-------|------|------|------|
| | 1981 | 1991 | 2002 | 2011 |
| Less than 40 | 110 | 107 | 119 | 141 |
| 40–60 | 21 | 25 | 11 | 10 |
| 60–80 | 11 | 10 | 8 | 2 |
| Higher than 80 | 17 | 19 | 23 | 8 |

Source: SORS, 1981–2011

Novi Sad, Majdanpek, Smederevo, Kuršumlija, Ivanjica, Knjaževac, Sjenica. In the period from 2002–2011 the value of this index significantly decreased, and this type of concentration was recorded only in 8 municipalities: Novi Beograd, Voždovac, Zemun, Palilula, Zvezdara, Cukarica, Niš and Novi Sad. The total share of population in those municipalities was much higher than total share of area. Average level of concentration (60–80) recorded constant decrease, from 11 (in 1981) to only two municipalities in 2011 (Kragujevac and Rakovica). The low level of concentration (40–60) according to the last census data was recorded in 10 municipalities, which is two times lower than in 1981. These municipalities are situated in the East (Knjaževac, Majdanpek, Negotin, Boljevac, etc.) and South West (Sjenica, Ivanjica). The increasing number of municipalities in the period from 1981–2011 was recorded only in the category under 40, which implies the population dispersion. In this category, 110 municipalities were registered in 1981, and 141 municipalities in 2011, which was 88% of total number of municipalities in Central Serbia and Vojvodina. That trend shows intensity of total depopulation process in Serbia in the last five decades (Table 1).

If we use the population concentration in Central Serbia and Vojvodina at the beginning of the XXI century as a standard size (37%), we can extract the contingents of the population with a concentration below and above that average. Concentration of population below average values have all categories of agricultural population, the population over 65 years of age, the population in the primary sector, the population with completed primary education, and non-migrant population. The smallest index of concentration in the analyzed period was recorded in the category of population with no education (20.5). That means that these contingents of the population are characterized by dispersive distribution, which is correlated with the distribution of the agricultural sector and its slow transformation, depopulation and cultural transformation in general.

The higher level of concentration is characteristic for the urban population, migrant population, and population active in the tertiary and quaternary sectors, and people with secondary and high education. It shows economic, demographic and social transformation strengthening trends of population redistribution and concentration in Serbia since the mid-twentieth century. The highest level of concentration in the analyzed period was recorded among dif-

ferent ethnic groups: Albanians, Vlachs, Muslims (Bosnians), Hungarians, Roma people which was related to the historical development of population in Serbia, as well as differentiated demographic development by nationality [Šantić 2013].

Analyses at micro-regional, municipality level shows that the lowest concentration in almost all analyzed features was in the municipality of Crna Trava. The municipality of Čajetina recorded the lowest concentration of population in urban areas, and Ada municipality in villages; Trgovište municipality had the lowest concentration among retired people, Tutin in single-member and two-member households, and Sjenica municipality had the lowest concentration in the level of mortality. On the other hand, the largest value of Hoover index of concentration was recorded in the municipality of Zemun in almost all studied categories. In Grocka, the highest concentration of population was recorded in villages, and in Bogatić, the highest concentration was in total and active agricultural population. The highest concentration of natural increase was recorded in the municipality of Preševo [Šantić 2013].

DISCUSSION

Does Serbian population have a trend of concentration or deconcentration? What are the effects of regional differences? Do they represent a comparative advantage, or limiting factor for current and future sustainable development?

Republic of Serbia has undergone some sizable changes in its population geography since the Second World War. Major component of these population shifts was rapid migrations from rural to urban areas due to the processes of urbanization, industrialization and deagrarization. Since 1980, major demographic changes such as decreased fertility rates, increasing mortality, ageing populations and changed migration patterns have been often seen as the main ingredient of regional demographic change. They caused changes in the territorial distribution of the population as a result of differences in the achieved level of transition of natural change and migration, and spreading in the last 60 years, while on the other hand, in Kosovo and Metohija and its surrounding municipalities populated predominantly by ethnic Albanians and Muslim population, formed a homogenous areas of high fertility and expanded reproduction. So, the result of that process are areas of dispersion on the one hand (regions in the east), and areas of extreme concentration of population (Kosovo and Metohija and major river valleys) on the other.

The process of territorial and demographic polarization of Serbia was continued at the beginning of the XXI century. In general, with the decades of depopulation, regional and international migrations, the resources for further territorial redistribution of the population have been exhausted (particularly relating to the previous dominant trends of redistribution from rural to urban areas). Recent trends of population redistribution have been based on population movement from towns and cities toward regional centers – Belgrade, Novi Sad, Niš, Kragujevac, etc., and they affect further spatial redistribution of population in optimal working and reproductive age. This opens the door to demographic extinction of entire villages and regions in Serbia. Thus, there is

a need for revitalization and reverse of future demographic trends in the vulnerable areas and towns of Serbia. It is possible only in the circumstances of the overall transformation of economic and social environment necessary for survival, as well as with the return of the population with favorable demographic structural features (younger, more educated). Therefore, the process of redistribution of the population must be taken as one of the most important requirements which, along with the rehabilitation of birth, has to be the main factor of future sustainable demographic and overall development of Serbia.

The concept of the future population distribution of Serbia should be based on the comparative advantages of space, opportunities, potentials, limitations, and existing development and distribution of the population. The main criteria to direct the population concentration and deconcentration should result from goals described in spatial planning documentations, and the best use of areal potentials in accordance with their specific characteristics. So, desirable trends in the spatial distribution of the population should be consistent with estimates of costs and benefits for individuals, families, communities, regions and countries. The measures should lead to an increase in income and its efficient and equitable allocation, as well as to the protection and improvement of the quality of living standards in Serbia. For this purpose it is necessary to redefine the migration policy in order to achieve a continuous decline in mortality, as well as the balance in structural characteristics, particularly age and sex structure. With respect to this, the measures of population policy in the sphere of population redistribution in Serbia are of special importance for the future. Modern scientific views on the phenomenon of urbanization and concentration of population in urban areas treat this segment as an important factor for sustainable development in the future. Distribution of population and urbanization are facing new challenges which have brought changes to the natural environment and will cause significant changes in the lifestyle of the population. Demographical issues have begun to regain important place in political agendas. That is why the study of population distribution may be useful to planners and decision makers as a guide in the selection of appropriate data level. In Serbia, no such study has been carried out so far, so it could be a subject of future research.

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ОРИГИНАЛНИ НАУЧНИ РАД

ПРОСТОРНА КОНЦЕНТРАЦИЈА СТАНОВНИШТВА У СРБИЈИ
1981–2011. МЕРЕНА ХУВЕРОВИМ ИНДЕКСОМ

ДАНИЦА ШАНТИЋ

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САЖЕТАК: Размештај становништва одражава целовитост природних, друштвених, економских и историјских чинилаца геопростора, релевантних како за фундаментална, тако и за апликативна истраживања. Сложену просторну структуру савременог размештаја популације у свету, као и у Србији, током историје су детерминисале људске миграције сложеног обима и детерминанти.

Просторна концентрација становништва представља важан сегмент организације географског простора, јер показује везе и односе елемената демографских

система у простору и нове релације са елементима осталих просторних система. За одређивање степена концентрације и дисперзије користе се различите статистичке мере, од којих у овом раду указујемо на Хуверов индекс концентрације. То је најшире коришћена мера за оцену (не)једнакости дистрибуције становништва на одређеној територији. Индекс третира проценат укупне популације коју треба разместити да би се постигла једнака дистрибуција становништва. На основу овог индекса можемо издвојити регионе дисперзије и концентрације становништва Србије: изразито депопулациони простори југоисточне, источне и југозападне Србије, као и Баната, са једне, и региони Београда, Новог Сада, Ниша, као и долине великих река, с друге стране. Достигнуте разлике у нивоу концентрације становништва Србије су у корелацији са историјским развојем насељености, преласка из аграрног у индустријско друштво, као и са процесом урбанизације и миграцијама становништва у последњих 60 година.

КЉУЧНЕ РЕЧИ: Хуверов индекс концентрације, просторна дистрибуција, становништво, Србија

SPECIFICITY OF POPULATION TRENDS IN VOJVODINA – THE 2011 CENSUS

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ABSTRACT: According to the 2011 Census, Vojvodina has the population of 1,931,809 which is by 100,183 less than in 2002. Vojvodina has fewer inhabitants today than in 1971. This decrease in number of inhabitants, according to the latest census, occurred in all municipalities except in the City of Novi Sad, where the population annually increased by 4,703.

The main objective of this paper was to analyze the movement of population between two censuses, focusing on the specifics of population movements in certain areas of Vojvodina. First of all, the area of the North Banat should be pointed out because there the population has been steadily declining since 1961. On the other hand, the South Bačka area records a steady increase in population in the period from the World War Two to the present, mainly due to the mechanical movement or immigration to the center of this area – the City of Novi Sad.

In addition to the population decline, the population of Vojvodina is characterized by higher average age. The last census showed that the population of all municipalities was, on average, older than 40, except in the municipality of Žabalj (39.7) and the City of Novi Sad (40.0).

Analysis of the data has shown that the trend of the population decline in Vojvodina, caused by very high mortality rates and low birth rates, continues and that the age structure of population is becoming less favorable.

KEYWORDS: population movements, population growth, migration, aging population, Vojvodina, Novi Sad

INTRODUCTION

In the republic of Serbia, the number of inhabitants decreased by 311,139 thousand in the period from 2002 to 2011, which was an annual reduction by 34,571 inhabitants. Decrease in population was recorded in Vojvodina too, where according to the 2011 Census lived 1,931,809 inhabitants. That is by 100,183 less than in 2002 and Vojvodina today has fewer residents than in 1971. The importance of the analysis of population trends is shown by the fact that

since the first modern census in 1869 until today, the lowest growth index 95.0 was recorded in the period between the last two censuses, 2002 to 2011 [Стојшин 2011].

The basic characteristic of population trends in Vojvodina is that the population growth in the province has most often been caused by mechanical movement or relocation of the population due to various social crises or wars, and that the number of inhabitants has stagnated or declined in the “peaceful” periods.

Besides the mechanical movement of population, we should not forget the natural increase which first negative value (-1.1‰) was recorded in 1989. Since then, when Vojvodina is considered as a whole, there have been more deaths than births every year. In recent years, natural increase has been around -5.0‰.

With a population decline between the last two censuses, Vojvodina is characterized by an aging population. Analysis of the age structure of the population is essential because of the influence of this structure on the various areas of social life, as well as because it indicates that different parts of Vojvodina show some differences.

CHARACTERISTICS OF POPULATION TRENDS IN VOJVODINA

The greatest increase in population in Vojvodina since the Second World War was recorded in the period from 1953 to 1961 (index 109.2)¹, when the population of Vojvodina annually increased by 19,542 residents [Стојшин 2011: 229]. The increase was influenced by higher natural increase which occurred as a result of a compensatory after war period, but also the colonization, the mechanical movement of the population, considerably influenced the population growth.

The first decrease in population in Vojvodina after the Second World War was recorded between 1981 and 1991, when the index amounted 99.0 (Table 1). During that period, in 1989, negative natural increase was recorded in Vojvodina for the first time, and the number of emigrants was higher than the number of immigrants because of the “beginning” of the social crisis.

This crisis, which “ended” with the war between the former republics of Yugoslavia, also influenced the movement of the population of Vojvodina in the period between the two subsequent censuses. Namely, it is most likely that the population would have continued to decrease until 2002 due to negative natural increase “if there had not been for the influx of a large number of refugees from the former Yugoslav republics. This is the period in which the migratory population movements had great significance for total population dynamics” [Стојшин 2011: 230], because the natural increase was constantly negative.

¹ The index given to gradation of changes in population should be explained: index less than 79 indicates sudden and significant decrease; index from 80 to 89 indicates medium decrease; index from 90 to 98 indicates slight or moderate decrease, from 99 to 100 stagnation of population, from 101 to 109 slight or moderate increase, from 110 to 119 moderate increase, and index greater than 120 indicates sudden or large increase in population.

The 2002 Census showed that there were 144,404 people who moved to this province. The refugees had a share of 9.18% in the total number of population in Vojvodina [Two centuries... 2008: 61] which meant that almost every tenth resident of Vojvodina escaped from the former Yugoslav republics during the war conflicts in the nineties.

Without immigrants, Vojvodina would have faced further decrease in the number of inhabitants. However, this population inflow into the territory of the province only briefly affected the increase in population. The last census of 2011 showed again that the population decreased, compared to the previous census year, by 100,183 inhabitants [Census 2011]. The growth index in this period was the lowest one since the Second World War (Table 1).

CHARACTERISTICS OF POPULATION TRENDS IN AREAS OF VOJVODINA

It should be noted that the demographic picture is not the same in all parts of Vojvodina and that the changes in population trends vary depending on the area regarded. In the period after the Second World War until 2011, the population constantly grew only in South Bačka region where the growth index from the 1948 Census to 2011 was 171.2 (Table 1).

All areas of Vojvodina were characterized by moderate increase in population until the 1961 Census. A slight reduction in the number of residents in North Banat occurred in the next 1971 Census, while in the 1981 Census the population decrease was also noted in Central Banat. Since then, these two regions have faced a constant decline.

In the areas of Srem, West and North Bačka and South Banat, the population decrease was observed between the 1981 and 1991 Censuses. In the period from 1991 to 2002, which was characterized by specific mechanical population movement, population increased in West and South Bačka and Srem, while in other areas the trend of population decline continued [Стојшић 2011: 233].

The period between 2002 and 2011 was characterized by population decrease in all areas except South Bačka (index 103.7). The greatest decrease in the nine year period between the two censuses was recorded in West Bačka (index 87.9) and North Banat (index 89.1) regions.

Analysis of population trends in different areas of Vojvodina has shown that these areas can be classified into three groups. The first group includes those areas in which the number of inhabitants constantly decreased since the population decrease was recorded for the first time up to the 2011 Census: North Bačka (after the 1981 Census), Central Banat (after 1971), North Banat (after 1961) and South Banat (after 1981). The second group comprises Srem and West Bačka where, after the 1991 decrease, population increase was recorded in 2002, but up to the last census continued to decline. South Bačka belongs to the third group with the population constantly increasing in the period between the censuses of 1948 and 2011.

Table 1. *Population trends in areas of Vojvodina*

| Area | 1948 | 1953 | 1961 | 1971 | 1981 | 1991 | 2002 | 2011 | 2011/ 1948 |
|---------------|-----------|----------------------|----------------------|----------------------|----------------------|---------------------|----------------------|---------------------|---------------|
| Vojvodina | 1,640,599 | 1,698,640 (103.5) | 1,854,971 (109.2) | 1,952,560 (105.3) | 2,034,782 (104.2) | 2,013,889 (99.0) | 2,031,992 (100.8) | 1,931,809 (95.0) | 117.7 |
| North Bačka | 184,506 | 186,569 (101.1) | 198,392 (106.3) | 205,929 (103.8) | 211,475 (102.7) | 202,493 (95.7) | 200,140 (98.8) | 186,906 (93.4) | 101.3 |
| Central Banat | 218,821 | 221,667 (101.3) | 229,812 (103.7) | 231,486 (100.7) | 230,962 (99.8) | 216,754 (93.9) | 208,456 (96.2) | 187,667 (90.0) | 85.8 |
| North Banat | 189,050 | 189,414 (100.2) | 194,150 (120.5) | 191,632 (98.7) | 187,179 (97.7) | 177,542 (94.9) | 165,881 (93.4) | 147,770 (89.1) | 78.2 |
| South Banat | 279,092 | 292,125 (104.7) | 320,187 (109.6) | 331,285 (103.5) | 340,189 (102.7) | 315,633 (92.8) | 313,937 (99.5) | 293,730 (93.6) | 105.2 |
| West Bačka | 200,465 | 207,941 (103.7) | 219,331 (105.5) | 220,671 (100.6) | 220,876 (100.1) | 210,679 (95.4) | 214,011 (101.6) | 188,087 (87.9) | 93.8 |
| South Bačka | 358,722 | 377,282 (105.2) | 432,873 (114.7) | 486,083 (112.3) | 538,016 (110.7) | 543,878 (101.1) | 593,666 (109.2) | 615,371 (103.7) | 171.2 |
| Srem | 209,943 | 223,642 (106.5) | 260,226 (116.4) | 285,474 (109.7) | 306,085 (107.2) | 303,216 (99.1) | 335,901 (110.8) | 312,278 (92.9) | 148.7 |

Source: Population censuses for given years; note: population indices are given in parentheses

NATURAL INCREASE OF POPULATION IN VOJVODINA

In the previous lines, as far as the space allowed, the influence of mechanical movement of population was explained, but it should be noted that the influence of natural movement in Vojvodina is equally important. Vojvodina is characterized by a long-term trend of decline in the natural increase rates. The highest natural increase of 10.9% in Vojvodina was recorded after the Second World War in the period from 1948 to 1952, while from 1953 to 1960 the rate fell to 8.7% [Стојшин 2011: 232].

Since the end of 1961, “in 71 places in Vojvodina, negative natural increase was recorded. In the next decade, their number increased to 210, and between 1981 and 1991, to 291” [Ђурчић 1996: 95]. Natural increase from 1981 to 1990 was about 0.7%.

In the period between 2002 and 2011, natural increase in Vojvodina had negative rates, and they continued to decrease in the following years. In the last five years, birth rates of the population in the province have been approximately equal, with about 9.4 children per 1000 inhabitants being born each year. Mortality rates have also stabilized, ranging from 14.5%. Today, natural increase is around -5.0%.

Table 2. *Natural increase in Vojvodina*

| Year | Birth rate | Mortality rate | Natural increase |
|------|------------|----------------|------------------|
| 1961 | 17.2 | 9.5 | 7.7 |
| 1971 | 13.4 | 10.2 | 3.2 |
| 1981 | 13.7 | 11.5 | 2.2 |
| 1991 | 11.4 | 13.2 | -1.8 |
| 2002 | 9.8 | 14.4 | -4.6 |
| 2011 | 9.0 | 14.5 | -5.5 |

Source: Natural Changes of Population in the Republic of Serbia from 1961 to 2010; Vitalna statistika 2011.

NATURAL INCREASE IN THE AREAS OF VOJVODINA

As shown by the analysis of population trends, the areas in Vojvodina also vary in heights of their natural increase. Greater number of deaths than births was first recorded in North Bačka in 1971, -0.5‰, while in 1981, negative natural increase was recorded in North Banat (Table 3). The area where the natural increase had a maximum positive value was South Bačka, where negative growth was recorded for the first time in 1992 (-0.9‰)².

In the last intercensal period, natural increase was negative in all areas of Vojvodina, but the rates of growth varied widely. The population of North Banat has the lowest rates in this period, -8.4‰ as recorded in 2011, and the situation was similar with the population of Central Banat (Table 3). The highest rates, but still negative, were recorded for the population of South Bačka, for example the natural increase was -1.4‰ in 2009.

The following data show the degree of difference in natural increase between the regions and municipalities as well. Specifically, in 2011, the lowest natural increase was recorded for the population of Nova Crnja, as low as -14.8‰, Čoka and Sečanj -12.8‰, while positive natural increase was recorded in the City of Novi Sad 1.2‰ (municipality of Novi Sad 1.4‰, municipality of Petrovaradin -0.3‰) [Витална статистика 2011: 5].

Novi Sad, the centre of Vojvodina and South Bačka region, the city where people from Vojvodina and other areas of Serbia gravitate, is specific for its constant population growth. This increase has been the result of immigration, but of positive natural increase as well.

Within the period from 2002 to 2011, the natural increase in Novi Sad was negative from 2003 to 2005³, and then became positive as a result of immigration, primarily of young people.

² Source: Two Centuries of ... 2012:57

³ In Novi Sad, from 1961 to 2010 negative natural increase was recorded only in the course of 7 years: 1993: -0.1‰; 1998: -0.6‰; 1999: -1.1‰; 2000: -1.1‰; 2003: -0.5‰; 2004: -0.7‰; 2005: -1.0‰; [Natural Changes... 2012: 65]

Table 3. *Natural increase in the areas of Vojvodina*

| | 1961 | 1971 | 1981 | 1991 | 2002 | 2011 |
|---------------|------|------|------|------|------|------|
| North Bačka | 5.0 | -0.5 | -0.2 | -4.1 | -6.7 | -7.0 |
| Central Banat | 7.6 | 1.7 | 0.1 | -4.5 | -7.7 | -7.8 |
| North Banat | 6.8 | 1.6 | -0.6 | -4.4 | -7.1 | -8.4 |
| South Banat | 7.3 | 3.0 | 2.3 | -2.0 | -4.8 | -6.6 |
| West Bačka | 8.4 | 3.7 | 1.7 | -1.9 | -6.0 | -8.7 |
| South Bačka | 9.0 | 5.2 | 4.5 | 0.2 | -1.3 | -2.0 |
| Srem | 8.5 | 4.6 | 3.8 | -0.1 | -3.8 | -5.4 |

Sources: Natural Changes ...1961–2010; Vitalna statistika 2011

AGE STRUCTURE OF POPULATION IN VOJVODINA

The population in Vojvodina is getting older every year. The share of population under 19 in Serbia, in the period of only nine years between the censuses of 2002 and 2011, decreased from 22.3% to 19.9%, and in Vojvodina from 22.6% to 20.0⁴. On the other hand, the share of population over 60 in the total population in Serbia was 22.5% in 2002 and 24.8% in 2011, which means that one in four people are over 60. In Vojvodina, the proportion of aged population increased as well, from 21.4% in 2002, to 23.7% in 2011. Also, analysis of the share of population age groups of 20–39 and 40–59 showed that in all regions, except in South Bačka, there were more residents of 40–59 than from the younger group (Table 4). The age group of 40–59 was also the largest.

The average population age in Vojvodina, according to the last census, is 41.8. Male population is on average 40.2, while female population is 43.3 years old. In urban areas, the average population age is 41.4 and in villages it is 42.3⁵.

It is obvious that in the period from 2002 to 2011 there were significant changes in the population age structure. The share of children in the total population of Vojvodina, which is an indicator of changes in the age structure, decreased from 15.6% in 2002⁶ to 14.3%. The share of population aged 15 to 49 in the period between the last two censuses also decreased from 49.4% to 46.3%. It was only the population over 50 that increased in 2011, from 34.3% to 39.3%.

Old demographic age of all areas of Vojvodina can be confirmed by the aging index, which indicates the proportion of the population aged 0 to 14 and the population over 65. In 2011, the aging index was 1.15.

The only region with more young (15.12% of total population) than old population 14.97% is South Bačka, with aging index 0.99. The population of South Bačka is the youngest in Vojvodina with an average age of 40.6.

⁴ Source: The 2011 Census, Book 2; 2002 Census, Book 2

⁵ Source: The 2011 Census, Book 2

⁶ Source: The 2002 Census, Book 2

The population of West Bačka is the oldest, with the worst ratio of young (13.23%) and the population over 65 (18.33%). The aging index is 1.38. The population of this area has the highest average age of 43.3.

The situation is similar in North Banat (index 1.28) followed by Central Banat (1.22).

Table 4. *Population by age in %, the 2011 Census*

| | Total | 0–19 | 20–39 | 40–59 | 60+ | Average age |
|---------------|-------|------|-------|-------|------|-------------|
| Serbia | 100.0 | 19.9 | 26.6 | 28.9 | 24.8 | 42.2 |
| Vojvodina | 100.0 | 20.0 | 27.0 | 29.3 | 23.7 | 41.8 |
| West Bačka | 100.0 | 18.7 | 25.2 | 29.7 | 26.3 | 43.3 |
| South Banat | 100.0 | 20.2 | 26.4 | 29.5 | 23.9 | 41.9 |
| South Bačka | 100.0 | 20.8 | 29.1 | 28.3 | 21.8 | 40.6 |
| North Banat | 100.0 | 19.7 | 25.3 | 29.8 | 25.2 | 42.6 |
| North Bačka | 100.0 | 19.8 | 26.7 | 29.4 | 24.1 | 42.1 |
| Central Banat | 100.0 | 19.9 | 25.4 | 29.8 | 24.7 | 42.4 |
| Srem | 100.0 | 19.7 | 26.3 | 30.3 | 23.7 | 42.1 |

Source: The 2011 Census, Book 2

CONCLUSION

The 2011 Census showed that changes in the population trends recorded in 2002 did not affect permanently the demography of Vojvodina which is getting worse every year. Population increase recorded in 2002 was the result of a large number of immigrants. If the number of immigrants had been excluded from the total population of Vojvodina, the total population would have been lower in this census, too. We can say with certainty that the trend of population decline, briefly interrupted by specific mechanical movements, continued in the period from 2002 to 2011, and that it is most likely to continue in the future.

Some areas in Vojvodina have fewer inhabitants than after the World War Two. The areas with more inhabitants in 2011 than in 1948 are South Bačka (index 2011/1948 is 171.2), Srem (index 148.7), South Banat (105.2) and North Bačka (101.3). Other areas had fewer inhabitants in 2011 than in 1948 and the largest decrease in population in this period was recorded in North Banat (index being only 78.2).

Although natural increase had greater influence on the population increase in the period after World War Two, today, negative rates affect population decrease in all areas of Vojvodina. The only area where natural increase is low but generally positive, the area to which people from other parts of Vojvodina and Central Serbia gravitate, is South Bačka, namely the City of Novi Sad. The population of this center of gravity is constantly growing while other areas

tend to be characterized by negative migration balance and very low, negative natural increase.

Vojvodina is characterized by increasing depopulation and aging population. Negative demographic trends will continue in the future. The importance of the analysis of population trends, and their structures as well, is reflected primarily in the planning of renewal and further development of Vojvodina and its areas.

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СПЕЦИФИЧНОСТИ ПОПУЛАЦИОНИХ ТРЕНДОВА У ВОЈВОДИНИ
– ПОПИС ИЗ 2011. ГОДИНЕ

СНЕЖАНА СТОЈШИН

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САЖЕТАК: На основу пописа из 2011. године у Војводини живи 1.931.809 становника што је за 100.183 мање у односу на 2002. годину. Војводина данас има мање становника него 1971. године. Овај пад броја становника је, судећи по последњем попису, присутан у свим општинама осим у граду Новом Саду где се број становника сваке године увећава за 4.703.

Циљ овог рада је анализа кретања становништва у периоду између два пописа, при чему је посебна пажња дата специфичним кретањима становништва у појединим областима Војводине. Област северног Баната би посебно требало издвојити јер је карактерише сталан пад броја становника још од 1961. године. С друге стране, јужна Бачка бележи стабилан раст броја становника у периоду између Другог светског рата па до данас, чему је углавном допринело механичко кретање становништва или имиграција у централни део ове области – град Нови Сад.

Поред броја становника који је у сталном паду, Војводину такође карактерише популација са високим просечним годинама. Резултати последњег пописа указују на то да је становништво у свим општинама старије од 40. година осим у општини Жабал (39.7) и граду Новом Саду (40.0).

Анализа података је показала да се тренд пада броја становника у Војводини, који је проузрокован високом стопом морталитета и ниском стопом наталитета, наставља и да старосна структура становништва постаје све неповољнија.

КЉУЧНЕ РЕЧИ: кретања становништва, раст становништва, миграције, старије становништва, Војводина, Нови Сад

EXPERIENCES OF THE PRO-NATALIST POPULATION POLICY
ИСКУСТВА У ВЕЗИ С ПОПУЛАЦИОНОМ ПОЛИТИКОМ КОЈА
ПОДСТИЧЕ РАЂАЊЕ

UDC 314.12(497.11)“20”
DOI: 10.2298/ZMSDN1448481V
ORIGINAL SCIENTIFIC PAPER

AGE MODEL OF FERTILITY IN VOJVODINA
AT THE BEGINNING OF THE 21st CENTURY

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ABSTRACT: This paper presents an outlook on fertility trends of the population of Vojvodina in the first decade of the 21st century, a period that includes the results of the previous two Censuses held in 2002 and 2011. The main concern is identifying determinants of this development process and the dynamics regarding the age model of fertility as well as the way it is manifested in Vojvodina. Methodology of this research relies on evaluating age specific rates, determining its fluctuations and shifts in order to establish the course of the change. Census of 2002 and Census of 2011 provide useful data to complete fertility analyses. Total fertility rates also show the tendency of continuous decline therefore representing the shifts in the age model of fertility. After the devastating 1990s marked by wars and sanctions, the transitional processes were initiated at the turn of the millennium, leading to a change in socio-economic environment. Along with constant economic crisis and accompanying poverty, this situation strongly influenced reproductive behaviour of women and their attitude toward childbearing in general. The trend of late childbearing and a raise of women's mean age at first birth continued.

KEYWORDS: fertility, Vojvodina

INTRODUCTION

Due to the characteristics of fertility and natural movement altogether, one of the dominant and most prominent features of the population of Vojvodina is low fertility rate and low reproductive norms as well. This trend appears to be the constant phenomenon in this region during the last few decades. It is the result of complex impacts of natural and migration components on the

overall dynamics of the population, as well as the variety of social, historical and geographical settings along with the inherent cultural traits. Since the mid-1950s, fertility level has not been high enough to ensure population replacement, and up to now, it has been promoting a reproductive model that is characterized by low birth rate. Therefore, there is a problem of ageing of fertility, the topic discussed in this paper.

ANALYTICAL FRAMEWORK

The aim of this study is to provide an overview of the age model of fertility in Vojvodina, at the beginning of this century. Present socio-economic and political circumstances, accompanied by post-transitional processes, caused by turbulent events in the 1990s such as wars and bombardment, affected most of the demographic trends, especially the ones related to reproductive performance. The tendencies in fertility behaviour are displayed through relevant indicators of fertility. The data relies on age specific fertility rates, regarding its dynamics in the interval from 2000 to 2012. This is how we can detect the direction of their advancement, along with the shifts in the age curve of fertility.

Along with low fertility characteristics leaning to depopulation tendencies and aspirations toward nuclear family, one of the most prominent demographic features of this region in the last few decades is postponement of childbearing. One of the main indicators of this phenomenon is registered through different quantum of age groups in total fertility in the observed period. An important component of the age model of fertility is mean age at first childbirth. During this, in demographic sense, relatively short period of time (13 years), this indicator revealed significant fluctuations, in terms of distinct raise of mean age at first childbirth.

AGE PATTERNS OF FERTILITY

In order to detect trends in the field of fertility, it is necessary to identify the changes of the shares of different age groups in the total fertility. Figure 1 shows the dynamics of specific fertility rates according to the Census of 2002 and 2011 in order to identify their changes in census years.

In the age model of birth, most visible changes in fertility are observed in the groups 20–24, 25–29, 35–39 and 40–44. Previously stable shape of the curve of fertility with a dominant share of age groups 20–24 and 25–29, has been disrupted by an increase of fertility in groups 30–35 and 34–39. Age group 25–29 still has the largest quantum, but with significantly lower values, while the older groups display a great amount of growth, which emphasizes an increasingly strong orientation of the female population to give birth at older age. One should not ignore the increasing specific fertility rates of the age group 40–44, given that its value in 2002 was 3.76, and in 2011 it was 5.26. The most distinctive changes have occurred in the age group 20–24. Its specific rates are less than 100 and have been in constant decline since the beginning of this period, and in the inter-census period decreased from 87.78 in 2002 to 59.92

at the last census, which is the lowest value recorded between 2000 and 2012. Next age group 25–29, recorded a steady decrease from 102.1 to 90.9.

Therefore, one of the main concerns is the growing tendency among women to transfer their reproductive behaviour outside the optimum period. Postponement of motherhood can be seen as a culturally based phenomenon present for decades, and at the same time, as an economic decision determined by the current socio-economic situation. Economic variable of childbirth is a rather significant one since it is reflected in the field of individual decisions in relation to this important demographic issue [Veljović R. 2013]. Structural barriers in the form of unemployment and general uncertainty in the economic field, lead to the postponement of important life events. Ignjatović S. [2009] considers the changes in fertility in the context of a more complex process, which is initiated by the transition to adulthood.

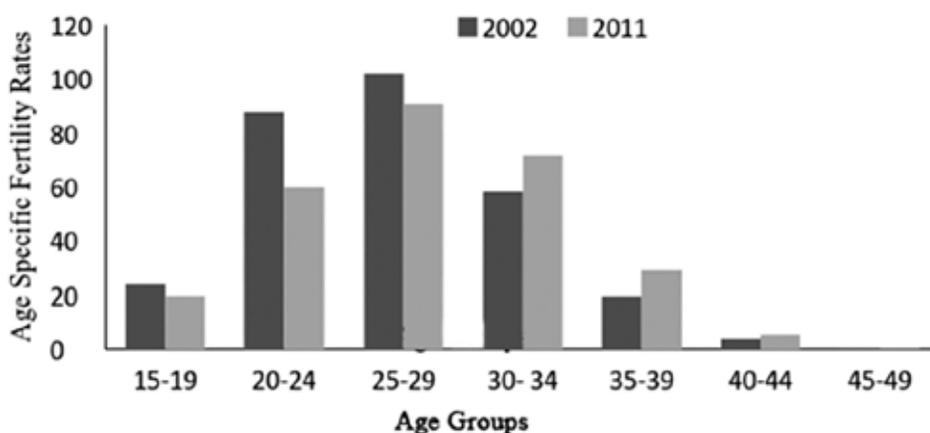


Figure 1. *Age specific fertility rates in Vojvodina in 2002 and 2011, Values calculated from the Demographic yearbook 2010, 2012*

In contrast to these trends, specific rates of the two older groups have a significant increase, which is especially noticeable in the group 30–34. In fact, in this age group, between the two censuses, specific rates recorded a steady increase from 58.3 to 71.7. In the next age group there is also an increase in the specific rates for a given period, from 19.4 to 29.2. The fertility transition from younger to older age groups explicitly points out the tendency of postponement of motherhood to older ages. This phenomenon in Vojvodina, given the low reproductive norms and the level of fertility below the generation replacement level since the second half of the 20th century, is not only the result of the recent socio-economic and political conditions, wars and the overall crisis that has lasted here for more than twenty years. It is also a kind of legacy of a cultural model that exists in this region much longer than the period observed in this paper.

Turbulent 1990s were followed by transitional processes, privatization and transition to market economy at the beginning of the 21st century, which most people were not prepared for. Economic reforms have not made the expected progress in new social relationships. Many individuals have faced a sense of hopelessness and insecurity, caused primarily by long-term economic instability and poverty.

As a sort of relic of the overall instability of the society, reflected in constant economic crisis, there are changes in attitudes toward childbearing. Studies based on attitudes on reproduction behavior, display numerous changes in the motivational system, related to children and parenting, which are in line with changes of the social position of an individual through the historical development [Petrović M. 1992]. Therefore, changes in the sphere of reproductive behaviour can not be considered separately from the social and historical context.

Polarization of life goals, diversification of the roles of women, the pursuit of self-realization and individualism, self-orientation and fulfillment of personal needs and accelerated lifestyle, followed by the shift of normative systems, are just some of the structural factors that have directly or indirectly affected the decisions to postpone parenthood.

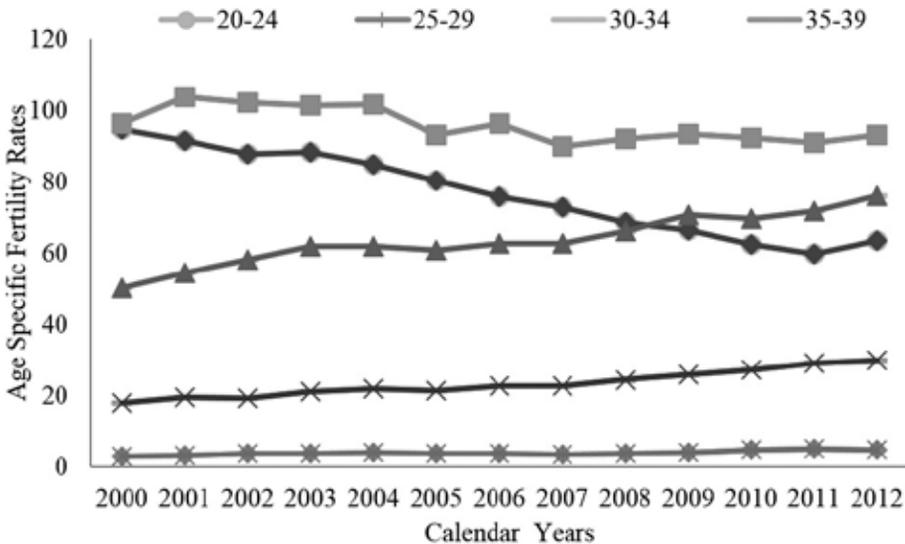


Figure 2. Age specific fertility rates in Vojvodina. Source: as Figure 1

Figure 2 depicts the changes in quantum of specific fertility rates of different age groups in the period from 2000 to 2012. Changes in fertility of the youngest and the oldest groups are not statistically significant, especially when it comes to the age group 45–49, so they will not be analyzed separately here. The most notable is the precipitous decline in specific fertility rates of women aged 20 to 24. In 2000, it was at 94.8, and in 2012 it was at 63.6. Furthermore, women aged 25 to 29 had a steady decline. Specific rates in the beginning had

an upward character and reached a value of over 100, but since 2005, with minor fluctuations, they have continued in a downward trend. The following three age groups reflected continuous growth of specific fertility rate, with a distinct group of women aged 30 to 34.

As Figure 2 shows, the specific rates of these groups have had a steady growth from 50.2 (2000) to 75.9 (2012) and display the tendency of further growth in the future. A similar trend has been detected in the following two age groups. Decline in shares of fertility of groups 20–24 and 25–29, which until a few decades ago had had the highest fertility rates, primarily on account of the age groups 30–34 and 35–39, is undoubtedly an indicator of the fertility transition into the older age of life. Rapid decrease in fertility rate of the group 20–24 and somewhat moderate decline in fertility rate of the group 25–29 in a relatively short period of 13 years, indicate substantial structural changes that have had indirect influence on the characteristics of the reproductive behaviour of women. The impact of external, in this case, primarily socio-economic factors, have rapidly reflected on attitudes about motherhood, suggesting a functional interdependence between social conditions and demographic variables, in this case reproductive behaviour.

Important and direct indication of the current age model of birth in Vojvodina is the mean age of mothers at first childbirth. Figure 3 shows the changes of this indicator during the thirteen-year long period. Since the beginning of the 21st century an upward trend has been registered. At the beginning of the millennium, in 2000, the mean age of mothers at first childbirth was 24.7, and during the first few years there was a slight increase up to 2004 (25.8). In the

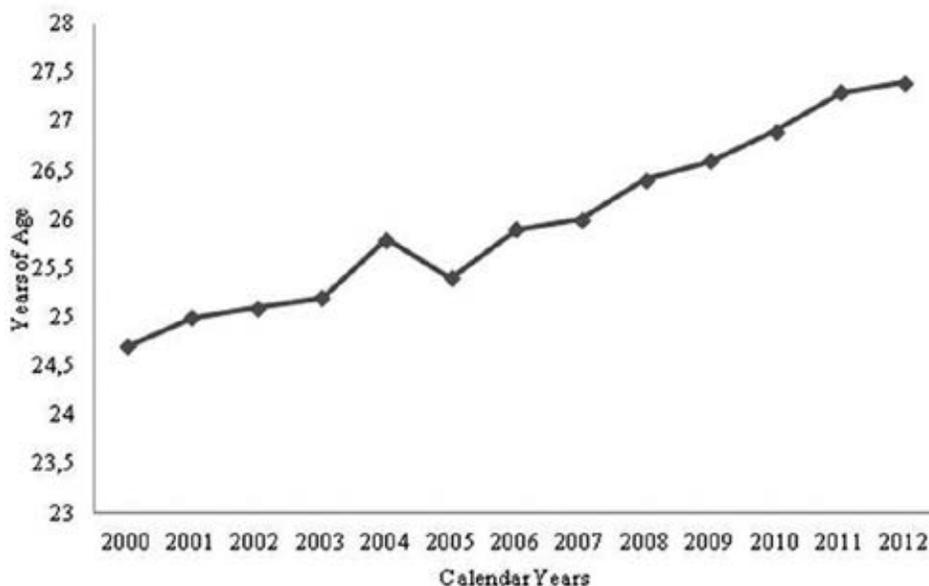


Figure 3. Mean age at first childbirth. Source: as the figure 1

following year there was a small decline, and the next seven years are marked by steady and continuous increase in mean age of first births, so at the end of the period, in 2012, it reached a value of 27.4.

This means that during the thirteen-year period there was an increase in the mean age of mothers at first birth of 2.7 years. A steep growth in the age of *primiparas* during a short period of time promotes the advancing processes of the second demographic transition in the region, with postponement of procreative behaviour for mature age, as one of its main manifestations. Aspirations toward economic autonomy of women and financial stability prolong the period of taking childbearing decisions.

GENERATION REPLACEMENT

In order to analyze the range of reproduction of female population, that is, generation replacement, we use transversal method. In this regard, the gross and net reproduction rates are introduced. A simple reproduction of the population is obtained if the value of the rate is 1. Taking into account the transversal analysis, the degree of generation replacement is most accurately detected by net reproduction rates. Net reproduction rate indicates that in Vojvodina there is no simple replacement of generations since 1956 [Penev 2001]. According to the data of the demographic statistics of corresponding years, the beginning of the 21st century was marked by higher rates of net reproduction compared to the last two years of the last century. However, the trend of lower values of this rate insufficient to ensure generation replacement, continued in 2005, when the values were the same as in 1999 and 2002. With minor fluctuations, until the Census of 2011, the values of the net reproduction rate were relatively stable and ranged around 0.67.



Figure 4. Gross and net reproduction rates in Vojvodina. Source: as the figure 1

Decreasing difference between the values of gross and net reproduction rates suggests a reduction in mortality of women in childbearing age, and therefore stimulates less impact of mortality component of natural movement

on fertility level. Slightly higher value of net reproduction rate of female population of 0.69 in 2012 is, among other things, the result of a more intensive decrease of mortality component, since the values of the gross and net reproduction rates in 2009 were equal (0,68). This means that the mortality of the female population in fertile age was zero. Yet, despite the reduction of these rates, the fertility level is still 30% below the level needed to ensure generation replacement. The impact of the continuous fertility decline is the main determinant of its dynamics.

This period is characterized by relatively slow dynamics of total fertility rate, which reflects the average number of children per woman. During the entire period, the value of the total fertility rate is far below the level needed to ensure generation replacement. With minor deviations, it is about 1.4, as it is found at the beginning and at the end of the observed period, while the lowest value was recorded in the middle of the period (in 2007 value of the TFR was 1.37).

In the cohort analysis of fertility we observe total fertility rate of a generation that includes the entire reproductive period. Censuses of the population allow us to obtain data to calculate the cumulative fertility rate. The average number of live births per woman, being part of the longitudinal analysis, is relatively accurate method for monitoring fertility of the female population during this period.

Table 1. *Cumulative fertility rate in Vojvodina*

| Women's age | 1991* | 2002* | 2011** |
|-------------|-------|-------|--------|
| 15–19 | 0.08 | 0.04 | 0.03 |
| 20–24 | 0.6 | 0.33 | 0.25 |
| 25–29 | 1.26 | 1.95 | 1.37 |
| 30–34 | 1.67 | 1.49 | 1.27 |
| 35–39 | 1.82 | 1.75 | 1.61 |
| 40–44 | 1.82 | 1.83 | 1.75 |
| 45–49 | 1.82 | 1.83 | 1.81 |

Sources: * Rašević, 2006; ** Calculated on the basis of the Census of population 2011

Values of cumulative fertility rate, according to the Census of 2011, compared to the data from the two previous censuses, are uniform for women aged 45–49 years (1.8 children per woman). The two oldest cohorts, practically out of the reproductive age, may represent the final fertility. They recorded the approximate values in the last three censuses. Given that the average number of children in the groups 40–44 and 45–49 in 2011, is almost equal (Table 1), it can be considered that the level of fertility is steady.

However, lower cumulative fertility rates in younger age groups, 20–24 and 25–29, can indicate postponement of childbearing. Given that these women are still in their reproductive age, the issue of their overall reproduction is still open. The reduction of the cumulative fertility rate and a certain increase in the proportion of women in the cohort 30–34 who have not given birth,

implies the shifts in reproductive norms. According to Census 2002, every fifth woman did not give birth, and in 2011 one in three. All in terms of the postponement of reproductive behaviour.

CONCLUSION

Within the comprehensive analyses of some of the main indicators of the change in age pattern related to fertility rate in Vojvodina, there has been detected a rapid change in fertility indicators, as a continuation of previous developments. Tendencies toward low fertility and low reproductive norms that exist here for more than half a century, are the result of complex social and economic circumstances, caused by long-term crisis, and distinctive cultural ambience. Diverse roles of women, along with changes in social and economic spheres, enhanced by greater social mobility, lead to postponing some of the important life events, reproduction being one of the main features.

The beginning of 21st century is marked by negative demographic trends, especially the ones referring to reproductive behavior. The age pattern of fertility has not changed its course, tendencies in terms of low birth rate still remain, but the intensity of the dynamics regarding low fertility rate and its indicators has become more explicit and distinct.

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СТАРОСНИ МОДЕЛ ФЕРТИЛИТЕТА У ВОЈВОДИНИ
НА ПОЧЕТКУ 21. ВЕКАРАДМИЛА ВЕЉОВИЋ
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САЖЕТАК: У овом раду размотрено је кретање фертилитета становништва Војводине у првој декади XXI века, у периоду који обухвата два последња пописа. Проучене су детерминанте овог развојног процеса. Акцент је стављен на промене у старосном моделу фертилитета, тј на начин на који се оне манифестују на територији Војводине. Резултати Пописа пружају увид у анализу кохортног фертилитета. На овом већ деценијама уназад нисконаталитетном подручју карактеристике фертилног понашања жена се огледају у промени удела специфичних стопа фертилитета петогодишњих старосних група и стопама укупног фертилитета у корист старијих кохорти, као и у постепеном повећању старости мајке при рођењу првог детета. Промене у старосном моделу фертилитета су затим представљене кретањем стопе укупног фертилитета, тј просечног броја деце по жени, при чему је забележена тенденција опадања СУФ-а, присутна на овом простору већ деценијама уназад.

Након турбулентних 90-их година 20. века, обележених ратовима и санкцијама, транзициони процеси започети на почетку овог миленијума, довели су до значајних промена у социоекономском окружењу, које су уз дуготрајну економску кризу, праћену сиромаштвом, снажно утицале на репродуктивно понашање жена и уопште на њихов став у односу на рађање. Тренд све каснијег родитељства и пораст просечне старости жена при прворођењу је настављен.

КЉУЧНЕ РЕЧИ: фертилитет, Војводина

RIGHT TO BE A PARENT WITH DIGNITY AS A NEW HUMAN RIGHT

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ABSTRACT: Today, to be a parent with full dignity means to have a lot more than one usually does in practice. The legislator sometimes, accidentally or intentionally, fails to regulate already existing social relations in an appropriate manner, or fails to regulate them at all. Also, the application of existing law is sometimes rather difficult, due to ignorance or inability of those who are supposed to apply the law in individual cases. That is mostly because they do not use the interpretation of the law as a mechanism to apply the law.

That is why some initiatives were started in the past few years by the NGOs which have been involved in the program of providing better life for the parents in Serbia. After a short overview of those initiatives and author's involvement in them, this paper will present a proposal for some new pro-natalist measures that can establish a new human right (to be a dignified parent), even though the current laws provide sufficient conditions to make the parenthood work in practice.

KEYWORDS: parenthood, dignity, initiatives

INTRODUCTION

Parenting is a kind of psychological, emotional, economic and financial adventure associated with the acquisition of a number of new skills, and balancing (constantly) with the time that is at parent's disposal.

National legal frameworks for parenting are quite different. However, when ratifying the international documents and convention, a state can preserve, reduce or increase the level of rights for parents. Where is the 'catch'? We often talk about children's rights and freedom. Parents' rights do not seem to be that significant to be regarded separately from the children's rights. They are considered to be the same thing. Or, are they?

According to international documents, 'parental responsibilities are a collection of duties and powers which aim at ensuring the moral and material welfare of the child, in particular by taking care of the person of the child, by maintaining personal relationships with him and by providing for his education, his maintenance, his legal representation and the administration of his property'

[Recommendation No. R (84) 4]. In *Principles of European Family Law Regarding Parental Responsibilities of the Commission on European Family Law*, in *Principle 3:1*, titled: *Concept of parental responsibilities*, it is said that:

'Parental responsibilities are a collection of rights and duties aimed at promoting and safeguarding the welfare of the child. They encompass in particular:

- (a) care, protection and education;
- (b) maintenance of personal relationships;
- (c) determination of residence;
- (d) administration of property, and
- (e) legal representation'.

Some go even further and talk about *Parental Rights Doctrine*, that is recognized in the Supreme Court decisions¹, in order to preserve and strengthen the relationship between a parent and a child, and that is constitutionally protected [Quilloin v. Walcott, 434 U.S.246 (1978)]. From the aspect of our national framework, we can observe the rights of parents in the context of the right to work without restriction (in our domestic practice, we had cases of clauses in the employment contracts for female employees, which implied the obligation not to get married or give birth to children in the next five years), the prohibition of mobbing based on parental status [Official Gazette RS, 36/2010], prohibition of discrimination based on marital and family status [Official Gazette RS, 22/2009], as well as a number of mechanisms of financial support to families with children at national [Official Gazette RS, 16/2002;115/2005;107/2009], provincial [Official Gazette APV, 4/13] and local levels.

Still, what can really help parents to do parenthood with dignity?

SOCIAL ACTIVISM AND INITIATIVES FOR PARENTS STRENGTHENING

In the *Program of demographic development of AP Vojvodina* [Official Gazette APV, 3/2005], we can find one specific aim: *lowering the psychological cost of parenthood*. Parents are under very strong social and personal pressures and expectations of being good parents, dedicated to the child all the time, but also dedicated to his/her work, friends and primary families. According to the authors of this program, the index of parenting stress in mothers is increasing due to the conflict of roles they have in modern times. Women wanted to get out of the houses and work in order to achieve their own financial independence. That financial independence has generated psychological pressure in other situations in which they have their traditional roles of moth-

¹ They talk about several principles that are listed in famous court decisions and precedents, during the activity of the Supreme Court, full text on:

<http://www.parentalrights.org/index.asp?SEC=%7B3051ABFF-B614-46E4-A2FB-0561A425335-A%7D>. There is a specific parental movement, dedicated to changing the American Constitution with this Parental Doctrine:

http://www.parentalrights.org/index.asp?Type=B_BASIC&SEC={4771B53E-D345-4753-BEF4-68C1CA71CE13}. Also, great list of important cases is available on:

http://familyrights.us/bin/Constitutional_Rights_Parents.htm

ers and wives. Therefore, there is always a constant need for helping women (more than men) who are struggling with modern achievements and traditional roles. Reconciliation of those roles could reduce the psychological price of parenthood, although on the other hand, it could also 'reduce the possibility of carrying out reproductive, protective and corrective functions, affect the position of the child in the family, and cause other changes therein'. This paper covers only the psychological cost of parenthood which includes all other costs.

The objective of this short study was not to show the already existing mechanisms of population policy, but to show that *social activism and initiatives that came from the NGO sector can equally well and positively help to resolve the problems in this area*, especially to reduce the psychological cost of parenthood. Such initiatives are more successful and authentic, because they are either led by parents or have parents as active participants. Parents are the subject of these regulations. They are on the front line for the enforcement of rights and the implementation of the law and other regulations that stipulate their rights and obligations. The parents are the ones who realize that the system, sometimes, does not work and they suggest appropriate and effective change in the legislature.

In 2006, the first NGO named 'Parent' was established². Its founders are parents in the first place. Their professional occupations are lawyers, economists, doctors, social workers, activists. Their intention was to suggest the authorities some better and more efficient ways for the realization of some rights, and to suggest the need for changes when necessary. They have all encountered misunderstanding in the proceedings that concerned their rights as parents and the rights of their children. In this regard, it was noted that despite the solid legal framework in this area, there was no sensitization of government authorities to deal with this issue, even by those who dealt with these issues in their jurisdiction.

After 8 years of specific social activism, this NGO and its ideas grew to the number of 14 NGOs on the territory of Republic of Serbia (six of them in Vojvodina)³. During this period, they became an important factor in preparing the documents, laws and strategies at all levels of government (national, provincial, or local). It seems that their true power comes from the authentic requests, although they are always supported by statistical and other relevant research; they also have a 'touch of subjectivity' and a relentless, tireless will to improve the living conditions of parents and children in the state.

All initiatives launched by this NGO were aimed primarily at reducing the psychological cost of parenthood, such as participation in the development of the Strategy to encourage births in 2007, when the state accepted a proposal regarding the age limit, for women entering their first artificial insemination, to change from 35 to 38 years (exactly because of the women's conflict between traditional and modern roles that are imposed on them), or the final hearing on the Fund for social inclusion and care of vulnerable groups in 2014.

² The author was one of the co-founders of this NGO.

³ All about this network on: www.roditelj.org

Even when the proposed measures, at any level, were of exclusively financial nature, they were secretly directed to reduction of the highest price that a modern (wo)man pays – the psychological price.

This network of NGOs, with the same name, ideas, and visions has participated so far in numerous hearings regarding:

- single parents and their financial and psychological status,
- poverty reduction, especially for vulnerable groups of people
- safety and health of children, at all levels of government.⁴

One of the pronatality measures that were adopted by the state parliament was the initiative to eliminate additional tax rate for hygiene products and baby food; this was accomplished in 2012. National Initiative for the abolition of VAT on equipment and food for babies was coordinated by the NGOs ‘Parent’ (the whole network of 9 NGOs at that time), internet portal ‘Bebac’, ‘Fund B92’ and NGO ‘Halo beba’, and signatures were collected in more than 50 cities in Serbia in the period from the 2nd to 8th March, 2012. More than 480,000 people signed this petition, which was accepted in May, the same year. The first attempt to launch this initiative was in 2004 when almost 800,000 people signed it, but there was not enough political will to accept it.

The decision on the return of VAT for baby equipment came into force on January 1, 2013 [*Official Gazette RS*, 107/04; 65/05; 63/07; 107/12; 120/12,74/13]. Three requirements must be met by parents in order to acquire eligibility for a VAT refund:

- The child cannot be older than two years
- Total income of the family cannot be more than RSD 981,120 per year
- Parents cannot own a property which value exceeds RSD 23,914,800 million (200,000 €)

A parent can apply for this kind of refund twice a year, in January and July. The only information that a parent must give in the request for a refund is personal identification number of both parents and a child (which are necessary in order to verify the citizenship and income of the parents), so no additional documents and evidence are required for the submission in that respect.

Parents apply for this refund to the organizational unit of the Tax Administration on which territory they reside. During the child’s first year of life parents can reimburse the tax amounting to RSD 40,880, but in the second year, this amount is reduced to RSD 30,660. The state provides tax refund for the following items: milk for infants, porridge, bed, cart, car seat and diapers.

The second campaign regarding the priority for pregnant women in all aspects of everyday life and mother with little children was launched in 2012 and it was successfully completed in 2013. That initiative was strongly accepted by the president of National Assembly of Republic of Serbia who proposed amendments to the Labor Law in order to prohibit employers to fire

⁴ The Ministries of health, education and sport and youth have accepted earlier this year, in May, an initiative that was given by this Parent network: all school kids, in order to prevent some health risks must have access to a free systematic health check like professional athletes have, once a year. This is a way of preventing some specific diseases and other health risks and could be noted as indirect measure of pronatalist policy.

women who are on their maternity leave and who had part-time employment contract.

Another campaign, 'Right for mothers – Bravo for mothers' ('P(B)ravo za mame') was started on March 8, this year (2014), with the aim of enabling the compensation payment for pregnant women and new mothers (during their maternity leave) to be paid directly from the national budget to their bank accounts instead of their employers' accounts. Three NGOs – 'Parent', 'Center for moms' and 'Serbia on the move' have implemented this campaign in a manner so far unknown to the public. The campaign was conducted by four separate teams, made up of women activists and trainers from these organizations. They carried out a brief training for the campaigners – future mothers and mothers with children aged up to five years, providing them with the knowledge of lobbying. Each participant, who had never been involved in social activism before, was directly affected by the financial problems-delay of financial compensation for the period of maternity leave. This delay, to our knowledge, lasts for a minimum three and maximum nine months. Each participant was 'assigned' a member of National Assembly, based on the place of residence, in order to establish personal, direct contact and to arrange a meeting with that member in order to discuss face-to-face about the goals of the campaign, and to seek support when the proposal to amend the law came into assembly procedure.

The campaign was completed successfully, again in May, with more than 150 'promised' votes of the Assembly members. Having in mind that promises can be forgotten, every promised vote was documented with a photo of a member and the participant of this campaign carrying a paper with 'I vote for moms' written on it.

CONCLUSION

When there are no children, there are no families.

No families, no societies.

No societies, no states.

State cannot function without people.

That is why we think that parenthood, done with full dignity, must be constituted as a human right due to all modern challenges and obstacles.

The future generations need more than just promises and laws which are good, and some of them even great, but which are not implemented in real life. There must be something wrong with a society which does not help families to reduce various costs of parenthood. We hope that new parental initiatives for better life of parents and children will not be launched anymore because, then, it will mean that the system works properly. Until that day, we think that the state should cherish those initiatives because of their authenticity and everlasting desire to improve and help the country.

We strongly recommend taking following measures and activities:

– continuous financial support for families with children in the same or greater extent, especially in case of families with three or more children.

– penalty for employers, by relevant state bodies, who do not apply valid legal provisions in the field of population policy, especially insisting on strict application of the enacted laws.

– prevention of abuse and penalties for those who commit abuse, particularly in the sector of financial support to families with children

– reduction of psychological cost of parenthood by guaranteeing the job for at least one parent and protecting particularly the working women-mothers and to-be mothers.

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ПРАВО НА ДОСТОЈАНСТВЕНО РОДИТЕЉСТВО
КАО НОВО ЉУДСКО ПРАВО

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САЖЕТАК: Бити достојанствени родитељ у данашње време значи имати много више него што је то случај у стварности. Законодавци понекад намерно или случајно не регулишу већ постојеће друштвене односе на начин на који би то требало, или их уопште не регулишу. Такође, примена постојећег закона је понекад веома тешка због незнања или немоћи оних који би требало да га примењују у појединачним случајевима. Разлог томе је углавном тај што се тумачење закона не користи као механизам за његову примену.

Управо зато су невладине организације које су усмерене ка остваривању бољих животних услова родитеља у Србији покренуле неке иницијативе у протеклих пет година. Након кратког осврта на поменуте иницијативе, као и ауторкино искуство са тим иницијативама, овај рад предлаже неке нове пронаталистичке мере које могу допринети стварању новог људског права (права на достојанствено родитељство), иако нам важећи закони пружају довољно могућности да такво родитељство и остваримо.

КЉУЧНЕ РЕЧИ: родитељство, достојанство, иницијативе

ECONOMIC ACTIVITY OF MIDDLE-AGED WOMEN IN SERBIA AS RELEVANT GENDER EQUALITY ISSUE

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ABSTRACT: Economic characteristics of the female population are important dimensions of contemporary gender regime. Thus, this paper focuses on disadvantageous characteristics of economic activity pointing to the range and the intensity of economic dependence of women as one of the obstacles to the improvement of their social position and reducing of gender gap. Statistical data show economic inactivity and unemployment of middle-aged women in Serbia. Also, regarding the employed women the economic disadvantages could be discussed. The indicator of this is a gender difference in earnings as a result of a smaller number of women having well-paying jobs. In the base of gender economic differences are characteristics of gender roles, and for this reason a specific “women’s work” is seen as an important segment in the improvement of the economic position of women and reducing of gender-based economic gap.

KEYWORDS: women, gender economic inequality, employment, “women’s work”

One of the central issues of gender regimes in post-industrial societies is the economic activity of female population in comparison with male population. Overcoming gender differences as well as economic independence are very important on path towards achieving gender equality [Commission of the European Communities, 2006], as well as in the Strategy for equality between women and men by 2015 [EU, 2011].

IMPLICATIONS OF ECONOMIC INEQUALITY BETWEEN WOMEN AND MEN IN THE EUROPEAN UNION

Gender economic inequalities are on the agenda of policies of developed European countries, even of those that have achieved the highest standards of gender equality. They are the indicator of unequal economic positions and unequal access to sources of livelihood, but also a reflection of gender inequality, based on the asymmetric division of gender roles in the private sphere.

The modern model of gender economic inequalities implies differences in labor market participation, distribution of economic resources and labor division in the private sphere [Babović 2010]. Gender inequality within households produces unequal opportunities for men and women to be economically active and to be engaged outside the family environment. The link between economic characteristics and positions within a family imposes itself as relevant. In this sense, the issues of employment patterns of men and women crystallize with regard to their family arrangements, division of labor within the household, division of responsibilities in raising children, as well as decisions regarding money issues within the household [Ibid: 199]. Hence, it can be said that the gender regime within a family is an important determinant of economic activity, employment and wages, as elements of economic and social status of an individual.

In the countries of the European Union (EU27), almost one quarter of female population aged 25–54 in 2006 was not economically active, which was three times higher share in comparison with male population [Eurostat, 2007]. In about 10% of cases the absence from the labor market was caused by different types of obligations related to the family, although the states differed with respect to its distribution. It was the least frequent among women in the UK, Sweden and Denmark (about 2%), and the most frequent among economically inactive women in Malta (46%).

The possibility of reconciliation between family responsibilities and employment is considered to be one of the factors associated with female employment in the European Union countries. In Denmark, Norway and Sweden, countries where in 2009 nearly 75% of female population aged 20–64 were employed, there is a high share of female part-time employment [European Commission, 2011]. Statistics show that in 2012 in Norway, Sweden and Denmark there were nearly 80% of women aged 25–49 years who had children under three years of age and were employed [UNECE, 2014]. A high employment rate for this group of women was also recorded in Portugal (over 70%), a south European country with the highest economic activity rates of women of working age (about 55%), but also in Belgium. This country had low economic activity (less than 50%), but women with young children accounted for a relatively high employment rate (nearly 70%).

On the other hand, this statistics suggest that family obligations may restrict economic activity of women. Representation of women with young children in the labor market is lower by about 11 percentage points, compared to women without children [European Commission, 2011]. Contrary to this, male population has a higher employment rate of fathers (by more than 8 percentage points) compared to men without children.

Hence the attempts to restrict the negative influence of parenting on the employment of women are limited to reconciliation of these two segments of life using a series of measures. The policy of the European Union considers high quality, availability and affordability of child care services as being vitally important, as well as a favorable framework for employment of women and choice of work [Ibid: 6]. However, despite this, the care of the elderly appears

an increasingly important limiting factor in economic activity of women of working age. In the EU27, with around 30% of economically inactive women, both factors related to family responsibilities were present [Ibid: 7].

More flexible working hours and a variety of employment options carry certain limitations in terms of the social status of women. In Italy, a country characterized by less developed and less accessible public childcare, part-time jobs have proved to be a good solution in terms of greater employment of women [Del Boca, Pasqua and Pronzato 2005]. However, from the standpoint of employment opportunities for women and harmonization of work and parenting, this advantage has negative implications concerning their economic and broader social status. Comparing the effects of the policies which regard family responsibilities as part of women's everyday life and others which do not, it was observed that in the latter case there is a greater step forward in overcoming the gender earnings gap [Mandel and Semyonov 2005]. Family policies have a limited impact on professional achievements of women and possibility of higher earnings, given the negative effects in terms of representation of women in leadership positions and highly paid jobs. A radical change in gender roles within a family seem to be the only possible solution for overcoming gender inequalities manifested through participation in the labor market, occupational segregation and earnings inequality [Ibid: 965]. This would minimize the price of women's engagement on both sides, and at the same time reduce the time of possible work engagement outside the household.

Although the European Union countries have established the principle that work of equal value should be paid equally both to men and women, gender earnings inequality is evident [EU, 2011]. Average earnings of women are by 17.8% lower than earnings of men. The intensity of the gender gap in wages and the high employment rate of women is what draws attention.

The least prominent inequality in earnings was recorded in Italy, a country with one of the lowest employment rates of women aged 20–64 (less than 50%). The average gross wage per hour is almost 5% lower than the earnings of men. In six countries the gender gap in earnings was between 8% and 10%, being the states with low and medium rates of female employment, as seen in the European context. In 2009, Malta was just close to 40% of women aged 20–64 who were employed, in Romania and Poland this percent was between 56 and 58, in Belgium it was a little more than 60%, and in Portugal it was two-thirds [EU, 2011: 17].

The greatest gender earnings gap was recorded in the Czech Republic. The average salaries of women were 26.2% lower compared to employed men, and female employment rate was 61.4%. A high gap in payments was recorded in Austria and Germany. These are the countries with high employment rate of women (nearly 70% of the female population aged 20–64), but their average gross earnings were one quarter lower than male earnings. By contrast, in Denmark and Sweden, the countries with the highest rates of female employment, the gender pay gap was the lowest. On average, women earned 17.3% less than men.

So, even working women are not without adverse economic characteristics. On aggregate level it is evident that they have lower average gross earnings than men. The reasons for the gender earnings gap can be found in several segments, and in the core of each are gender specificities. It is caused by a segregated labor market in which health, education and administration are typically “female” sectors, and these typically “female” occupations are generally less valued and which results in lower average wages compared to men [EU, 2011: 16]. In addition, gender earnings inequality is a consequence of unequal involvement in the private sphere and the problem of harmonization of family and professional obligations.

BASIC CHARACTERISTICS OF ECONOMIC ACTIVITY OF MIDDLE-AGED FEMALE POPULATION OF SERBIA

On the one hand, the process of emancipation during the second half of the 20th century shaped the economic characteristics of female population of Serbia, but on the other hand they are result of barriers and limiting factors related to socio-economic conditions, and also of those that more directly determine the position and role of women [Šobot, 2012]. The influence of the latter is relevant from the perspective of women’s behavior in terms of participation in the labor market and employment opportunities, but also from the perspective of employees and the possibility of performing types of work for which they have necessary knowledge and expertise, as well as the ones yielding greater profit.

Acquisition of secondary and higher education resulted in a change of the socio-professional structure of economically active women. It is manifested in abandonment of agricultural activities and employment in industry sectors and services. A common characteristic of all generations of women born during the second half of the 20th century is their appearance in the labor market, which reflects their clear intention to be employed outside their homes. However, unfavorable economic characteristics are continuously more present among women than among men.

According to the 2011 Census, gender differences regarding economic activity of working-age population is still visible. Economic activity rate of female population aged 20–64 was by one fifth lower than in the male population (54.4% vs. 73.1%). Economic inactivity is rather a characteristic of female population. There are twice as many women (1,035,332) than men (602,937) who were not economically active.

Except in quantity, men and women also differ in the structure of persons who were not economically active. Among economically inactive women aged 20–64 the most numerous are “housewives” (430,214 women) making 41.6%. They are present in all age groups, whereas there is difference in their prevalence (Table 1).

Table 1. *Housewives, by age, and their share in economically inactive women, Serbia 2011*

| | Housewives | |
|-------|------------|------|
| | number | in % |
| 20–24 | 22879 | 16,8 |
| 25–29 | 38486 | 48,1 |
| 30–34 | 44242 | 70,9 |
| 35–39 | 46128 | 77,6 |
| 40–44 | 47614 | 77,8 |
| 45–49 | 52679 | 73,6 |
| 50–54 | 50024 | 59,8 |
| 50–59 | 12562 | 56,4 |
| 55–59 | 75046 | 37,1 |
| 60–64 | 40554 | 15,8 |

Source: Population Census, Serbia 2011

Economic inactivity of females aged 20–29 is mostly the consequence of continued education. The decision to enroll in a faculty usually implies the delay of entering the labor market, and this is the only reason why these young women belong to the group of economically inactive persons. Hence the lower shares of “housewives” in these age groups than among women aged 30–59. However, among economically inactive women under 30 years of age there were those who did not attend tertiary education. In addition, the number of “housewives” in the female population aged 30–54 also draws attention.

Economic inactivity is relevant from the perspective of the status of women within the family, from the perspective of opportunities for them to be economically independent, as well as the possibilities to be active in other areas outside their family environment. However, any closer determination is not possible without knowing the reasons for their economic inactivity, as well as the socio-economic status of their families. The fact that they do not participate in the labor market questions their intention to be employed. Given that the majority of these women acquired secondary or tertiary education, it seems reasonable to ask for the reasons of their economic inactivity, despite their constituting a smaller portion of the female population.

During the 1990s, as a consequence of the deep economic crisis, “escape to privacy” became a key feature of the social position of women [Blagojević 1995]. In the time marked by massive job losses and increased unemployment, they focused on day-to-day survival and existence of their families. It was their most important task in conditions of general impoverishment of the population. However, the question is whether non-participation in the labor market in different socio-economic circumstances may explain the “feminine strategy.” Even if it may, the reasons are vague. It is also interesting to what extent gender specificities caused such decision of women.

Results of the Labour Force Survey indicate that economic inactivity, among other things, may be caused by the factors related to the family. In 2013, the need to take care of a family member or other family reasons were present in 18% of economically active women aged 15 years or over [Statistical Office of the Republic of Serbia, 2014]. Gender specificity is visible through a significantly greater number of women than men, and through the difference in age structure. LFS from 2010 shows that more than 60% of these women were aged between 25 and 44, and about 60% of men between 55 and 64. More than half of the women said that unavailability of child care services was the reason for their not searching for employment, while men were mostly faced with lack of access to adult care services.

Nevertheless, middle-aged women in Serbia are mostly economically active, which is clearly evidenced in younger generations born after World War II. According to the 2011 census data, the rate of economic activity of females aged 30–49 was between 76% and 70%. However, these were lower percentages than in the male population in which the share of economically active population was between 87% and 85%.

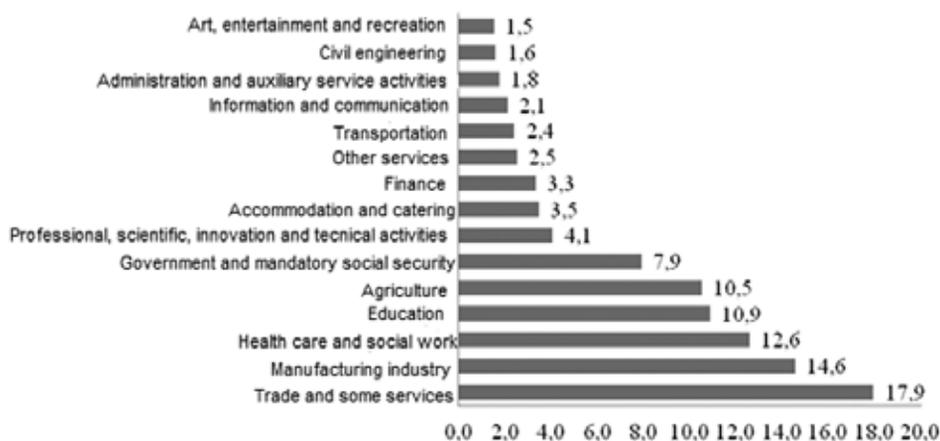
Economically active women are also faced with certain disadvantages. Due to difficulties in finding a job that often results in a long-term and very long-term unemployment, women belong to vulnerable groups in the labor market [Krstić *et al.* 2010]. According to the LFS in 2013 a quarter of females aged 15–64 were unemployed. About 45% of unemployed women were aged between 25 and 40, and one fifth had a tertiary education. The specificity of female unemployment, compared to men's, is somewhat higher percentage of people belonging to 30–49 age group as well as a higher share of persons with tertiary education. In addition to this, women were looking for their first employment slightly more often than men. Unlike men, among women who were employed, the need to care for family members (child or adult) was the most common reason for termination of employment.

Statistics indicate differentiated employment structure of women, given the number of children [SORS, 2011]. According to the 2010 LFS results, women aged 25–49 with one child had the highest employment rate (60%), while women without children were more often employed (58%) compared to those with three children (55%). By contrast, men with children had a higher rate of employment than those without children, whereas this difference was not negligible. Less than two-thirds of men without children were employed, while the employment rates of those with children ranged between 79% and 82%. The greatest difference between men and women was related to the employment of those having three or more children.

It seems that for women parenting and the number of children have limiting effect on their employment, while for men this is not the case. Higher employment rates for men with children compared to those who have not become parents can be explained by distribution of models in which a man has a greater responsibility in terms of providing a standard of living. Hence they most usually decide to become parents when they have a job.

Considering the characteristics of the employed female population there is an obvious orientation towards certain sectors and occupations, which became regularity during the second half of the 20th century. According to the 2011 Census data, women made up more than three-quarters of employees in health and social care, somewhat more than 70% in education, and nearly two-thirds in the financial sector. However, these are not the activities in which they were most usually employed (Graph 1).

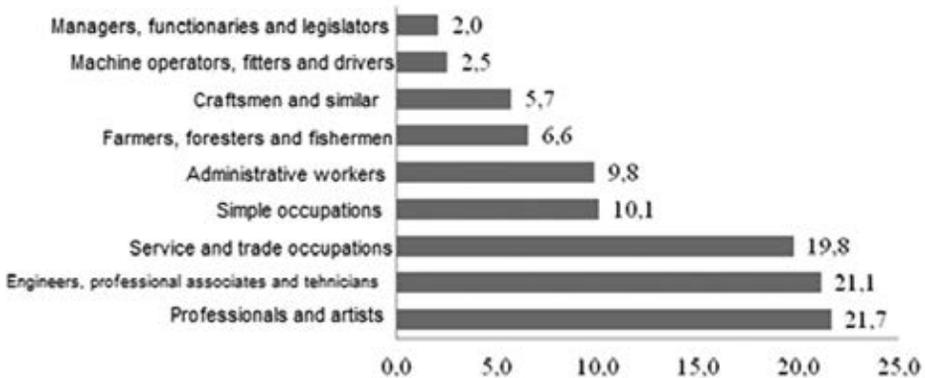
Women in Serbia were mostly employed in trade and industry, followed by healthcare and social work. The share of employees in agriculture and education was equal. They are almost two times more employed in civil service than in science or innovation and technological activities.



Graph 1. *Employed women by sectors (in %), Serbia, 2011*

Gender profiling of occupations was characterized by orientation towards certain vocational schools and groups of faculties, a model that has marked the education of all generations of women born during the second half of the 20th century. According to the 2002 Census data, employed women were most often employed as associate professionals and technicians. They were more often employed as professionals, service and sales workers than clerks. Women were employed in these professions more often than men, and the difference was most pronounced in terms of professionals, technicians and administrative staff.

Results of the 2011 Census show some movements, but without significant changes. The three most common occupational groups are more evenly represented, but a distinctive characteristic of the employed women is not disturbed (Graph 2). The acquisition of tertiary education resulted in expansion of the number of professionals and other occupations with this level of qualification.



Graph 2. Employed women aged 25–64 by occupation (in %), Serbia, 2011

However, working women were still rarely seen as managers or decision makers. They were ten times less represented than women of the three most common occupational groups, and five times less than women who were clerks and those who performed some simple jobs. Representation of managers and officials among employed men was only slightly higher (2.8%), but the gender gap becomes more apparent regarding the fact that the number of employed women with these occupations was almost 40% less than the number man (18,306 to 29,991).

Economically more unfavorable position of women, compared to men, is also visible in the gender pay gap. During the second half of the first decade of the 21st century, the average earnings of women in Serbia were lower in most sectors, including those characterized by the most intense feminization [SORS, 2008; SORS, 2011]. Statistics show that in 2007 women employed in health and social work, on average, earned 87% of the average earnings of men, while in education this percentage was 92%, and in the financial sector it was 83%.

Average earnings of women were lower than the overall average earnings, and in 2010 this difference was slightly expanded. The only two activities with slightly higher average salaries of the female population in 2007 were civil engineering and real estate business. However, the gender difference changed in 2010. Earnings in civil engineering were uniform, while men had higher earnings in the real estate business. Average earnings of women employed in administration, in services, as well as professional, scientific and innovative sectors were slightly higher than the overall average earnings.

Women of all educational levels had lower average earnings than men, and the difference was more pronounced among employees with high levels of education. Average earnings of women with faculty degrees amounted to 83% of average earnings of men, and in persons with secondary education this percentage was 88%.

In Serbia there were no prominent gender differences in the length of working hours [SORS, 2011]. According to the Labour Force Survey in 2010

the overwhelming majority of employees of both genders worked for more than 40 hours during a normal work week. Still, working women had this number of working hours in slightly fewer cases than men (87% women and 90% men).

Women worked shorter than full working hours more often than men due to family reasons of various kinds. Nearly 5% of women had a shorter working time because of child care or adult family member care, and a little less than a quarter of them due to some other family or personal reasons which were not related to education or disease [SORS, 2014 – ARS, 2013].

There is no difference between men and women in the predominant form of employment, but there is a difference in the representation of self-employment. According to the LFS, the number of self-employed women in 2010 was more than two and a half times less than the number of men (161,182 to 422,094). Encouraging women to use this modality of employment could have a positive impact not only on reducing unemployment, but on strengthening their economic position. Beside the factors related to socio-economic conditions, the development of entrepreneurship among women also implies a break with gender stereotypes and prejudice in all segments of life.

Women in Serbia have maintained the continuity of relatively high rates of economic activity and the model in which employment is a “normal standard”, which resulted in the acceptance of the concept of employment of both men and women [Blagojević-Hjusun 2013]. In such an established cultural pattern, unemployment is seen as a social problem defined by systemic barriers. In addition, difficulties in finding employment and low earnings aggravate a more radical change of the model in which a man is responsible for the living standard of the family which puts a lot of pressure on him.

Unfavorable economic characteristics of female population of Serbia are caused by both structural barriers and gender specificities. Economic conditions certainly cause difficulties in creating environment for improvement of economic position of female population. However, what is significant in this regard is the awareness of gender equality as of equal conditions for both men and women to be committed to their profession and professional advancement. The conditions for this are equal commitment and equal share of responsibilities within a family as well as institutional support to the establishment of substantive equality.

* * *

Certain unfavorable features of the economic activity of the female population of Serbia are more pronounced than in male population, and it is not a characteristic only of Serbian society. Economic gender differences are consequence of asymmetric division of roles, which implies inequality within the private sphere and unequal opportunities for expressing oneself in other areas. Employment and profession are some of them.

From the perspective of an individual, it is important to create conditions that provide opportunities for both men and women to realize their potentials and achieve their ambitions. In addition, we can talk about the benefits from the position of the family and the society as a whole. Employment of women

and higher earnings are important contributions to standard of living, expanding the opportunities for better living conditions. From the perspective of the society, economic gender equalities mean achievement of goals and fundamental principles of equality and fairness, and utilization of female labor resources, knowledge, expertise and professionalism, which is indeed a relevant framework for development.

Indicators of economic gender inequalities are present both in Serbia and in the European Union. Women have a lower rate of economic activity and higher unemployment rate in comparison with men. They are mainly employed in health care, education, trade and services. Also, they are under-represented in managerial positions and jobs that imply higher earnings. The need to take care of children or an adult member of the family is not a common reason for economic inactivity or unemployment of women, but it is an obstacle that women face more often than men. Family responsibilities affect women workers, slowing or limiting their professional career, career advancement and the possibility to perform better-paid jobs.

Improved economic characteristics of women, as the challenge to gender regimes of both “center” and “semi-periphery”, mean greater social security and more favorable economic position, not only of women, but also of their families. Ultimately, better economic characteristics mean better social status of women. However, this is not possible without creating the conditions for an untroubled dedication to work and professional accomplishments, which implies greater equality in terms of family responsibilities.

ACKNOWLEDGEMENTS

This paper is a result of working on the project “Investigation of demographic phenomena with regard to public policies in Serbia” (No. 47006), funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

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ОРИГИНАЛНИ НАУЧНИ РАД

ЕКОНОМСКА АКТИВНОСТ СРЕДОВЕЧНИХ ЖЕНА У СРБИЈИ КАО РЕЛЕВАНТНО ПИТАЊЕ РОДНЕ ЈЕДНАКОСТИ

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РЕЗИМЕ: Економска активност женског становништва Србије одликује се одређеним неповољним карактеристикама, које су израженије него у мушкој популацији. Ово није само особеност српског друштва, већ је одлика родних режима који се темеље на асиметричној подели улога, која имплицира неправноправност унутар приватне сфере и неједнаке шансе за реализацију у осталим областима, међу којима су запосленост и професија. То су важни сегменти са становишта појединца и могућности реализације сопствених потенцијала, афинитета, аспирација и амбиција, али и са становништа породице и друштва у целини. Запосленост жене и веће зараде представљају важну потпору животном стандарду породице и проширују

могућности за квалитетније услове живота. Из угла друштва, поред тога што родне економске једнакости значе оствареност циљева и темељних принципа једнакости и праведности, искоришћеност женских радних потенцијала, знања, стручности и професионализма треба посматрати као релевантан оквир развоја.

Нижа стопа економске активности, већа незапосленост, претежна запосленост жена у здравству, образовању, трговини и услугама, мања заступљеност на менаџерским позицијама и у пословима који имплицирају веће зараде су питања са којима се суочавају и развијене европске државе. Потреба да се брине о деци или неком одраслом члану породице нису чест разлог економске неактивности или незапослености, али јесу препрека са којом се чешће суочавају жене него мушкарци. Породичне обавезе посматране у још ширем смислу утичу на могућност запосленог женског становништва да постигне радну ефикасност, да реализује своју професију и да напредује у послу.

Побољшање економских карактеристика женске популације, као изазов родних режима и „центра” и „полупериферије”, значи бољу позицију и већу социјалну сигурност. Међутим, оно је тешко оствариво без уважавања специфичности женских позиција и без стварања услова за неометану укљученост и посвећеност послу и професионалним постигнућима.

КЉУЧНЕ РЕЧИ: жене, родне економске неједнакости, запосленост, „женски послови”

TOWARDS NEW UNDERSTANDING OF CHANGE IN GENDER RELATIONS AT THE MICRO LEVEL: SERBIAN CASE¹

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ABSTRACT: Democratization of gender regimes has been taken as one of societal causes of 'ongoing and universal' Second Demographic Transition (SDT), [Lesthaeghe 2010]. The question whether it is present in countries of ex-socialism or not is a frequent matter of debates and 'crisis argument' is referred to when assessing whether it has been delayed, postponed or running in a specific manner [Höhn, *et al.* 2008; Sobotka, 2008; Bobić 2014]. This paper, however, argues that this mainstream theory seems inadequate when it comes to demographic and social changes of Balkan countries, Serbia in particular. Thus it should be complemented or even replaced by more suitable paradigm of semi-periphery.

After discussion of this novel approach and macro perspective, we will particularly focus onto micro level analysis, i.e. family relations through the lens of gender and individual agency [Blagojević 2009, 2013; Bobić 2014], due to their profound effects on persistent low fertility and rising childlessness. Our goal was to trace ongoing and gradual transformation from so called 'traditional model' to greater gender empowerment and emancipation. Decline of and resistance to the women's 'self-sacrificing micro-matriarchy', observed and

¹ The paper stems from the work of the two authors on the referent projects of the institutions they are engaged in, funded by Ministry of science, education and technological development of the RS: Marina Blagojevic Hughson, subproject: Social inequalities and Social Inclusion (No 47011), which is being realized in the Institute for Criminological and Sociological research in Belgrade and Mirjana Bobic, the project 'Challenges of New Social Integration – Concepts and Actors' (Izazovi nove društvene integracije – koncepti i akteri') (No 179035), carried out by the Institute for sociological research Faculty of Philosophy.

broadly investigated in state socialism [Blagojević 1994, 1997] is taking place among younger generations, middle and upper educated groups being forerunners. This shift is reflected, *inter alia*, in increased males' participation in parenthood and care, though crisis of masculinity is also observed at the semi-periphery. Specific societal setting, although unfavourable when it comes to opportunities of expanding of personal and social resources (including strengthening of networks, increasing of quality of everyday life and broadening of choices), paradoxically encourages egalitarian practice in everyday life, through exchange and cooperation among men and women but as a part of 'survival economy'. This less visible and slow 'bottom up' social change awaited for ever since the end of 1980s is, seemingly irreversible, yet troublesome. We deem this practice of collaboration and mutual support in privacy as highly conducive for rising egalitarianism although there are still prominent asymmetrical attitudes in public discourse related to gender roles, paid work, care and career. Theoretical and policy implications of such developments will also be discussed in the paper.

KEYWORDS: Serbia, population, semi-periphery, SDT, gender regimes

INTRODUCTION: SEMI-PERIPHERY VS. SDT

Alarming demographics of Serbia², ever since the onset of post-socialist transformation (hereafter PST), and especially from 2000s onwards, are reflected in: stark depopulation³, rather low fertility (TFR of 1.40 in 2010), [Nikitović 2013] increase of childlessness⁴, rise of births out of wedlock⁵, ageing, with the average age of 42.2 and share of 65+ of 17.4% [RZS, 2012] with its projected rise of up to 30% by the mid 21st century, out migration of young and better educated⁶, etc. Childbearing is still tightly related to marital unions, and rare in cohabitations, while extramarital births are mostly widespread among single mothers and lower social strata [Penev and Stanković 2010; Tomanović *et al.* 2014]. Thus, low fertility in Serbia is intertwined both with a lack of flexibility of unions (de-standardization) and lack of postmodern transformation of fertility behaviour. Longitudinal studies demonstrate that major life events marking transition into adulthood of young people are still uniform, though delayed up to ages of 31–35. These are entry into the work force, marriage, conception as well as housing separation from family of origin, etc [Tomanović *et al.* 2012]. Having all these in mind, the question arises as to what is happening on the level of primary groups. Are there only structural hindrances in question or some other shifts have been occurring within couples and in a nuclear family? What are the political and practical implications for future social change? Finally, should acceleration be put in place, as we had

² Without Kosovo and Metohija throughout the whole text.

³ In between censuses 1991–2002 the population decline was -78,836 persons, and in 2002–2011 even greater, -377,355 [Penev 2007; RZS 2011].

⁴ In the census interval 2002–2011 the share of childless women in Serbia, increased from 43.3% to 55.3 in ages 25–29 while among those aged 30–34 from 21.2 up to 30.6% [Rašević 2014].

⁵ In Serbia in the period 1990–2012 it has risen from 13.1% up to 24.69% [Penev and Stanković 2010; RZS 2014].

⁶ It is estimated as -15,000 per year [Nikitović 2013].

previously argued for marriage at the Conference organized by Matica Srpska in 2010? [Bobić 2010]

As it is well known, as to fertility trends and pronounced ageing, there is a convergence between Serbia and the developed countries. Second demographic transition (SDT) is dominating demographic thinking in the 21st century [Coleman 2005: 11]. It is claimed to be ongoing and universal in all industrialized populations of the world, with different explanations offered for developed and less developed parts. In the case of developed regions, underpinning causes are set as spreading of literacy and education, increase of income and living standards, intellectual emancipation (of women) and diffusion of post-materialist values, such as individualization and secularism, which all cause plurality of life choices and chances ('do it yourself' biography). Democratization of gender regimes is considered to be an important part of the "second modernization". However, when discussing the newer demographic shifts of PST countries, so called 'crisis argument', referring to structural barriers, low living standards, etc, is taken as an explanatory variable for a specific trajectory of otherwise universal SDT [Stankuniene and Maslauskaitė 2008].

Notwithstanding its global relevance, we deem SDT as not only Eurocentric but, even more importantly, insufficiently and inadequately contextualized for countries of PST. We will argue that it does not possess any adequate heuristic pregnancy when it comes to understanding region's undergoing long term social change, which has been lasting long enough to be able to actually create new social structures, processes, relations, (mal)adaptations and controversial behavioural features [Blagojević-Hughson 2012, 2013]. Therefore, we resort to developing of theoretical paradigm related to societies *at the semi-periphery* including specific *gender regimes* at the semi-periphery [Blagojević 2012, 2009]⁷.

The latter is founded on Wallerstein's world system theory (1979) referring to deep structural difference between, so called, countries of the 'centre' and the 'semi-periphery'. However, we move here beyond it with new arguments and introduction of gender perspective. Societies undergoing transition are a part of the semi-periphery, 'lagging behind' developed or 'core' countries, but at the same time positioned ahead of the Third world (periphery) [Blagojević-Hughson 2009, 2012, 2013].

Social transformation of Serbia, as well as of other ex-socialist countries of the Balkans, central and eastern Europe and ex-USSR, has been largely navigated from the core countries according to the formula: "democratization, privatization and market economy". In order to bring it to reality, hard economic restructuring policies have been enacted, aiming at fast adaptation to the countries of centre and their advanced market economies (e.g. Europe and USA) [Blagojević-Hughson 2009, 2013]. Lately, we have been witnessing that such a model of social transition has been in many ways unsuccessful and has actually annulled almost all of the previously established advantages of Serbia,

⁷ These concepts will be discussed in more detail in another paper of ours at the Conference, and therefore and also due to the shortage of space, here we will not elaborate on them further.

which were (as part of ex-Yugoslavia) at the forefront of countries of socialistic or eastern block. These advantages included: higher GDP, better living standards of vast majority of population, higher income and salaries, and *eo ipso* increased personal consumption and quality of life, semi-market economy, solidly established stock exchange and cultural cooperation with the West. Ex-Yugoslavia was world famous for high quality of social and health care systems, education, housing and infrastructural development. To the contrary, transition, as the very notion says, implies very uncertain and fuzzy shift toward centre (neo-liberal capitalism in particular), tending to reach core countries, while this goal always stays out of reach for the countries at the semi-periphery. In Serbian public discourse it is said that social progress is very close by, pending, while in reality, the society and economy are actually pushed aside in long term *de-development*⁸, i.e. permanent social regression – representing a mean line of social and demographic development of semi-periphery. Its main features are: population decline, enormous social devastation and overall insecurity, collapse of economic activity and employment, decrease of consumption and lifestyle of pure survival for vast majority of citizens, shrinking of social protection and social instability, lack of solidarity and cohesion, general social chaos, engrossed violence (suicides and homicides), etc⁹. Actually, today, Serbian population is sharply divided into masses of losers ('work society') and narrow stratum of winners ('money society'), the latter consisting of economic and political elites (males mostly) by whom semi-periphery has been included into the centre (transnational masculinities) [Blagojević-Hughson 2013].

In order to get a completed picture of social and demographic context of today's Serbia, it seems necessary to introduce a concept of *gender regimes at the semi-periphery* [Blagojević-Hughson 2009, 2012]¹⁰. It is claimed that the semi-periphery in its effort to catch up with the core, shows a tendency of extremely high consumption of female resources, in private and in public sphere [Blagojević-Hughson 2009]. Intensive and extensive exploitation of female resources is evidenced in all national representative sociological surveys of the Institute for Sociological Research of the Faculty of Philosophy, carried out in 2000s [see: Milić *et al.* 2004; Milić *et al.* 2010; Milić and Tomanović 2009; Tomanović *et al.* 2012, 2014; Bobić and Sekulić 2010]. Women were first to lose job in the process of economic restructuring and privatization of state

⁸ „De-development“ is a theoretical concept which is explained in detail in the book by Marina Blagojević Hjuson: *Gender Barometer in Serbia 2012: development and everyday life* [Belgrade: UN WOMEN <http://www.RB.rs/>] pp 43–45.

⁹ Social change at the semi-periphery is either too fast or ambivalent, which is particularly strongly evident in Serbia after the political turnover in 2000. Political elites are also quite confused as to the direction of social development and unequivocal acceptance of European values, course of globalization, and/or opting for resistance in the name of tradition, turning to Russia or choosing one's own way [Blagojević-Hjuson 2012].

¹⁰ *Gender regimes* are systems of power, roles, identity practices and discourses, which arrange relationships between males and females in a particular socio-historic context. In that way, gender regimes mediate in between microsphere of personal identity and everyday life and macrosphere of population, society, economy and politics. They are actually constitutive parts of these spheres. Nonetheless they deeply correspond to the given society and its characteristics, i.e. with the specific context [Blagojević 2012].

owned enterprises and/or in cases of low profits of private companies. They have been facing mobbing ever since 1990s, as well as various indecent blackmailing from employers, when applying for a post or being employees. Sociological, anthropological and interdisciplinary field researches have also widely elaborated on re-traditionalization and re-patriarchalization of everyday lives and gender regimes during the PST, retreat to the privacy, delayed transformation of family and diversification of partnerships, strengthening of kin networks and strong interdependence among household members and generations as a coping strategy [Milić *et al.* 2004; Tomanović *et al.* 2006; Milić and Tomanović *eds.* 2009; Milić *et al.* 2010; Blagojević 2006; Blagojević-Hjusun 2012, 2013]. In parallel, revitalized ideology of public patriarchy, enhanced by right wing political elites and groups, including Orthodox Church, were used to neutralize actual high level of males' dependence on females. Therefore, this refreshed patriarchal ideology was aimed at disciplining women to peacefully accept their quite unfavourable position. By the same token, women are socialized to internalize patriarchal ideology and feel not as victims, but more, as heroines of sacrifice and accept harsh living conditions and exhaustion of their resources as 'natural' and 'necessary' [Blagojević 1997; Blagojević-Hjusun 2012; Blagojević-Hughson 2013].

DATA AND METHOD

As stated above, the results to be discussed here derive from broad empirical evidence created in between 2000 and 2014, out of six field researches, where data triangulation was strongly applied. These are: Gender Barometer Survey (GBS) in 2006 and 2012 (1,026 citizens aged 20–50 were covered by questionnaire, with 22 focus groups and 32 in depth interviews), all carried out by UN Women, office in Belgrade. Following field works' data of the Institute for sociological research Faculty of Philosophy (ISI FF) were also discussed here: Transformation strategies of individuals and households from 2003 (N=1,636 households in Serbia), family transformation in 2008 (N=1,200 families, out of which 600 of early stage marriage, 1–5 years, and 600 'later stage' of marriage, 15–20 years), attitudes toward gender equality in Serbia (N=1,950 citizens), representatives of civil organizations (N=50 NGOs) and local authorities in cities and municipalities of Serbia (N=230). Finally, qualitative research results on transformation of partnership into parenthood conducted in 2013/14, was also used (snow ball sample N=30 couples from Belgrade and 10 from Kragujevac).

Surveys from GB and ISI FF covered various aspects of everyday life, such as family interactions, labour division, career, gender relations, conflicts' management, etc, while qualitative methods were applied to focus on some key topics, such as gender performance, turning points in biography, reorganizing of a group after childbirth, etc¹¹. Theoretical reasoning and concomitantly

¹¹ More specifically, surveys were used to provide an overview of the state of affairs, while qualitative methods were deployed to search for 'points' which might be politically utilized to speed up transformation of everyday living and society as a whole, towards gender equality,

gathered empirical evidence helped us to conceive main vision for future gender equality policy strategies. That vision is defined as a new type of academic understanding and social consensus on – post-materialistic, post-conflict, post-industrial, post-neo-liberal harmonization of relations between males and females and/or genders, leading to overall social inclusion [Blagojević-Hjusun 2013].

DISCUSSION

Main finding from upper stated empirical evidence is that gender regime in Serbia is undergoing transformation in terms of further empowerment of family and private sphere ('family times'), but that this does not annihilate strengthening of individualization and egalitarianism inside very primary groups. Although this sounds paradoxical, this is not surprising because long lasting devastation of public sphere has resulted in reinforcement of a private sphere. From the standpoint of public policies it is important, however, that this tendency of 'strong familism' is not in controversy with the increase of equality especially with younger generations, better educated and broadly adopting (post-)modern values [Bobić 2014]. This tendency of rise in egalitarianism in private and less in public domain is actually irreversible and it can not be hindered, as shown by comparisons of research results in almost 20 years of steady research.

Nevertheless, we do not want to make an overly optimistic exaggeration, but instead, we wish to highlight the macro tendency which is running through many oscillations (moving back and forth), and presupposes various types of resistances. For example, reaffirmation of patriarchal ideology which is vastly present in media and public life in Serbia should be understood as a reaction to the actual strengthening of gender symmetry at a micro level, and not necessarily as a retro trend. Although women are still highly economically dependant on men and kinship ties, the fact is that their position in decision making is advanced, compared to earlier times and working mother/housewife is a dominant norm shared by both women and men. Researchers point out on insufficiently crystallized postmodern values as a barrier to a faster modernization altogether with low living standards [Bobić 2014]. Namely, ISI FF field work, from 2008 in particular, pointed out to a value mismatch in terms of mixed pre-modern and post-modern attitudes. Liberal preferences are evident when it comes to sexual freedom for both genders, shared authority in a couple and adoption of non marital unions. Still pre-modern preferences have been reflected in idealization of 'a complete conjugal family', traditional femininity and masculinity. As many as 70.5% of highly positioned couples (in terms of education and revenues) opted for an intact nuclear family when a child's well-being is at stake, and there are no great differences compared to their middle and lower status counterparts. Almost half of couples from high strata (45.5%) held conservative viewpoints on women's self realization and as many

positive demographic change and overall social advancement. In that sense, researches carried out in GBS were targeted towards formulation of (gender) policies at the semi-periphery, especially towards enhancement of their meaningfulness and effectiveness [Blagojević-Hjusun 2013].

of them considered 'male provider' model to be an optimal family strategy. However, in prioritizing care of minors as a predominantly female's duty, they are three times less conservative (22.6%) compared to their counterparts from lower strata (65.2%). Couples from all social strata did not widely accept a model of unemployed mother, although differences among strata persist. The norm of a working mother is inherited from the previous system of state socialism. The dual income was then necessary to secure well-being of a household and was also strongly supported by socialist ideology as well as it was set in line with 'catching up' with the centre [Blagojević 2009; Bobić 2014].

Pro-familism is a central value for both males and females and Serbian families are still highly child centred [Bobić 2014; Blagojević-Hughson 2012], even with younger and better educated cohorts. Family transformation, de-standardization of unions and fertility patterns foreseen by SDT, is not widely spreading in Serbia as well as in many other Mediterranean and PST countries, except for Slovenia [Bobić 2014]. Family is praised much higher compared to job and career, while employment is mainly seen as instrumental in securing livelihood and less as a means of self actualization (job/profession). This could be explained with low career chances in general, low activity, payments and generally almost nonexistent channels of self realization, in particular of women's human capital in paid work. Such an unfavourable setting pushes an individual into a primary group, thus enforces his/her dependency on social networks and accentuates significance of social capital. This is then an open way for global nepotism and corruption.

However, grounded theory research from 2013/14 demonstrated that young couples are quite prone to erect boundaries toward intruders, be it family of origin, relatives or friends. It clearly indicates individuals' liberation potentials. Parents and kin are welcome to assist in realizing strategic goals, such as: entry into employment, housing, and access to key social resources, then everyday help with newborns and in housework. Still, the intimacy of young couple and their offspring is jealously preserved and kept separate (ISI FF database 2013/14). This finding brings us to tentative conclusion that once social setting becomes less frustrating/supporting (economically, socially, politically and culturally), individualization and self realization might be revealed and speeded up.

Until then, gender roles will be defined according to the possibilities offered by actual social context. Asymmetry of gender roles is particularly outlined when measuring time consuming of men and women in paid and unpaid work. Men engage more often in a paid work than women, but women actually work longer than men, spending even one hour more per day performing mainly unpaid jobs. According to GBS 2012 women spend almost one hour per day less than men in paid jobs (four hours compared to five hours for men). They spend half the time males spend in informal paid activities. Women are much more engaged in activities related to child care (two times more), in housework (4.3 times more) and in care of the elderly, sick and minors (2.7 times more). If we aggregate paid and unpaid work, women work more than men during a week (8.76 hours per working days weekly, against 7.47 hours for men) [Blagojević-Hjusun 2012].

In next two paragraphs we will dispose more details on differences in gender performance by quoting GBS and interviews with couples, transient to parenthood from 2013/14. As we shall see, both researches came up with similar results.

The greatest gender inequalities in behaviour are related to the private sphere and exploitation of women's resources (persistence of sacrificing micro patriarchy), [Blagojević-Hughson, M. 2012]. In GBS from 2012, as many as 68% males claimed that they rarely or almost never prepared food, 65% of them rarely or never kept their flat clean, and 78% rarely or never washed clothes or ironed them. However, while in 2006 GBS, 84% females had claimed that parents should do anything for the sake of their child, in 2012 that number decreased to 66%. Decline of 'sacrificing motherhood' is positively related to the education. Thus, among the least educated as many as 54% women see 'sacrifices' as a norm in parenthood, compared to 33% women with tertiary education. Qualitative research in outskirts of Kragujevac (ISI FF 2013/14 data base) demonstrated that even a rural housewife with elementary education considers living in a house with in-laws as highly unfavourable for a young couple, although households are held separate.

Interviews carried out among 30 couples in Belgrade experiencing transition into parenthood in 2013/14 revealed many relevant, yet similar results¹². Firstly, according to discourse analysis, patriarchy is most often practiced among lower educated (primary school and less) couples of all age groups, while mutual collaboration of partners (gender democratization) is most frequent among those with secondary education (!), even stronger compared to those with tertiary degree. Due to lack of space we will only briefly discuss findings indicative for predominant engagement of females in couples. Activities performed by a vast majority of women in all couples are: 1. ironing of baby's clothing (88%), performed by all women in couples from lower status (7 out of 7). Yet it is almost equally practiced by women from the highest status couples (6 wives out of 7), while women in intermediate group are less burdened (9/11); 2. the second highest ranked 'female duty' is (still) cooking (74.1%), where both women from higher and lower groups are almost equally and entirely engaged (7/8 with primary or less education and 6/7 with higher, while only 7 out of 12 couples with secondary education); 3. cleaning of the apartment (69.56%) with less exemplified differences among couples (5 out of 7 wives from the lowest group, 4 out of 6 from the highest and 7 out of 10 from intermediate one); 4. getting up in the night when the baby cries (69.23%), with the prevalence of those with highest education (6 out of 7) followed by lower (6 out of 8), while the least burdened are wives from the middle status (6 out

¹² Interviews were conducted among 3 social and age groups, with tendency to select 10 cases in each one, according to the methodological rule of sample saturation. Social groups were represented by education: primary, secondary and tertiary, while age groups were following: 18–29, 30–39 and 40–55. However, due to some additional interwies, we ended up with 9 couples with primary or less education, 12 with secondary and 9 with tertiary. Aggregate results discussed here are derived from those responses where both partners agreed in their transcripts, while those where there were discrepancies were extracted and should be processes as such separately. That is why the total in each social group might be lower or bigger than 10.

of 11); 5. putting the baby for a sleep (66.66%), performed by all wives from lower status (6 out of 6), somewhat less by those from upper status (5 out of 8), and least frequently in intermediate group (5 out of 10); 6. changing of diapers (65.38%), were the same tendency is evidenced (9 out of 9 in lower status, 4 out of 6 from upper and 4 out of 11 with secondary education); 7. making baby's photo album (56%), (4 women out of 7 couples in lower status, 5 out of 8 in higher and 5 out of 10 in intermediate); 8. walking baby out (53.85%), where the highest educated women are least engaged (1/7). Instead, majority of them perform it with a partner, while a male partner never does it alone (!). As to secondary school 7 out of 12 wives do it themselves (the rest do it together as a couple) while among those from lower status, women do it mostly alone (6/7); 9. baby bath (51.58%), the least frequently done alone by a wife with secondary school (3/11), then with higher education (3/7) and predominantly alone by wives from lower status (8/9); 10. going to a doctor for a check up is the activity where females from all social statuses are least engaged alone (36%). Only 2 out of 11 wives from intermediate group do it themselves, 2 out of 6 from higher couples and 5 out of 8 from lower one.

From the aforementioned results two points should be highlighted: 1. There is still a 'core' of house work which is taken for granted as females', such as: cooking, cleaning, ironing as well as tasks related to care of newborns (putting a baby for a sleep, changing diapers, waking up during the night). Secondly, there are no tasks which are dominantly or only male, which has been rationalized in discourses through arguments of naturalization (close connections of a woman and a baby), pressures for men to earn money, therefore long daily absence from home¹³. It looks that males are entering into family life more by assisting wives and less by completely overtaking tasks. Escape into privacy is a widespread coping strategy for majority of men – losers and it evolves through insertion into parenthood [Blagojević-Hughson 2013].

Discourse analysis further discloses that it is not only due to ideological reasons of a still strong patriarchy, but also due to many other, both structural and psychological factors operating, which should be taken into account. In PST males find themselves in highly contested situation. As well as females they praise family highly, but unlike them they still do not have their own place within it. In public and everyday life they are still perceived as bread winners but they are strongly restricted in its realization. Owing to similar findings of GBS we might argue that men and women act simultaneously within two differentiating models: in family (private sphere), based on solidarity and in public sphere which is founded on market model (capitalistic and individualistic), they are highly competitive.

Research results were also conducive on elaborating on a 'masculinity crisis' at the semi-periphery [Blagojević-Hughson 2012, 2013], implying that males pay a high cost of PST through reaffirming of patriarchy in public. Social devastation and economic decline produce surpluses of population and

¹³ It should be also outlined that other than mutual support and kin related solidarity, only one couple out of 30 in metropolitan area could afford paid help.

their massive exclusion from labour market, because they are redundant, aged, ill or ineffective, all from the standpoint of capital accumulation. Therefore everybody, not only women, but men too, become socially excluded. Still this is particularly troublesome for males, since the loss of profession and career, and concomitantly, demise of an existence base symbolizes 'personal' misfortune. This might be related to the increase of self destructive acts (suicides, alcoholism, drug abuse, depression, etc) in particular violence towards females and minors.

Transformation of privacy toward egalitarianism has been steadily revealed in empirical research, quantitative and qualitative, as discussed above. Not only is cooperation between women and men increasing in a survival economy but everyday life is highly de-ideologized. Persevering of low fertility for many generations up to date has resulted in small number of children (vast majority of interviewed couples had only 1 child) and therefore practice of gender neutral upbringing is widespread, with high investments in 'quality of minor' (time, money, emotions, opportunity costs, etc), in particular in education.

The transformation of privacy is, however, irreversible and takes place in three phases. It starts against the backdrop of previous weakening of male's patriarchal authority in almost all domains of family (1). Next step (2) is women's empowerment through the model of 'self-sacrificing micro matriarchy', but the latter is a transient one leading towards (3) general reinforcement of symmetry and equality. These tendencies are enhanced by processes of de-development at the semi-periphery. However, new generations of men and women definitely establish pattern of equality, grounded on cooperation and shared responsibility [Blagojević-Hjusun 2013].

CONCLUSION: TOWARDS GENDER EQUALITY POLICIES

Under social conditions of the semi-periphery where vast majority of population becomes 'surplus' [Blagojevic-Hjusun 2012, 2013] because they can not fit into the imposed patterns of neo-liberal globalization, public policies need to be targeted toward a society as a whole and not only toward particular groups (impoverished, women, children, aged, youth, etc). It looks important to accentuate lines of social cohesion instead of competing around restricted resources. As the cake is shrinking, so are the parts, and intensified competition does not produce positive effects [Blagojević-Hjusun 2012]. Inter-dependency, mutuality and assistance, exchange and support, these are the elements for creating social tissue, which is crucial for general overall survival. Therefore, shift in the mainstream paradigm from selfishness/competitiveness towards social inclusion/cohesion is needed in creating development alternatives which might expand emancipation potential for vast majority of people.

Above discussed empirical results demonstrated the urge to include men into the gender policies and not only women. Both men and women are engendered. Therefore, they both need de-gendering, stepping out of gender constructs. This is a prerequisite for realization of their individuality and wholeness, as

well as establishment of healthy relations with (other) men and (other) women. However, stronger social support, more effective public policies, legal and fiscal instruments and different institutions have to be put in force in order to enhance personal choices and promote reconciliation of work and family. That needs to be done for both genders and throughout the life course. Social intervention is particularly needed to enable young people's faster transition into adulthood, if they are expected to take part in socio-biological reproduction, and avoid emigration, which is at the moment established as the best individual strategy to escape disastrous effects of neo-liberal type of 'transition'.

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ОРИГИНАЛНИ НАУЧНИ РАД

КА НОВОМ ТУМАЧЕЊУ ПРОМЕНА У ОДНОСИМА ПОЛОВА НА МИКРОНИВОУ: СРПСКИ ПРИМЕР

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РЕЗИМЕ: Демократизација родног поретка је узета за један од друштвених узрока „текуће и опште” Друге демографске транзиције (ДДТ) [Lesthaeghe 2010]. Питање да ли је она већ присутна у бившим социјалистичким републикама или не, тема је многих дебата а „аргумент кризе” се често користи кад се процењује да ли је ова транзиција закаслела, одложена или се креће у одређеном смеру [Höhn *et al.* 2008; Sobotka 2008; Bobić 2014]. Овај рад, међутим, расправља о томе да се ова општеприхваћена теорија чини непримереном када се узму у обзир демографске и друштвене

промене у балканским земљама и у Србији конкретно. Стога би је требало допустити или чак заменити погоднијим примером полупериферије.

Након расправе о овом новом приступу и макро перспективи, посебно ћемо се усредсредити на ниво микро анализе, то јест на породичне односе кроз призму полова и индивидуалног деловања [Blagojević 2009, 2013; Bobić 2014] захваљујући њиховом израженом утицају на константно низак ниво фертилитета и бездетност у порасту. Наш циљ је био да пропратимо актуелну и постепену трансформацију од такозваног „традиционалног модела” до јачег оснаживања полова и еманципације. Отпор ка женском „самопожртвованом микро-матријархату” и смањивање обима истог, што је посматрано и широко истраживано у државном социјализму [Blagojević 1994, 1997], све су заступљенији у млађим генерацијама, при чему су групе са средњим и високим образовањем најбројније. Овај се преокрет огледа, *inter alia*, у повећаној присутности мушкараца у родитељству и бризи око деце, иако је криза мужевности такође посматрана на полупериферији. Особено друштвено окружење, мада неповољно када говоримо о приликама за проширење личних и друштвених могућности (укључујући јачање мрежа, побољшање квалитета свакодневног живота и проширивање могућности избора), парадоксално подстиче изједначавање у свакодневном животу, кроз размену и сарадњу између мушкараца и жена али као део „принципа преживљавања.” Ова мање видљива и спора друштвена промена „од дна ка врху” која је очекивана још од краја 1980-тих, наизглед тече у једном смеру али је ипак проблематична. Сматрамо овај принцип сарадње и узајамне подршке у приватности као врло повољан за све већу равноправност, иако постоје истакнути супротстављени ставови у јавном дискурсу у вези са улогама полова, плаћеним радом, бригом и каријером. Теоретске и политичке импликације оваквог развоја догађаја такође ће бити тема овог рада.

КЉУЧНЕ РЕЧИ: Србија, популација, семипериферија, ДДТ, родни поредак

UNDERSTANDING THE POPULATION CHANGE FROM SEMI-PERIPHERAL PERSPECTIVE: ADVANCEMENT OF THEORY¹

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ABSTRACT: A lot of empirical evidence on demographic changes in 'countries in transition', those which belong to the semi-periphery of Europe, has been undertheorized, or theorized in the framework of the theories on the First and the Second Transition. However, both of those metanarratives have proven to be applicable only to a certain degree when it comes to the development of population at the semi-periphery. This paper argues that specificity and unprecedented population developments of the semi-periphery of Europe call for a different approach, one which will actually clearly acknowledge the structural difference between the core and the semi-periphery, and the developmental dependence as a core of the problem. The main arguments are related to the specificities of gender regimes at the semi-periphery [Blagojević 2009; Blagojević 2013; Bobić 2013], as well as to the process of 'de-development' which results in a profound social structural change. The starting epistemological points for this type of approach relate to the three strands of theoretical developments: 1. feminist standpoint theory (semi-periphery is both strategic standpoint for knowledge articulation, as well as a location where connection between the ontology and the epistemology of gender could be reaffirmed – [Wickramasinghe 2006; Blagojević 2009]; 2. Connell's critique of 'metropolitan theory' [Connell 2007],

¹ The paper is based on the work of two authors related to the projects of the institutions they are engaged in, funded by the Ministry of Science, Education and Technological Development of the RS: Marina Blagojević Hughson, subproject: Social Inequalities and Social Inclusion (No 47011), which is being realized at the Institute of Criminological and Sociological research in Belgrade, and Mirjana Bobić, the project 'Challenges of New Social Integration – Concepts and Actors' (No 179035), carried out by the Institute for sociological research Faculty of Philosophy.

and her vision of 'polycentric social science' [Connell, 2013]; and finally, 3. the idea of multiple modernities and multiple trajectories of modernization [Eisenstadt, 2002]. Historically speaking, demography as a discipline has been empirically rich, but theoretically 'poor'. Striving towards more theory, towards grounded theory, can profoundly enrich our understanding of the population change, by connecting micro, mezzo and macro level into a more heuristically rewarding manner, and, at the same time, it would be moving towards effectiveness and meaningfulness of the population policies.

KEYWORDS: semi-periphery, first demographic transition, second demographic transition, de-development, countries in transition, depopulation, gender regimes.

INTRODUCTION: WHAT IS THE PROBLEM?

The face of East and South East Europe has largely been changed in the last few decades, during the 'transition' towards 'democracy and market economy'. Many volumes have been published on the nature and quality of 'transition', its failures or successes. However, population changes, although often equally dramatic, have been rarely explicitly connected to other structural features of the 'transition', to future prospects of development of those societies, or to the immanent quality of the present mode of neoliberal globalization. Demographic approach, descriptive by its nature, often struggles with theoretical generalizations, and it is usually focused on interpretation of data from mostly simplified and ideologically biased theories from 'the core'. Both the Theory of Demographic Transition (the first transition – FDT) and the theory of the Second Demographic Transition (SDT) failed to explicate, to a large extent, specific population developments of the transitional societies. Knowledge which will offer adequate explanatory propositions is simply missing. Population policies in those countries, as a consequence, also fail to respond adequately to serious population issues.

So, much of the dramatic change, which populations from the semi-periphery have experienced, simply stayed undertheorized and inadequately understood. The aim of this paper is to theorize on population change in countries in transition, which are geographically speaking the countries in East and South East Europe. This will be done by re-affirming and, in fact, reconceptualizing the notion of the semi-periphery. Conceptualization of the semi-periphery will offer a necessary framework for understanding the population change during the 'transition' in the countries in East Europe. Theorizing, here, is not taken as an aim for itself, but as a necessary tool for the advancement of knowledge beyond demographic descriptions, into the sphere of deeper understanding of the structural causes of population developments, from micro, individual and family level to the global level. Population development in East Europe is seen as in connection to neoliberal globalization, which is affecting, downward, different intermediaries, including regions, sub-regions, states, local communities, families, individuals, as well as different economic and non-economic organizations and institutions. The paradox of the moment we are living in comes out from the fact that the causes which are produced on a

global level, are creating, downward, many negative consequences at all levels of human organization, without the institutional possibility, at the moment, to counteract. However, the very first precondition for any kind of rational intervention at any level of human society is to actually understand 'how the things work'. This is why we are offering here an explanatory framework in a form of a set of theoretical propositions and generalizations. Theory of the semi-periphery can be seen as an empirically based theory, a type of a 'grounded theory', which is connecting developmental issues of the semi-periphery, as a part of the global community, with the present globalization process. This paper is written with deep conviction that there is a possibility of a rational response to the growing chaotic global condition, population issues being one of them, but only if there is adequate knowledge basis which can explain that very condition, its causes and consequences.

POPULATION ISSUES AT THE SEMI-PERIPHERY: WHAT IS THE PROBLEM?

UNFPA publication from 2010, under the name *Emerging Population Issues in East Europe and Central Asia: Research Gaps on Demographic Trends, Human Capital and Climate change*, was the first step of UN which actually recognized that there was some kind of a 'problem' with population in East Europe. The region which is covered by this population actually consists of three subregions²: 1. European part of the former Soviet Union (which is dominated by Russia, Ukraine and Belarus) but does not include Central Asia; 2. East Europe consisting of former socialist countries which were not part of the Soviet Union, and 3. Countries belonging to the Central Asia [Lutz 2010:3]³. Although not all countries in those three subregions share exactly the same population problems, which are mainly the consequence of different age structures, many of them do share numerous similarities and similar trends of developments. The semi-periphery of Europe, term which we will use here to go beyond geography into the level of structural dispositions, is according to the above document going through an unprecedented demographic change. That change, in short, can be described as a combination of extremely low birth rates, migration losses and high or moderate mortality, leading to a combination of rapid population aging together with population decline [Lutz, 2010: 1]. Even though these changes were already present at the beginning of the 1990s, there was huge resistance to address them. We believe that the resistance to acknowledge population problems in many transitional countries was a result of complex blindness which resulted from different sources. The first source

² The Report does not specify which countries belong to the three regions.

³ The list of countries is subject to change, since those countries which become members of the EU, get excluded from what we here consider to be 'the semi-periphery'. However, structurally, countries like Croatia, Romania, Bulgaria are very much part of the picture. Other semi-peripheral countries in Europe, or at the border with the EU include: Albania, Armenia, Azerbaijan, Belarus, Bulgaria, Bosnia and Herzegovina, Georgia, Kazakhstan, Kosovo, Kyrgyz Republic, Moldova, Romania, Russian Federation, Serbia, Tajikistan, TFY Republic of Macedonia, Turkey, Turkmenistan, Uzbekistan.

was political in its nature, since the change from communism to postcommunism was framed as both positive and inevitable, so population problems in countries in transition could not be seen and interpreted as 'problems' either. Secondly, UN tends to see the world divided into the two poles (North and South), with the EU belonging to the North, which does not experience 'population problems' which are 'reserved' for 'the South'. Since population 'problems' are regularly connected to economic development, there is no intellectual tradition or background to see population development as a 'problem' if a country is developed.⁴ Finally, there were 'pure' epistemic reasons, since there were missing theories, missing generalizations, missing explanations. However, those three were interlinked, in short, the political interest and will to create the missing knowledge were also absent on the global UN level.

Until the above mentioned publication was published, population problems in East Europe, from the perspective of UN, had been mostly invisible and covered mainly by Millennium Goals, which were, again, largely shaped according to the problem agenda of the developing countries. The gap in knowledge about population problems of East Europe and other developing countries became even wider in the two decades of the 'transformation', when it reached a point when UNFPA stated the following: 'Rapid population decline and all of its possible consequences, ranging from changes in individual health and well-being due to changing socioeconomic structures to changes in the structure of society, regional population redistribution, economic growth and national identity and security, are clearly emerging population issues that require attention and scientific analysis' [Lutz 2010: 5].

In the above mentioned document, UNFPA states that because the phenomena of population problems in East Europe is such a new phenomena, it has not received enough attention either in the international political and intergovernmental community or in the scientific community. Although we do not fully accept the thesis that it was 'new', we also believe that in the last few decades, in fact, during the 'transition', the problems became even more pronounced.

So, what is actually new in population development in the countries in transition? Most importantly, what is new is the fact that population decline at the semi-periphery is not connected with the economic growth, but it is reverse. The economic crises or unfavorable economic situation is linked to low voluntary fertility. What is also new is that intense aging is even intensified with high emigration of young people, and that there is even a reverse trend in mortality rates (mortality of Russian men, for example [Somach 2011]), which all together have led to depopulation. Also, what is new is that depopulation is framed as a problem only by individual governments in the region, and not by UN. In fact, depopulation was never before really linked to development problems.

⁴ Of course, issues such as aging of the population, or immigration (illegal, especially), even low fertility rates could be framed as 'problems', however in the case of developed countries they are mostly framed as 'normal' consequence of development, which can be treated rationally with adequate policy measures.

MISSING THEORY: GAPS, BLIND SPOTS, BIASES

There are various complex, often chaotic and ambivalent changes in contemporary societies worldwide which affect population developments. 'De-standardization of life course and chaotic biographies in a risk society of the late capitalism mean that life is not taking place according to standard patterns' [Bobić 2013: 43]. If we engage in a critique of what was/is taken for 'standard' we can easily come to the conclusion that it is a model of industrialized developed society of the West. The knowledge, theory, policies, explanations, expectations, all have been basically following this 'standard'. In its deep nature, the prevailing social theory is still reflecting colonialism and/or neocolonialism [Connell 2007]. Therefore, to deal with societies outside the core, such as the societies in the European semi-periphery, it is necessary to articulate and accept very different epistemic propositions, starting with the idea that the whole of knowledge body is simply a construct and that it is reflecting power and interests of those who create it. The next step, then, is to call for a creation of multiple knowledges, or 'polycentric social science' [Connell 2013], those which will respond to real differences both in social conditions and the societal needs for knowledge. In other words, the 'ontological turn', a full recognition of ontologies of both humans and contexts, needs to become the basis for this paradigm shift. However, even when we accept the necessity for a different Theory, an open question remains to what extent valid generalizations can be made, and how to move towards causes instead of being focused on the consequences.

Still, before we continue exposing our arguments in this direction, it is necessary to discuss briefly what exactly the problems with the 'Theory' are at the moment. The first problem is that 'Theory' is actually missing. There are no adequate and well accepted explanations, and valid generalizations within academic communities in the countries in transition, or even within the general public, about the background and causes of present day population situations in those countries. This fact reflects much deeper problem of knowledge creation in those countries [Blagojević 2009]. Secondly, gaps in terms of disparities between the developed countries of the core and countries which belong to the semi-periphery are not really taken into account, except on a phenomenological level. Similarities (low fertility rates, delay of the first marriage, postponement of births, decline in the total first marriage, higher divorce rates, differentiation of family forms, increase of cohabitation and single living, etc.) are obvious on the surface, and they cannot be ignored, but the causes of those similar trends are very different in East and in West. However, demographers of the East European countries were, and still are, tempted to simply borrow explanatory tools from the FDT to explain the low fertility rates. They blamed 'emancipation' of women and even, 'women's selfishness' [Blagojević 1997] for changed reproductive behavior. Demographers simply misunderstood that it is not 'modernization' but rather the absence of 'modernization', expressed in a low living standard and low quality of life, and that it is not 'emancipation' but rather lack of true emancipation expressed in a heavy burden

of women to be 'blamed' for their low fertility rates [Blagojević 1997; Bobić 2010]. Borrowing of readymade formulas only blurred the difference between the core countries and the semi-periphery, further leading to distorted knowledge about demographic processes. Atheoretical nature of demography, especially its divorce from sociology, prevented deeper understanding of relevant contextual and structural differences between the West and the semi-periphery.

Thirdly, there are other, more specific, blind spots in explanations which mainly refer to two different aspects: position of women and gender regimes in the said countries, and de-development of the said countries. As Bobić notices, feminist authors still struggle for their position within the demographic field, and demography is late in accepting gender paradigm in comparison to other social sciences [Bobić 2013: 48]. In countries in 'transition', marginalization of gender issues in demography is even more pronounced. There is profound absence of feminist demographers. The consequences are multifold. Fertility is not understood as what it is in today's semi-peripheral societies: mainly woman's decision to have or not to have a child [Blagojević 1997]. The link between fertility and women's position is yet to be explored in different contextual settings. For example, Bobić claims that educated women, especially in the developed countries, do not necessarily have lower fertility rates since their position is improving and they can rely on other sources to fulfill their desire for children [Bobić 2013: 53]. Feminist authors in semi-peripheral societies, who are usually not demographers, have done considerable body of research related to instrumentalization of women in the national projects through pressure for birth giving [Drezgić 2010]. However, they have not dealt with other side of the problem – profound frustration of young women and men who would like to have children, but do not have adequate economic conditions to make decisions in this direction [Blagojević 1989; Blagojević 2013]. In fact, the formula of 'freedom of choice' as a human right, when it comes to decision about children, was mainly 'working' for developing countries to promote women's rights but it was of limited use for the semi-periphery which was experiencing 'negative freedom of choice'. In other words, freedom of choice should work on both ends: freedom to both have and not to have children, and responsible and rational choice should be supported by society.

Finally, both the theory of FDT and SDT suffer from serious issues related to ethnocentrism and tempocentrism. For example, Slovenian demographer Kuhar has found that non-postmaterialist value orientation, which plays prominent role within SDT theorizing is not among important predictors of childbearing in succession countries of former Yugoslavia (except in Slovenia). Instead the findings indicate that material conditions and socio-economic status are relevant [Kuhar 2010: 55]. Kuhar thinks that SDT is a useful umbrella concept in analyzing changes in fertility and family formation in developed countries, but it is not useful for East European countries.

Both theories assume that there is unilinear development, often referred to as 'modernization', which is inevitable for all the populations of the world who will experience it sooner or later. Not only that there is a hidden assumption of superiority of such a model which bears the colonial bias, but the major

failure of that model to be applied successfully on countries in transition comes from the fact that not taking into account historically different situations of developed, semi-peripheral or developing countries is a serious distortion. In fact, the core of that distortion is disregard of different structured developmental interdependences of those societies, at different points of time. This disregard of interdependence as a relevant explanatory variable is distortion more than ever, under the conditions of the present neoliberal globalization.

It seems strange to be in a situation in 2014 to repeat the arguments which were given to the FDT years ago [Šijaković 1980; Roca 1987] but it still seems necessary⁵ for the reasons mentioned above. FDT was already criticized in the 1970s and 1980s. However, with respect to our approach here, not all of the critiques are equally relevant. The most relevant ones are those which put in focus the very basis of generalization: the fact that it was founded on the experiences of few countries in the West and their demographic development. As any generalization in social sciences, FDT was also faced with an open question of validity and scope of generalization. So, for our approach here it is not relevant whether, and to what extent, it could be empirically tested and whether it was coherent, especially when different authors were compared. The quest for consistency and coherence is largely outdated, having in mind contemporary knowledge developments in social sciences, and abandoning of the metanarratives as such. However, what remains a key challenge to FDT and to theoretical thinking about population development in general, then and now, is the very question of which structural characteristics could be taken as the most relevant ones: what is the connection between social, economic, cultural structures and population development? Theory is mostly an epistemic tool which enables ordering of a certain segment of social reality. However, for that ordering it is not necessary to have all examples and statistical series in line but to understand the deterministic, cause-consequence, set up of reality. Regarding FDT, the major factors related to population change in the West were linked to industrialization and urbanization. In some cases, some authors even claimed that FDT was preceding urbanization and industrialization, that it was in fact a factor which was a precondition for industrial development. So, cause-consequence explanation in theory could be refined with more subtle analysis of synchronicity of different changes leading to the same direction.

However, the major flaw of FDT, from epistemological, and not only ethical perspective, is that it was ethnocentric, as much as it was tempocentric. Most of the authors linked to FDT failed to recognize that developing countries, those outside the West, actually find themselves in a very different set of circumstances. It was not an issue of simple 'lagging behind', as much as an issue

⁵ That is in fact not so strange if other social science domains are compared. It seems that valid arguments which have been very present in theoretical debates in the 70s and 80s, especially on the side of the authors who were Marxists or well informed about Marxist theory, almost disappeared under the influence of new theoretical developments from the 1990s on. From the perspective of sociology of knowledge it would be easy to connect those facts with the changing power relations on the global scale, and different exclusionary practices related to knowledge production worldwide [Blagojevic and Yair 2010].

of dependent development. Croatian demographer Zoran Roca coined a term 'dependent demographic transition' and proved that external factors played an essential role in demographic transition of developing countries, in comparison to their internal developments [Roca 1987]. What was characterized as 'irrational' behavior leading to 'population explosion' of developing countries, in fact was rational behavior of population under the conditions of the countries in question. In other words, the main problem with both FDT and SDT is that they ignore interdependence of populations, which happens under the conditions of unequal and unjust global economic development. As 'transition' is not just an endogenous process, neither is the population development of countries at the semi-periphery a self-driven process of collective self-suicide and rationally or irrationally 'chosen' collective disappearance (self-extinction).

From the perspective of this fundamental failure of FDT, it is not difficult to understand the failure of SDT theory, since it is, again, locked in the same antinomy: how to theorize on a world population development if the model is just extrapolation from the West to the rest, instead of focusing on structural connections between the West and the rest, which is taking place in the code of neoliberal globalization. In fact, SDT is disclosing absolutely the same type of blindness as FDT, but this time especially strong in connection to the semi-periphery. Deeper explanation of this 'mistake' lies in the fact that colonial approach in the FDT was replaced by neocolonial approach of SDT, which means that it became more 'soft' and 'politically correct', but not different in its essence. Both approaches are based on two ideas: that development is unilinear, so the underdeveloped, developing or semi-peripheral societies are 'lagging behind', and secondly, there is powerful convergence leading to the same outcome. Without necessarily rejecting those very general ideas, in fact meta-narratives, which are still very much ideologically shaped in colonial and neocolonial terms, we can safely say that even if they are taken as valid assumptions to describe long term developments, the relevance of contextual analysis and relevance of an issue of actual human costs of 'development' short term and medium term could not be simply ignored. They are epistemic, but ethical issues are interconnected, as well.

CONCEPTUALIZING THE SEMI-PERIPHERY AND ITS GENDER REGIMES

The semi-periphery, as explained elsewhere [Blagojević 2009; Blagojević Hjusun 2013] is a concept which enables better understanding of structural relation and dependence between the core and the semi-periphery. It is a necessary concept, since its omission results in dangerous blindness which often produces inadequate public policies and developmental interventions, frequently bringing profound counter effects [Blagojević 2009]. Inspiring work of Connell, with elaboration of Southern Theory and development of the idea of 'polycentric social science' [Connell 2013] could easily be translated into the quest for contextual and contextualized knowledges, which would be interconnected in the grid of wider generalizations.

The semi-periphery is more than 'geography', it is a 'strategic concept' [Harding 1998] which enables naming of a specific entity with specific structural characteristics. In this case, the most relevant characteristic of the semi-periphery is that it is shaped by its structural, not only positional relationship with the center which is the one of: dependence, imitation, resistance and transfer. The semi-periphery cannot simply be understood from the post-colonial theoretical aspect, not only because of the innovative strategies of neo-colonialism through sweeping privatizations and financial manipulations [Klein 2007; Horvat and Štiks 2012], but because it is also the subject of its own colonization, it is subjected to the process of 'self-colonization' [Kovačević 2008]. Different trajectories of modernization also imply that differences between the core and the semi-periphery or periphery, are not simply quantitative, but also qualitative (some of which can be quantified, though). In developmental terms, being previously industrialized to a large degree, and then largely de-industrialized during the 'transition', makes the semi-periphery a quite different social setting from the periphery and its developmental path. Although these may seem as overwhelming generalizations, the facts are that there are huge differences, for example, between structural poverty in the Third World Countries and the process of impoverishment in the Second World during the 'transition'.

Without going into further theoretical explanation of the concept of the semi-periphery, we would like to focus here on several important characteristics of the semi-periphery which are closely connected to population development. One of the major structural characteristics of the semi-periphery is that it is constructed, from within and without, as an entity which is 'lagging behind' and 'catching up' with the core [Blagojević 2009; 2013]. 'Catching up', as deliberate political and developmental choice of the countries at the semi-periphery, profoundly shaped their gender orders: for that goal to be achieved, the women's resources were extensively and intensively used both in private and public spheres. In that light, egalitarian ideology during communism could be seen as highly instrumental for high mobilization of women's resources. This is the background of the explanation of high education and employment level, as well as early voting rights for women in East Europe. In some countries at the semi-periphery, contrary to the general misconceptions and prejudices about the 'backward women from the East', voting rights were granted quite early: in 1918 in Estonia, Hungary, Latvia, Lithuania, and Poland, in 1920 in Czechoslovakia, in 1929 in Romania, in 1937 in Bulgaria [Enwise Report 2003: 23].

Another key characteristic of the (contemporary) semi-periphery is a process of 'de-development' which is qualitatively different from the lack or absence of development, or slow pace of development. 'Transition' for the 'Second World', former industrialized communist countries in Europe, took a form of 'de-development' in many ways. De-development is a deep structural change which is in economic terms related to depreciation of human, institutional and infrastructural capital [Meurs and Ranasinghe 2003], but it also has its profound social side effects. That process could be well understood from

the perspective of global change, in the code of neoliberal paradigm [Klein 2007]. In social terms, the de-development is related to many negative consequences such as: increased social insecurity, decreased social protection and stability, institutional destruction, anomie, increased crime and violence, population crises, increased mortality, and even 'barbarization' through the violent conflicts [Blagojević 2009]. De-development is not a simple 'regress', since it is not a simple 'going backward' along the same line, but instead it is distancing from the genuine developmental path, in terms of modernization and creation of some kind of *structure-less*, chaotic, anomic social environment, which is more pronounced at the bottom (micro level), than at the top (macro/nation state level).

The de-development, if it lasts long enough, is not only a social process but it becomes a *social condition and a new social structure*. This extremely relevant social fact, unfortunately, largely stays invisible and not understood since there is a 'blindness of theory' grounded on an assumption of unilinear development, which is backed up by efforts to 'Europeanize', to bring EU standards to the rest of the European continent. Increasing pressure on societies to adapt to the requirements of global players, results in a number of strategies of passive and active resistances and subversions. It is almost impossible at this point, and with the existing theoretical apparatus, to understand the exact direction of social change which is currently taking place in large part of the European semi-periphery.

De-development as a process is very territorial and closely linked to the statehood, and the best example of it is the EU Accession. Different states and different regions within the states are, to different degrees, integrated into a global capitalist system. Those that stay excluded from the transnational flows of globalization could easily become 'losers' of the 'transition' [Blagojević 2013]. Not all levels of territoriality and population from one territory (however the boundaries defined) are equally 'transnationalized', exposed to transnational flows and merged with them. Still, all levels of territoriality, from micro to macro, are immersed into global neo-liberal restructuring of the world. Even when they stay non-included in the transnational flows they are still included in the globalization which creates huge developmental differences. Paradoxically, the fast and often unpredictable transnational capital flows, make concrete territories and peoples more vulnerable than ever. With neoliberal globalization, dependence on territoriality for social positioning of individuals, groups and even societies, has become more pronounced and more prone to fast shifts and changes.

De-development, being related to depreciation of capital (human, infrastructural, institutional and environmental resources), also represents the major obstacle for further development, or going back 'on track'. In the new neo-liberal setting, states are increasingly losing the ability to control their own destinies, as well as large parts of their population. In fact, de-development is the most plausible explanation of why many countries, or large regions within the countries, have found themselves in a circle of non-development. In that setting, both women and men are increasingly becoming 'losers' of 'transition',

but in different ways. The overall framework of depreciation of human capital has led to the phenomena of *'surplus of humans'*, surplus of both women and men, especially of those who belong to the fast growing underclass (uneducated, rural, old, or even urban, educated but unemployed labor force). 'Surplus of humans' phenomenon is not expressed only in high, permanent, structural unemployment, but also in an obvious erosion of labors' rights, as well as shrinking of the middle class, class of the professionals at the semi-periphery. In demographic terms, 'surplus of humans' exhibits itself in fast changing reproductive norms, where voluntary infertility becomes a logical response to 'surplus-ness' of population at the territory of the semi-periphery.

For biological reproduction which is still taking the place mainly within the family and which is largely shaped by gender regimes, two very distinctive features of gender regimes at the semi-periphery also play a role, and they are closely connected to the economy of care: the first one is existence of 'self/sacrificing micro-matriarchy' [Blagojević 1994; Blagojević Hjuson 2013], and the second one is the existence of 'masculinity crises' [Blagojević 2009; So-mach 2011; Blagojević Hjuson 2013]. The two are closely linked together, thus producing a combination of high level exploitation of women's resources, on the one hand, and strong patriarchal ideologies with pronounced misogyny which boost demystification and pacification of women, thus enabling that exploitation [Blagojević Hjuson 2013]. In fact, the greater dependence on women resources in public and private domain, the stronger ideological patriarchalism to counterbalance it. The combination of the two often seems to be paradoxical, and, therefore, it often stays invisible for the 'Western eye' in theory, research or policy making. The result is, from the Western point of view, a strange amalgam of a 'super woman', strong, powerful, but at the same time, sacrificial woman, who is 'more than equal' ('Polish mother', for example). Masculinity crises, on the other hand, is a result of dependent position of men in a model of 'self/sacrificing matriarchy', in combination with actual male identity crises, since identity cannot be organized around the nonexistent 'male breadwinner' model, due to the 'surplus of humans', high structural unemployment and dependence on women's resources. At the same time, re-traditionalisation and re-patriarchalization, as part of an overall change of value system in 'transitional' countries [Blagojević 2003; Milić 2009] additionally put burden on men to comply to their role of 'breadwinners', a role which during the socialism was largely cancelled due to the prevailing 'dual earner' model of family organization. On the other hand, 'self/sacrificing micro-matriarchy' model is a solid basis for creation of women's identity, and women actively participate in this model, experiencing high emotional rewards and strengthened subjectivities. At the same time, to integrate into the patriarchal setting, women actively participate in misogynous discourses and practices, often deeply internalizing them [Blagojević 2000; 2004] and acting negatively towards other women.

CONCLUSION

The evidence shows that population developments at the semi-periphery in the last several decades are unprecedented, that they, in many ways, relate to something new, and that the adequate theoretical explanations are largely missing, mainly because the semi-periphery is not recognized as being structurally different from both the core and the periphery. Therefore, the whole question about population developments at the semi-periphery needs to be reframed. Population development cannot be understood by a simple descriptive approach or very simplified modeling related to few macroeconomic variables (GDP for example), or indicators which in reality contain great variety (education, for example). The approach we suggest in this paper is the one which is based on the following theoretical assumptions:

- population developments at the semi-periphery of Europe are reflecting the position of the semi-periphery in the global neoliberal project;
- phenomena of the 'surplus of population' is closely connected to the de-development of the semi-periphery, and reflected in the voluntary infertility (extremely low birth rates);
- de-development and decay of public sphere, due to the budget cuts, together with high unemployment, lead to micro based survival economy which is anchored in the private sphere;
- economy of care (both for elderly and minors) is limited by women's resources, and caring for the aging population competes with the caring for the young generations;
- semi-periphery suffers from de-appreciation of all kinds of resources in the present day globalization, including human resources and environmental resources, therefore 'human capital' approach is insufficient and misleading⁶;
- intense aging, low fertility, high mortality, depopulation and intense emigration, all combine to additionally worsen developmental situation;
- states at the semi-periphery are faced with serious security issues due to depopulation of large parts of their territories, which feeds national populist approach to population policies;
- immigration for the semi-peripheral countries could not be seen as a solution as it was, and still is, the case with the core European countries, since economic and political conditions are very different;
- low fertility at the semi-periphery is closely connected to development of a specific gender regime, concentrated on self/sacrificing micro-matriarchy model, masculinity crises, and interrelated crises of fatherhood.

In other words, the proper theory could provide proper explanation if it would properly acknowledge the realities of power differentials between the core and the semi-periphery, instead of feeding the myths of unilinear develop-

⁶ That is the approach advocated in UNFPA publication in 2010, under the name *Emerging Population Issues in East Europe and Central Asia: Research Gaps on Demographic Trends, Human Capital and Climate Change*.

ment and convergence. It would acknowledge the existence of different modernization paths, as well as the right and necessity for the countries of the semi-periphery to create their own knowledge and understanding of the processes which shape their developments, instead of accepting readymade images and explanations, including readymade policy solutions. Imitating solutions without recognizing basic differences, even when the outcomes might appear similar (i.e. low fertility rates), is necessarily creating even more problems. Instead of advocating positivist critique, which is so present in demographic debates and which is often concentrated on finding data that approve or disapprove some generalizations, the approach we advocate here is theoretical in terms of finding the key structural explanations for the present population situation at the semi-periphery. The basic assumption here is that only that kind of knowledge would allow for rational and effective intervention in the population developments.

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РАЗУМЕВАЊЕ ПОПУЛАЦИОНЕ ПРОМЕНЕ ИЗ ПОЛУПЕРИФЕРИЈСКЕ
ПЕРСПЕКТИВЕ: УНАПРЕЂЕЊЕ ТЕОРИЈЕ

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РЕЗИМЕ: Много емпиријске евиденције о демографским променама у земљама у „транзицији”, тј. у онима на полупериферији Европе недовољно је теоретизовано, или је теоретизовано унутар оквира теорија о првој и другој демографској транзицији. Међутим, обе ове метанарације су само делимично примењиве на популациони развој полупериферије. У овом раду ауторке тврде да специфичност и изузетност популационог развоја полупериферије тражи другачији приступ, тачније приступ који ће јасно признати значај структуралне разлике између центра и полупериферије, и развојну зависност као кључни проблем. Основни аргументи односе се на специфичност родних режима на полупериферији [Blagojević 2009; Blagojević 2013; Bobić 2013], као и на процес „раз-развоја” који резултира дубоком друштвеном структуралном променом. Полазна епистемолошка становишта за овакав приступ односе се на три струје теоријског мишљења: 1. феминистичку теорију позиционирања (полупериферија је и стратешко поље артикулације знања, као и локација на којој се реafirмишу онтологија и епистемологија родности [Wickramasinghe 2006; Blagojević 2009]; 2. Критике „Метрополитанске теорије” Р. Конел [Connell 2007] и њена визија „полицентричне друштвене науке” [Connell 2013]; 3. идеја вишеструких модерности и вишеструких путања модернизације [Eisenstadt 2002]. Како је, историјски посматрано, демографија као дисциплина била емпиријски богата али теоријски сиромашна, померање ка теорији, ка утемељеној теорији (‘grounded theory’), може дубински обогатити наше разумевање популационе промене, повезујући микро, мезо и макро нивое на хеуристички плодносан начин, уз истовремено унапређивање ефективности и, у суштини, смислености популационе политике.

КЉУЧНЕ РЕЧИ: полупериферија, прва демографска транзиција, друга демографска транзиција, раз-развој, депопулација, родни режими

RESPONDING TO POPULATION POLICY – WHICH WOMEN CAN PROVIDE THE GREATEST DEMOGRAPHIC BENEFIT IN SERBIA?¹

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ABSTRACT: Population policy measures address all fertile women in Serbia, and the aim is to mobilize the largest number of women to give birth. Although strong response is desirable, not all women react, or at least not to the same extent, to the population policy measures which are financially based in Serbia. In this paper our intention was to identify which categories of fertile women could give greatest demographic benefit in the near future considering current population policy measures. We assumed that age and socioeconomic characteristics are the most relevant for the different response of women. Considering past structural changes of women population, and population projection results, we tried to define which categories of fertile women can give the greatest demographic benefit to the increase of birth level until 2041.

KEYWORDS: population policy, population projections, age structure, educational structure, fertility level

INTRODUCTION

Direct political response of Serbia, after 2002, regarding the fertility is based on the Law on Financial Support for Families with Children, and the

¹ This paper is the result of work on the project *Research of demographic phenomena in the function of public policies in Serbia* (47006) financed by the Ministry of Education and Science of RS.

Pronatalist Strategy. The mentioned law has two basic financial measures: full compensation of salary to the working parent (mother or father) during parental leave, and the parent allowance for the first, second, third and fourth child of the mother [Basten and Frejka 2014]. Since a whole spectre of socioeconomic characteristics of fertile women, and their age, are highly significant for their reproductive norms and childbearing, we analyzed differences in number and structure of birth according to Demographic yearbook data. The year of 2002 can be considered as the first year of systematic attempt of the government to become involved in childbearing, so we followed the time series from 2002 to 2012. Even though there is a whole spectre of socioeconomic characteristics of fertile women which are significant for decision making regarding the fertility, we focused only on educational level of women which is in our opinion one of the most significant characteristics that determine woman's reproductive behavior. Thus, the number and structure of live births by birth order were analyzed, and by age and educational level of mother.

With respect to the type of birth analysis, we tried to show if, and to what extent, reproductive behavior of women of different age and educational level differed and changed in the above mentioned period. Also, we tried to discover which analyzed categories of fertile women responded to the pronatalist measures.

FERTILITY CHANGE WITH RESPECT TO THE AGE OF THE MOTHER

Birth order structure considering the age of the mother can show qualitative change in the live birth structure. We can describe that change by using the *age specific average birth order* indicator to the birth of the fourth child, which was defined by authors for the purpose of these analyses. Only the first four birth orders were taken because they are only covered by the population policy measures. If we multiply each birth order (1, 2, 3, and 4) by its relative share in the total births of specific age group, and sum all four results, we can show changes in birth order structure over one period.

Table 1: Age specific average birth order to the birth of the fourth child

| Age | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 15–19 | 1.20 | 1.22 | 1.23 | 1.26 | 1.24 | 1.23 | 1.23 | 1.24 | 1.25 | 1.24 | 1.27 |
| 20–24 | 1.43 | 1.46 | 1.46 | 1.50 | 1.50 | 1.45 | 1.46 | 1.47 | 1.47 | 1.46 | 1.46 |
| 25–29 | 1.66 | 1.69 | 1.68 | 1.69 | 1.67 | 1.62 | 1.61 | 1.59 | 1.58 | 1.58 | 1.58 |
| 30–34 | 1.85 | 1.88 | 1.84 | 1.88 | 1.84 | 1.79 | 1.77 | 1.76 | 1.74 | 1.72 | 1.72 |
| 35–39 | 1.98 | 1.99 | 1.97 | 2.01 | 1.98 | 1.93 | 1.94 | 1.89 | 1.87 | 1.86 | 1.86 |
| 40–44 | 2.03 | 1.99 | 1.92 | 1.93 | 1.96 | 1.89 | 1.93 | 1.87 | 1.85 | 1.85 | 1.87 |
| 45–49 | 1.72 | 1.91 | 2.06 | 1.89 | 1.63 | 1.92 | 1.93 | 1.56 | 1.91 | 1.60 | 1.52 |
| Total | 1.615 | 1.646 | 1.637 | 1.672 | 1.657 | 1.614 | 1.621 | 1.619 | 1.617 | 1.611 | 1.618 |

Resource: Authors calculations

In the first part of the period, from 2002–2005, the age groups from 15 to 29 years had increased share of the third and fourth birth order in total live births, and at the same time they had decreasing share of the first and second birth order in total live births. On the other hand, women from 30 to 39 years of age had increased share of all four birth orders in total live births in the same period.

In the second part of the period, from 2006–2012, the age groups from 15 to 29 had decreased share of all four birth orders in total live births, except for the first born child in the age group from 25–29 (+1.5%). At the same time, women aged 30 to 44 had increased share of the first three birth orders in total live births. If women aged 15 to 29 are considered cummulatively as one age group, it can be seen that only third and fourth birth order in 2005 and 2006, respectively, increased their shares, while the first and the second birth order shares decreased in the analyzed period. These changes may have been the result of the changing age structure of the fertile women, so we considered these changes and standardized age structure by the year 2002 (Chart 1). Ageing of reproductive women occurred parallelly with marriage delay, first child-bearing, and reduction of higher-order births [Devedžić and Mucić 2011]. All trends were the same, only the decrease rate was slightly slower.

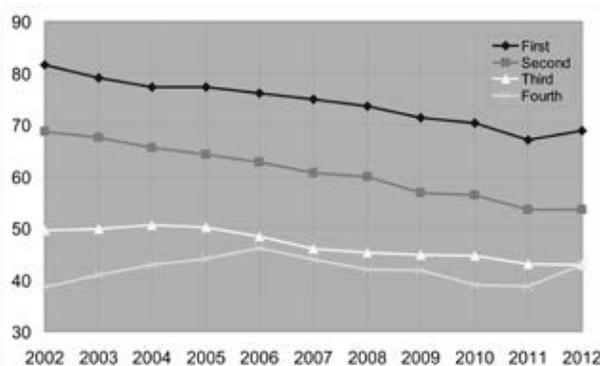


Chart 1: *Relative share of live births by mothers aged 15–29 by birth order*

At the end of the period, women aged 15–29 gave birth to 17,442 children less than at the beginning of the period. Even with changed age structure of the fertile women, the shortage of children would still be large, 16,298.

If we analyze the age specific fertility rates (ASFR), it can be seen that the change was not equal throughout the period. Women below 30 years of age showed the greatest decrease in the first part of the period. Until 2005, women aged 15–19 had 34.4% of their ASFR decrease, women aged 20–24, had 37.0, and women aged 25–29 had 78.3% of their ASFR decrease. At the same time, women aged 30–34 had only 4.8% of their ASFR increase, women aged 35–39 had 13.2, and women aged 40–44 had 0.0% of their ASFR increase. ASFR level for women aged 45–49 was too low to make any conclusions (Chart 2).

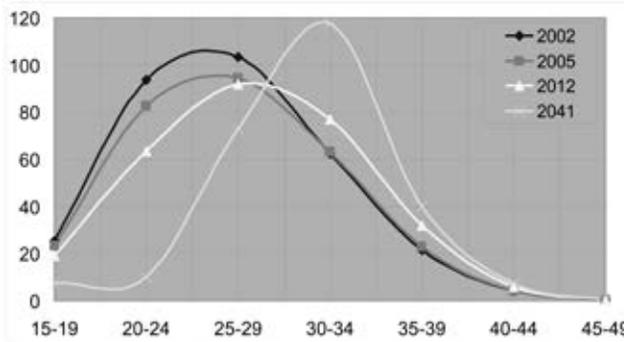


Chart 2. Age Specific Fertility Rates

Obviously, the decrease of ASFR in women below 30, and increase of ASFR in women who were 30 and above, did not occur simultaneously. The ASFR decrease of women below 30 took place first and it was followed by ASFR increase of women who were 30 and above. It can be easily concluded that those were the same women postponing their maternal role. If we translate this to cohorts (meaning year of birth of the women), we can say that women born around 1975 and earlier, are the main carriers of further fertility change, regarding childbirth postponement and ASFR decrease. Projection of ASFR levels until 2041 show that the fertility pattern has a tendency of shortening the effective reproductive period, postponing the childbirth, concentrating childbirth at the age from 30 to 34, and reducing the Total Fertility Rate level (TFR). With further decrease of TFR level, linear projection, considering previous TFR trends, shows that TFR may fall to 1.28 in 2041 (Chart 3).

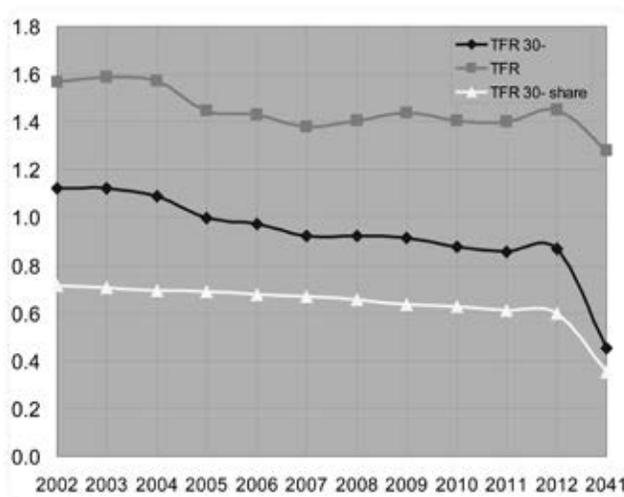


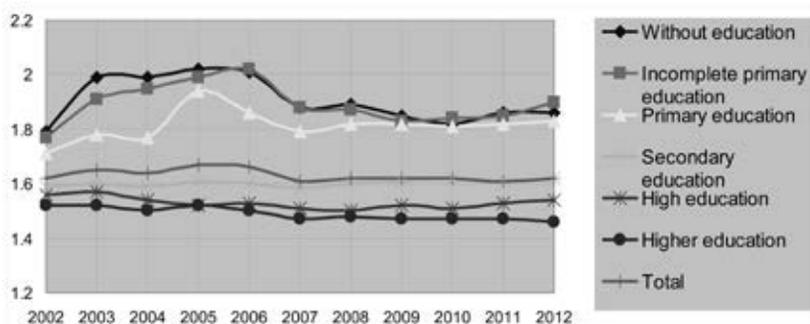
Chart 3. TFR, TFR for women below 30, share of TFR 30- in overall TFR

Childbirth postponement can be best seen through TFR structure. As transversal indicator, TFR contains ASFR values of all age groups, so the contribution of each age group in TFR can be measured. As it can be seen from Chart 3, contribution to TFR by women who are under 30 is continuously reducing in the analyzed period. At the beginning of the period, relative share of TFR of women below 30 in overall TFR was 71.5%, and it was continuously decreasing until it reached 59.9% in 2012. If previous trends continue, relative share of TFR 30- in overall TFR may fall to 35.5% in 2041. In other words, in 2002, women below 30 were contributing to TFR with more than two thirds, and in 2041 they may contribute to TFR with just a little over one third!

FERTILITY CHANGE WITH RESPECT TO EDUCATIONAL LEVEL OF THE MOTHER

Educational structure of population in a country can directly point to socio-cultural development level of that country. Also, educational structure of population in one country can be an indirect determinant of a large number of social, and among them, demographical phenomena. Among demographical phenomena, the below replacement fertility especially stands out in Serbia. Besides the whole specter of other determinants affecting reproduction level of a population, educational level of a female population is taking special place regarding the childbirth decision making [Vasić, 2013]. In the same manner as in the first part of the paper, we will start the fertility analysis with average birth order by mother's education to the birth of the fourth child (Chart 4).

Chart 4: *Education specific average birth order to the birth of the fourth child*



Resource: Authors calculations

Structural changes in live births are quite diversified in the analyzed period, when educational level of the mother is concerned. Again, in some modalities we have opposite trends in the first, and in the second part of the period. First three categories of women with lowest education show structural improvement in the first part of the period, influencing the improvement of total birth order structure. Therefore, in 2005, the women without education

increased average birth order by 12.8%, women with incomplete primary education by 12.4%, and women with primary education by 13.5%. In the same period, women with secondary education increased birth order structure by 1.3%, while women with high education decreased average birth order structure by 2.6%, and women with higher education remained at the same level of birth order structure.

The second part of the period brought opposite trend to the three lowest categories. From 2006 to 2012, the women without education decreased average birth order by 7.9%, women with incomplete primary education by 4.5%, and women with primary education by 5.7%. At the same time, women with secondary education remained at almost the same level (+0.6%), women with high education increased average birth order by 1.6%, and women with higher education decreased average birth order by 3.9%. As for the total average birth order, from 2002 to 2005, it increased from 1.62 to 1.67, and dropped again to 1.62 in 2012.

If we analyze each birth order separately with respect to mother's education, we can show intensity of the change considering the change of population educational structure. First, we have to show educational structure of the female population to see how it could affect the live birth structure by mother's education (Table 3).

Table 3. *Estimation of the female population educational structure 2002–2012*

| Educational attainment | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Without education | 8.56 | 8.08 | 7.60 | 7.11 | 6.63 | 6.15 | 5.66 | 5.18 | 4.70 | 4.21 | 3.72 |
| Incomplete primary education | 18.64 | 18.09 | 17.54 | 16.99 | 16.44 | 15.89 | 15.34 | 14.79 | 14.24 | 13.68 | 13.12 |
| Primary education | 24.72 | 24.36 | 24.00 | 23.64 | 23.28 | 22.92 | 22.56 | 22.20 | 21.84 | 21.50 | 21.16 |
| Secondary education | 36.43 | 37.27 | 38.10 | 38.94 | 39.77 | 40.61 | 41.44 | 42.28 | 43.11 | 43.95 | 44.79 |
| High education | 4.11 | 4.26 | 4.41 | 4.57 | 4.72 | 4.87 | 5.03 | 5.18 | 5.33 | 5.49 | 5.65 |
| Higher education | 5.76 | 6.32 | 6.88 | 7.44 | 7.99 | 8.55 | 9.11 | 9.66 | 10.21 | 10.77 | 11.33 |

Resource: Authors calculations

As the educational structure of the female population changed, it was expected that live birth structure by mother's education would change as well. As the live birth structure by mother's education changed, we cannot know whether that happened because female population educational structure changed or women of different educational attainment changed their reproductive behavior. Therefore, we standardized it with basic educational structure from 2002. This way, each birth order by mother's education can show us if women of different educational attainment changed their reproductive behavior. Since we know that majority of live births came from the mothers with secondary, high, and higher education, and that it is continuously rising, the changes by birth order of these categories are presented (Chart 5).

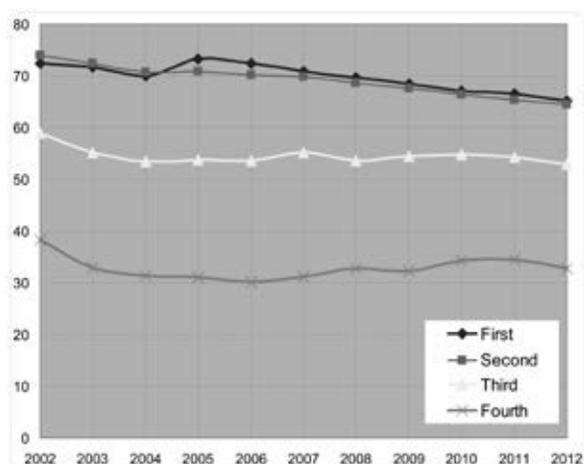


Chart 5. *Relative share of live births by mothers with secondary, high, and higher education (aggregate) in each birth order*

If we do not consider female population educational structure change, we can say that women with three highest educational modalities raised their relative share in each birth order. Therefore, three higher educational categories increased relative share in first birth order by 14.5%, second birth order by 11.9%, third birth order by 11.7%, and fourth birth order by 5.5%. Actually, these educational categories of women (considering educational structure change) would have reduced relative shares in each birth order. Therefore, the relative share in the first birth order dropped by 7.3%, in the second birth order by 9.6%, in the third by 6.0%, and in the fourth birth order by 5.4%. If this trend continues, we may expect that relative share of these categories aggregately drops to 46.0% of the first born, to 39.1% of the second born, to 37.1% of the third born, and to 18.6% of the fourth born children. It is obvious, and expected, that these categories reduce their fertility level, but it would be interesting to see to what extent different educational categories of women postpone childbirth. Considering the overall fertility decline and childbirth postponement trend, it would be significant to show childbirth postponement by birth order, and educational attainment of mother (Table 4).

It is very interesting that there are opposite changes in the mean age of mother with respect to educational attainment, but it is even more interesting that there are opposite changes in the mean age of mother by order of live born children. Women without education increased mean age at birth (MAB) of first two birth orders, but significantly decreased MAB for third and fourth birth order. At the same time, women with incomplete primary education, and primary education decreased MAB of all four birth orders, and only women with secondary education increased MAB of all four birth orders. Women with high and higher education increased MAB of first two birth orders, and decreased MAB of third and fourth birth order. It is important to emphasize that MAB

Table 4. *Mean age of mother with respect to the order of live born children and educational attainment*

| Educational attainment | Year | First | Second | Third | Fourth |
|------------------------------|------|-------|--------|-------|--------|
| Without education | 2002 | 20.0 | 22.0 | 25.7 | 27.5 |
| | 2012 | 21.3 | 22.7 | 24.3 | 26.8 |
| Incomplete primary education | 2002 | 21.7 | 23.1 | 26.4 | 28.8 |
| | 2012 | 20.7 | 22.2 | 25.3 | 27.8 |
| Primary education | 2002 | 23.3 | 25.6 | 28.9 | 31.2 |
| | 2012 | 22.9 | 25.5 | 28.8 | 30.5 |
| Secondary education | 2002 | 25.2 | 27.8 | 30.9 | 33.2 |
| | 2012 | 26.8 | 29.1 | 31.5 | 33.6 |
| High education | 2002 | 28.4 | 31.0 | 33.8 | 35.7 |
| | 2012 | 29.5 | 31.4 | 33.4 | 34.5 |
| Higher education | 2002 | 30.6 | 32.9 | 35.4 | 37.4 |
| | 2012 | 31.0 | 33.0 | 35.2 | 36.9 |

Resource: Authors calculations

of first born child increased from 25.3 to 27.7 years, MAB of the second born child increased from 27.8 to 29.6 years, and MAB of the third born child from 30.1 to 31.0 during the investigated period. However, MAB of the fourth born child slightly decreased from 31.6 to 31.5.

If MAB is analyzed by birth order, we can see which educational category of women has determined the direction of MAB change. At first two birth orders, situation is rather clear, almost all educational categories increased MAB. MAB of the third birth order showed an increase, but although all educational categories showed decrease, the secondary education category showed increased MAB. As for the fourth birth order of MAB, the situation is almost the same, except the secondary education category which continued with the same trend but it minimized the increase.

CONCLUSION

The analysis of age specific indicators gave several conclusions. First, the total average birth order during the investigated period shows a decrease. Secondly, the period from 2002 to 2005 can be marked as a period of certain fertility level rehabilitation at all ages which is well known as the post-crisis period. Thirdly, age group from 20 to 29 can be marked as the main age group reducing the number of live births and postponing the childbirth. Main change in this age group happened in the first two birth orders. One in five first born children was born after the age of 30 in 2002, and one in three first born children was born after the age of 30 in 2012. One in three second born children was born after the age of 30 in 2002, and one in two second born children was born after the age of 30 in 2012. Total number of live births reduced by 13.9%, and the number of

live births by women under the age of 30 reduced by 31.0%. Generations born around 1975 and earlier, significantly postponed childbearing to the ages after 30. Increased importance of women over 30 is particularly interesting; in 2000, a quarter of the total number of live births was given by them, in 2008 it was over a third (34.8%) [Devedžić and Mucić 2011], and in 2012 it was even 41.9%.

The analysis of educational attainment of mother gave the following conclusions. Average birth order at three lowest modalities showed increase until 2005, and then a decrease until the end of the period. Average birth order at three highest modalities showed slight decrease during the whole period. It is clear that three highest educational categories of women lead to the negative trend of the fertility level decrease and childbirth postponement. By analyzing the changes of birth order, these educational categories showed the most intense changes at first two birth orders. During the investigated period, standardized relative share of first and second born children by these educational categories (aggregate) dropped from three out of four, to two out of three at the end of the period. If the current trends continue, we may expect that less than one out of two of the first and second children will be born by these educational categories (standardized) in 2041. As for childbirth postponement by birth order, and educational level of the mother, the main change may be described as serious postponement of first and second born children and the most serious childbirth postponement of all four birth orders by women with secondary education.

Finally, in the effort to identify potential demographic reservoir for replacement fertility, we found the main carriers of further fertility decline, and overall negative trend in fertility patterns. If we would have to define the main carrier of these trends, it would be the woman under 30, with secondary education attainment. Obviously, the population policy measures were not defined very well because the main carriers of the fertility change have not reacted to these measures at all, not even at the beginning of the period! Things additionally changed, so even the first, and second born children have to be in the focus of population policy. In addition, population policy measures are not defined to stop or slow down the childbirth postponement, obviously that they have to be age specific. It seems not very natural that averagely educated women play so significant role in the fertility level decrease and childbirth postponement. It must be that the long-term socio-economic crisis affected the core of fertile population forcing it to fertility pattern modernization, even the (theoretically) necessary terms have not emerged! Serbia definitely does not have enough money “to buy needed children for the real price”, so the population policy measures do not have to be financially defined, but directed to diminish structural difficulties for future parents. Conclusion of all conclusions is that, at this point, there is no category of women that can provide any demographic benefit in the near future.

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ОРИГИНАЛНИ НАУЧНИ РАД

РЕАКЦИЈА НА ПОПУЛАЦИОНУ ПОЛИТИКУ – КОЈЕ ЖЕНЕ МОГУ НАЈВИШЕ ДОПРИНЕТИ ДЕМОГРАФСКОМ РАЗВОЈУ СРБИЈЕ?

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САЖЕТАК: Мере популационе политике се односе на све фертилно способне жене у Србији а циљ је мобилизација што већег броја фертилно способних жена. Иако се очекивала значајна реакција, нису све жене једнако реаговале на мере популационе политике које су у Србији финансијске природе. У раду је представљен покушај одређивања категорије жена које би у ближој будућности дале значајан допринос демографском развоју, имајући у виду актуелне мере популационе политике. Наша претпоставка је да су године и социоекономске карактеристике пресудноутицале на на реакцију жена. Узимјући у обзир претходне структурне промене код женске популације као и резултате популационих пројекција, покушали смо да утврдимо које су то категорије фертилно способне женске популације која може значајно допринети повећању броја рођених до 2014. године.

КЉУЧНЕ РЕЧИ: популациона политика, популационе пројекције, структура годишта, структура образовања, степен плодности

ECOFEMINISM AS A WAY OF RESOLVING SOME ENVIRONMENTAL ISSUES¹

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ABSTRACT: Women and nature are connected in many different ways: with their biological status, reproductive role, discrimination. That is why ecofeminism stands for one of the main theoretical, philosophical and even practical ways of resolving the environmental problems. The representatives of this thinking find that changing positions and behaviors by leaving the patriarchal approach to everything – to the women and to the nature, can stop the degradation of the environment.

Demographic significance of the women's role, in context of environmental changes, was represented by some feminist movements, as Chipko movement in India, Green Belt movement in Kenya, Love Canal in State of New York, etc. In this paper, the author gives a short overview of connections between women and nature, and proposes some new solutions.

KEYWORDS: ecofeminism, women, nature

INTRODUCTION – WHY ECOFEMINISM?

The nature became a new subject that should be protected in our modern life – it is devastated and ruined, but there is still a chance for it to be saved [Leopold 1948: 2–4]. Only the changing of paradigm regarding our behavior towards nature can save the nature of inevitable total destruction in the future. That can be done by reviewing all general ethical principles from this environmental standpoint.

“A set of moral relations created between the world of humans and the natural world” is called the environmental ethics [Taylor 2011: 18–19]. Some other theorists believe, that environmental ethics is the philosophical discipline that deals only with the moral relationship of human beings to the environment and creatures other than human [Brennan and Lo 2011]. On the other hand,

¹ This paper was created during the work on the project “Biomedicine, Protection of the Environment and Law” No. 179079, financed by the Ministry of Education, Science and Technological Development of Republic of Serbia.

Joseph R. de Jardin believes that “... ethics is an important step in process of making a self-conscious stepping back ... in our own lives as we think about the type of life we lead, how we should act and what kind of people we should be” [Zarden 2006: 31]. Jardin thinks that we should keep in mind that technology and other technical sciences cannot always provide necessary solutions to these problems. We must be fully capable of identifying the problems in this area and who people are responsible to [Zarden 2006: 40]. We must face the truth, we live in the world of risk (societies) in which “unlimited number of actors want nothing to do with one another, who pursue different political goals and who may even live in incommensurable worlds” [Beck 2009: 6]. Modernization is not always the solution, it is even something more – the key problem. We are living in the state of “antagonism of risk” [Beck 2009: 6] – modernization brings some benefits to one part of the population, but it is not that part of population which must bear the costs of modernization.

Women and nature are in the same position; they are observed as passive subjects and because of that, according to the ecofeminists, they are “eligible” to be the subjects of violence and different forms of social inequalities. Women are often seen as “wild” and “untamed” as nature itself. So, men must “tame” the women (and not educate them) in the same manner as the nature: by restricting their freedom and rights (marriage is often seen as a perfect tool for that purpose), or even by means of violence. Nevertheless, there is something “very wrong”, as Vandana Shiva says, if you must use violence in order to communicate and cooperate with other [Shiva 1988: 48].

One of the most comprehensive definitions of ecofeminism is given by K. Warren: “Eco-feminism is a term that encompasses many different viewpoints which are rooted in the different feminist practices and philosophies. All these perspectives do not only reflect the different feminist perspectives (e.g. liberal, traditional Marxist, radical, socialist feminism or feminist movement of black women and women of the Third world), but also the different understandings of nature and solutions to the growing environmental problems” [Warren 1987: 3–20]. So, the ecofeminism is not the environmental movement which is strictly feminine because of the women who lead it or participate in it, but because of its basic similarities between the status of women and nature in the modern world. The basic premise of ecofeminism is that “ideology which authorizes oppressions, based on race, gender, class, sexuality, physical abilities and species is the same ideology which sanctions the oppression of nature” [Gaard 1993: 1–2]. That patriarchal framework is present in relations and behavior to nature in the same manner as it is leading principle in communication with women.

The first papers constituting ecofeminism appeared in the 1970s, although some authors think that true origins of this concept could be found in the work of Mary Woollstoncraft² in 1792 [Ćorić 2013: 295; Green 1994: 119]. The patriarchal approach to environmental problems, as well as serious damage done by adopting that approach, is the reason why environment has been the subject of numerous works of ecofeminists until today.

² Woollstoncraft, M., *Vindication of the Rights of Women* (with Structures on Political and Moral Subjects), available on: <http://www.bartleby.com/144/>.

Gender perspective has become a necessary element in the theoretical and practical guidelines; we find it in international treaties and reports of international organizations³. For example, Agenda 21, adopted by the United Nations conference in Rio de Janeiro in 1992, says that women should be more engaged in combating deforestation, in planning and management of land resources, etc. The motives for adoption of this document are very important for ecofeminism and all feminists' issues: "tribute to the solidarity with global women's caucus... and helping to build a world in which women and men all share responsibilities and the rewards..."⁴. It was noted that there is a "pressing need to centralize women's issues and to ensure the incorporation of their collective perspectives, experiences and contributions to sustainable development"⁵.

Gender equality policy has expanded, not only as a requirement for increased participation of women in political life, but also in other forms of social activities. "Engendering" all action plans and policies at all levels, local to global, has become constant of the modern world. Ecofeminism is based on gender perspective that is taken as an active component of the process of environmental protection [Baćanović 2011: 7].

PRESUMED CONNECTIONS BETWEEN WOMEN AND NATURE

Karen Warren identified eight kinds of connections [Warren 1991] between women and nature using the experiences of herself and her colleagues.⁶ We can say that those connections provide insight to a variety of positions of ecofeminism, and consequently to ecological (feminist) ethics. Although some of the listed connections could be sometimes mutually complementary or supportive or competitive, they all have one thing in common – they are all valuable sources and grounds for ecofeminism itself.

1. Historical (causal) connections. There is a long history of struggle against patriarchal culture and its outcomes: deprivation, discrimination and humiliation. Also, "when historical data are used to generate theories concerning the sources of the dominations of women and nature, it is also causal" [Warren 1991]. Aldo Leopold, at the beginning of his *The Land Ethic* [1948], debates about Odysseus and his act, after returning home. He hung twelve maids for their unethical behavior. They were simply things and he was not

³ A list of international treaties and reports of international organizations that deal with women's issues is available on: https://www.unfpa.org/webdav/site/global/shared/documents/publications/2009/climateconnections_2_policy.pdf. This list is not final.

⁴ Capeling-Alakija, S., Message from the UNIFEM Director, available on: <http://www.gdrc.org/gender/a21/agenda1.html>

⁵ Strong, M., Message from the UNCED Secretary-General, available on: <http://www.gdrc.org/gender/a21/agenda1.html>

⁶ During her work on identifying the connections, Warren has assisted on the works of rather significant authors such as: Ariel Kay Salleh, Charlene Spretnak, Vandana Shiva, Val Plumwood, Ynestra King, Carolyn Merchant, Maria Mies. All those works were cited and used in Warren's analysis of possible connections between women and nature, and consequently, possible theoretical grounds for ecofeminism. A great bibliography of these ecofeminists' work can be found at the end of the Warren's paper.

sad about it. That was not the question of life and death, or if his action was fair or not, but if he was the owner of the property or not. So, the dominant patriarchal culture must be – “reeducated” and changed.

2. Conceptual Connections. There are so many ways to connect historical and causal links between the dominations of women and nature with conceptual structures of domination that construct women and nature. Authors with this viewpoint⁷ think that “female bodily experiences (e.g. of reproduction and childbearing) situate women differently with respect to nature than men” [Warren 1991]. Women and men have different views on almost everything, especially in the area of protection of environment. “There is a pain that nature feels, that could be understood only by a women” [Warren 1991].

3. Empirical and Experiential Connections. Warren thinks that ecofeminists have focused on discovering empirical evidence linking women with environmental destruction. Women, who are fragmented and divided in different social, and some vulnerable groups, are disabled from reacting properly in situations where the response is required.

4. Symbolic Connections. Symbolic connections between women and nature are visible in religion, theology, art, literature. For example, Gaia is the alternative spiritual symbol depicted in the form of a woman. On the other hand, language can be rather discriminating weapon used against the women, particularly if we have in mind sexist language – “language that inferiorizes women and nonhuman nature by naturalizing women and feminizing nature” [Warren 1991]. We think that we maybe honor the Earth by saying: Mother Earth, but in fact we deceptively show subordination of men over women and nature.

5. Epistemological Connections. According to Val Plumwood, if there is a need for symbolic view of feminine side in ecology, why not providing a new, specific epistemology? This should give “a broader political aspect of the critique of instrumentalism” [Plumwood 1991: 3–37].

6. Political (Praxis) Connections. From the very first time when Françoise d’Eaubonne introduced the term “ecofeminism” in 1974 (this coined term was first mentioned in her work: *Le Feminisme ou la Mort*) in order to emphasize women’s potential for ecological revolution, ecofeminism has become a classical political movement. Although it has specific background, ecofeminism has the same basis as feminism, in general, or ecology itself, when seen from another point of view.

7. Ethical Connections. Ecofeminism is part of environmental ethics, in the same manner as deep ecology, new animism, and many other ecologically inspired philosophical or ethical standpoints. Some say that nature requires a feminist ethical analysis and response and that we must develop “ecofeminist ethic of care and appropriate reciprocity” [Warren 1991].

8. Theoretical Connections. This kind of connection between women and nature is tightly linked to ethical connections.

⁷ Warren here mentioned the works of Plumwood, Grey, Ruether and Salleh, which are all focused on exposure and dismantling of the conceptual structures of domination which have kept various “isms of domination”. More on that in: Warren, K. J., *Introduction to Ecofeminism*, available on: <http://environmental.lilithzine.com/Introduction-to-Ecofeminism.html>.

We must say that this list of possible connections between women and nature is not final. There may be some connections that could include two or even more of the above listed connections (for example, ethical and theoretical connections, or historical and conceptual connections as well).

EARTH DEMOCRACY

One of the most prominent movements related to the ecofeminists is the Earth democracy. Vandana Shiva [Shiva 2006: 40–45] talks about *Earth Democracy* – the ancient principle that includes peace, justice and sustainability, which connects the individual with the universal, different and usual, local with global.⁸ She quoted the chief of an Indian tribe who said that they find it impossible to buy the sky, heat and earth, because these are things that belong to nature and not to other people from whom you can buy it. Nature cannot sell its resources; it offers them unconditionally to everyone, asking only that its consumers care about it and keep it safe and sound. Man belongs to the nature, and it is not the other way around. Democracy of Earth is, therefore, discovering all previous principles and fusing them into a single principle: *protection of environment*. Although focused on India, this doctrine can be, in our opinion, applied to other countries and cultures as well.

CONCLUSION

Why is ecofeminism so significant? “Vision of female liberation, social inequalities and, ultimately, social justice associates with the affirmation of degraded areas and subordinate non-human nature. Thereupon, the promotion of eco-feminist ethics, which is basically a partnership, is promotion of freedom from the dualisms of Western intellectual thought and male-gender bias about women and nature” [Buzov 2007: 1–16].

Karen Warren [Warren 2000: 34] finds that ecofeminism has its roots in all areas of feminism. She claims that in the developing countries more women than men depend on the nature and its resources, primarily on the trees and fruits thereof. Women are the primary victims of environmental degradation, and in particular the destruction of forests. Also, women are faced with customs and taboos which are not known to men. Having that in mind, Warren thinks that “trees, forests and forestry in particular are ‘women’s matter’ for conceptual reasons” [Warren 1991]. For example, “The Chipko” movement [Jain 2000] in India arose from the protection of trees, namely “hugging” the trees⁹ in

⁸ More on Earth democracy and its principles: Earth Democracy-Ten Principles of Justice, Sustainability and Peace, A supplement to Earth Light Magazine 47, Fall/Winter 2002/03, available on: http://www.earthlight.org/2002/essay47_democracy_pff.html.

⁹ Famous Indian poet Ghanasyam Raturi, also the Chipko poet, wrote a poem describing the method of embracing the trees to save them from falling:

*Embrace the trees and
Save them from being felled;
The property of our hills,
Save them from being looted.*

Available on: <http://edugreen.teri.res.in/explore/forestry/chipko.html>.

order to prevent their cutting. Besides Chipko movement, there is also *Love Canal* movement named after the area in the vicinity of Niagara Falls¹⁰ which in the 1970s suffered ecological disaster due to leakage of toxic waste. *Green belt movement* was also founded in the 1970s in order to help rural women in Kenya to preserve woods and soils.¹¹

Ynestra King believes that feminism and ecology contain primordial rebellion scream against the human (male) domination, and against any kind of domination. *Genus proximum* here is a demand to re-think the relationship between humanity and nature. Present dualisms, such as body and soul, mind and heart, men and women, nature and society, are not that important because the time has come to unite and transform the society and to prevent domination that could destroy the world [King 1990: 112].

Fosters of the future generations, women and nature, are constantly under threat [Mayer 1994]. Their existence, according to the representatives of ecofeminism [King 1990: 110; Warren 1991; Warren 2000], is on the edge of viability. However, changes of policies, which countries make due to their commitments to international conventions and bodies, remains largely on paper, while the mass destruction of nature in the name of people is continuing.

On the other hand, there are many critics regarding the return to nature and symbiosis with nature.¹² Historical and social conditions of our ancestors, according to these authors, were such that they would not take from nature more than they really needed. Modernization of society leads to an increase of numerous needs¹³ regardless of whether they come from renewable resources or not.

After this short overview, we can say that ecofeminism brings new energy and a bit fresh, different view on environmental problems and their resolving. Ecofeminism, with its specific, although sometimes different approaches emphasized what is important: giving the true importance to the roles of women and nature. That is the main reason for further development of this ethical conception and also for its implementation in the real life solutions.

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¹⁰ More about this: <http://www2.epa.gov/aboutepa/love-canal-tragedy>.

¹¹ More about this on: <http://www.greenbeltmovement.org>.

¹² For example, see debate on GMO crops between Vandana Shiva and Michael Specter, available on: <http://www.newyorker.com/magazine/2014/08/25/seeds-of-doubt>.

¹³ Or, there is a need for increasing profit.

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ЕКОФЕМИНИЗАМ КАО НАЧИН РЕШАВАЊА НЕКИХ
ЕКОЛОШКИХ ПИТАЊА

ДРАГАНА ЂОРИЋ

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САЖЕТАК: Жене и природа вишеструко су повезани: биолошким статусом, репродуктивном улогом, дискриминацијом. Зато је екофеминизам један од основних теоретских, филозофских, па чак и практичних начина којим се могу решавати еколошки проблеми. Поборници ове идеје сматрају да другачији ставови и понашања, који би били резултат напуштања патријархалног приступа свему, па и жени и природи, могу зауставити уништавање природе.

Покрет „Chipko” из Индије, „Green Belt” (Зелени појас) из Кеније, „Love Canal” (Љубавни канал) из државе Њујорк итд. указују на значај жене с аспекта демографије, а у контексту промена које се дешавају у природи. У овом раду аутор даје кратак преглед веза између жене и природе и предлаже нека нова решења.

КЉУЧНЕ РЕЧИ: екофеминизам, жене, природа

REGIONAL AND DEMOGRAPHIC DEVELOPMENT OF
THE WESTERN BALKANS
РЕГИОНАЛНИ И ДЕМОГРАФСКИ РАЗВОЈ ЗАПАДНОГ БАЛКАНА

UDC 314(497.113 Fruška gora)
UDC 314.116(497.113 Bešenovo)
DOI: 10.2298/ZMSDN1448559D
ORIGINAL SCIENTIFIC PAPER

DEMOGRAPHIC CHARACTERISTICS AND LIFE
SATISFACTION IN SETTLEMENTS OF FRUŠKA GORA
MOUNTAIN REGION: BEŠENOVO CASE STUDY

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ABSTRACT: Serbia has been facing an economic crisis for the last two decades, which is one of the causes of poor demographic situation in the country. Along with low or negative rates of population growth and ageing of population, the majority of municipalities in Vojvodina have a negative migration balance. Vojvodina is characterized by long-term trend in the decrease of young population and the increase of old population. These two processes are affected by low birth rate and life expectancy increase. The bad economic situation and the ageing of population are especially apparent in mountainous areas and peripherally located settlements. This situation has not bypassed Bešenovo, mountainous village of Fruška Gora. Field research and conduction of the questionnaire have found out that the population of this village is not satisfied with the basic living standard.

KEYWORDS: Fruška Gora, demography, mountain region, living standard

INTRODUCTION

In Serbia, there is a large depopulation across the country and a large concentration of population and industry in a few cities only. Level of economic development of some towns in Serbia stems from their geographical position which is in a number of cases the cause of functional isolation in relation to economic centres and development centres. This often results in slow development processes [Miljanović, Miletić and Đorđević 2010]. Such trends have negative consequences in the economic, social, spatial and ecological sphere [Đorđević and Todorović 2006]. Undeveloped areas of Serbia are mainly characterized by a high degree of isolation in relation to neighbouring regions and unfavourable demographic and economic picture [Đorđević 1994; Đerčan, Bubalo-Živković and Lukić 2010]. It seems that the situation is worst in the mountainous areas.

Today, mountainous areas in Serbia and the rest of the world are faced with many problems. Due to the poor quality of transport infrastructure or the complete absence of any roads, a lot of the mountainous rural communities are isolated in terms of space and time. Consequently, mountainous areas today are at risk of depopulation and population ageing [Lampič and Potočnik Slavič 2007]. Modern lifestyles and standards of living, along with the general development of technology, industrialization and urbanization, bring completely different aspects of development into the life of the population in mountainous areas.

The state of the rural area is entirely worrying and the problems are mostly pronounced in the mountain areas. The depopulation is enormous which results in processes of deagrarization. Because of this, the interest for revitalization and infrastructural management, as well as supply for the populated areas, is very small [Đerčan, Bubalo-Živković and Lukić 2010].

European Commission (2004) determined the typology of mountainous regions based on statistical data, taking into account both social and economic indicators. The typology includes five categories based on population density, standard of living and access to market:

- Areas with best developmental preconditions
- Areas with high potentials for development but with negative demographic trends
- Areas with low population density in the vicinity of densely populated areas
- Remote areas with low population density
- Remote areas with high population density

In accordance with accessibility criteria, the following has been taken into consideration: transport infrastructure, national and regional accessibility, services (high education, health institutions – clinical centres). In line with it, four categories have been determined: very good, good, fair, bad.

Indicators of quality of life equally integrate objective and subjective elements. Since the objective circumstances of the quality of life of individuals are usually difficult to measure, these indicators must be combined with subjective judgments. These are primarily questions that determine personal opinion of the individual. The most commonly asked questions relate to life circum-

stances of the individual, but also the common questions are those about the general level of happiness [Di Tella, Haisken-De New and MacCulloch 2010]. Such questions measure fears, confidence, feelings about the future [Royo and Velazco 2006; Diener *et al.* 1993]. Many sociologists have examined the relationship between individual satisfaction and satisfaction with life in general. Diener and Suh [1997] speak specifically about indicators of economic, social and subjective well-being of a person. According to Diener's definition, the subjective quality of life is actually how people evaluate their lives, including happiness, satisfaction with their own lives, pleasant feelings as well as the relative lack of unpleasant feelings and moods.

Using data about satisfaction with life circumstances aims to show the quality of life in a country, town, or in a particular social group [Ferrer-i-Carbonell 2005]. Thus, we usually estimate level of a social problem and recommend possible intervention of government services. The high level of satisfaction suggests that the quality of life is good. The low level of satisfaction indicates serious flaws in society [Veenhoven 1996]. Households dissatisfied with living conditions often decide to emigrate looking for job or other benefits of economically wealthier urban areas.

Numerous examples of depopulation in mountainous regions can be found in the Republic of Serbia. In this case, the village called Bešenovo is analyzed.

PLACE OF RESEARCH, METHODOLOGY AND SAMPLE

Mountainous village of Bešenovo in the municipality of Sremska Mitrovica was selected as a place of research. The village is located at 151 m above sea level, peripherally on the slopes of Fruška Gora [Solarević and Đerčan 2012]. According to Đ. Simonović and M. Ribar's typological scale [1993], Bešenovo with 841 residents is one of the villages of medium size. It was presumed that Bešenovo is characterized by negative demographic trends and population is not satisfied with life in this village.

The work uses the results of the Census of 2002 and 2011, as well as demographic data obtained by special processing of data of the Statistical Office. In order to credibly show the life in mountainous areas, there was conducted a field survey and its results are used as a supplement in making objective image derived from official statistical results. Field research was conducted from the 10th to the 20th of June, 2014. The survey was conducted through a questionnaire. A combined sample was applied. The sample is at the same time appropriate because the research involved only residents willing to participate. All questions in the questionnaire were closed. Questions were asked in the form of sentences, and the responses were measured using a Likert scale [Turjačanin and Čekrija 2006].

The sample included 50 respondents, or about 6% of the population of the village. The demographic structure of the sample had a slightly higher number of women (51%) compared to men (49%). The largest number of respondents was aged 46–59 years (39%), followed by 32–45 years (33%), 18–31 years (20%) while the lowest number of respondents was in the age group over 60 years (8%).

The largest part of the sample consisted of respondents who were unemployed (63%), followed by employed (25%), and pensioners (5%). By level of education most of the sample consisted of respondents with primary education (62%), followed by respondents with secondary education (33%), respondents with college or university education (4%), and the lowest number of respondents have not completed primary school (1%). According to the amount of monthly income, most respondents have an income of up to 200 euros (52%), followed by those with income of 200 to 400 euros (35%), and the lowest number of respondents have a monthly income of over 600 euros (2%). The largest number of respondents (29%) comes from the three-member households, followed by respondents from households with two members (25%), one-person households (20%) and the four-member households (15%). The smallest proportion of respondents is from households with five or more members (11%). Percentage share of respondents is in line with the overall structure (gender, age, education).

Authors-researchers had sorted out properly completed questionnaires and then entered and processed the obtained data in SPSS 17.0. for Windows. The results presented were obtained from the statistical analysis in which four types of analysis were applied: descriptive statistical analysis, application of the chi-square test, t-test for independent samples and ANOVA. To determine the significance of differences between groups post-hoc Scheffe's test was used.

RESULTS AND DISCUSSION

In the first half of the 18th century, Bešenovo was a small village with only a few dozen homes. In 1756, the village had 50 homes and in 1774 it had 109 homes. Faster growth began in the late 18th century and in 1787 it had 870 residents. This trend continued in the early next century. Growth was soon interrupted and Census in 1850 registered only 951 residents. Since the second half of the century, censuses have carried out regularly and Bešenovo com-

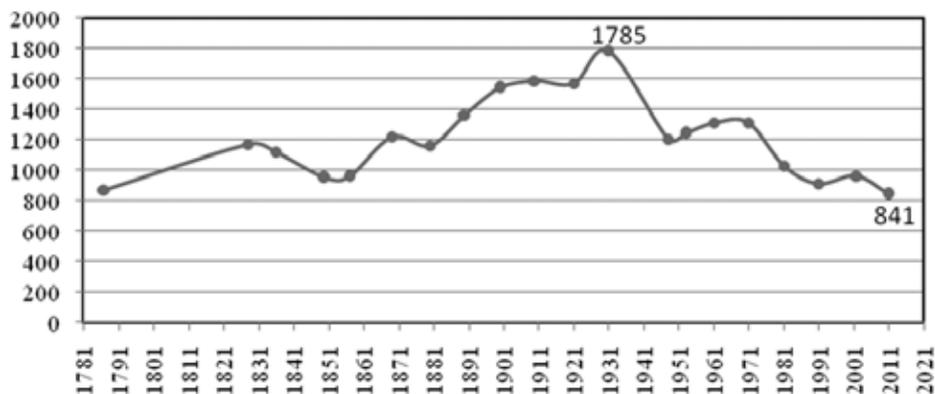


Figure 1. Trends in population in the period 1787–2011

Source: Čurčić, Đuričić and Marjanović, 2002; Statistical Office (Census 2002 and 2011)

prised the population of the neighbouring Prnjavor (until 1981, when Prnjavor was first separately registered).

The figure shows that the population decline occurred after the Census of 1931 (when the maximum was recorded), specifically during and after the Second World War, when the nearby Prnjavor was burned and displaced. After the war, there was a slight increase in population as a result of post-war colonization, especially in the period 1961–1971. The general trend follows the trend of population decline at the national level as a result of the ageing of population (increasing mortality) and emigration, which, with a minimum birth rate in the inter-census period gives negative natural increase [Solarević 2009].

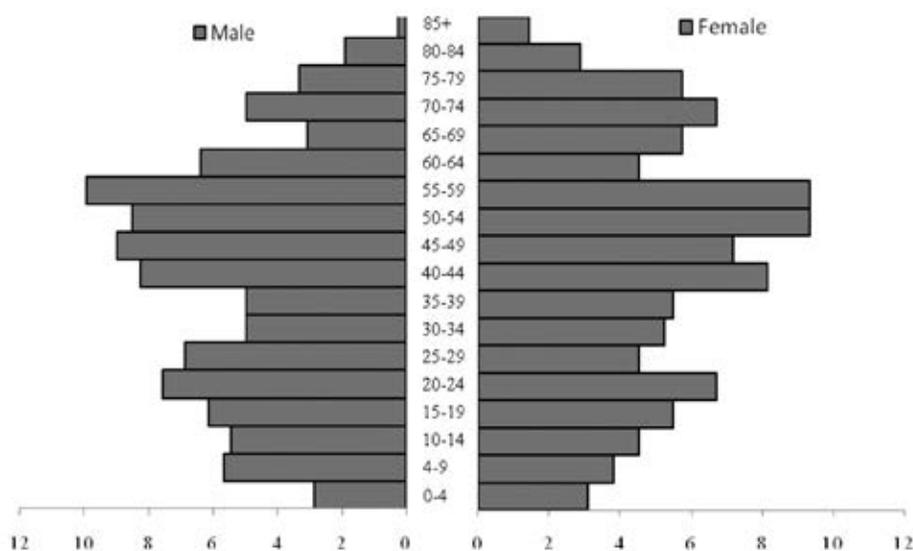


Figure 2. Age pyramid of the population according to Census 2011

Source: Statistical Office, Census 2011

The figure clearly shows that the age structure of male and female population of Bešenovo is dominated by older people as a result of longer life expectancy and decline in fertility and birth rates that would contribute to expanding the base of the pyramid and appearance that would suggest stationary or regressive population. The appearance of the age pyramid coincides with the trend across the country, and this is configuration that is defined as a regressive type, because the pyramid is widest in the middle part and at the top, which shows the increasingly high ageing of population. It will inevitably lead to a drop in population in the next census, due to the increased number of people entering the age group with potentially highest mortality rate.

In 2011, the largest age groups were 55–59 and 50–54, and this is the category that is already out of the reproductive period and can not contribute to an increase in the birth rate, and therefore the natural growth. Category of

children up to 4 years is among those with the lowest share. The fact that the share of old population in the future will be even greater, because the proportion of middle-aged population is greater than half of the total population, is concerning. The average age increased from 40.2 years (2002) to 43.2 years (2011), which is above the national average (42.2).

The ageing index (i) is one of the most reliable analytical indicators of the age structure of the population and thus the process of demographic ageing. It expresses the relationship between old and young population, and a critical value is 0.4 or 40%. Population, where the relationship has higher values, is characterized by ageing and vice versa, if the index is less than the threshold value, the population is young. The ageing index in Bešenovo is 1.26, which indicates that the old population has exceeded the share of young population and as a result, shown pyramid emerges and the village disappears in terms of population. Coefficient of age (k_s) only takes into account the relationship between the individual major age groups and the total population. When the proportion of persons aged 60 and over reaches 12%, it is considered that the population has begun to age, and the ratio of Bešenovo has a value of 23.42%, which confirms earlier findings.

According to the Census of 2002, there were 45.9% of active persons in Bešenovo, 14.1% of persons with personal income and 40% of dependents. There is a trend of growing share of dependent population, which is in Bešenovo represented by a significant proportion of the older population that does not receive a pension, and if we add the population registered as pensioners, then this share is very high, and it is more than a fifth of the total population [Solarević 2009].

Bešenovo has the highest percentage of people with incomplete primary education, and there is growth in number of persons with a secondary school diploma, while the share of highly educated population is insignificant, therefore, still present high illiteracy is not surprising in Bešenovo. In Bešenovo, according to the Census of 2002, there were recorded 290 households, out of which 239 family households and 51 non-family households. According to Census of 2011, the number of households has decreased and amounted to 271, which is not a significant decrease compared to the population decline, indicating a consistently large proportion of single (53) and two-member (67) households (together 44.28% of the households). These are predominantly households of older population, and this means that almost in half of the households in Bešenovo there live one or two people (mostly older). This decrease in the following Census will be bigger because of the expected rate of mortality in these categories, and households will be turned into empty and abandoned houses. The average number of members is 3.10.

Migrations did not favour village. More people regularly emigrated than immigrated to the village. Migration balance was negative, and such it remained to this day. In the decade from 1961 to 1971 village was left by 78 people more than people who moved in, so that a remarkable population growth (79 people) increased population only by one resident. In the following two decades, balance was -140 and -185 persons, which far surpassed population growth (5 to 60 people) and led to a striking depopulation. In the decade from 1991 to 2002 somewhat larger population immigrated (137), which contributed to the increase in population between the two censuses. This is largely the

population that fled after 1991 and during the civil war from Croatia and Bosnia and Herzegovina (mostly in 1995 from Croatia). After that, immigrants prevailed, especially younger age groups, looking for a job and a better economic situation, and there is an increasing permanent departure of highly educated population, and their staying in larger towns where they were educated. A particular problem is the postponement of marriage, which led to a large number of male unmarried population aged over 45, remaining to work on the farms, and then, after the death of their parents falling into a category of single-person households thus not contributing to the reproduction of the population.

Such migration characteristics have contributed to the fact that this village gets into a group of settlements with a minimum population of immigrants, and more common forms of migration are weekly and daily due to the high mobility of younger people [Ćurčić, Đuričić and Marjanović 2002]. According to a general coefficient of commuting, Bešenovo falls into the category of medium-active migratory settlements. According to a functional typology it is an agrarian settlement (60.1% of the working population is in the primary sector), and according to the criteria of functional dependencies is among the partially dependent settlements. Analyzed demographic and functional characteristics suggest that this village does not represent an attractive place for life and work. Conducted survey research gave subjective indicators of personal views of individuals on these topics.

Respondents were surveyed about satisfaction with life circumstances. On a scale ranging from 1 to 5, they evaluated the satisfaction with certain elements of living standards (Table 1).

Table 1. *Elements that influence the quality and satisfaction with life circumstances*

| Elements of satisfaction | | 1 | 2 | 3 | 4 | 5 |
|---|---|------|------|------|------|------|
| Traffic connections (sufficient number of bus and rail lines) | % | 50.7 | 22.9 | 17.1 | 7.1 | 2.1 |
| The quality of the roads in the village | % | 37.9 | 28.6 | 17.1 | 15.0 | 1.4 |
| Electrification of village | % | 13.6 | 7.9 | 20.7 | 30.7 | 27.1 |
| Water supply network | % | 13.6 | 11.4 | 22.1 | 28.6 | 24.3 |
| Sewerage network | % | 43.9 | 37.5 | 17.7 | 0.9 | 0,0 |
| Gas network | % | 69.3 | 15.4 | 12.1 | 2.2 | 1.0 |
| Mobile phone network | % | 10.7 | 7.9 | 18.6 | 24.3 | 38.6 |
| TV signal | % | 22.1 | 15.0 | 26.4 | 15.0 | 21.4 |
| Internet | % | 27.1 | 9.3 | 22.1 | 22.1 | 19.3 |
| Hygiene in village | % | 28.6 | 25.0 | 23.6 | 15.0 | 7.9 |
| Preschools | % | 10.7 | 15.7 | 35.7 | 22.9 | 15.0 |
| Elementary schools | % | 11.4 | 11.4 | 25.7 | 28.6 | 22.9 |
| Diversity of content for children and adults | % | 31.4 | 22.1 | 29.3 | 12.9 | 4.3 |
| Provision of medical services | % | 18.6 | 25.0 | 27.1 | 12.1 | 17.1 |
| Prices of products and services | % | 40.0 | 31.4 | 20.0 | 8.6 | 0.0 |
| Quality of products and services | % | 25.7 | 29.3 | 23.6 | 15.0 | 6.4 |

Traffic connections, sewer and pipeline networks have proved to be major problems because more than half of the respondents expressed their full dissatisfaction, while full satisfaction was expressed by the lowest percent of respondents. Satisfaction with the infrastructure network can be regarded as positive when it comes to electrification of villages, water supply network and mobile network, because about 70% of respondents reported partial or full satisfaction. Provision of medical services in the majority of cases (27.1%) was rated grade 3, which means that the respondents were not able to accurately determine the level of satisfaction with medical services. Surveyed residents also expressed their dissatisfaction (over 50%) in terms of the variety of content for children and adults. Generally speaking, population of Bešenovo is not satisfied with the quality and prices of products and services. Dissatisfaction with the quality of products and services was reported by more than 50% of respondents, and dissatisfaction with prices about 70% of the respondents. Interestingly, none of the respondents expressed their full satisfaction with prices.

Based on the results of t-test we see that the male population is more satisfied with certain elements of the standard of living, such as transport links, quality of roads and water supply network, while the female population is more satisfied with the availability of children's and educational institutions. Also, women are more satisfied with the prices and quality of products and services. In respondents of different ages can be seen statistical significance at the level of significance of $p < 0.05$ for attitudes of respondents when it comes to the variety of content for children and adults. Based on factorial analysis and post-hoc Scheffe's test ($F = 3.685$, $p = 0.014$) the biggest differences were found between respondents in the age category of 18–31, who were not satisfied with the quality and accessibility of such content and older people in category of 46–59, who had a positive attitude towards these. Generally speaking the older categories of persons aged over 45 are more satisfied with tested elements of the standard of living compared to younger respondents. Younger categories of the population are working-age people and want better living conditions in their neighbourhood.

Regarding the attitudes of respondents of different education levels, a statistically significant differences at the level of significance of $p < 0.01$ or $p < 0.05$ are observed only in the Internet availability ($F = 3.464$, $p = 0.018$), where respondents with higher levels of education consider that this element is available to them to sufficient extent and respondents with primary school, who are not satisfied with the availability of this element. Analysis of the results obtained from attitudes of respondents of various occupations does not show the existence of major differences in attitudes within these groups.

In the analysis of the attitudes of those who have different monthly income, statistically significant differences are observed at the level of significance of $p < 0.01$ for question relating to the quality of the roads in the neighbourhood ($F = 5.376$, $p = 0.002$). In this element, there is a distinguished group of respondents with higher incomes than 600€ per month, who are very dissatisfied and people with lower monthly income, who are satisfied with the quality of roads in their neighbourhood. As far as the other elements of the standard of

living are concerned, people with higher monthly incomes are dissatisfied to a higher extent in relation to people with lower incomes.

To the questions about satisfaction with the quality of life, responses were discouraging (Table 2). The largest portion of respondents (45.7%) were partially satisfied with their lives, followed by people who are not satisfied (44.3%) and the lowest percentage of respondents is satisfied (10.0%).

Table 2. *Level of satisfaction with life in the border region*

| Are you satisfied with life in Bešenovo? | % |
|--|--------|
| Yes | 10.0 |
| Partially | 45.7 |
| No | 44.3 |
| Total | 100.00 |

Data obtained using the chi-square test, when it comes to answers given by respondents of different gender, show that a slightly higher percentage of women are satisfied with their standard of living in comparison to men. If we look at the age structure, the most dissatisfied is the younger population aged from 18 to 31 and from 32 to 45. When it comes to employment, employees are a category of respondents who are most dissatisfied with their living standards. On the basis of education, the greatest dissatisfaction is manifested by persons with secondary education. When we talk about monthly income, those persons whose income is below 200€ per month are most dissatisfied. Based on these findings, we conclude that the differences in perception exist, but they are small and not statistically significant.

CONCLUSION

Research of demographic statistics showed that unfavourable demographics of this village is characterized by high mortality as a result of high average age of the population. The current structure of the population does not provide the conditions for the improvement of demographics in the future. The ageing of population and the deterioration of vital characteristics over a long period create the problem of providing a sufficient share of working-age population.

It is likely that this problem will not be solved soon, because there are fewer and fewer young people, and most of them are going to the cities, there is no natural growth, the highest percentage of the population consists of middle-aged and elderly people, and therefore the population is increasingly diminishing in number. It is essential that the awareness of residents is much higher in terms of family planning, getting married, finding employment, in terms of contribution to rural development, but also it is necessary to obtain much greater cooperation with the local government of the municipality, the allocation of more funds for Bešenovo, and many other villages that have problems of this kind.

In the empirical study of quality of life, it was concluded that the views of respondents are most affected by economic possibilities. Positive or negative attitude about perception of own living standards, respondents formed primarily on the basis of average earnings and employment. The analysis shows that the population of Bešanovo is not fully satisfied with living conditions and slightly or moderately satisfied with the basic elements of living standard. These findings confirm the initial assumptions. The biggest problems are low incomes and lack of employment.

Mountainous areas such as Bešanovo are on the economic and social margins of development resulting in permanent emigration, depopulation and economic crisis. Despite numerous opportunities for the development, these regions are classified as underdeveloped regions that are barely surviving. Today, the mountainous rural regions face sudden and rapid changes in their natural environment, economy and society. Although there are numerous opportunities for progress in synergy of agriculture, tourism and small family industry, the main problems are lack of motivation and lack of planning. The existence of mountainous regions depends on the attractive opportunities that are acceptable for the younger population. In order to keep young population in the mountainous rural areas, it is necessary to create new jobs. Also, the existing infrastructure needs to be rebuilt. Job creation is just one step towards prosperity of mountainous rural regions. In addition, numerous social and cultural activities should be restored.

ACKNOWLEDGMENTS

The authors would like to express their sincere gratitude to the Provincial Secretariat for Science and Technological Development of the Vojvodina Province, Republic of Serbia – Project No. 114-451-3602/2014-01, for the financial support.

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ДЕМОГРАФСКЕ КАРАКТЕРИСТИКЕ И ЗАДОВОЉСТВО ЖИВОТОМ У
НАСЕЉИМА ФРУШКОГОРСКЕ РЕГИЈЕ: СТУДИЈА СЛУЧАЈА БЕШЕНОВО

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РЕЗИМЕ: Србија се суочава са економском кризом у последњих двадесет година, што је један од разлога лоше демографске ситуације у земљи. Поред ниских или негативних стопа природног прираштаја и старења становништва, већина општина у Војводини има и негативан миграциони салдо. За Војводину је карактеристичан дугорочни тренд смањења младог становништва и пораста старије популације. Ова два процеса су условљена ниским стопама фертилитета и наталитета и повећањем очекиваног трајања живота. Лоша економска ситуација и старење становништва су нарочито присутни у брдско-планинским подручјима и периферно лоцираним насељима. Ова слика није заобишла ни Бешеново, планинско насеље на Фрушкој гори. Депопулација је присутна од 1931. године, уз мало повећање броја становника током послератне колонизације. Према попису становништва из 2011. године просечна старост у Бешенову износила је 43,2 године, индекс старења био је 1,26, а коефицијент старости 23,4%, што говори да је старо становништво премашило удео младог и условило нестајање села у популационом смислу. У емпијском истраживању квалитета живота дошло се до закључка да на ставове грађана највише утичу материјалне могућности. Позитиван или негативан став према доживљају свог животног стандарда испитаници су формирали првенствено на основу просечних примања и запослености. Анализа показује да становништво Бешенова није у потпуности задовољно животним приликама и да је мало или средње задовољно основним елементима животног стандарда. Као највећи проблеми наводе се мала примања и немогућност запошљавања.

КЉУЧНЕ РЕЧИ: Бешеново, Фрушка гора, демографија, планинска регија, животни стандард

UDC 314.15(497.11:439)
UDC 005.96(497.113)
DOI: 10.2298/ZMSDN1448571G
REVIEW SCIENTIFIC PAPER

THE IMPACT OF EMIGRATION FROM SERBIA TO HUNGARY ON THE HUMAN RESOURCES OF VOJVODINA

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ABSTRACT: In the recent decades the migration processes and circular migration are increasing worldwide and have become more and more complex. There has been a new type of international migration – back and forth international migration. Nowadays, job seeking in the international space, brain circulation, multiple citizenship and identity, property ownership and consumption at the place of origin and at destination residence result in completely new lifestyles in Central and Eastern Europe, too. After the disintegration of the socialist regime both in Serbia and Hungary, new types of emigrants from Serbia appeared in Hungary, namely students, highly qualified workers, entrepreneurs, elders and circulars. The most recent types of migrants along the Serbian–Hungarian border area are: economic emigrants (emigrant physical workers); creative class (entrepreneurs, businessmen, international traders); circulars and seasonal emigrants, as well as students.

The hypothesis of this work is that the main motive of emigration from Serbia to Hungary is the economic motive, especially job-seeking. The analysis of emigration from Serbia to Hungary is based on the interviews and questionnaire-based research obtained among emigrants from Vojvodina to Hungary, who were living in Hungary or commuting there regularly between 2010 and 2013. The obtained data prove the hypothesis. The economic motives are present even when the emigrants do not stay in Hungary, but move off to more developed countries of the EU.

KEYWORDS: emigration, the motives of emigration, Vojvodina, Hungary

INTRODUCTION

Population is one of the key factors of social and economic development of each country. Due to different levels of economic development, life standards, and political stability in different countries, population is often moving to other countries. Migration processes significantly influence the demographic and economical situation of each country.

According to Jordan and Düvell [2003], migration is representing the movements of people across political borders. Consequently, they are transnational processes. The transnational concept describes the phenomenon of migrants, who are living in a foreign country but do not cut off their relations (family, cultural, business, civilian, and religious) with the home country. Transnationalism means higher variations in the length of residence time at the new place, higher seasonal variations, higher frequencies of cross border mobility, creation of multi-dimensional (economic, political, cultural, linguistic) transnational social areas. These activities and relations are present at the same time among more nations. Transnational and peripatetic lifestyles have been emerging along the border zone with heavy travels, property purchases and changes of working places. The complete integration is not necessary in the destination areas because of the frequent spatial movements. On the other side of the coin, new kind of problems of identity crisis has been emerging among transnational migrants.

The focus of this paper is emigration from Serbia to Hungary. The aim of this paper is to present the types of emigrants and their motives, as well as their transnational relations in the Serbian-Hungarian cross-border region.

THE CHARACTERISTICS OF EMIGRATION PROCESSES FROM VOJVODINA IN THE 1990s

Migration and transnational relations are regular phenomena in Central and Eastern Europe. Migration was one of the peculiarities of the population in the former Yugoslavia and nowadays it is characteristic for the inhabitants of Serbia and its northern multi-ethnic province, Vojvodina, too.

The massive emigration from former Yugoslavia had begun in 1960s. On the basis of the 1971 census, the number of migrants was 750,000 [Statistical Institute of Serbia, 1985] according to the official estimates; at the end of 1973, there were about 1,150,000 Yugoslav migrants in Western Europe [Grečić 2002].

The emigrational territories (from where the labour force emigrated) were not the most developed regions of Yugoslavia, nor the most densely populated ones where living circumstances were harsh. Migration was encouraged by the unemployment and dissatisfaction with social-financial standards. The rate of emigration from the present territory of Serbia was the highest in Vojvodina, though this part of the country was the most developed. Within Vojvodina, the most intensive emigrational regions were the relatively underdeveloped South Banat and North Bačka, which, on the other hand, was economically and culturally the most developed area.

In the 1990s, the proximity of the war and its dangers resulted in further waves of massive and rapid migration, both within the borders of the country and abroad. About 73,000 people left Serbia and moved overseas [Grečić 2002]. Tragedies of whole nations and ethnic groups forced many families to leave their country. Gábrity Molnár [2011] underlines that at the end of the twentieth century, the antecedent and consequences of NATO bombing (poverty, military mobilization, and insecurity) generated massive migration of Vojvodinian Hungarians, too. According to the same author's moderate estimation, from 1990s up to now, approximately 50,000 Hungarians emigrated from Vojvodina.

“The migration periods strongly depend on the (geo)political circumstances of the period in question, since the most significant (forced) migration waves were triggered by wars and by the change of political systems and state borders. During peaceful periods, mostly economic inequalities and regional disparities influence voluntary migration. Beside the political and economic factors, ethnicity plays the most important role in the examined migration processes [Grečić 2001]. According to our perception, every migratory process in which ethnicity represents symbolic, cultural or social capital is considered to be ethnic migration (e.g. the forced migrations generated by the changes of borders, the migration wave of Serb refugees to Serbia and the resettlement of Vojvodinian Hungarians in Hungary)” [Tátrai *et al.* 2013: 36]

Pál [2003] states that as the result of the processes of democratization and economic stabilization in Serbia, the emigration to Hungary has decreased. From then on (especially after Hungary's accession to the EU) the importance of the establishment of cross-border relationships is obvious. Mass migration has been replaced by regional and cross-border relationships that require mutual planning and programs of cooperation. For instance, it requires the synchronization of the local developmental plans between cross-border municipalities of the Southern Great Plain region in Hungary and Vojvodina, from the Serbian side. Beside that, the role of spontaneously co-operating organizations that became Europe-regional formations or territorial co-operational groupings bear significant importance to this day.

Today the majority of emigrants from Vojvodina to Hungary are young specialists (IT specialists, programmers, engineers, investors, and microbiologists, professionals with PhD degrees, medical workers, artists and sportsmen) who have mastered or can master foreign languages and have capital as well. Vojvodina faces serious disadvantages as a result of a “brain drain” and the migration of businessmen and their capital. The results of empirical research obtained among young Hungarian intellectuals from Vojvodina support their high mobility, as they show that the young people believe that they will find job much easier abroad than in Vojvodina [Szlávity 2005: 70]

According to the analysis of Gábrity Molnár [2008], the most important emigration types from Vojvodina to Hungary from 1990 until today according to the length of migrant stays are the following:

a) *Temporary foreign employment* – Employment targeted migration to the West has been officially registered by the Yugoslav authorities about half a century ago [Grečić 2001]. Even today, the most highly qualified employees

work abroad during the whole year (generally with their families) and return to their home country only occasionally, i.e. visiting their relatives two or three times per year. They usually maintain their foreign status for as long as they have their jobs but it is also possible that this group of people will return only after Serbia's admission to the EU or after the significant improvement of the economic situation in Serbia.

b) Entrepreneurs, businessmen – At the end of the 1980s, a small number of enterprise-oriented private tradesmen, privately-owned small factories and suppliers appeared in Yugoslavia and its province, Vojvodina. The nature of their business activities resulted in the establishment of various relationships with foreign business partners. Groups of new businessmen have tried to launch enterprises during the years of economic and political crisis of 1990s. Entrepreneurs of a new class in Serbia try to benefit from cross-border economic opportunities. The average life cycle of these firms is usually short. They are characterized by perpetually travelling businessmen and managers, but the business activity of this segment is very diverse.

c) The economic emigration of the unemployed people – During the 1990s, the “technological labour excess” of state firms became the new unemployed population, who tried to look for jobs abroad. They tried to find jobs in the more developed European states that reflected their qualifications. Alongside this group of unemployed, surplus agricultural workers also went abroad to find seasonal work.

d) Daily or weekly cross-border commuters – Following the Second World War, especially from 1960s, rapid industrialization resulted in intensive internal migration (people commuted between villages and towns). Later (from the 1990s) Vojvodinian people who lived near the border started commuting to their schools or workplaces on a daily or weekly basis to Hungarian towns. This resulted in periodical, but permanent commuting and absence from their home country. There were mainly construction and industrial workers who travelled home every 2nd or 3rd month, secondary school and university students who commuted on a week-basis but also smugglers who commuted daily.

TRANSNATIONAL MIGRATION AND THE SERBIAN-HUNGARIAN CROSS-BORDER REGION

The cross-border contacts in the last century were always present, in spite of political and historical changes. Only their intensity, political charge and tension have been changing. The asymmetries defining the border region have been reflected in different directions, time and intensity.

Between both sides of Hungarian-Serbian cross-border region there are numerous historical, cultural and economic relations, which contribute to the shaping and intensifying of transnational networks (Hungary–Serbia IPA Cross-border Co-operation Programme 2007– 2013). Potential migrants from Serbia to Hungary have a possibility to inform about the economic situation in Hungary, about its laws, educational system, investment potentials etc. The development of transnational relations contributes to the intensification of

economic, cultural, educational cooperation and to the exchange of material and human resources between Serbia and Hungary.

Hungary was a popular destination for Serbian citizens at the time of the disintegration of the former Yugoslavia, too. Between 1988 and 1999, about 155,000 refugees arrived to Hungary [Tóth 2001]. About 30% of the immigrants were Hungarians. Between 1991 and 1993, mostly intellectuals, physical workers and students migrated from Serbia [Gábrity Molnár 2001].

Regarding the EU membership of Hungary (from 2004), an intensifying trend of migrations of young educated people from Serbia, especially among Hungarians from Vojvodina to the neighbouring country, has emerged [Takács, 2013: 36]. The emigration of Hungarians from Vojvodina to Hungary (to the motherland) has economic motives, but it is considered to be ethnic migration. If these emigrants from Vojvodina to Hungary move off from Hungary in a short time period to other developed market economies, it is considered to be transnational migration [Tátrai *et al.* 2013].

Over the last years, in the Serbian-Hungarian border region, regarding the periodical emigration processes, the mass appearance of women has become relevant. Men dominate among international circular migrants which is also true for those Vojvodinian men who leave Hungary and migrate to the West [Takács and Gábrity Molnár 2012]. Nowadays, the vast majorities of circular migrants are single people (53.6%), and are mostly 25–54 years old. Labour mobility is the overwhelming part of cycles of repeated migration, and many of migrants are involved in one or more systems of emigration and return. It can be inferred that the female age composition was younger than the male counterpart. We can hypothesize with high probabilities that women started their immigration careers to Hungary earlier than men [Gábrity Molnár and Illés 2012].

Based on the analysis of Gábrity Molnár and Illés [2012] about the migration processes in the Serbian-Hungarian cross-border region, it can be concluded that the most recent types of emigrants from Vojvodina are as follows:

A) By status:

1. Settlers (with dual citizenship),
2. Circulars and seasonal migrants,
3. Pendulum migrants (from 3 months to 1 year),
4. Students (secondary and third level),
5. Refugees and asylum seekers.

B) By the causes and purposes of migration:

1. Migrant physical workers,
2. Creative class: entrepreneurs, businessmen, international traders (between the continuum of settlers and circulars),
3. Investors and career builders (brain drain, brain gain, brain circulation),
4. Family unification or reunification (marriage as family formation and, for instance, retirement movement as family reunification),
5. Applicants for citizenship,
6. Recreational migrant-tourists.

According to the research data of Gábrity Molnár [2010] the most emblematic periods of Serbian citizens who immigrated to Hungary between 1989 and 2010 are the following:

- a) Before the 1990s wars (between 1989 and 1991) Hungarians from Vojvodina were not refugees, but migrating *guest workers*. Hungary often served only as a transitional country for further migration to more developed capitalist countries in hope of well-paid work possibilities.
- b) At the beginning of the wars and hyperinflation (1992–93) mostly *entrepreneurs* left the country (their estimated number in Hungary is approximately 500). This group established small and medium-sized private companies (e.g. limited companies) with a positional advantage (having the capital). Most of these companies belong to the tertiary sector.
- c) *Economic emigrants* and refugees who left Serbia as a result of fear from the wars (1991–95) had less capital. Their estimated number including their families was more than 10,000. They had to rely on their domestic relationships from the country of origin and also to find a job with the help and support of their domestic relationships (black marketers). The migrants belonging to this group rarely sold their properties, maintaining the possibility of return. They usually chose seasonal high-paid jobs. Some of them are “refugee entrepreneurs”.
- d) From 1990, there was a group of *students* among those who immigrated to Hungary (hundreds of secondary school and university students who generally stay abroad having finished their educational career). In 2010, about 1,400 young people, a half of the Vojvodinian Hungarian students, were studying in Hungary.¹

“The analysis of spatial distribution of all immigrants to Hungary shows that they are concentrated in two typical areas in Hungary. Firstly, about 60% of them live in Budapest and its surroundings. Budapest and Pest County is generally the migration centre of Hungary. The others have settled in areas close to the Hungarian side of the Hungarian-Serbian border (Csongrád County and Bács-Kiskun County), where the proximity of the border is a contact zone from the aspect of migration flows. They usually become frequent commuters or self-employed/entrepreneurs” [Gábrity Molnár and Illés 2012].

THE EFFECTS OF CROSS-BORDER EMIGRATION FROM SERBIA TO HUNGARY

The intensive (though one-directional) migration processes in the analyzed period (the last two decades) from Serbia to Hungary need to be reflected from economic and social aspects both in Serbia and Hungary.

In Hungary, the cross-border migration had mostly positive effects. In the period between 1991 and 1999, the number of foreign-interested, especially

¹ We notice that since the possibility of acquiring Hungarian citizenship (2011), one-third of Vojvodina Hungarians applied for *dual citizenship*. The goal of those Hungarians in their active years is not to relocate to the mainland, but to travel and work in the EU.

small entrepreneurships, has quadrupled [Szónokyné 2001]. “There are chronological data about the industry’s export-orientation of the country according to which the export ratio of industrial sales between 1994 and 2002 had significantly raised, almost doubled (from 27.7% to 55.1%). The increase of export-orientation characterized all regions; however, differences in ratio can be noticed. In 2002 the two most typical export-oriented regions of Hungary (where the export ratio was higher than 70%) were West and Central Transdanubia. The lowest rate of industrial sale was noted in the South Plain” [Antalóczy and Sass 2005]. In Hungary, the density of foreign entrepreneurships in 1999 was 2.6% (the ratio of foreign entrepreneurships in comparison to registered ones), while in the South Plain region it was only 1.9%. However, Csongrád County exceeded the country’s average, the ratio there was 2.9%. The reason for this is the fact that about 70% of Yugoslav companies were founded in this region (44% of them in Csongrád County). After 1996, the number of Yugoslav firms decreased by 10% in Bács-Kiskun County, while it rose by 32% in Csongrád County [CD Cég hírek, 1999]. The territorial movements of Yugoslav entrepreneurships regarding their economic innovative spread describe two directions: a spread along the municipalities along the border to the cross-border municipalities and to the towns in Hungary (Szeged, Kecskemét, Budapest), thereby significantly influencing the economic activities of the municipalities in the cross-border region [Szónokyné 2001].

According to Szónokyné [2001] entrepreneurial types of Vojvodinian Hungarians emigrating to Hungary, refugee-businessmen who moved to Hungary can be classified as follows:

1. Successful *small and medium-sized entrepreneurships* became foreign subcontractors who were experienced and had invested available capital (money, capital, machines that they could take over the border without paying duty). The target settlement of refugee-businessmen was usually the nearest cross-border municipality or Szeged.
2. Many *fictive companies* were founded in the region in order to obtain work permits, property purchase rights or a residential permit.
3. Hungarians from Vojvodina established *family companies* in villages along the border. These were mostly small factories employing not more than ten employees.

Considering the emigration from Serbia to Hungary, educational migration is one of the most important types of cross-border movements. From 1990s, many Hungarian families from Serbia have decided that after finishing primary school in Serbia, their children should pursue their secondary and tertiary education in Hungary.

According to the authors’ opinion, mass emigration from Vojvodina to foreign countries has almost only negative economic, social and psychological consequences to the country of origin. The economic migration of the population caused damage to both society and economy at different levels:

1. Lack of experts, human capital loss causing serious economic deficit (withdrawal, lack of repayment of investment in education/qualifications).

On the basis of empirical indicators, Grečić [2002] estimates that the exodus of citizens holding university degrees is probably over 30,000.

2. Demographic crisis (decrease of the population, desertion of villages, decrease in birth rate, decrease of the number of marriages, increase of the number of divorces, etc.)
3. The powerlessness of Vojvodina (the lack of developmental potential and innovation).

The negative effect of economic emigration to Hungary is reflected in the Serbian labour market. The result of the move-off of qualified people and entrepreneurs from Serbia to Hungary is that the qualifications of those who work abroad are higher than that of those who work in Serbia. One element of the damage is the financial loss, resulting from the absence of those experts whose education was paid by the state. At the same time, the rhythm and quality of economic development of Serbia has slowed down. This is because the countries of high emigration to a great degree depend on foreign capital investments that they spend on the replacement of the experts missing from the labour force. Labour market competition will also be weak since positions that should be occupied by experts are filled in by a less qualified workforce. The emigration of highly educated, active, enterprising population segments has a negative effect on the home country. Even if it can decrease the level of unemployment, it surely cannot compensate the loss regarding the investment in the education of those who left the country [Gábrity Molnár 2001:132].

The positive effects of the cross-border migration between Serbia and Hungary are the social, communicational and cultural aspects. The cross-border lifestyle opens new communicational channels bringing closer different social segments. In the emigrants, the local and national identity is weakening, and beside the new regional identity, a special European identity is evolving, too. Sometimes it can lead to de-territorialisation, i.e. the migrants can break away from their homeland and even from the new territory where they have found temporary living place. They are not attached to those places and can easily move away. It is especially relevant among young cross-border commuters and circular migrants. They are usually highly qualified professionals speaking several foreign languages following the modern lifestyle, having experience in living abroad through student exchange programmes or short periods of working abroad, so the spectrum of potential target countries is becoming broader [Gábrity 2013: 124].

CONCLUSIONS

From the 1990s up to this day, the different migrant groups of Serbian citizens (e.g. commuters, students, circulars and seasonal migrants, etc.) in the Serbian-Hungarian border region play a specific role in forming transnational networks and transnational spaces. The everyday activities of the people as well as their mobility, emotional attachments, and economic relations have contributed to the formation of a transnational region, using their material, cultural, social and symbolic capital in various ways.

The empirical research data prove that in the last 25 years, economic reasons were the main causes of emigration from Vojvodina to Hungary. The main positive effect of this process for Serbia is the decline in the number of unemployed people, while the negative effect is regarding the human capital loss in the country of origin.

In this specially built and constantly reorganizing scope of Serbian-Hungarian cross-border region, people living their everyday life have tried to use the asymmetries for their benefit, and to improve their possibilities. With their transnational lifestyles and cross-border networks, they substantially contribute to the stability and prosperity of the cross-border region.

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УТИЦАЈ МИГРАЦИЈЕ ИЗ СРБИЈЕ У МАЂАРСКУ
НА ЉУДСКЕ РЕСУРСЕ ВОЈВОДИНЕИРЕН ГАБРИЋ МОЛНАР
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РЕЗИМЕ: У последњим декадама миграциони процеси између Србије и Мађарске постају све интензивнији и комплекснији. Нови тип миграције између две земље је етничка и транснационална међународна миграција. Тражење посла на међународном тржишту рада, миграција стручњака, двојно држављанство и више-струки идентитет, власништво над покретном и непокретном имовином и потрошња у оригиналном и новом месту боравка доводе до новог начина живота. Након системских промена политичког режима 90-их година 20. века у бившој Југославији и Мађарској појављују се нови типови миграната, као што су висококвалификовани стручњаци, студенти, предузетници, старији који одлазе код своје деце и циркуларни мигранти. Најновији типови миграната на подручју пограничне регије између Србије и Мађарске су економски мигранти: физички радници, креативни слојеви (предузетници, бизнисмени, међународни трговци), циркуларни и сезонски мигранти, као и студенти.

Циљ аутора је да у раду анализирају мотиве емиграције војвођанских Мађара у Мађарску. Резултати истраживања спроведених међу држављанима Србије који живе у Мађарској показују да је главни мотив емиграције економске природе – потрага за послом у Мађарској, или касније у другим развијеним земљама Европске уније.

КЉУЧНЕ РЕЧИ: емиграција, мотиви емиграције, Војводина, Мађарска

THE DISAPPEARANCE OF SERBS IN CROATIA*

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ABSTRACT: Based on the latest references and the Census of the population in Croatia from 1880 to 2011, the paper presents current and future trends in the number, share and aging of Serbian population in Croatia. Until the 2001 Census, the share of Serbs was slowly decreasing, in spite of evident persecutions, organized migrations and killings during the First and, especially, the Second World War. The breaking point occurred in the last decade of the 20th century when the share of Serbs dropped to one fifth when compared to the maximum, or to one third, when compared to the beginning of the decade. The 2011 Census shows that a small remaining share of Serbs is dominated by ageing population, so the projections indicate that the share of Serbs will have dropped to only 2.4% until 2051.

KEYWORDS: the Serbs, Croatia, population perspective

In the course of history, the relations between Serbs and Croats went through different phases. Perhaps, the peak of their unity was recorded on June 5, 1848, when Serbian patriarch Josif Rajačić enthroned Josip Jelačić as Croatian Ban [Krestić 2013]. Soon after, these relations were disturbed again. In the period of 131 years, there were 14 censuses on the territory of Croatia and they showed significant fluctuations in non-Croatian population. Almost until the end of the 19th century, the territory of Croatia was inhabited only by Croats

* This paper is a part of the project number 114-451-1135/2014-01

and Serbs, since other ethnic groups were represented by not more than 2% (Table 1). A tenfold increase of 'other' ethnicities was recorded in 1900 and 1910 Censuses, along with a significant decline in the number and share of Croats (from over 80% to below 70%, which is the smallest recorded share of Croats in Croatia in all 14 censuses), whereas the share of Serbs leveled off at 16–17%.

The first Census after the First World War recorded a maximum of 764,901 or 22.2% of Serbs¹, and their share had constantly been decreasing since 1961, and according to 2001 and 2011 Censuses, it finally reached only one fifth of the share in 1921. A similar thing happened to 'other' nationalities, since their share in 2011 Census was only one third of the share in 1910 Census, although there were even more significant declines of their shares in the meantime. Without an in-depth analysis, it is difficult to say why there was a decline of other ethnic groups, but it seems that the earlier category of 'Yugoslav population' had a crucial impact on this. Since the 1981 Census, people have, along with their children from mixed marriages, declared themselves as Croats [Ljajić and Bara 2010]. For the first time in the history of census recordings, Croats accounted for over 90% of the total population of Croatia in 2011, even though their absolute number fell by over a hundred thousand or by 2.6% if compared to the earlier 2001 Census when there was the highest absolute number of Croats in the history of census recordings in Croatia (Figure 1).

Table 1. *Population by ethnicity and censuses in Croatia*

| Census | Absolute numbers | | | | Share (%) | | | |
|--------|------------------|-----------|---------|---------|-----------|----------|----------|----------|
| | Total | Croats | Serbs | Others | Total | Croats | Serbs | Others |
| 1880 | 2,506,228 | 2,018,783 | 441,912 | 45,533 | 100 | 80.6 | 17.6 | Min 1.8 |
| 1890 | 2,854,558 | 2,295,634 | 502,019 | 56,905 | 100 | 80.4 | 17.6 | 2.0 |
| 1900 | 3,161,456 | 2,162,014 | 535,473 | 463,969 | 100 | Min 68.4 | 16.9 | 14.7 |
| 1910 | 3,460,584 | 2,371,546 | 564,214 | 524,824 | 100 | 68.5 | 16.3 | Max 15.2 |
| 1921 | 3,443,375 | 2,505,787 | 764,901 | 172,687 | 100 | 72.8 | Max 22.2 | 5.0 |
| 1931 | 3,785,455 | 2,660,425 | 633,256 | 491,774 | 100 | 70.3 | 16.7 | 13.0 |
| 1948 | 3,779,858 | 2,975,399 | 545,039 | 259,420 | 100 | 78.7 | 14.4 | 6.9 |
| 1953 | 3,936,033 | 3,116,625 | 589,511 | 229,897 | 100 | 79.2 | 15.0 | 5.8 |
| 1961 | 4,159,696 | 3,339,890 | 624,932 | 194,874 | 100 | 80.3 | 15.0 | 4.7 |
| 1971 | 4,426,221 | 3,513,647 | 626,789 | 285,785 | 100 | 79.4 | 14.2 | 6.5 |
| 1981 | 4,601,469 | 3,454,661 | 531,502 | 615,306 | 100 | 75.1 | 11.6 | 13.4 |
| 1991 | 4,784,265 | 3,736,356 | 581,663 | 466,246 | 100 | 78.1 | 12.2 | 9.7 |
| 2002 | 4,437,460 | 3,977,171 | 201,631 | 258,658 | 100 | 89.6 | 4.5 | 5.8 |
| 2011 | 4,284,889 | 3,874,321 | 186,633 | 223,935 | 100 | Max 90.4 | Min 4.4 | 5.2 |

Source: Censuses 1880–2011

¹ In the Independent State of Croatia in 1941, by religious denomination, out of a total of 5,655,750 there were 2,993,335 or 52.9% of Roman Catholics and even 1,809,613 or 32.0% of Orthodox Christians [calculations by Škiljan, 2012].

STAGES OF DISAPPEARANCE OF SERBS IN CROATIA

As regards the disappearance of Serbs in Croatia, it could be said that it was a continuous process of several interconnected events starting from the Second World War, i.e. from 1941 to 1995 (Graph 1).

As one of the methods of resolving 'Serbian question', the idea to move Serbs rose immediately after the establishment of the Independent State of Croatia. Organized emigration was conducted between June and October 1941. The first emigrants were Salonika front volunteers from Slavonia and Srem, 28,000 of them, then Orthodox priests with their families, totalling up to 327, and from the Croatian part of the Independent State of Croatia up to 104. This was followed by the emigration of traders and entrepreneurs, and massive organized emigration of the entire Orthodox population began in July with the arrests made in Zagreb and deportations via transit camps in Caprag, Bjelovar and Požega. According to German estimates, 180,000 Serbs had already fled to Serbia by the end of July. Because of the uprising in Serbia, Germans suspended organized emigration of Serbs from the Independent State of Croatia, but it continued illegally in 1942 and 1943 due to Ustaše terror, so the number of 200,000 was not final. After the emigration, all movable and immovable property of Serbs was seized and given to the settlers from Slovenia, Croatian Zagorje, Dalmatia and Herzegovina [Škiljan 2012].

After the end of the Second World War, in communist Yugoslavia, the list of war victims was not compiled in due time so the data published up to now was based on the assumptions of war losses as well as demographic losses in general. According to Kovačević [1992/1993] [after Žerjavić 1989], the total demographic losses during the Second World War on the territory of ex-Yugoslavia comprise pure demographic losses (the decline of birthrates), emigration, murdered or deceased persons outside the country, and killed, murdered and deceased persons within the country. Based on that, total demographic losses in Croatia were 502,000, out of which war losses were 295,000. The total demographic losses of Serbs in Croatia were 159,000, out of which war losses comprise up to 137,000 or 46.4% out of total war losses in Croatia [Kovačević, 1992/93]. The Second World War on the territory of ex-Yugoslavia had taken many victims, and when considering the population of Serbian ethnicity, great human suffering on the territory of Croatia were the result of extermination of Serbian population by the Independent State of Croatia, particularly in the concentration camps of Jasenovac, Jadovno and others, but also during the actions against partisans who were mainly Serbs.

Massive organized migrations, known as the colonization of Vojvodina, were organized by the communist government from 1945 to 1948 under the pretence of solving the agrarian issues. A total of 36,430 families with 216,306 persons were moved to Vojvodina. Out of this number, 52,929 persons or 25% of all the colonists were moved from Croatia, and their origins show that they were from the areas inhabited by Serbs. Those were the demographic regions of Lika and the North Littoral (colonists from this republic account for 61% of all the colonists) and the region of Dalmatia (with 22% of colonists). Colonization, thus, had a very similar effect as the emigration of Serbs at the beginning

of the Second World War. Moreover, the participants of the colonization had often emphasized that local governments forced them to move, so entire villages were often displaced [Đurđev 1994].

The return of colonists was also present during the colonization, but it was only when massive organized migrations stopped that the significance of the return became evident. The phase of spontaneous return lasted much longer than the organized migration and it had been one of the prevailing types of migration in Vojvodina for a period of time. The scale of the return depended on the differences in the economic development between the starting point and the destination, so this is the reason why the return rate to Slovenia was the highest, whereas to Croatia was the lowest, with only 6.5% or just a couple of thousand persons, since the colonists from Croatia did not even have the place to return to because of war devastation [Đurđev 1995].

As far as the chronology of the refugees movement from Croatia to Serbia during the 1990s is concerned, it should be mentioned that after 1991, when Serbia received 16.2% of the total of 233,125 refugees from Croatia to Serbia, the number of refugees was getting smaller in the following three years and it was cut by half in every consecutive year, only to reach a sudden peak in 'Oluja', a military campaign of the Croatian army which began in August 1995 when more than a half of the refugees from Croatia (54%) started to flee [Đurđev 1996; Đurđev and Bubalo-Živković 2011]. Until 1995, Serbia had received 330,000 refugees from Croatia, and by the World Refugee Day, June 20, 2014, only 69,000 or 21% returned to Croatia. This year's World Refugee Day, Serbia marked with the highest number of refugees in Europe – 43,763, out of which 32,371 or almost three quarters are the refugees from Croatia. Why? 'The Republic of Croatia did not pay outstanding pensions, RSD or

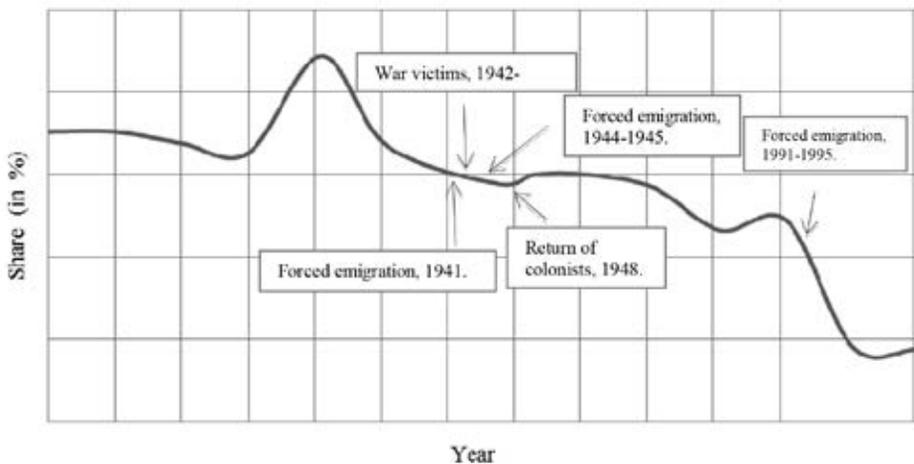


Figure 1. *Share of Serbs in total population of Croatia*

Source: Table 1

foreign exchange savings. Tens of thousands of refugees from the Republic of Croatia did not regain their tenancy rights 19 years after the war. The Republic of Croatia has not reconstructed more than 10,000 of destroyed Serbian houses in the areas without war activity and about 8,000 houses in the areas affected by the war. The agricultural land was not restituted either. It is also worrying that competent authorities in the Republic of Croatia do not prosecute individuals who deliver hate speech and campaign against Serbian language and alphabet. All the above arguments support the view that the expected change, unfortunately, did not happen' [Commissariat for Refugees and Migrations, 2014].

AGEING OF SERBS IN CROATIA

The results of the last Census showed that median age² of Serbs is up to 15 years higher when compared to the median age of the total population of Croatia, or up to 16 years higher when compared to the median age of the population of Croatian ethnicity (Table 2). Similar differences were observed regarding the average age of population by gender, bearing in mind the fact that the median age of 58 years for Serbian females shows small chances of reproduction. Thus, for example, the share of Serbian females up to 50 years of age in the total number of Serbian females is 34.8%, and the share of Serbian females in the fertile period (15–49 years of age) is 28.6%.

Table 2. *Median age of the population by ethnicity, age and gender, 2011 Census*

| Ethnicity | Gender | Median Age |
|-----------|--------|------------|
| TOTAL | All | 42 |
| TOTAL | Male | 40 |
| TOTAL | Female | 44 |
| Croats | All | Min 41 |
| Croats | Male | Min 39 |
| Croats | Female | Min 43 |
| Serbs | All | Max 57 |
| Serbs | Male | Max 55 |
| Serbs | Female | Max 58 |
| Others | All | 46 |
| Others | Male | 44 |
| Others | Female | 48 |

Source: Calculations based on the 2011 Census data.

² The age which divides the population into two equal parts.

However, it is assumed that the median age of the total world population was 29 in 2013, and according to the assumptions for 227 countries of the world, in 2014, the oldest population and the only population with the median age of over 50 lived in Monaco (51 years of age). The populations of Germany and Japan, with 46 years, held the second and third places, respectively, and the youngest population, with 15 years of age, lived in Niger. That year, Croatia reached 21st place, and Serbia 24th place, with the age of 42 [CIA World Factbook, 2014-04-12].

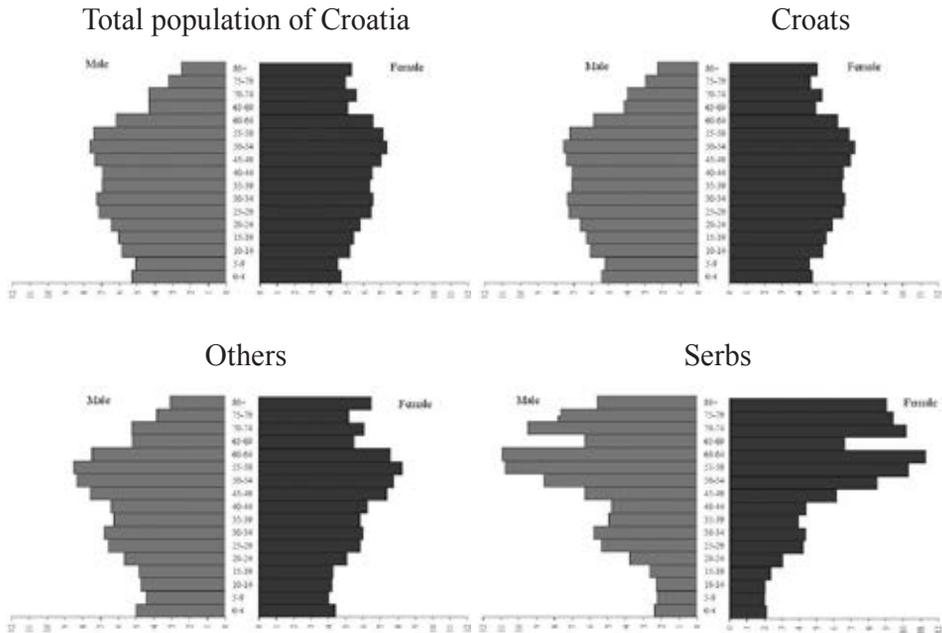


Figure 2. *Population pyramids for 2011*

High age of Serbs is much more obvious in the age pyramids for 2011 (Figure 2). While the age pyramid for Croats shows stationary population, the age pyramid for Serbs is particularly regressive and shows the population in disappearance.

THE FUTURE OF SERBS IN CROATIA

One of the most important objectives of population projections is presenting demographic as well as social and economic trends of future migrations of the population in a certain area. The analysis in this paper comprised the projections for total population of Croatia, as well as the projections by ethnicity, with the aim of showing more clearly the consequences of war activity during the 1990s. The paper includes specially designed projections for the population of Croatian ethnicity and the population of Serbian ethnicity, where-

as all other ethnic groups were observed collectively and categorized as 'others'. The projections were made for the period until 2051, provided that in the projection period there would be no wars, epidemics or natural disasters, such as devastating earthquakes. Based on the long-term average, it was assumed that in the whole projection period 105 boys and 100 girls would be born. Concerning the fertility, it was assumed that it would remain the same as in 2011, i.e. constantly on the level of 1.51 until the end of the projection period. The changes in the expected life expectancy rate were assumed based on the model of the United Nations for average increase of life expectancy. The model used by the United Nations assumes that the life expectancy for both genders increases by 2.0 to 2.5 years during each five-year period when life expectancy is less than 60 years, and this increase is slower at higher levels. The assumptions made by the Croatian Central Bureau of Statistics (2011) were used for the initial data on life expectancy according to which the life expectancy of the population in Croatia in 2011 was 76, i.e. 72.6 for males and 79.4 for females. Model tables by Coale-Demeny, and model West (IMR=12) were used in the projections. As regards the population migration, the projections were calculated based on the assumption of the zero net migration.

The results of the analysis show that the population in Croatia will still be decreasing by the middle of the 21st century. The decline of population numbers in the projected demographic conditions will be present for both Croatian and Serbian population. However, the share of Croatian population in the total population will be increasing, whereas the share of Serbs and 'others' will still be decreasing (Table 3).

Table 3. *Population projection for Croatia by ethnicity (a variant of constant fertility)*

| Year | Absolute numbers | | | | Share (%) | | | |
|------|------------------|-----------|---------|---------|-----------|--------|-------|--------|
| | Total | Croats | Serbs | Others | Total | Croats | Serbs | Others |
| 2021 | 4,081,565 | 3,724,252 | 150,882 | 206,431 | 100 | 91.2 | 3.7 | 5.1 |
| 2031 | 3,820,584 | 3,513,119 | 119,887 | 187,578 | 100 | 92.0 | 3.1 | 4.9 |
| 2041 | 3,499,868 | 3,237,302 | 94,570 | 167,996 | 100 | 92.5 | 2.7 | 4.8 |
| 2051 | 3,173,046 | 2,945,197 | 77,689 | 150,160 | 100 | 92.8 | 2.4 | 4.7 |

By mid 21st century, the share of Serbs will have been less than 2.5%, i.e. almost half of the share of 'other' ethnicities, and this will definitely mean that Serbs no longer live in Croatia, i.e. it is inevitable for them to naturally disappear from these regions [Livada 2014]. Therefore, Tudman's programmed idea to have 3% of Serbs in Croatia will exceed the expectations [Livada 2013].

CONCLUSION

A long-term trend in the decline of the number and share of Serbs in Croatia has been evident ever since the end of the First World War. Since 1941,

a continuous policy towards Serbs in Croatia has been observed: Pavelić's persecutions, and later, slaughter, continued by colonization and ending with Tuđman's persecutions.

Nevertheless, until 1991 Census the share of Serbs decreased slowly, despite evident persecutions, organized emigration and killings during the First, and especially the Second World War. A breaking point happened in the last decade of the 20th century, when the share of Serbs declined by almost three times in comparison to the beginning of the decade.

The 2011 Census data show that the small remaining share of Serbs is dominated by ageing population, so the projections for 2051 indicate the reduction of the share of Serbs to just 2.4%, whereas their age structure shows complete absence of any possibilities for their future reproduction.

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САЖЕТАК: На основу најновијих референци и пописа становништва Хрватске од 1880. до 2011. у раду се указује на досадашња и будућа кретања броја, удела и старења српског становништва у Хрватској. Све до пописа 2001. удео Срба споро је опадао, упркос евидентним прогонима, организованим пресељењима и убиствима за време Првог, и нарочито Другог светског рата. Преломни моменат одиграо се у последњој декади 20. века, када је удео Срба смањен пет пута у односу на максимум, односно три пута у односу на почетак те декаде. Подаци пописа 2011. показују да у том малом преосталом уделу Срба преовлађује остарело становништво, те зато пројекције до 2051. наговештавају свођење удела Срба на само 2,4%.

КЉУЧНЕ РЕЧИ: Срби, Хрватска, будућност становништва

DEMOGRAPHIC AND FUNCTIONAL EVALUATION OF URBAN AREAS IN VOJVODINA REGION

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ABSTRACT: The article illustrates the procedure of quantitative demographic and functional evaluation of urban areas in Vojvodina region. Evaluation is based on seven indicators such as total population, population change index, aging index, the share of employees in primary sector, the share of employees in total population, the share of economically active population (non-commuters) and the share of commuters in economically active population of all urban settlements in Vojvodina region. Quantitative procedure of demographic and functional valorization of urban areas is based on a rank method. According to the results of applied procedure, the categories of urban areas are determined. Each category demonstrates a level of demographic development and correlation between demographic potential and suitable geographical and traffic position. The article is an attempt to perceive better the demographic processes in settlements. Moreover, we pay attention to a different approach in the research of urban settlements network in Vojvodina region.

KEYWORDS: evaluation, rank method, urban settlement, Vojvodina

INTRODUCTION

Scientific and professional discussions on uneven and differentiated demographic development in all regions of Serbia focus on the issue of decentralization of Serbia and the establishment of balanced regional development. This imposes the need to encourage the development and preservation of the identity of urban settlements in Serbia. The question of future demographic development of cities is ongoing and the research of the urban population and its potential for the aforementioned problems is significant. The problems that urban areas are facing today, in Serbia as well as in Vojvodina, are the result

of insufficiently controlled and directed processes of urbanization as well as the insufficient usage of the existing network of settlements. Due to a decrease in the birth rate and reduce of immigration of the population, unfavourable tendencies of the demographic development that manifest themselves through the process of depopulation, negative population growth and population aging, have come to the fore. In the last intercensal period 2002–2011, the decrease in the population was observed in almost all urban settlements in Vojvodina, with the exception of the city of Novi Sad.

Looking back through history, there were favourable natural potentials for population, spatial distribution and demographic increase of settlements in the territory of Vojvodina. Settlements in Vojvodina benefit from the characteristics of this region – plain fields, relatively stable for building, with small slopes and fertile land [Kojić 1961].

However, social factors – demographic and sociological, as well as historical – had a special influence on the intense development of urban centres and the transformation of the settlement network [Bukurov 1954; 1983].

In the period after The World War II, development centres in Vojvodina were Novi Sad, Subotica, Zrenjanin and Pančevo. Development centres were characterized by high spatial concentration of economic activities with diversified structure of activity. The gradual transformation of the urban areas was conducted through the slow development of urban settlements and resulted in the manifestation of the effects of the polarization activity. Since the 1980s, Novi Sad has been proclaimed the leading development centre [Veljković *et al.* 1995]. Today, Vojvodina is characterized by model of the primate city – Novi Sad [Đurđev 2006].

Centrality of settlements in the settlement network relies first on the demographic conditions of the settlement and its surroundings. Current demographic situation in the urban areas in Vojvodina is the result of negative natural increase and, also, intensive migration of the urban population. Observing the movement of the total population according to the census, since the period 1948–1953, urban settlements of Vojvodina were among the first to record the decrease in population: Irig (4%), Titel (3%), Kanjiža (3%) and Mol (2%). Between the next two censuses (1953–1961) the number of settlements with the decrease in population had increased and Alibunar (4%) and Srbobran (4%) joined the previously mentioned settlements. Such negative trend continued in the following census periods. On the other hand, according to the Census 2002, in some urban settlements (Apatin, Šid, etc.) the increase of the population was noticed due to the influx of refugee population from the former Yugoslavia. Census 2002 data demonstrate that 1,146,731 inhabitants live in urban areas of Vojvodina, which makes 59.4% of the total population. Compared to the previous census, population has decreased by about 1%. Observing the total urban population, the increase in population (18%) was registered in Novi Sad only. The greatest decrease in population was registered in Kovin (28%), Sečanj (21%) and Bela Crkva (15%).

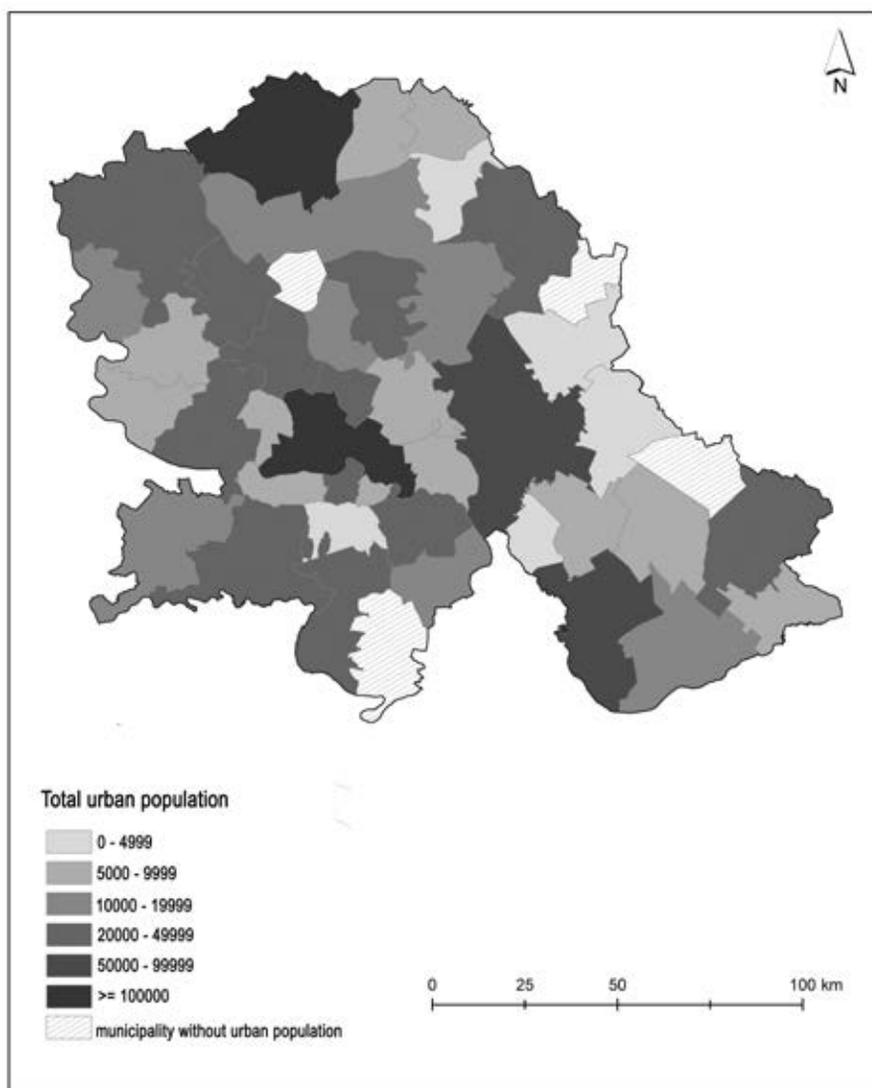


Figure 1. *Total urban population by municipalities in Vojvodina, 2011*

On the territory of Vojvodina, municipalities with urban population between 5,000 and 50,000 are dominant. Particularly dominant are the municipalities with 5,000–10,000 and 20,000–50,000 of the urban population (60% of total urban population in Vojvodina). Municipality Sečanj records the lowest number of inhabitants in urban areas (2,373 inhabitants), while the largest urban population is inhabiting the municipality of Novi Sad. It is important to mention that in Vojvodina there are no urban areas with less than 1,000 inhabitants (Figure 1).

METHODOLOGY AND DATA

The subject of research in this paper was Vojvodina region, precisely urban areas in Vojvodina. From 467 settlements in the region of Vojvodina, 52 are urban type settlements, which is 25.5% of the total number of urban settlements in Serbia. Since the first post-war census in 1948 until today, number of urban settlements on the territory of Vojvodina has not changed. The territories of 52 urban settlements are located in the 42 municipalities. Census 2011 data were used for the demographic analysis.

Quantitative, demographic and functional evaluation of urban areas within the 42 municipalities in Vojvodina was done according to the methodology Grgurević [1995]. This methodology has been partially modified in accordance with the available data from the Census 2011 in Serbia.

Methodological procedure is based on a comparison of seven indicators which are interrelated thus providing a picture of the demographic and functional situation in the observed area.

Following parameters were selected for the evaluation of the urban population:

- total population
- population change index
- aging index
- the share of employees in total population
- the share of employees in primary sector
- the share of commuters in economically active population
- the share of economically active population (non-commuters)

After calculating seven indicators for the urban areas of the mentioned municipalities, the ranking is done in the following way: weak demographic and functional characteristics are marked with the rank 1, while the most favourable demographic and functional characteristics are ranked 42. Number of ranks equals the number of elements in sample, and in this case, the number of researched municipalities. The position or the rank for each municipality and for each of the seven indicators (expressed in numbers from 1 to 42) are demonstrated through a quantitative procedure. Ranking according to above stated indicators represents the basis for the use of method of the cumulative sum of the ranks, in order to obtain a more complete picture of the demographic situation in every urban area as well as its position within the observed sample and the network of the settlements. Grouping of the demographically and functionally similar municipalities has been done based on the cumulative values of the sum of ranks [Grgurević 1995; 2001].

DISCUSSION

Based on the performed ranking (Table 1 in Appendix), groups of municipalities with the same or similar characteristics of the observed demographic and functional indicators have been distinguished from others. Urban areas in the municipalities of Novi Sad and Subotica are highly ranked, while, on the other hand, the populationally small urban areas are low ranked. In the

municipalities with the most favourable circumstances, the contemporary social processes have positively influenced the change in the number and structure of the population of these areas. These are the areas that attract people from the surrounding areas and where daily migrations of the population are clearly expressed. The urban population of Novi Sad and Subotica participates with 28.7% of the total urban population of the observed area.

Analyzing the indicators clearly and each individually, the urban areas of the populationally largest municipalities are distinguished (Novi Sad, Subotica, Zrenjanin). Observing the population trend between the censuses (2002–2011), the population growth was recorded in the above-mentioned areas only. On the other hand, the decrease in population of about 20% was registered in the populationally smallest urban areas (Kovin, Sečanj, Bela Crkva). The aging process is present in all of the observed areas with Sečanj, Alibunar, Senta and Coka having the highest values of aging index. Relatively favourable relation between the young and the old population was registered in the municipalities of Beočin, Žabalj and Temerin (about 0.6). Share of the active population ranges from 25% to 35%, the largest share registered in Opovo, Novi Kneževac and Bački Petrovac. Analyzed indicator share of the active population employed in the primary sector ranges from 1,2% in the municipality of Novi Kneževac to 27% in the municipality of Žabalj. The total daily circulation of the population in the most of the observed municipalities is over 20%. The highest share of daily commuters was recorded in municipalities near Novi Sad, so the share of daily commuters in Petrovaradin is 98%, Sremski Karlovci 78%, while the lowest share of daily commuters was recorded in the municipality of Kikinda 7% [Statistical office of Republic of Serbia, 2012]. Certainly, one of the indicators important for this analysis is the share of the active population employed in the place of residence, which is directly related to the previously mentioned indicators (share of the daily out-commuters). The areas with the lowest share of the daily commuters in the total population record high values of the share of the active population in the place of residence (Kikinda 93%). It is evident that the populationally large urban areas stand out as a highly ranked by all analyzed indicators.

RESULTS

In the first stage of the quantitative method, there are different indicators which, in authors' opinion, affect in a number of ways the position of the municipality in the network of settlements in Vojvodina. Special attention is devoted to the analysis of the four indicators – indices of total population change and aging and socio-economic characteristics.

The urban areas in the municipalities of Novi Sad, Petrovaradin and Temerin (Figure 2) have the highest values of indicators of index of total population change. This fact is not surprising considering that the municipalities are located along the main economic and transport corridors. In this regard, there are also low values (70–90) in the municipalities that occupy a peripheral position in the network of settlements in Vojvodina. However, positive trends

of the population movement in the last intercensal period are mainly relying on the positive population migration, thereby the urban area of Novi Sad and nearby Petrovaradin are defined as a distinct gravity centre of Vojvodina. On the other hand, observing the aging index of the population, mentioned region centres have an unfavourable relation between the young and the old population (Figure 2). Urban areas in the municipalities of Zabalj, Temerin and Beočin (0.6) have the lowest values of the aging index, while the worst image is in the urban areas Alibunar and Sečanj (1.1).

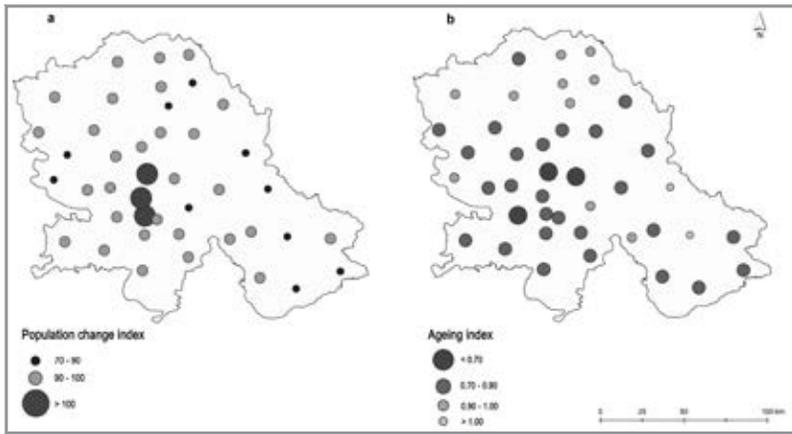


Figure 2. *Urban population change index in Vojvodina, 2002–2011 (a) and Ageing index of urban population in Vojvodina, 2011 (b)*

Functional and economic characteristics of the urban centres determine significantly the centrality of the settlements. In this regard, indicators related to the economically active urban population are presented distinctively (Figure 3). Empirical data show that 64.3% of the areas record values between 28.4 and 34. The share of the economically active population that do not go to work from the place of residence, observed in the whole sample, is ranging from 31.2% (Petrovaradin) to 94.5% (Kikinda). Values of the share from 65.1% to 92% were recorded in 78.6% of the urban areas. Urban areas in Vojvodina show a high degree of economic strength and ability to retain the active population.

After analysing the selected indicators, quantitative procedure was continued by adding the ranks for all indicators. This has produced the sum of ranks for each element of the sample separately. Results from Table 1 (in Appendix) indicate the potential grouping of areas with similar demographic and functional characteristics, according to the indicators included in the analysis. In order to confirm this, the cumulative value of the sum of the ranks [Preston 1971] was determined. In this way, the hierarchy of urban areas in Vojvodina was made. In Figure 4, the distribution of urban areas in Vojvodina is presented using quantitative procedure.

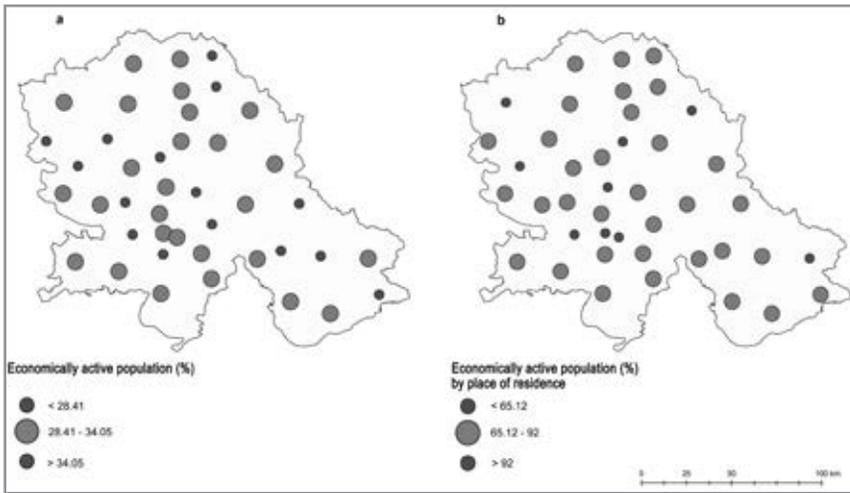


Figure 3. *Share of economically active urban population in Vojvodina, 2011 (a) and Share of economically active urban population by place of residence, in Vojvodina 2011 (b)*

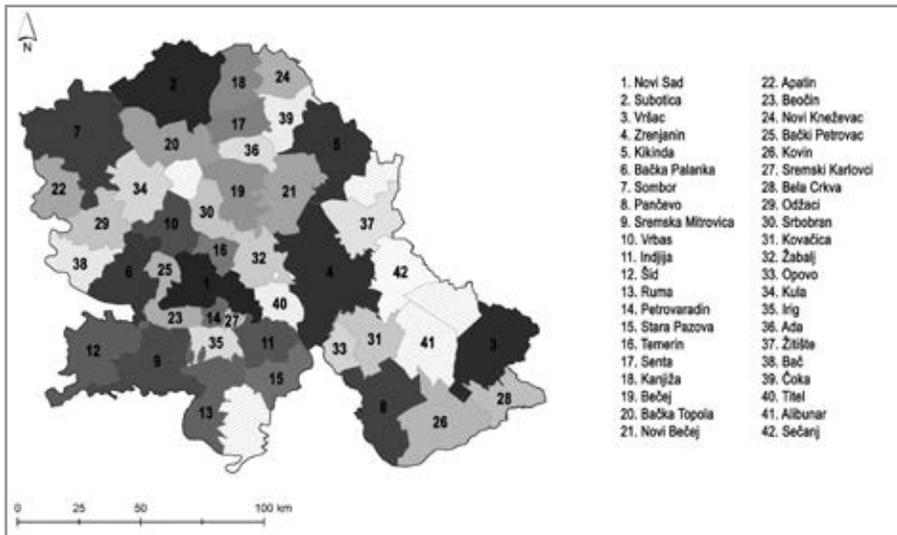


Figure 4. *Distribution of urban areas in Vojvodina, using quantitative procedure*

In order to distinguish the categories of the urban areas according to their demographic and functional position, there were used different slopes on the cumulative curve of the sum of ranks (Figure 5). If the differences in the hierarchy between the municipalities do not exist, the curve shows the same

slope. In this regard, the categories were selected based on the following principles – the same demographic and functional characteristics are the same for all urban areas where parts of the cumulative curves have the same slope. Changes in the slope of the curve indicate changes between categories of urban areas in the observed municipalities in Vojvodina.

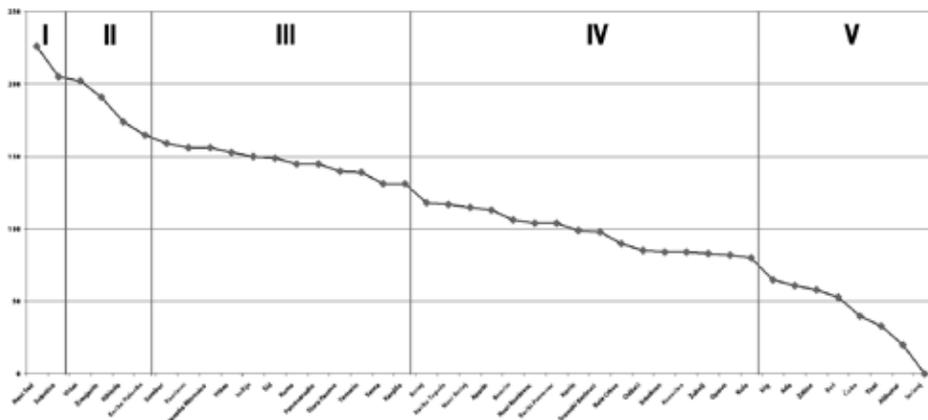


Figure 5. *Hierarchy of urban areas in Vojvodina, 2011*

Based on the explained principle, five categories of urban areas in Vojvodina were defined (Figure 6). Urban areas in the municipalities of Novi Sad and Subotica, which are the first class of areas, are distinguished with the best values in relation to other elements of the observed sample. These are, also, the populationally largest municipalities in Vojvodina (the average of inhabitants – 191,601), which stand out as the economically strongest centres with their influence on urban areas in the region. Only in this category of urban areas, analyzing the intercensal period 2002–2011, a population increase of 8% has been recorded based on the urban settlements in Novi Sad. When it comes to the age structure, these areas record the best values of the aging index. The second group consists of five urban areas within the municipalities of Vršac, Zrenjanin, Kikinda, Bačka Palanka and Sombor. According to the analyzed characteristics, these areas are similar to each other and according to population size are among the larger (the average number of inhabitants of this settlement category is 45,295). In the past intercensal period, population decrease of 5% on average was recorded in this category. The largest population decrease in this group is present in urban areas in the municipalities of Kikinda (90.7) and Sombor (92.5). The average share of the active working population is 32.4%, while the average share of daily out-commuters in the total active population is 14% (Bačka Palanka – 21%; Kikinda – 9%) [Statistical office of Republic of Serbia, 2013]. 64.3% of the observed sample, i.e. 27 municipalities are in the third and the fourth category. This third group consists of 11 municipalities: Pančevo, Sremska Mitrovica, Vrbas, Indija, Šid, Ruma,

Petrovaradin, Stara Pazova, Temerin, Senta and Kanjiža. The average number of total population in this category is 29,737. In this group, there was a population decrease of 4%, while the average aging index is 0.8. This category also recorded the highest average share of daily commuters in the total active population (38.4%) in comparison to the other categories of municipalities. Petrovaradin and Temerin have the largest shares, where more than 60% of the active population goes to work outside the place of residence. The fourth and the largest group consists of 17 municipalities: Bečej, Bačka Topola, Novi Bečej, Apatin, Beočin, Novi Kneževac, Bački Petrovac, Kovin, Sremski Karlovci, Bela Crkva, Odžaci, Srbobran, Kovačica, Žabalj, Opovo, Kula and Irig. The average number of inhabitants in this group is 11,374. In this group, a

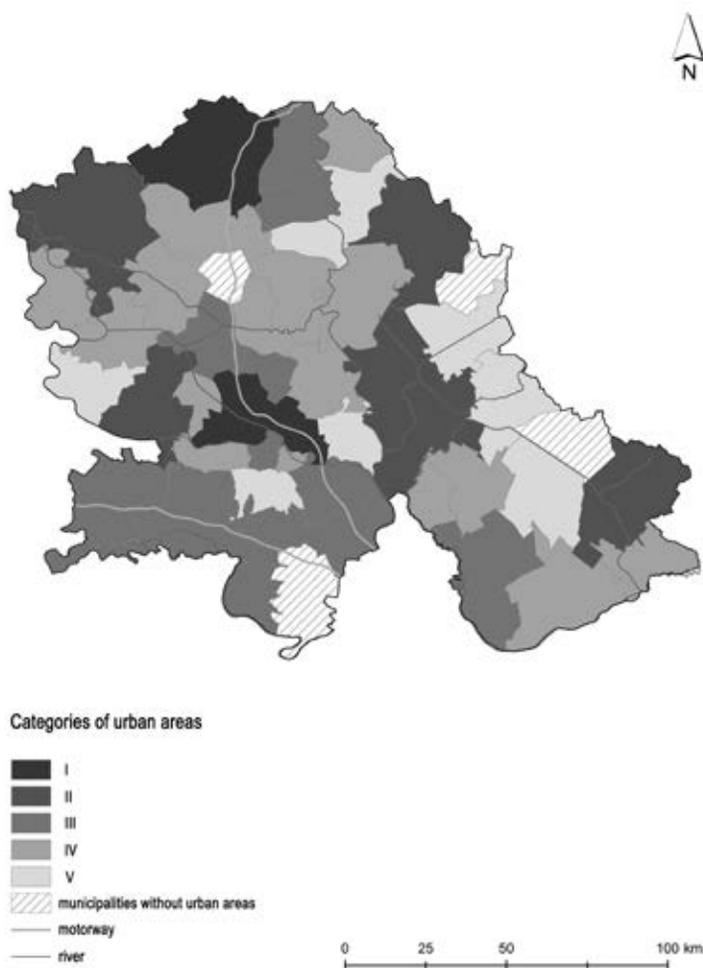


Figure 6. *Hierarchy of urban areas in Vojvodina according to cumulative values of difference of rank total*

population decrease of 9% on average was also recorded. Areas in the municipalities of Kovin (28%) and Odžaci (12%) record a significant reduction. The last, the fifth separate group with the lowest values of the analyzed indicators consists of 7 municipalities: Ada, Žitište, Bač, Čoka, Titel, Alibunar and Sečanj. Average number of inhabitants of this group is 6.237 with the most intense decrease between the censuses 2002–2011 of 13% on average. The highest proportion of elderly population characterizes these municipalities. The average share of the active population is around 29%. Certainly, it is important to emphasize that the majority of settlements that belong to this group recorded the highest share of the active population employed in the primary sector (Table 1 in Appendix).

CONCLUSION

The methodological procedure that is presented in this paper is focused on the demographic and functional situation in the urban areas. Although the spatial component was neglected in the paper, the evaluation of demographic conditions of the same areas allows conclusion of the real position of urban areas in the network of settlements in Vojvodina. Quantitative evaluation done based on seven demographic and functional indicators confirms the assumption that primarily functional and economic role of municipality in the network of settlements affects the positive development of urban areas. Share of active working population is the basis of economic strength of settlements. Workplaces in the settlement itself should be added by all means, because this indicator has a direct impact on the appearance and maintenance of the centres of development, on one hand, and the increase of the gravitational power of the centres, on the other hand. Novi Sad, Subotica, Vršac, Zrenjanin, Kikinda, Bačka Palanka and Sombor generate the highest values in a quantitative analysis and are referred to as leaders of the development in Vojvodina region.

On the other hand, the evaluation of urban areas, that is presented in the paper, lead to the reconsideration of the status of urban settlements, in Vojvodina and Serbia. This particularly raises the question whether certain urban areas (within the studied municipalities) justify the status of an urban settlement acquired in 1981, which is based on legislative acts from the period of 1960s–1980s [Pavkov 2008]. Based on the presented demographic and functional evaluation of urban areas, the distinctive fifth category of settlements, according to the authors, does not deserve the status of urban settlement. However, given that the analysis was performed only based on demographic and functional indicators, the question of the division of the settlements in the urban and the others remains open.

The authors consider that the proposed methodological approach can contribute to a more comprehensive and objective introducing of urban areas as well as their surroundings with all their strengths and advantages, but also with limitations and weaknesses. Use of this quantitative procedure could have its share in spatial planning practice. Use of the method in Vojvodina is an attempt to contribute to modern geo-demographic researches of urban areas in Serbia.

ACKNOWLEDGEMENT

This paper is a part of the scientific project 47007 supported by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

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| | Total number of Population, 2011 | | Total population change index | | Population age index | | The share of active population | | The share of active population in primary sector | | The share of dialy commuter population | | The share of active population in residence place | |
|-------------------|----------------------------------|------|-------------------------------|------|----------------------|------|--------------------------------|------|--|------|--|------|---|------|
| | Total | Rank | | Rank | No | Rank | % | Rank | % | Rank | % | Rank | % | Rank |
| Ada | 15573 | 23 | 89.85 | 10 | 0.94 | 6 | 31.61 | 19 | 13.69 | 15 | 10.45 | 36 | 74.57 | 12 |
| Alibunar | 8089 | 12 | 87.44 | 5 | 1.01 | 2 | 27.93 | 7 | 11.20 | 18 | 25.43 | 12 | 66.76 | 6 |
| Apatin | 17411 | 24 | 90.12 | 12 | 0.89 | 13 | 28.13 | 9 | 8.41 | 20 | 33.24 | 6 | 89.55 | 36 |
| Bač | 5399 | 7 | 88.70 | 7 | 0.90 | 11 | 30.19 | 16 | 17.18 | 10 | 18.04 | 19 | 81.96 | 19 |
| Bačka Palanka | 28239 | 33 | 95.89 | 28 | 0.78 | 29 | 31.83 | 20 | 4.99 | 29 | 12.59 | 31 | 87.41 | 31 |
| Bačka Topola | 14573 | 21 | 90.12 | 11 | 0.91 | 9 | 33.84 | 36 | 16.20 | 11 | 12.33 | 33 | 87.67 | 33 |
| Bački Petrovac | 6155 | 8 | 91.50 | 18 | 0.84 | 19 | 36.62 | 42 | 19.43 | 6 | 17.39 | 22 | 82.61 | 22 |
| Bela Crkva | 9080 | 15 | 85.06 | 3 | 0.78 | 28 | 26.29 | 2 | 11.98 | 16 | 12.48 | 32 | 87.52 | 32 |
| Beočin | 7839 | 11 | 97.28 | 33 | 0.57 | 42 | 27.43 | 6 | 2.00 | 40 | 36.14 | 5 | 63.86 | 5 |
| Bečej | 23895 | 19 | 92.71 | 24 | 0.79 | 25 | 30.99 | 17 | 25.51 | 2 | 7.78 | 39 | 92.22 | 39 |
| Vrbas | 24112 | 28 | 93.07 | 25 | 0.72 | 37 | 29.99 | 13 | 6.89 | 25 | 11.78 | 34 | 88.22 | 34 |
| Vršac | 36040 | 35 | 98.41 | 36 | 0.80 | 24 | 32.60 | 26 | 3.56 | 35 | 5.85 | 41 | 94.15 | 41 |
| Žabalj | 9161 | 16 | 95.45 | 27 | 0.59 | 41 | 26.99 | 3 | 13.75 | 14 | 29.96 | 7 | 70.04 | 7 |
| Žitište | 2903 | 2 | 89.54 | 8 | 0.74 | 36 | 30.18 | 15 | 29.22 | 1 | 19.41 | 17 | 80.59 | 17 |
| Zrenjanin | 76511 | 39 | 95.91 | 29 | 0.82 | 20 | 32.88 | 30 | 3.02 | 37 | 10.72 | 35 | 89.28 | 35 |
| Indija | 26025 | 30 | 99.15 | 38 | 0.79 | 27 | 32.30 | 23 | 2.71 | 38 | 25.03 | 13 | 74.97 | 13 |
| Irig | 4415 | 4 | 91.07 | 15 | 0.85 | 17 | 34.90 | 39 | 18.04 | 7 | 27.90 | 11 | 72.10 | 11 |
| Kanjiža | 9871 | 17 | 96.77 | 31 | 0.94 | 7 | 33.85 | 37 | 7.66 | 22 | 14.01 | 29 | 85.99 | 29 |
| Kikinda | 38065 | 36 | 90.77 | 13 | 0.82 | 23 | 32.04 | 22 | 3.87 | 32 | 5.45 | 42 | 94.55 | 42 |
| Kovačica | 6259 | 9 | 92.53 | 23 | 0.86 | 16 | 28.33 | 10 | 11.28 | 17 | 16.36 | 24 | 83.64 | 24 |
| Kovin | 13515 | 20 | 72.44 | 1 | 0.77 | 32 | 30.08 | 14 | 5.90 | 28 | 17.98 | 20 | 82.02 | 20 |
| Kula | 26867 | 31 | 91.19 | 16 | 0.88 | 14 | 27.97 | 8 | 9.22 | 19 | 23.67 | 14 | 76.33 | 14 |
| Novi Bečej | 13133 | 27 | 90.87 | 14 | 0.79 | 26 | 29.33 | 12 | 17.34 | 9 | 15.19 | 27 | 84.81 | 27 |
| Novi Kneževac | 6960 | 10 | 91.81 | 20 | 0.90 | 12 | 35.59 | 41 | 14.21 | 13 | 17.60 | 21 | 82.40 | 21 |
| Novi Sad | 277522 | 42 | 118.01 | 41 | 0.71 | 38 | 33.79 | 35 | 1.26 | 42 | 14.53 | 28 | 85.47 | 28 |
| Opovo | 4527 | 5 | 96.46 | 30 | 0.77 | 33 | 35.45 | 40 | 23.49 | 4 | 50.40 | 3 | 49.60 | 3 |
| Odžaci | 8811 | 14 | 88.64 | 6 | 0.91 | 10 | 28.51 | 11 | 6.45 | 26 | 15.72 | 26 | 84.28 | 26 |
| Pančevo | 90776 | 40 | 98.32 | 35 | 0.78 | 30 | 32.76 | 28 | 2.57 | 39 | 28.01 | 10 | 71.99 | 10 |
| Petrovaradin | 27083 | 32 | 193.82 | 42 | 0.77 | 31 | 33.32 | 33 | 1.31 | 41 | 68.77 | 1 | 31.23 | 1 |
| Ruma | 30076 | 34 | 93.32 | 26 | 0.84 | 18 | 32.52 | 25 | 3.75 | 33 | 17.39 | 23 | 82.61 | 23 |
| Senta | 18704 | 26 | 92.13 | 21 | 0.97 | 3 | 32.32 | 24 | 8.07 | 21 | 9.83 | 38 | 90.17 | 38 |
| Sečanj | 2373 | 1 | 79.58 | 2 | 1.16 | 1 | 24.23 | 1 | 23.65 | 3 | 21.91 | 15 | 78.09 | 15 |
| Sombor | 47623 | 38 | 92.52 | 22 | 0.94 | 5 | 32.60 | 27 | 7.51 | 23 | 7.63 | 40 | 92.37 | 40 |
| Srbobran | 12009 | 18 | 91.73 | 19 | 0.71 | 39 | 27.29 | 5 | 20.69 | 5 | 18.74 | 18 | 81.26 | 18 |
| Sremska Mitrovica | 41624 | 37 | 96.85 | 32 | 0.82 | 21 | 31.43 | 18 | 4.30 | 30 | 16.25 | 25 | 83.75 | 25 |
| Sremski Karlovci | 8750 | 13 | 98.99 | 37 | 0.87 | 15 | 33.02 | 31 | 3.67 | 34 | 56.66 | 2 | 43.34 | 2 |
| Stara Pazova | 18602 | 25 | 99.77 | 39 | 0.76 | 34 | 32.79 | 29 | 4.15 | 31 | 29.08 | 9 | 70.92 | 9 |
| Subotica | 105681 | 41 | 98.10 | 34 | 0.82 | 22 | 33.29 | 32 | 3.32 | 36 | 10.22 | 37 | 89.78 | 37 |
| Temerin | 25348 | 29 | 100.33 | 40 | 0.68 | 40 | 33.40 | 34 | 7.23 | 24 | 43.95 | 4 | 56.05 | 4 |
| Titel | 5294 | 6 | 89.82 | 9 | 0.93 | 8 | 27.26 | 4 | 17.39 | 8 | 21.83 | 16 | 78.17 | 16 |
| Čoka | 4028 | 3 | 85.57 | 4 | 0.97 | 4 | 34.06 | 38 | 14.72 | 12 | 29.66 | 8 | 70.34 | 8 |
| Šid | 14893 | 22 | 91.31 | 17 | 0.74 | 35 | 31.89 | 21 | 6.36 | 27 | 13.09 | 30 | 86.91 | 30 |

Table 1. Demographic and functional evaluation of urban areas in Vojvodina region
Source: Census of population 2011, Republic statistical office of Serbia, Belgrade.

ДЕМОГРАФСКА И ФУНКЦИОНАЛНА ЕВАЛУАЦИЈА
УРБАНИХ ОБЛАСТИ У ВОЈВОДИНИ

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РЕЗИМЕ: У раду је приказан квантитативни поступак демографске и функционалне евалуације градских насеља у Војводини. Анализа је базирана на седам демографских и функционалних показатеља (укупан број становника, индекс промене броја становника, индекс старења, удео запослених у примарном сектору, удео активног становништва, удео активног становништва запосленог у месту становања, као и удео дневних миграната у активном становништву). Циљ рада је да се прикаже квантитативни поступак демографског вредновања градских насеља, као и да се на основу добијених резултата утврди постојање насеља са демографским потенцијалима. На позитиван развој градских подручја утиче, пре свега, функционална и економска улога поменутих области у мрежи насеља Војводине. Удео активно запосленог становништва је основа економске снаге насеља. Анализа је показала да управо популационо највећи градски центри (Нови Сад, Суботица, Зрењанин) заузимају највише рангиране позиције, па се самим тим могу окарактерисати као носиоци развоја региона Војводине. С друге стране, позиционирање популационо малих градских подручја (Сечањ, Мали Иђош, Жабал и др.) као најслабије рангираних отвара питање да ли та насеља оправдавају статус градских и какви су услови за њихов будући развој. Стога предложени методолошки поступак може допринети свеобухватнијем и објективнијем упознавању градских области, као и њиховог окружења.

КЉУЧНЕ РЕЧИ: евалуација, методолошки поступак, градска насеља, Војводина

UDC 316.346(497.11)
UDC 314.15(497.11)
DOI: 10.2298/ZMSDN1448607R
ORIGINAL SCIENTIFIC PAPER

HOW TO MOTIVATE POLICY MAKERS TO FACE DEMOGRAPHIC CHALLENGES?

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ABSTRACT: If we want to understand the deeper truth, or intend to interpret phenomena through the perception of a specific population, a more holistic perspective might be necessary. By applying foresight exercise, some new patterns might be discovered and shifts in study aspects inhibited. Such an approach intends to give meaning to future perceptions, expectations and fears of experts, decision makers and civilians. Its activities are designed to address critical questions, which might significantly shape the future of a country in the coming years. Foresight exercise reinforces thinking about what future steps should be taken, if a specific scenario becomes reality. Personal life stories based on binary opposition of the futures of a country can be used to unambiguously show the policy makers all the relevant implications that different futures might have regarding fertility, migration, population ageing, human capital and labour market in Serbia in the forthcoming period. Furthermore, it seems that such foresight exercise, as a qualitative approach, can provide additional insight into quantitative methods of forecasting demographic future of a country.

KEYWORDS: foresight exercise, qualitative research, policy makers, demographic future, international migration, Serbia

SOCIAL SCIENCES FOR SOCIETY

Nowadays, more than ever before, there seems to be a need for understanding a range of socio-economic challenges we face. Namely, the first decades of the 21st century are marked by financial crisis, political turbulences, serious climate changes, ecological issues, deficiency of water and energy, terrorism, demographic disturbances and so on. It is important to study the characteristics, determining factors, consequences, patterns and the expected changes in the foreseeable future for each of them, including the cause-and-effect relationships.

Knowledge gained from numerous researches in the field of social sciences can improve political decision making because the formulation, adoption and evaluation of those decisions implies being well informed. However, many obstacles, both contextual and structural, hinder the dialogue between the researchers and decision makers. Researchers and policy makers have separate work environments, use different wording, have distinct temporal perceptions, have different views of utilizing knowledge and information, and have different methodologies and *modi operandi*.

Considerable effort is required in both communities in order to mitigate the observed obstacles. The culture of cooperation between policy makers and scientific community is more developed in the countries with decentralized decision making model than in the countries with a centralized model. Still, the researchers are not fully content even in the environments in which this kind of dialogue, i.e. transfer, has a longer standing tradition. They are in search of modalities for a more successful motivation of decision makers to act strategically using the knowledge gained from social sciences.

DEVELOPMENT OF INTERNATIONAL MIGRATION

During and after the wars in the Western Balkans in the 1990s, Serbia became one of the main destinations for refugees from Bosnia and Herzegovina and Croatia, and for internally displaced persons from the southern province of Kosovo and Metohija. At the same time, a large scale emigration from the country took place [Nikitović and Lukić 2010]. Afterwards, in accordance with political stabilization of the region, forced migration ceased. However, emigration process continued (at lower rates though) due to failure of economic recovery. Consequently, net migration balance of the country varied roughly between -10,000 and -15,000 persons per year during the last decade [ISS, 2013]. Migration trends in Serbia in the recent period have a negative impact on population development, as they result in a decrease of the population size of the country, reduction of total number of births, reduction of labour resources and have an adverse effect on the age structure of the population.

Recent immigrants in Serbia mainly consist of refugees from former Yugoslav republics and internally displaced persons from Kosovo and Metohija while the share of foreigners originating outside the former Yugoslavia is drastically lower [Nikitović and Lukić 2010; SORS, 2013: 39]. Emigrants from Serbia are typically younger than the population in the country. Those working in traditional European destinations mostly have low education, while brain

drain, renewed since the 1990s, is considered to be an important part of the emigration flows to overseas countries [Grupa 484, 2010].

Population and labour force are declining and growing older. These clearly identified characteristics of contemporary Serbia could not be avoided even by the most optimistic scenario of future demographic and labour market processes. In the following decade, before the expected accession to the EU, net migration losses might reduce slightly. Short lasting large volume emigration could be a realistic future for Serbia just after the EU accession as it was the case in Poland after 2004, but in the long term a turn towards positive net migration is considered to be a plausible scenario [Kupiszewski, Kupiszewska and Nikitović 2012].

In Serbia, there is no sufficiently developed consciousness in the political and public discourse about the significance of the migratory phenomenon. The potentials of migrations in country development programs, including demographic revitalization and particularly the requirement to comprehensively act in this sphere, are not completely recognized. There is no migration component of population change in political, economic, academic or in general public discourse. If migration is mentioned at all, it is typically used in a negative context. The brain drain has become synonymous with emigration as the echo of the 1990s. The reasons for the misrecognition of the immigration potential should be sought in traditionalism, unfavourable economic and social situation, general insecurity, the country's isolation, and the like, but also in lack of information [ISS, 2013].

FORESIGHT AS A METHOD

Foresight as a methodological approach converges policy analysis, strategic planning and futures studies. It can be briefly defined as “a systematic, participatory, future-intelligence-gathering and medium-to-long-term vision-building process aimed at present day decisions and mobilizing common actions” [JRC-IPTS, 2001: 5]. It emerged in decision-making context following the WWII within the military strategic planning and then in 1960s was used by large corporations as part of business strategic planning with respect to technological change and progress [Miles, Harper, Georghiou, Keenan and Popper 2008]. Since the 1990s it has been increasingly applied in public policy and policy analysis, also at the EU level.

Both quantitative and qualitative methods can be used. Examples of quantitative techniques include Delphi surveys, modelling and simulation, or structural analysis, while widely used qualitative techniques are scenario building, creativity methods (brainstorming, brain mapping), SWOT analysis or expert panels. Foresight exercise as a qualitative analytical method uses a holistic approach in order to answer questions which cannot be expressed as numerical information. It develops scenarios which consider a range of plausible futures and how these could emerge from the realities of today. The scenarios recognise that people hold beliefs and make choices that lead to outcomes. Scenarios ask “what if?” questions to explore alternative views of the future and create plausible

stories around them. They consider long-term trends in economics and social changes, as well as the motivating factors that drive the changes. In doing so, they help build visions of the future. Scenarios help decision makers reconcile apparent contradictions or uncertainties. They also have the potential to raise awareness around the issues that could become increasingly important to society. Organisations using scenarios find it easier to recognise impending disruptions in their own operating environment, such as political changes, demographic shifts or recessions [JRC-IPTS, 2008].

FORESIGHT EXERCISE IN SERBIA

The foresight exercise was carried out as a part of the SEEMIG project¹ on December 12–13, 2013 in the Institute for Education and Culture “Cnesa” in Kanjiža. It was organized by Serbian project partners: Institute of Social Sciences, Statistical Office of the Republic of Serbia and the Municipality of Kanjiža. The exercise was built as a qualitative exploratory approach based on creativity methods (brain mapping and brainstorming) and scenario building on two levels: macro and micro. The authors of the paper were the foresight moderators. There were 24 participants divided into three groups: experts, decision makers, and representatives of migrants/civil society.

Each group identified key drivers of migration and labour market in the near future in Serbia during three parallel brainstorming sessions on the first day. Participants were encouraged to talk about the factors which might surprise them due to their recent low probability, yet, which might significantly impact the course of their future.

On the second day, during the discussion of all participants, five key drivers were selected according to priority and put into binary matrix afterwards. The moderators then divided the participants into two groups. Based on the matrix, one group had to create a positive country-level scenario and the other a negative one up to 2025. Finally, each of these groups applied the previously developed macro-level scenario to life of a specific person, which resulted in two individual stories.

The participants were aged between early twenties and mid-fifties. Most of them were born in Serbia. Still, some of them were born in the territory of former Yugoslavia, but now have Serbian citizenship. A number of them are members of the Hungarian minority group. When it comes to their experiences, they differ from group to group. The experts have relevant experiences in demography, social geography, sociology, economy, psychology, political studies and human rights. Decision makers came from the Ministry of Labour,

¹ Managing Migration and its Effects in South-East Europe (SEEMIG) is a strategic project on migratory, human capital and demographic processes in South-East Europe, as well as their effects on labour markets, national and regional economies. It is funded by the European Union's South-East Europe Programme and includes research institutes, statistical offices and local governments from eight countries. The main goal of the project is to empower public administrations to develop and implement policies and strategies by using enhanced datasets and empirical evidence. For further information visit: <http://seemig.eu/>

Employment, Veteran and Social Policy, Commissariat for Refugees and Migration, Ministry of Foreign Affairs, Border Police, Ministry of Interior, Office for Human and Minority Rights, Asylum Protection Centre, Centre for Social Work in Kanjiža and Migration Officer in Kanjiža. The group of migrants/civil society was represented by students who studied and plan to continue studying abroad, retired with children abroad, local branch of Red Cross, social workers who work with illegal immigrants, and non-governmental organization Group 484 dealing with migration issues.

The results of the parallel brainstorming sessions were presented in Table 1. As it can be seen, all three groups chose almost the same factors, even though the definition used varies. All of them mentioned *political stability*, either on national or local level. Also, *economy* was emphasised. *Institutional support* was mentioned, although some groups went a bit further and chose concrete areas such as social and legal rights. *Human capital* from the aspect of education system and migration flows was listed as one of the key drivers in the expert group. Similarly, *youth and education* were recognized as valuable human resources in the group of migrants/civil society. *System of values* both on micro and macro level, that needs to be restored after its collapse in the 1990s, actually influences all the drivers. It is a somewhat elusive category and refers to intangible values such as culture, moral, and ethics which shape the community as a whole. Its collapse brought money dictating the trends, poor taste in culture, hunger for scandals and no wish for facing the real situation. *Accession to the EU* was mentioned by all three groups. Participants from the group of migrants/civil society felt that the time span was insufficient for it to become a key factor. Experts thought that the EU accession as a factor is included in the political stability and economic growth. In the table below selected key drivers in each group are listed by priority.

Table 1. *Key drivers of migration and labour market in Serbia according to the three groups*

| Drivers | Experts | Public Officials/ Decision makers | Migrants/Civil society |
|---------|--------------------------|--------------------------------------|---|
| 1 | Political stability | Stable political system | Local self-government as a factor of support to the citizens |
| 2 | Economic growth | Economic development | IT sector (virtual business, employment, new business models) |
| 3 | Institutional background | Social development | Legal regulations in connection to employment |
| 4 | Human capital | Change in the system of values | Youth/education |
| 5 | | Accession to the EU | |

As the follow-up activity of the brainstorming sessions, participants under the guidance of the foresight facilitators reviewed the factors which they ranked previously, and all together selected four, which they considered to be the most

important, by merging the findings of all three groups: experts, decision makers, and migrants/civil society (Figure 1). Then, with the help of the moderators they were encouraged to put the drivers into a matrix of binary opposing scenarios (Table 2).

Figure 1. *Key drivers of migration and labour market in the near future of Serbia*

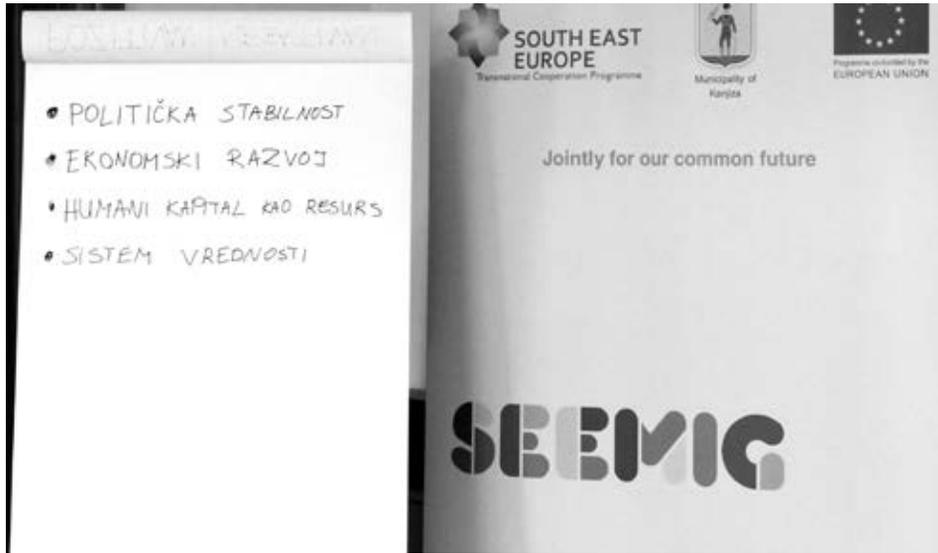


Table 2. *Matrix of the binary opposing scenarios*

| Drivers | Positive scenario | Negative scenario |
|-----------------------------|--|------------------------------|
| Political stability | Stable political situation | Instable political situation |
| Economic development | Strong economy | Economic recession |
| Human capital as a resource | Negligible brain drain and brain waste | Brain drain and brain waste |
| System of values | Restored system of values | Degraded system of values |

During the creation of national scenarios (positive and negative) in mixed groups the participants went through the phenomenon of migration and labour market in Serbia until 2025 keeping in mind the matrix key drivers as guidelines. The discussions began with the influence of political stability and economy. Special emphasis was put on the system of values. Institutional background and bureaucracy were discussed, as well as education, health care and social systems. The process of developing scenarios in both groups was fluent.

The group that made a positive scenario was impressed by the ability to perceive the future of Serbia from a completely different point of view from

the one dominant during the last two decades. Such an approach resulted in the following scenario: Political stability would provide positive conditions for improvement in economy resulting in growth in the fields of agriculture, energy and industry. The education system would go through intensified process of reforms and modernization in accordance with EU standards. Businesses would be easier to initialize due to simplified bureaucratic regulations. Increase in economy would encourage the return of emigrants who left the country in the recent period. Also, it is expected that Serbia would become attractive for foreign students as it was the case before the 1990s. Awareness would be raised concerning all kinds of diversities that would result in restoring of system of values.

It seemed that it was much easier for the second group to make a negative country scenario given that the negative realization of key drivers of migration and labour market has been shaping reality in Serbia for a long period of time. Thus, the presence of linear trends in the following scenario was not unexpected.

Political instability would lead to a decrease in economy, which in turn would cause poverty in the society. As always, poverty is the first step to the downfall of values, such as culture, moral, ethics, etc. Corruption would increase. The education system, health and social protection systems would start to regress. The country would be further disintegrated. The feelings of insecurity, lack of perspective, and impotence would be commonly experienced. Emigration flows would increase while fertility rates would decrease mainly due to postponement of births. The process of population ageing would be intensified.

A single hero was chosen to depict individual scenarios, and she was put into both positive and negative country scenarios. Olga is a 24 year old nurse who now lives in Kraljevo, but moved there from Orahovac as an internally displaced person. She is an only child. She works in a kiosk. She is single and lives with her parents in a flat.

She was put into both positive and negative country context. In the positive country scenario, Olga gets a job in Mataruška banja (Mataruška Spa), in a medical rehabilitation centre, established by Milan George Jovanović from American diaspora. She completes a course of chiropractic and gets a better job position. Her husband is an agronomist, a returnee from Holland, specialized in organic plants production. They have 2 children by 2018, and a third by 2022. Olga leaves her job and they build their own house where they start their organic based agricultural business.

In the opposite country scenario, Olga works in a kiosk and falls in love with a car mechanic who is employed. They get married and live with her parents. When she is 28 they get their first baby, and can no longer live with her parents. They start thinking of moving abroad. First her husband goes to Italy and start working in the field. Then Olga and the child join him. She soon gets a job as a caretaker in a nursing home for the elderly. They get their second child. Both kids grow up as Italians. Olga and her family do not return to Serbia.

POLICY IMPLICATIONS

Experts, decision makers and migrants/civil society represented the three groups that participated in the foresight exercise. Participants' views regarding migration and labour market processes in Serbia largely coincide with the recent findings of demographers [Radivojević and Nikitović 2010; Penev and Predojević-Despić 2012; Rašević 2012; Nikitović 2013]. All three groups chose almost the same key factors, which, in their opinion, would influence their own future and future of Serbia, even though the definition used varied. They recognized political stability, economy, institutional background, and system of values in the society as the key drivers of migration and labour market in the near future. The issue of the EU accession is included in the political stability and economic growth.

Increase in economy, education system in line with modern demands, and return of emigrants who recently left the country are the main pillars of the positive country scenario that experts, decision makers, migrants and representatives of civil society defined in this exercise. In the negative country scenario, political instability and weak economy leads to regression in the vital systems of the country. Emigration flows increase while population ageing intensifies.

Since the participants do not see Serbia as an immigration destination for foreigners in the next 12 years, the only opportunity in positive country scenario regarding migration and labour market might be the return of emigrants who have recently left the country. The rationale is that expected economic growth will not be strong enough to induce significant immigration flows from abroad by 2025 because the current level of the economic development is very low.

Given the recent dramatic events during the 1990s in Serbia, the linear development of the unfavourable processes in the negative scenario did not come as a surprise. Participants see emigration as almost exclusively negative phenomenon since the recent outflows from the country consisted mainly of young and well educated persons unlike the typical outflows of guest workers between the 1960s and 1980s based on the bilateral country contracts, which primarily targeted low-skilled segment of unemployed people. In addition, the number of foreign workers in Serbia is currently negligible, which did not give enough elements for thinking of immigration as the counterbalancing factor for labour shortages in the conditions of negative scenario.

The increase of permanent emigration of prime-age workers from the country, as presented in the negative country scenario, could be a serious challenge for the health and social protection systems in the conditions of intensive population ageing. Pension system sustainability could be particularly in danger. Major tasks for the policy makers in that sense would be to deal with rising demands in medical sector, to improve elderly care system, and to reform pension system due to low labour force base.

Two life stories can be transformed into direct messages to policy makers, which is one of the basic aims of the foresight exercise. Persons from the Province of Kosovo and Metohija, who were internally displaced across the country since 1999, are integrated in their new local communities. The realization of the positive country scenario on individual level would bring back young

emigrants who have different work experiences and new knowledge from developed economies, who have enough incentive for launching small business in Serbia. Also, from a demographic viewpoint, this scenario would help young couples achieve their norms of reproduction. Finally, the positive country scenario shows that individuals would be more encouraged for job mobility as compared to the heritage from the socialist period.

Table 3. *Synthesis table of opportunities, threats and policy implications by the two opposing scenarios up to 2025*

| Future up to 2025 | Opportunities | Threats | Policy implications |
|---------------------------|-----------------------------|--|--|
| Positive country scenario | Return of recent emigration | Concerns of residents for their job positions in the labour market | Measures important to facilitate return |
| Negative country scenario | | Increasing permanent emigration of prime-age workers from the country Intensifying of population ageing | Pension system sustainability in danger Improved elderly care system Demands in medical sectors rise |

The no return migration outflows from Serbia to the overseas destinations (USA, Australia), renewed during the 1990s, are considered to be general patterns of emigration from the country; thus, while searching for a job in the conditions of negative country context, emigrants from Serbia would strive to permanently settle down even in close European destinations, such as Italy, unlike the case of working emigration (guest workers) to Germany between 1960s and 1980s. Consequently, intensified population ageing would bring new challenges in medical sector, elderly care system, and pension system.

Both personal stories are illustrative enough to clearly demonstrate differences between two opposite futures in regard to migration, human capital and labour market in Serbia in the forthcoming period. They could be inspiring for policy makers to realize the importance of migration issue and its implications. It seems to us that this foresight exercise, as a qualitative approach, could provide additional insights to quantitative methods in forecasting the future of a country.

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ОРИГИНАЛНИ НАУЧНИ РАД

КАКО МОТИВИСАТИ КРЕАТОРЕ ПОЛИТИКЕ ДА СЕ СУОЧЕ СА ДЕМОГРАФСКИМ ИЗАЗОВИМА?

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РЕЗИМЕ: Ако желимо дубље да сагледамо истину, или намеравамо да тумачимо појаве кроз сагледавање одређене популације, биће нам неопходна холистичка

перспектива. Применом вежби предвиђања могу се открити неки нови обрасци, а померања у аспектима проучавања могу се инхибирати. Циљ таквог приступа јесте давање смисла будућим опажањима, очекивањима и страховима како стручњака и оних који одлучују тако и обичних грађана. Његове активности усмерене су ка решавању критичних питања, што може значајно да обликује будућност земље у наредним годинама. Вежба предвиђања јача размишљање о будућим корацима које треба предузети уколико неки специфичан сценарио постане стварност. Личне приче из живота засноване на бинарној опозицији различитих будућности једне земље креаторима политике могу недвосмислено да покажу све релевантне импликације које би различите будућности могле имати у погледу наталитета, миграција, старења становништва, људског капитала и тржишта рада у Србији у наредном периоду. Осим тога, чини се да таква вежба предвиђања, као квалитативни приступ, може да пружи додатан увид у квантитативне методе предвиђања демографске будућности земље.

КЉУЧНЕ РЕЧИ: вежба предвиђања, квалитативно истраживање, креатори политике, демографска будућност, међународне миграције, Србија

DETERMINANTS OF DEMOGRAPHIC DEVELOPMENT OF THE REPUBLIC OF SRPSKA AT THE BEGINNING OF THE 21TH CENTURY

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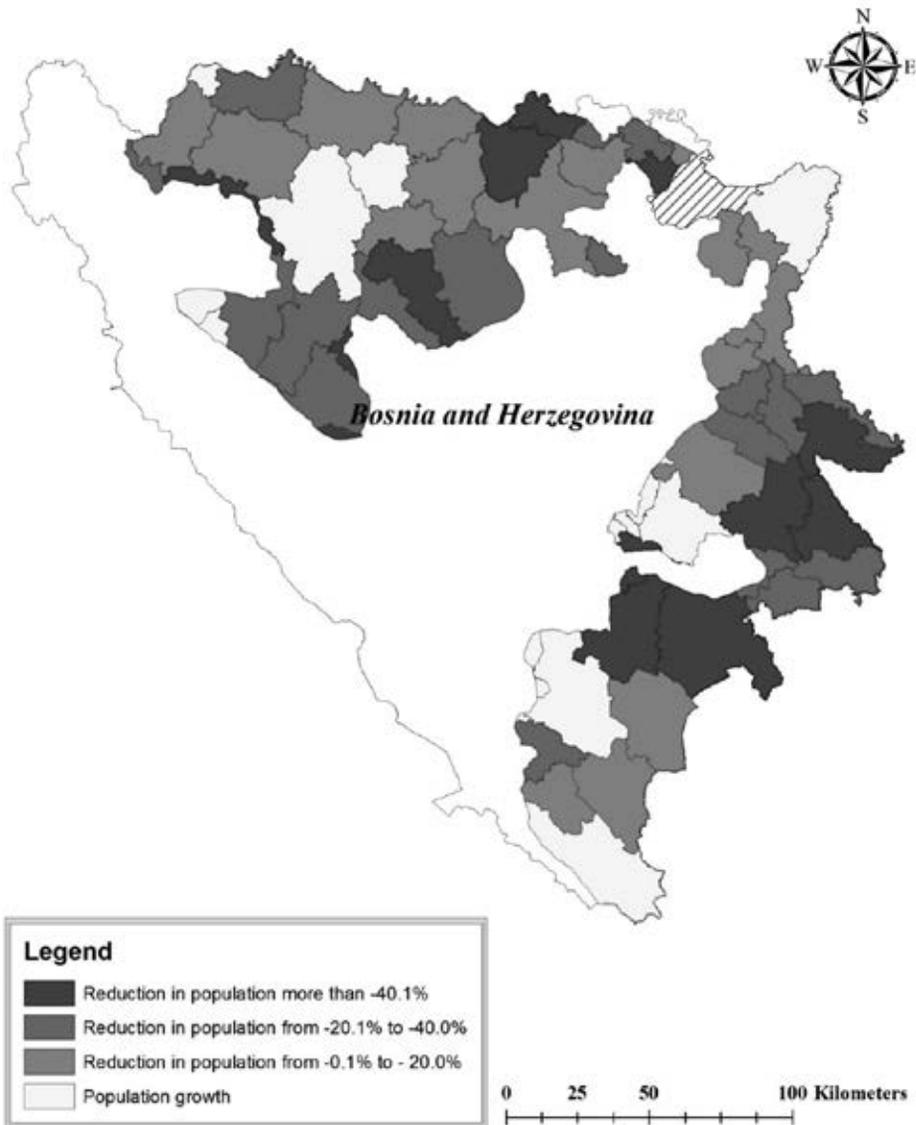
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ABSTRACT: For decades now, the Republic of Srpska has been affected by the natural depopulation process and starting with 2002 it has been manifested through negative rate of natural increase resulting from natality decrease and mortality increase. During the target period, the number of the live-born declined by 28% whereas the number of the dead increased by 25%. Clearly, negative demographic figures along with negative migrations resulted in the total depopulation. Negative migration balance additionally complicates negative demographic trend, which results in total depopulation of large proportions. Major issue of the Republic of Srpska population is the phenomenon of low fertility resulting from a whole range of negative factors. Therefore, the implementation of population policy measures is fundamental for both society and population in the country.

KEYWORDS: demographic development, Republic of Srpska, low fertility, population policy

In the first decade of 21st century, the Republic of Srpska witnessed an extremely difficult demographic development period in which the population gradually decreased and the natural increase got a decreasing trend. Annual population growth rate and data on the population percentage in specific areas indicate the interdependence among natural movement, depopulation, and population ageing [Marinković 2012].

Cartogram 1. *Percentual population changes in the municipalities of RS between two censuses (1991–2013)*



Since 1992, RS population figures have been rather difficult to analyze from a scientific point of view due to the lack of a census for more than two decades. In 2013, 22 years later, a census of population, households, and flats was conducted. According to the preliminary results, there are 1,326,991 people in the Republic of Srpska.

Between 1991 and 2013, 82.2% of cities and municipalities, out of a total of 51 on RS territory, faced the population decrease. The depopulation process mostly affected eastern parts of the country, the municipalities of Berkovići, Bratunac, Višegrad, Vlasenica, East Mostar, Kalinovik, Novo Goražde, Rogatica, Srebrenica, Trnovo, Foča, Han Pijesak, and Čajniče where the population is one-third fewer than it was in 1991. Only 4 cities and 9 municipalities had the population larger than in 1991. The largest increase in population was in the cities of East Sarajevo (53.7%), Bijeljina (18.4%), Trebinje (7.8%), and Banja Luka (2%). The municipality of East New Sarajevo had three times larger population, and the population was almost as twice as large in East Ilidža and East Drvar. The municipality of Pale had the population increase of 55.5%, whereas in municipalities of Laktaši (23.2%) and East Old Town (19.9%) the population increased by one fifth. The increase was insignificant in the municipalities of Petrovac (1.4%) and Kostajnica (1.4%) and in Nevesinje the figures did not change at all [Marinković 2014].

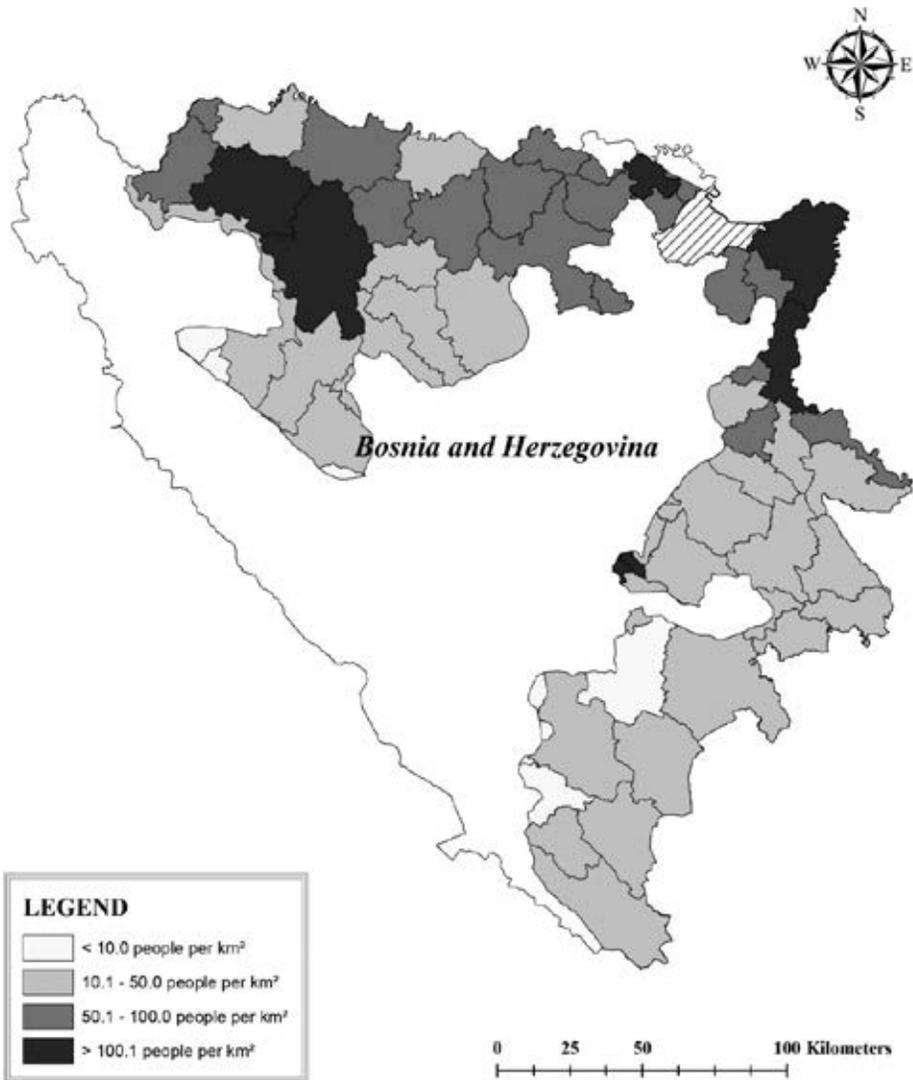
Out of 2,756 settlements in the Republic of Srpska, 530 (19.2%) have population less than 10 people. These settlements are mostly located in the eastern parts of the country in municipalities of Višegrad (78), Kalinovik (45), Rogatica (34), Novo Goražde (33), Rudo (27), Foča (23) and Gacko (21), and in the city of Trebinje (68). Twelve municipalities had no settlements with population less than 10: Gradiška, Donji Žabar, East Ilidža, East New Sarajevo, Kneževo, Kozarska Dubica, Kostajnica, Laktaši, Novi Grad, Petrovo, Prnjavor, and Čelinac.

Extremely heterogeneous demographic features are typical of the RS area. Two thirds or 65% of the population are located west from the Brčko District all the way to Novi Grad and Ribnik, whereas the rest of the population belongs to the eastern part of the country south from Rača all the way to Trebinje and south from East Herzegovina [Marinković 2012].

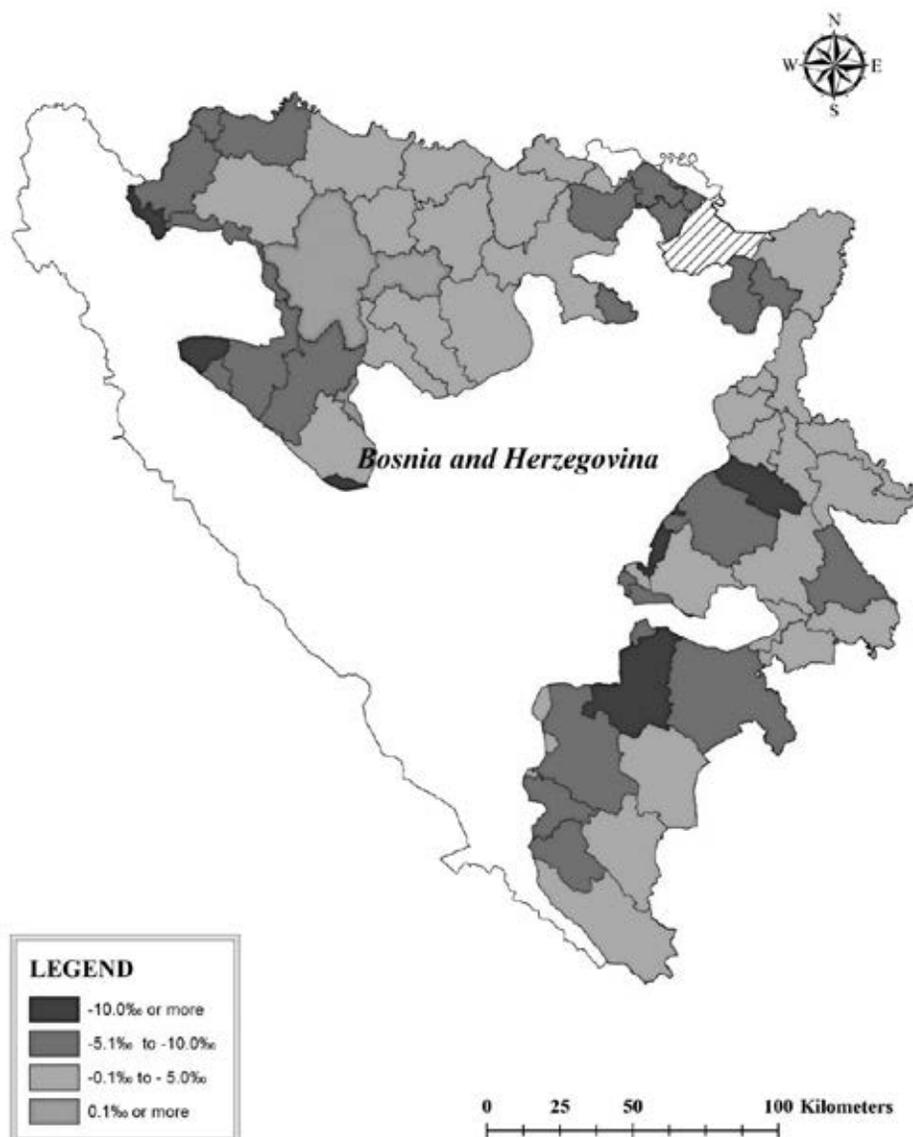
The analysis of regional population distribution indicates that Banja Luka mesoregion is the most populated. Namely, this region is spatially the largest and includes 35.5% of total RS population according to 2012 estimations. Bijeljina mesoregion comes second (20%) followed by Doboj (17.4%) and Prijedor (11.6%). The following two highland mesoregions have the poorest population rates – East Sarajevo with 9.7% and Trebinje with 5.8%. The aforementioned is a direct consequence of long term emigrations that had only been accelerated by the 1992–1995 events which caused some areas to reach critical population density.

Republic of Srpska has poor population density of 51.1 people per square kilometer. The previous cartogram clearly shows that within the country's borderline there are extreme differences in population density. Most populated are Bijeljina and Doboj mesoregions with 74.2 and 71 people per square kilometer, respectively. Prijedor mesoregion has the population density of 66.9 people per square kilometer whereas Banja Luka mesoregion figures are 66. The poorest average density is in East Sarajevo (22.5) and Trebinje (19.1) mesoregions which are also the least populated [Marinković 2014].

Cartogram 2. *Population density in municipalities of Republic of Srpska in 2012*



Components of RS population natural movement indicate certain problems with almost all cities and municipalities. According to the 1991 population census, there were 42 municipalities in the RS territory with moderate rate of natural increase (5–14‰), and only 10 municipalities with low rate of natural increase (up to 5‰). The 1996 data show negative rate of natural increase in 28 municipalities, which makes 46% of RS territory [Marinković 2010].

Cartogram 3. *Rate of natural increase in RS municipalities in 2012*

The cartogram clearly shows that out of a total of 63 cities and municipalities in the Republic of Srpska, only 3 had positive rate of natural increase. Thus, except Banja Luka, Čelinac, and Jezero all other local communities had more deceased than the newborns.

We should say that ever since 1992 no city or municipality has had a continuous positive trend in the rate of natural increase. Furthermore, it is

evident that 11 cities and municipalities, or one-fifth of RS territory, has not had positive rate of natural increase during that period: Višegrad, East Drvar, East Mostar, East New Sarajevo, Kalinovik, Kozarska Dubica, Kostajnica, Petrovo, Prijedor, Rudo, and Han Pijesak.

Table 1. *Population number, population density, components of natural movement, inner migrations and number of enrolled pupils in elementary schools in RS*

| | | | |
|------|---|---------------------|-------------------------|
| Year | Population number | Absolute difference | Relative difference (%) |
| 1991 | 1,558,387* | -231,396 | -14.8 |
| 2013 | 1,326,991** | | |
| | Population density | Absolute difference | Relative difference (%) |
| 1991 | 63.24 st/km ² * | -9.34 | -14.8 |
| 2013 | 53.85 st/km ² ** | | |
| | Rate of natural increase | Absolute difference | Total sum (1996–2013.) |
| 1996 | 1,332*** | -5,800 | -30,532 |
| 2013 | -4,468*** | | |
| | Number of the liveborn | Absolute difference | Relative difference (%) |
| 1996 | 12,263*** | -2,753 | -22.45 |
| 2013 | 9,510*** | | |
| | Number of the deceased | Absolute difference | Relative difference (%) |
| 1996 | 10,931*** | 3,047 | 27.87 |
| 2013 | 13,978*** | | |
| | Inner migration balance | Absolute difference | Total sum (2007–2013.) |
| 2007 | 133**** | 506 | 8,149 |
| 2013 | 639***** | | |
| | Number of pupils enrolled in elementary schools | Absolute difference | Relative difference (%) |
| 1996 | 127,426***** | -30,902 | -24.25 |
| 2013 | 96,524***** | | |

Source: * Marinković, D.; Vranješ, R. [2013]. Preliminary results of the 2013 Census of Population in the Republic of Srpska and their comparison with the previous census from 1991. Demography, Belgrade, Faculty of Geography.

** Preliminary results of the Census of Population, Households and Dwellings on the Territory of the Republic of Srpska [2013]. Banja Luka, Republic of Srpska Institute of Statistics.

*** Demographic statistics – Bulletins no 4 and 14, Banja Luka: Republic of Srpska Institute of Statistics.

**** Population statistics – annual announcement for 2013, Banja Luka: Republic of Srpska Institute of Statistics.

***** Migrations and refuge statistics – annual announcement for 2013, Banja Luka: Republic of Srpska Institute of Statistics.

***** Education statistics – Elementary education, Bulletins no 2 and 14, Banja Luka: Republic of Srpska Institute of Statistics.

The previous Table clearly shows that all the parameters for the RS territory, except inner migration balance, are negative. In comparison with the previous period, there are now fewer people and poorer population density; the rate of natural increase has decreased; the number of the live-born is smaller as well as the number of pupils enrolled in elementary schools.

In the near future, we may witness further decline in fertility due to the age disparity. Namely, the decreased natality rate in the early 1960s affected the portion of the reproductive population in the early 21st century. In 2013, the fertile women were those born between 1964 and 1998. Radical decline in natality in the 1970s, 1980s, and 1990s largely affected the reproduction trends in the Republic of Srpska.

In the next two decades, we might expect a mortality increase due to the inevitable loss of the 'baby boom' era population. In the early 2010s, a great part of the population, born after the WW II, got retired which shall have a further impact on the population age structure and the country's funds. If we wish to improve the life expectancy, there is a need for preventive measures and strategies regarding the elderly population.

Family planning and population policy in the Republic of Srpska are largely affected by the existing social changes. The analyses of demographic determinants over the last decade clearly show a long-term demographic recession in the country, which was initiated by the intensive decline in fertility. In order to boost the fertility, it is necessary to develop strategies of demographic development and a family planning program which should consider the number of children necessary to replace the whole generations. Therefore, we need intensive activities to systemize the existing population policy measures and we should aim at the pronatality policy [Marinković 2014].

The general principle of population policy should be based upon the free decision making of each individual and family regardless of where the policy is being implemented. Population policy should reflect pro-natality measures on both national and local levels. The measures of pro-natality population policy should focus on children and women healthcare, child allowances, female education, and promotion of motherhood. It is crucial to make a clear distinction between population policy and social policy, i.e. a healthy population climate within a society is a priority.

Recent studies have shown that there are preconditions for birth rehabilitation in the Republic of Srpska – a fact which we base upon the opinion of most examinees that there is no clear line between a desirable and ideal number of children. In other words, three is both ideal and desirable number of children, but there is also the key number for the population reproduction which should be aimed at. Studies have confirmed that the poor reproduction in the Republic of Srpska is in connection with poor funds. Still, there is a clear readiness to adopt the pronatality policy measures in order to boost the number of the newborns [Marinković 2014].

The demographic recovery of the country as well as the demographic structure improvement entails the birth rate increase, which is attainable only by motherhood promotion (female employment incentives, labor market adjustment,

liability for legal irregularities and contempt with reference to maternal leave, financial incentives for families with three or more children, larger fertility treatment funds) and improvement of children's social care (new pre-school facilities, playgrounds, parks, and other cultural and sports contents, new sets of tax laws to support tax-free children products, daily excursions for children under the age of 12, new residential quarters for families with large number of children at small interest rates, stimulation for employers of couples with three or more children).

In rural areas, population and human resources should be preserved and given incentives via different commercial activities, employment of the young, construction of small production and processing capacities, employment of women, and different financial and non-material stimulations for rural families. In order to prevent further rural depopulation, rural residents should be provided with stable income. Cooperatives should actually represent places where the individual agricultural producers might conveniently purchase everything necessary for the production and placement of their products. Therefore, it is crucial to create such conditions that would enable women to start their own cooperatives in order to consolidate their agricultural products [Marinković 2014].

A long-term plan should be to prevent the young from leaving the country through different programs such as: employment support and career development for the young (support employment and self-employment of the young researchers and scientists, programs of training in entrepreneurship, provision of scholarships for the talented people and prospective professionals, improvement of higher education quality, development of the program of professional training within the education system); management of the housing facilities for the young (construction of economic residential facilities, subsidies for residential problems of young couples with children), and stronger engagement of the young in the creation of cultural and sports affairs (stimulation of the young to take local initiatives and availability of different cultural and sports content).

Regardless of the significant regional differences within the Republic of Srpska area, due to general demographic migrations, specific population policy measures should be introduced gradually. Special attention ought to be paid to specific economic, socio-cultural, and other characteristics of various regions, i.e. the population policy should be spatially differentiated.

In order to provide a safe and balanced demographic and economic prosperity, the population policy measures should aim at the death rate decrease.

The focus should also be on the female health care, their reproductive potential and health, disease prevention, promotion of healthy life style, usage of adequate contraception, sterility struggle, appropriate care during and after pregnancy, etc.

A novelty in population policy is the population education, meaning that individuals know little about family planning and population policy in general. Hence, continuous campaigns are necessary in order to spread the information on demographic trends in the Republic of Srpska at all education levels – ranging from primary schools to universities [Marinković 2014].

The universal goal of the population policy measures regarding the pronatality should be the total fertility of 2.1 children per one mother. This would

enable a simple generation switch and the stationary population level. This goal is also attainable by promoting mothers as professionals, which means that the national program of demographic development should be a crucial document to define the family planning strategy. More specifically, in the Republic of Srpska, a whole range of measures aiming at specific population groups are necessary to promote the birth of the first and second child. The birth of a third child should be stimulated financially, i.e. the child benefits ought to be a universal trend (regardless of the financial status of a family). Based upon the suggested measures of population policy implementation in the Republic of Srpska, it is expected to reach the total fertility rate (TFR) of 2.1 children per one mother and to enable a simple generation switch.

INSTEAD OF CONCLUSION

Demographic development in the Republic of Srpska is a threat to the total development. Bearing in mind the aforementioned demographic features, it is crucial to implement the spatially differentiated population policy as soon as possible, especially at the municipal level. The population policy should indeed be based upon the birth rates stimulation.

The design of pro-natality population policy measures requires extensive multidisciplinary studies, which consequently needs bigger scientific, IT, and statistics funds than we have at our disposal. The pro-natality population policy should have explicit demographic objectives targeting at the total number and structure of the population, using strategic variables of fertility, nuptiality, death rates and migrations.

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ДЕТЕРМИНАНТЕ ДЕМОГРАФСКОГ РАЗВОЈА РЕПУБЛИКЕ СРПСКЕ
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РЕЗИМЕ: Демографски развој Републике Српске пријети да буде ограничавајући фактор свеукупног развоја. Република Српска је већ деценијски захваћена природном депопулацијом, која се од 2002. године манифестује негативним природним прираштајем, што је последица смањивања стопе наталитета, а повећавања стопе морталитета. У анализираном периоду број живорођених се смањило за 28%, док је у истом временском интервалу број умрлих порастао за четвртину. Изразио негативна демографска слика, потпомогнута негативним миграционим салдом, манифестује се укупном депопулацијом. Негативна демографска слика додатно је усложњена и негативним миграционим салдом, тако да укупна депопулација поприма велике размјере. Основни проблем становништва Републике Српске је феномен недовољног рађања који је последица низа негативних фактора. Имајући у виду назначене демографске карактеристике, неопходно је што прије приступити спровођењу просторно диференциране популационе политике, а посебно на нивоу општина. Основна карактеристика популационе политике требало би да се заснива на стимулисању (повећању) наталитета. Разрада мјера за провођење пронаталитетне популационе политике захтијева опширна мултидисциплинарна истраживања, која би се ослањала на далеко шири научни и статистичко-информациони фонд од оног којим ми располажемо. Пронаталитетна популациона политика би требало да има експлицитне демографске циљеве који утичу на укупан број и структуре становништва путем стратешких варијабли фертилитета, нупцијалитета, морталитета и миграција

КЉУЧНЕ РИЈЕЧИ: демографски развој, Република Српска, низак фертилитет, популациона политика

UDC 332.1(497.5)
UDC 314(497.5)
DOI: 10.2298/ZMSDN1448629L
REVIEW SCIENTIFIC PAPER

REGIONAL ECONOMIC AND DEVELOPMENT PROBLEMS AND PERSPECTIVES: CASE STUDY OF SLAVONIA AND BARANJA (CROATIA)

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ABSTRACT: Slavonia and Baranja or Eastern Croatia is a physical-geographical part of the Pannonian Basin and it is divided administratively into 5 counties: Virovitica-Podravina, Požega-Slavonia, Slavonski Brod-Posavina, Osijek-Baranja and Vukovar-Sirmium (which make nearly 20% of the state). Regarding functional organization, Slavonia and Baranja is a part of Osijek nodal region but with interrelated influences of other regional centres like Slavonski Brod, Vinkovci, Vukovar, Đakovo and Požega. Analysis of this region consisting of 22 cities and 104 municipalities with 805,998 people (according to Census 2011) will be conducted according to several economic-geographic indicators: foreign trade exchange, number of employed people per 100 inhabitants, number of unemployed people per 100 inhabitants, economic structure of population as well as the share of people employed in agriculture and industry as the most important sectors in the regional economy. Demographic problems will also be analysed, because the population is one of the most important factors of economic and social development. The main problems of the analysed region are depopulation, aging and rural exodus as well as the fact that every city or municipality, except one, had the decline of population comparing to previous Census of 2001. These processes are accompanied by spatial population polarization which has also resulted in economic decline.

KEYWORDS: Slavonia and Baranja, regional problems, economic decline, economic perspective

INTRODUCTION

Croatian part of the Pannonian Basin is a region with advantageous geo-strategic position along the pan-European transport corridors Vc, VII and X and with rich natural, cultural and historical resources. However, this region suffers from broad consequences of war, with large mine areas which certainly limit the usage of natural and agricultural potentials. Because of that, Slavonia and Baranja is demographically and economically the most endangered region of Croatia.

That is why the implementation of regional development policies is of great significance. Regional development policy usually implies all deliberate activities implemented by government with the goal of changing spatial distribution of economic and social phenomena like population, income, government incomes, manufacturing of different goods and services, transportation infrastructure, social infrastructure and political power [Hansen, Higgins and Savoie 1990]. The golden age of regional policy in the world began in the late 1960s and early 1970s. Up to that time, the regional intervention was mainly sporadic and of limited range, something like TVA project launched as a part of the American New Deal [Pavić 2003].

In Regional Development Strategy of Croatia, regional development policy is defined as entirely adjusted agglomerate of goals, priorities, measures and activities aimed towards strengthening competition of regional and local units according to principles of sustainable development and decreasing regional inequalities according to degree of development. Regional development policy in Croatia is defined by specific laws and it is mostly focused on local level [Ministarstvo regionalnog razvoja..., 2010].

INDICATORS OF DEVELOPMENT

Analyses and microeconomic indicators show competency of the region for development of entrepreneurial infrastructure. As a consequence of insufficient investments of local entrepreneurs and their weak networks, the entrepreneurial infrastructure is relatively weak in Slavonia and Baranja. The level of education is low and the investments in research and new technologies are fractional. Regardless of the tradition in industry and craftsmanship the lack of networks in business sector is obvious as well as non-connectivity between agriculture and tourism. Economic structure is extremely narrow, mainly focused on agriculture. Besides agricultural fragmentation there are pending property issues. It is also necessary to intensify preparations for horizontal issues and organizations of common market. It is particularly important that the systems for collecting and tracking information and for identifying agricultural parcels are set up [Ministarstvo regionalnog razvoja..., 2010].

This part of Croatia shows certain weaknesses in stimulation of economy, although government stimulation measures represent strength in targeted area. The main cause of weak stimulation is an uneven development capacity of local and regional administration. In addition, there are high unemployment rate and negative demographic trends. The advantages of this region could be

adequate management of natural, cultural and historical resources, cross-border cooperation and possibilities of EU funds utilization. Insufficient ecological consciousness and lack of regional brands are weaknesses of the region [Ministarstvo regionalnog razvoja..., 2010].

POPULATION AS A FACTOR OF ECONOMIC DEVELOPMENT

Population is a bearer of economic development, because it represents a manufacturing strength that drives and directs all activities in the region. Therefore, a comprehensive understanding of the current development trends and perspectives of Slavonia and Baranja is not possible without understanding and evaluating its demographic aspects [Wertheimer-Baletić and Živić 2003]. Regarding climate and environmental, traffic and geographic, demographic and socio-economic characteristics and processes, it is particularly important to note that this region clearly stands out in comparison to other Croatian regions. Its population advantages have always attracted people, although it was and still is rarely populated compared to the rest of Croatia [Wertheimer-Baletić and Živić 2003].

Results of low fertility, decline in birth rates, increasing mortality rates, emigration, adverse economic conditions and war are negative population trends and a pronounced population decline by more than 170,000 inhabitants in the last three decades (by 2011 Census only Dragalić in Slavonski Brod County had minimal growth of population in relation to 2001 Census throughout Slavonia and Baranja). Rural areas of Slavonia especially suffered. The process of “village senilization” progressed with emigration [Cifrić 2003]. In this way, the potential for the development of Slavonia and Baranja was reduced.

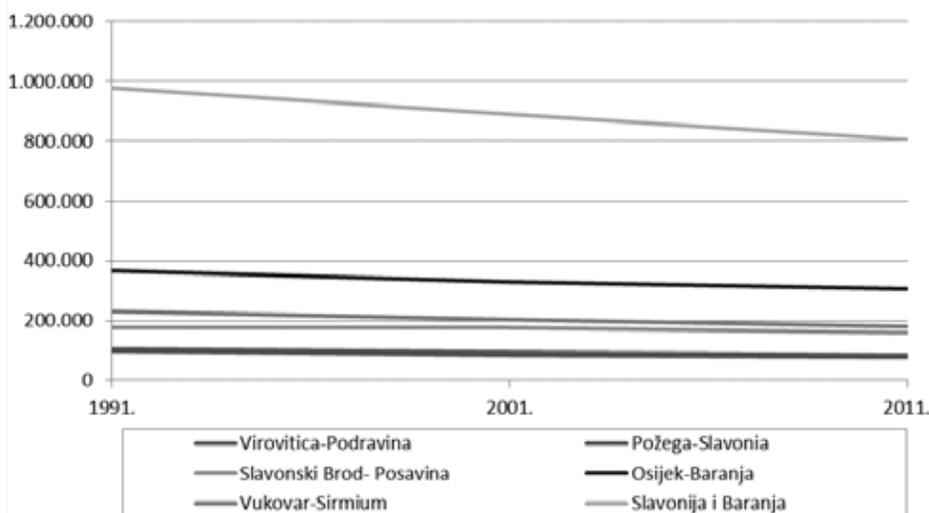


Fig. 1. Population of Slavonia and Baranja by counties, 1991–2011

Source: Census 1857–2001, Census 2011, www.dzs.hr

AGRICULTURE AND RURAL AREAS AS FACTORS OF DEVELOPMENT

The present situation of Croatian agriculture in general, and thus the state of agriculture in Slavonia and Baranja as traditional agricultural area, is more than unenviable. The reasons for this are untended land, lack of trained and motivated farmers, and also too small and unregulated market [Petrač and Zmaić 2003].

“The development of the whole agricultural area mainly serves food industry development. Namely, it is the so-called derived demand. However, agricultural products are also used in other industries: textile industry, animal feed, tobacco industry, pharmaceutical industry and wine and spirits industry. So, the agricultural development also depends on the exploration of other industrial sectors [Baban and Ivić 2003]”.

As it can be seen in Table 1, the size of utilised agricultural land in Slavonia and Baranja counties is small, mostly up to 10 ha. The agricultural farm size is a factor which can stimulate or restrict the efficiency and effectiveness of agricultural activities [Petrač and Zmaić 2003]. In this case, size is a limiting factor and Croatian family farms are among the smallest in the EU.

Structure of the sowing is unsatisfactory because besides cereals, the share of industrial plants, vegetables, fruits as well as livestock breeding should also be growing. In addition, some parts of agricultural land are dangerous because of the mines, which is one of the reasons why they are not used [Baban and Ivić 2003]. Nowadays, agricultural sector of Slavonia and Baranja comprises around 7% of total employment in this region.

In order to meet the market requirements, it is assumed that farms should export in the markets with the perspective of successful business [Petrač and Zmaić 2003]. Farms in Slavonia and Baranja still do not have that power. The peasant labour force is insufficiently used, agricultural incomes cannot cover all and farm consumption needs to be supplemented by auxiliary tenure. Even the entire incomes of peasant families, through agricultural and non-agricultural work, often remain unsatisfactory [Zorzolliu 2012].

ECONOMIC AND GEOGRAPHIC INDICATORS OF DEVELOPMENT

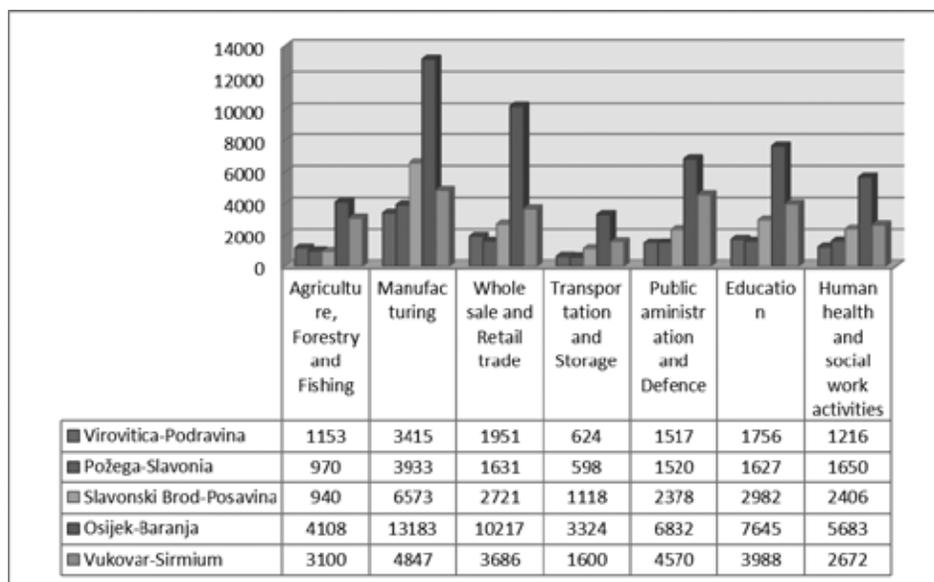
Eastern Croatia plays a significant role in Croatian economy [Baban and Ivić 2003]. However, demographic aging of society and rapid technological advances will influence the transformation of the economy along these paths and will increase competitiveness and provide important sources of growth and employment, at the same time addressing economic and social needs [Zorzolliu 2012]. In Slavonia and Baranja employment in the secondary sector still dominates (31,951 employees), in low value-added industries and the low level of technology. There are 20,206 employees in wholesale and retail trade, 17,998 in education and 16,817 in public sector. At the same time, counties of Slavonia and Baranja have a very low export and import share in the trade balance of Croatia with a maximum of 4.5% (Osijek-Baranja).

Tab. 1. *Agricultural households by the size of utilised agricultural land and number of parcels of utilised agricultural land up to 10ha in Slavonia and Baranja by counties, 2003*

| County | Number of agricultural households | Utilized agricultural land | Number of parcels of utilized agricultural land |
|-------------------------|-----------------------------------|----------------------------|---|
| Virovitica-Podravina | | | |
| 1,01–2,00 ha | 2,622 | 2,816.35 | 7,134 |
| 2,01–3,00 ha | 1,475 | 2,890.37 | 5,229 |
| 3,01–5,00 ha | 1,888 | 6,296.67 | 8,611 |
| 5,01–10,00 ha | 2,034 | 12,805.08 | 13,382 |
| Total | 8,019 | 24,808.47 | 34,356 |
| Požega-Slavonia | | | |
| 1,01–2,00 ha | 2,019 | 2,153.12 | 6,451 |
| 2,01–3,00 ha | 1,215 | 2,245.65 | 5,427 |
| 3,01–5,00 ha | 1,596 | 4,892.28 | 9,238 |
| 5,01–10,00 ha | 1,539 | 8,613.75 | 12,305 |
| Total | 6,369 | 17,904.80 | 33,421 |
| Slavonski Brod-Posavina | | | |
| 1,01–2,00 ha | 3,217 | 3,266.52 | 8,845 |
| 2,01–3,00 ha | 1,991 | 3,588.33 | 7,380 |
| 3,01–5,00 ha | 2,297 | 6,736.27 | 10,736 |
| 5,01–10,00 ha | 2,055 | 1,1611.90 | 12,988 |
| Total | 9,560 | 25,203.02 | 39,949 |
| Osijek-Baranja | | | |
| 1,01–2,00 ha | 4,401 | 5,219.81 | 10,635 |
| 2,01–3,00 ha | 2,318 | 4,974.86 | 7,400 |
| 3,01–5,00 ha | 2,865 | 10,182.07 | 11,495 |
| 5,01–10,00 ha | 3,135 | 20,512.67 | 17,616 |
| Total | 12,719 | 40,889.41 | 47,146 |
| Vukovar-Sirmium | | | |
| 1,01–2,00 ha | 2,583 | 3,089.62 | 5,976 |
| 2,01–3,00 ha | 1,311 | 2,838.43 | 3,888 |
| 3,01–5,00 ha | 1,722 | 6,125.93 | 6,299 |
| 5,01–10,00 ha | 2,269 | 15,357.66 | 1,1427 |
| Total | 7,885 | 27,411.64 | 2,7590 |

Source: Agricultural Census, 2003

Fig. 2. Persons employed in legal entities (in different sectors) by counties, 2011

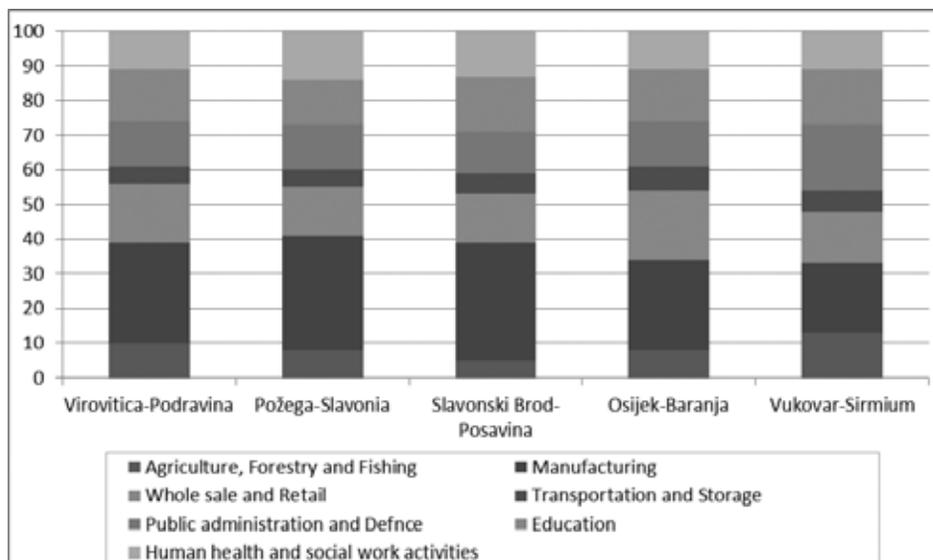


Source: Employment and Wages, Statistical Reports, 2011

In the region of Slavonia and Baranja only five municipalities have significant employment in the industry (60% of total employment), and these are: Đurđevac, Belišće, Strizivojna, Andrijevci and Oprisavci (where the majority of people are employed in the City of Slavonski Brod industry). In the majority of other regions the industrial employment is much smaller, which is associated with general de-industrialization of Croatia as a whole. It is even worse that, apart from an insignificant development of new industries, the existing ones have disappeared. Nowadays, around 22% of employees work in the the manufacturing industry of Slavonia and Baranja.

Comparing competitiveness of Slavonia and Baranja with other parts of the Croatia, the region has the lowest level of competitiveness caused by the economic structure, while the proportion of certain activities is under the national average. This region is mostly specialized for agriculture, forestry and manufacturing industry. This is a narrow economic base oriented to one dominant activity – agriculture, which is very sensitive and dependent on the global competitive environment. Other Croatian regions have considerably more heterogeneous economic structure (Strategy for Regional Development).

Fig. 3. Share of employed persons in main sectors in the counties of Slavonia and Baranja, 2011



Source: Employment and Wages, Statistical Reports, 2011

Tab. 2. Values of development index for Slavonia and Baranja counties

| County * | Value of standardized indicators according to national average | | | | | Index of group development | |
|-------------------------|--|---------------------------|-------------------------------|------------|--|----------------------------|-------|
| | Average income per capita | Average profit per capita | Average rate of un-employment | Population | Share of educated people in 18-65 population | Index of development | Group |
| | 2010-2012 | 2010-2012 | 2010-2012 | 2010-2001 | 2011 | | |
| Virovitica-Podravina | 1.56% | 11.93% | 0.00% | 17.17% | 5.36% | 5.56% | <75% |
| Slavonski Brod-Posavina | 0.00% | 0.70% | 2.71% | 69.14% | 47.64% | 18.43% | <75% |
| Vukovar-Sirmium | 9.81% | 3.76% | 4.87% | 50.30% | 44.68% | 18.73% | <75% |
| Požega-Slavonia | 14.02% | 0.00% | 64.66% | 37.66% | 37.06% | 33.81% | <75% |
| Osijek-Baranja | 54.30% | 38.27% | 24.71% | 59.46% | 69.46% | 46.07% | <75% |

Source: Ministry of regional development and EU Funds

* All counties are in the category of aided regions

The main characteristic of trade market in Croatia is the decline in the labor pool as a result of negative demographic development, emigration and aging workforce. The necessary policies which should be implemented need to consider the following issues: the increase of active population, the increase of employment rate, coherence of supply and demand as well as the increase of workforce mobility.

Also, for Croatia as a whole, high and long-term unemployment of 18.9% (in 2012) has been an unsolvable problem for Croatian government for several years. Main problems that government also have to cope with are: low per cent of active population, structural inconsistency of supply and demand of professional occupations, small number of flexible and adaptable companies and small utilisation of human potential and resources [Ministarstvo gospodarstva, 2014].

CONCLUSION

Slavonia and Baranja is a region with numerous economic and developmental advantages compared with other Croatian regions. Unfortunately, there are also numerous disadvantages preventing the full utilization of resources and capacities of this region. One of the biggest problems is depopulation and lack of young and educated people who are usually the “engines” of positive changes and bases for social and economic development and perspectives.

When talking about agriculture and industry, as traditional sectors in Slavonia and Baranja, it is obvious that without financial help from the state and EU cohesion and structural funds further restructuring and development of these fields as well as investments in new technologies and research, would not be possible. Both of these sectors have suffered from economic crisis for decades. Because of that, a specialized geographical production system should be developed to serve as a good basis for food industry and agro-food sector in general. Big part of this production could be used in tourist sector to a much larger extent than at present.

The unique identity of Slavonia and Baranja might become a significant resource and prospect for further development of the regional agriculture, tourism or economy in general. Also, the incentive for development of this region may be the entry of neighboring countries in the EU, because almost all Slavonia and Baranja counties are bordering with other countries. The entry of these countries into the EU would reduce the negative impact of national borders and establish stronger regional cooperation, which is very important for the development of border regions.

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APPENDIX

Share of employed and unemployed persons per 100 inhabitants and share of employed in sector of industry and agriculture in relation to all employed, in cities and municipalities of Slavonia and Baranja, 2011

| <i>County/Municipality/ Cities</i> | <i>Number of inhabitants</i> | <i>Employed in total</i> | <i>Employed persons per 100 inh.</i> | <i>Unemployed persons</i> | <i>Share of Industrial workers</i> | <i>Share of Agricultural workers</i> |
|------------------------------------|------------------------------|--------------------------|--------------------------------------|---------------------------|------------------------------------|--------------------------------------|
| Virovitica -Podravina | 84836 | 13986 | 16,4 | 11,6 | 24,4 | 8,2 |
| Orahovica | 5304 | 1310 | 24,6 | 9,2 | 27,5 | 15,6 |
| Slatina | 13686 | 2608 | 19 | 13,8 | 23,8 | 8,4 |
| Virovitica | 21291 | 6919 | 32,5 | 9,8 | 27,2 | 2 |
| Crnac | 1456 | 44 | 3 | 12,1 | 0 | 56,8 |
| Čačinci | 2802 | 299 | 10,7 | 11,8 | 46,2 | 21,4 |
| Čadavica | 2009 | 133 | 6,6 | 14,2 | 27,1 | 15,8 |
| Gradina | 3850 | 138 | 3,6 | 12,1 | 2,9 | 23,2 |
| Lukač | 3634 | 254 | 7 | 11,9 | 2 | 5,9 |
| Mikleuš | 1464 | 59 | 4 | 16,8 | 15,3 | 0 |
| Nova Bukovica | 1771 | 101 | 5,7 | 14,7 | 2 | 58,4 |
| Pitomača | 10059 | 998 | 9,9 | 9 | 22,2 | 7,1 |
| Sopje | 2320 | 86 | 3,7 | 14,7 | 0 | 62,8 |
| Suhopolje | 6683 | 435 | 6,5 | 11,8 | 3,7 | 17,7 |
| Špišić Bukovica | 4221 | 152 | 3,6 | 9,6 | 15,1 | 8,6 |
| Voćin | 2382 | 255 | 10,7 | 21,7 | 29,8 | 33,7 |
| Zdenci | 1904 | 195 | 10,2 | 12,4 | 10,3 | 44,1 |
| Požega-Slavonia | 78034 | 13892 | 17,8 | 7,9 | 28,3 | 7 |
| Kutjevo | 6247 | 878 | 14,1 | 8,7 | 23,7 | 45,7 |
| Lipik | 6170 | 1277 | 20,7 | 7,5 | 33,4 | 10,2 |
| Pakrac | 8460 | 1526 | 18 | 7,7 | 25 | 2,75 |
| Pleternica | 11323 | 808 | 7 | 8,6 | 23,4 | 4,6 |
| Požega | 26248 | 8382 | 31,9 | 7,4 | 31,5 | 2,9 |
| Brestovac | 3726 | 177 | 4,8 | 7,9 | 30,5 | 8,5 |
| Čaglin | 2723 | 219 | 8 | 6,2 | 0 | 26,9 |
| Jakšić | 4058 | 123 | 3 | 8,1 | 14,6 | 0,8 |
| Kaptol | 3472 | 117 | 3,4 | 9,1 | 6,8 | 0 |
| Velika | 5607 | 385 | 6,9 | 8,7 | 1,6 | 11,9 |
| Slavonski Brod-Posavina | 158575 | 25851 | 16 | 10,8 | 25,4 | 3,6 |
| Nova Gradiška | 14229 | 3069 | 21,6 | 11,6 | 10,4 | 6,8 |
| Slavonski Brod | 59141 | 16797 | 28 | 9,5 | 27,2 | 2,4 |
| Bebrina | 3252 | 105 | 3,2 | 12,5 | 5,7 | 21,9 |

| | | | | | | |
|--------------------|--------|-------|------|------|------|------|
| Brodski Stupnik | 3036 | 53 | 1,7 | 10,2 | 34 | 13,2 |
| Bukovje | 3108 | 106 | 3,4 | 10,6 | 11,3 | 0 |
| Cernik | 3640 | 166 | 4,6 | 13,2 | 2,4 | 0 |
| Davor | 3015 | 162 | 5,4 | 10,5 | 27,2 | 0 |
| Donji Andrijevići | 3709 | 437 | 11,8 | 9,8 | 68,6 | 1,8 |
| Dragalić | 1361 | 31 | 2,3 | 14,3 | 3,2 | 0 |
| Garčin | 4806 | 252 | 5,2 | 10,7 | 2 | 35,3 |
| Gornja Vrba | 2512 | 663 | 26,4 | 10,9 | 0,6 | 0 |
| Gornji Bogičevci | 1975 | 54 | 2,7 | 18,2 | 0 | 0 |
| Gundinci | 2027 | 122 | 6 | 7,9 | 53,3 | 3,3 |
| Klakar | 2319 | 116 | 5 | 9 | 51,7 | 0 |
| Nova Kapela | 4227 | 375 | 8,9 | 10,4 | 33,3 | 14,9 |
| Okučani | 3447 | 390 | 11,3 | 20,2 | 4,1 | 6,7 |
| Oprisavci | 2508 | 322 | 12,8 | 10 | 62,4 | 0 |
| Oriovac | 5824 | 853 | 14,6 | 10,6 | 60 | 9,1 |
| Podcrkavlje | 2553 | 44 | 1,7 | 12,6 | 0 | 9,1 |
| Rešetari | 4753 | 237 | 5 | 13,4 | 49,8 | 0 |
| Sibinj | 6895 | 439 | 6,4 | 10,5 | 8,2 | 0 |
| Sikirevci | 2476 | 80 | 3,2 | 7,3 | 0 | 0 |
| Slavonski Šamac | 2169 | 143 | 6,6 | 8,8 | 19,6 | 0 |
| Stara Gradiška | 1363 | 171 | 12,5 | 16,7 | 35,1 | 17,5 |
| Staro Petrovo Selo | 5186 | 194 | 3,7 | 14,1 | 3,1 | 3,1 |
| Velika Kapanica | 3308 | 143 | 4,3 | 7,9 | 28,7 | 0 |
| Vrbje | 2215 | 25 | 1,1 | 17,1 | 12 | 4 |
| Vrpolje | 3521 | 302 | 8,6 | 8,6 | 4,6 | 0,7 |
| Osijek-Baranja | 305032 | 70072 | 23 | 10,8 | 18,8 | 5,9 |
| Beli Manastir | 10068 | 3797 | 37,7 | 16,5 | 34,3 | 15,8 |
| Belišće | 10825 | 1971 | 18,2 | 13,3 | 71,1 | 11,1 |
| Donji Miholjac | 9491 | 2687 | 28,3 | 10,7 | 35,5 | 10,7 |
| Đakovo | 27745 | 5215 | 18,8 | 9,3 | 19,6 | 1,6 |
| Našice | 16224 | 4593 | 28,3 | 13,7 | 19,9 | 6 |
| Osijek | 108048 | 40031 | 37 | 8,1 | 12,2 | 1,5 |
| Valpovo | 11563 | 1757 | 15,2 | 10,9 | 30,4 | 5,9 |
| Antunovac | 3703 | 240 | 6,5 | 9,3 | 14,2 | 22,9 |
| Bilje | 5642 | 418 | 7,4 | 9,1 | 13,9 | 10,8 |
| Bizovac | 4507 | 381 | 8,5 | 9,8 | 6,8 | 15 |
| Čeminac | 2909 | 104 | 3,6 | 10,5 | 8,7 | 5,8 |
| Čepin | 11599 | 822 | 7,1 | 9,1 | 33,5 | 2,9 |
| Darda | 6908 | 1299 | 18,8 | 17 | 13,2 | 31,9 |
| Donja Motičina | 1652 | 15 | 0,9 | 15,6 | 0 | 0 |

| | | | | | | |
|---------------------|--------|-------|------|------|------|------|
| Draž | 2767 | 455 | 16,4 | 14,9 | 4 | 13,2 |
| Drenje | 2700 | 208 | 7,7 | 12,3 | 55,3 | 12,5 |
| Đurđenovac | 6750 | 911 | 13,5 | 15,8 | 60,2 | 8,2 |
| Erdut | 7308 | 594 | 8,1 | 13,3 | 1,3 | 39,4 |
| Ernestinovo | 2189 | 276 | 12,6 | 10 | 58 | 2,5 |
| Feričanci | 2134 | 240 | 11,2 | 16,2 | 46,7 | 29,2 |
| Gorjani | 1591 | 73 | 4,6 | 11,1 | 0 | 24,7 |
| Jagodnjak | 2023 | 145 | 7,2 | 21,2 | 2,8 | 37,9 |
| Kneževi Vinogradi | 4614 | 445 | 9,6 | 16,2 | 7,4 | 29 |
| Koška | 3980 | 211 | 5,3 | 13,9 | 1,4 | 39,8 |
| Levanjska Varoš | 1194 | 98 | 8,2 | 12 | 0 | 27,6 |
| Magdalenovac | 1936 | 216 | 11,2 | 11,7 | 0 | 25 |
| Marjanci | 2405 | 183 | 7,6 | 10,9 | 45,4 | 39,3 |
| Petlovac | 2405 | 177 | 7,4 | 15,8 | 2,3 | 47,5 |
| Petrijevci | 2870 | 358 | 12,5 | 8,7 | 56,1 | 2,5 |
| Podgorač | 2877 | 185 | 6,4 | 17,9 | 0 | 55,1 |
| Podravska Moslavina | 1202 | 24 | 2 | 13,2 | 4,2 | 4,2 |
| Popovac | 2084 | 68 | 3,3 | 17,9 | 8,8 | 1,5 |
| Punitovci | 1803 | 115 | 6,4 | 12 | 0 | 47,8 |
| Satnica Đakovačka | 2123 | 180 | 8,5 | 12,8 | 11,1 | 8,3 |
| Semeljci | 4362 | 448 | 10,3 | 7,2 | 2,9 | 67,9 |
| Strizivojna | 2525 | 505 | 20 | 10,5 | 75,8 | 7,7 |
| Šodolovci | 1653 | 29 | 1,8 | 13,2 | 0 | 17,2 |
| Trnava | 1600 | 62 | 3,9 | 12,9 | 0 | 27,4 |
| Viljevo | 2065 | 62 | 3 | 12,5 | 0 | 0 |
| Viškovci | 1906 | 252 | 13,2 | 10,9 | 0,8 | 0,8 |
| Vladislavci | 1882 | 111 | 5,9 | 12 | 47,7 | 0,9 |
| Vuka | 1200 | 111 | 9,25 | 10 | 17,2 | 0,9 |
| Vukovar-Sirmium | 179521 | 30498 | 17 | 10,7 | 15,9 | 10,2 |
| Ilok | 6767 | 1230 | 18,2 | 7,1 | 15,8 | 23,7 |
| Otok | 6343 | 358 | 5,6 | 11,7 | 3,9 | 31,3 |
| Vinkovci | 35312 | 12511 | 35,4 | 8,5 | 13,2 | 6 |
| Vukovar | 27683 | 7552 | 27,3 | 9,9 | 17,1 | 9,4 |
| Županja | 12090 | 2815 | 23,3 | 13,1 | 33,3 | 4,1 |
| Andriješevci | 4075 | 183 | 4,5 | 9,2 | 52,5 | 2,7 |
| Babina Greda | 3572 | 169 | 4,8 | 13,5 | 14,8 | 3,6 |
| Bogdanovci | 1960 | 43 | 2,2 | 11,2 | 0 | 32,6 |
| Borovo | 5056 | 154 | 3 | 12,7 | 4,5 | 1,3 |
| Bošnjaci | 3901 | 153 | 3,9 | 15,2 | 2 | 26,8 |

| | | | | | | |
|-----------------|------|-----|------|------|------|------|
| Cerna | 4595 | 361 | 7,9 | 11,7 | 23,3 | 22,4 |
| Drenovci | 5174 | 299 | 5,8 | 15,1 | 10 | 11,4 |
| Gradište | 2773 | 151 | 5,4 | 14,1 | 4,6 | 2,6 |
| Gunja | 3732 | 359 | 9,6 | 20,8 | 37,6 | 18,9 |
| Ivankovo | 8006 | 319 | 4 | 9,8 | 0,3 | 17,2 |
| Jarmina | 2458 | 57 | 2,3 | 10,6 | 0 | 0 |
| Lovas | 1214 | 319 | 26,3 | 7,3 | 41,4 | 31 |
| Markušica | 2555 | 91 | 3,6 | 12,8 | 1,1 | 8,8 |
| Negoslavci | 1463 | 77 | 5,3 | 10 | 0 | 44,2 |
| Nijemci | 4705 | 600 | 12,8 | 8,9 | 0 | 34,3 |
| Nuštar | 5793 | 409 | 7,1 | 9,2 | 9,3 | 1 |
| Privlaka | 2954 | 136 | 4,6 | 9,4 | 4,4 | 8,1 |
| Stari Jankovci | 4405 | 230 | 5,2 | 10,9 | 6,5 | 30 |
| Stari Mikanovci | 2956 | 278 | 9,4 | 16,1 | 23,8 | 30,9 |
| Štitar | 2129 | 126 | 5,9 | 14,7 | 41,3 | 1,6 |
| Tompojevci | 1565 | 82 | 5,2 | 8,8 | 0 | 15,9 |

Source: Croatian Bureau of Statistics, Zagreb

ПРЕГЛЕДНИ НАУЧНИ РАД

РЕГИОНАЛНИ ЕКОНОМСКИ И РАЗВОЈНИ ПРОБЛЕМИ И ПЕРСПЕКТИВЕ:
СТУДИЈА СЛУЧАЈА СЛАВОНИЈЕ И БАРАЊЕ (ХРВАТСКА)

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САЖЕТАК: Славонија и Барања (Источна Хрватска) физичко-географски су део Панонске низије, а административно се састоје од пет жупанија: Вировитичко-подравске, Пожешко-славонске, Бродско-посавске, Осјечко-барањске и Вуковарско-сремске (заузимају мало мање од 20% укупне државне територије). Што се тиче функционалне организације, Славонија и Барања део су Осјечке нодалне регије, али ту се преплићу и утицаји других регионалних центара попут Славонског Брода, Винковаца, Вуковара, Ђакова и Пожеге. Анализа овог подручја, које се састоји од 22 града и 104 општине с укупно 805.998 становника (према задњем *Попису становништва* из 2011) спровешће се кроз неколико економско-географских индикатора: трговински биланс, број запослених на 100 становника, број незапослених на 100 становника, економска структура популације као и удео запослених у

пољопривреди и индустрији као најважнијим секторима овог подручја. Демографски проблеми такође ће бити анализирани у овом раду, будући да је становништво један од најважнијих фактора економског и друштвеног развоја. Главни проблеми анализираних подручја су депопулација, старење, рурални егзодус, као и чињеница да сви градови и општине, осим једне, имају забележен пад броја становника у односу на претходни *Попис становништва* (2001). Ови процеси праћени су просторном поларизацијом, која је резултирала и економским падом.

КЉУЧНЕ РЕЧИ: Славонија и Барања, регионални проблеми, економски пад, економска перспектива

PREGLEDNI NAUČNI RAD

REGIONALNI EKONOMSKI I RAZVOJNI PROBLEMI I PERSPEKTIVE:
STUDIJA SLUČAJA SLAVONIJE I BARANJE (HRVATSKA)

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SAŽETAK: Slavonija i Baranja (Istočna Hrvatska) fizičko-geografski su dio Panonske nizine, a administrativno se sastoje od pet županija: Virovitičko-podravске, Požeško-slavonske, Brodsko-posavske, Osječko-baranjske i Vukovarsko-srijemske (zauzimaju malo manje od 20% ukupnog državnog teritorija). Što se tiče funkcionalne organizacije, Slavonija i Baranja dio su Osječke nodalne regije, ali tu se isprepliću i utjecaji drugih regionalnih centara poput Slavenskog Broda, Vinkovaca, Vukovara, Đakova i Požege. Analiza ovog područja, koje se sastoji od 22 grada i 104 općine s ukupno 805.998 stanovnika (prema posljednjem *Popisu stanovništva* iz 2011) provest će se kroz nekoliko ekonomsko-geografskih indikatora: trgovačka bilanca, broj zaposlenih na 100 stanovnika, broj nezaposlenih na 100 stanovnika, ekonomska struktura populacije kao i udio zaposlenih u poljoprivredi i industriji kao najvažnijim sektorima ovog područja. Demografski problemi također će biti analizirani u ovom radu, budući da je stanovništvo jedan od najvažnijih faktora ekonomskog i društvenog razvoja. Glavni problemi analiziranog područja su depopulacija, starenje, ruralni egzodus, kao i činjenica da svi gradovi i općine, osim jedne, imaju zabilježen pad broja stanovnika u odnosu na prethodni *Popis stanovništva* (2001). Ovi procesi praćeni su prostornom polarizacijom, koja je rezultirala i ekonomskim padom.

KLJUČNE RIJEČI: Slavonija i Baranja, regionalni problemi, ekonomski pad, ekonomska перспектива

ACTIVE AGEING OF THE POPULATION
AKTIVNO STAREЊE STANOVNIŠTVA

UDC 364.65-22-053.9(497.11)
UDC 314(497.11)
DOI: 10.2298/ZMSDN1448643S
ORIGINAL SCIENTIFIC PAPER

ACTIVE AGEING OF THE ACTIVE ELDERLY
IN SERBIA – EMPIRICAL APPROACH

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ABSTRACT: One of the most important paradigms that emerged in demographic literature when it comes to mitigation of the population ageing in developed world is the concept of active ageing. At the core of this approach is the idea that elderly population is a very important and resourceful segment of a society because of their large experience in different fields that can contribute to the welfare of all. However, there are still no empirical studies of the population such as pensioners that can contribute the most. Even though elderly pensioners are economically inactive, they have a considerable spare time and non-negligible financial assets. In order to empirically enlighten the practice of active ageing in Serbia, we conducted a survey based on the questionnaire from Special Eurobarometer Report 378 dealing with issues of active ageing in Europe. We chose as the target population (already active) participants of the Sixth Olympiad of Sport, Health and Culture for the Third Age held in Vrnjačka Banja. As a result, we got comprehensive responses to a variety of questions, which could be used as guidelines on how to achieve active aging. Additionally, collected evidences of different attitudes of the active elderly towards family, young generations, work, pension, and the like are elaborated.

KEYWORDS: active ageing, pensioners, Serbia, interview, population policy

INTRODUCTION

Population ageing has become a core topic of demographic research recently. Global concerns are raised over the anticipated problems that accompany this

phenomenon. This process is also regarded as a danger to economy. One of the main driving forces of demographic development is a fertility rate, which have stabilized at a quite low level in Serbia. As one of the consequences of the decreasing number of births, the percentage of older population is increasing. When comparing to the rest of the world, Serbia (without Kosovo and Metohija due to data unavailability) is among the oldest countries in the world [IASA, 2014]. Still, there are certain fundamental differences between some demographically old (western) European countries and Serbia, of which the most important is life expectancy length. In Serbia, life expectancy at birth and at 65 is less than in the majority of developed countries [Devedžić and Stojilković 2012]. While other European countries facing with the population ageing are in more favorable position when it comes to solving this puzzle of ageing and prosperity, Serbia does not have the same resources, preconditions and highly educated migrants as it is the case in richer countries. This is the reason why the paradigm of active ageing is seen as a possible solution since it gives the framework for activation of older people.

THEORETICAL BACKGROUND

Perception of older people's role in a society went through various approaches, reflecting different historical contexts older people lived in. To begin with, (socio-psychological) old age was defined as a period of disengagement [Cumming 1960], meaning that older people are slowly reducing their social contacts and narrowing their social networks. It was regarded as beneficial and consensual process on the behalf of individuals and society as well. This theory was largely criticized and followed by other theories that are more in favor of active role of older people, such as activity theory and continuity theory [Havighurst 1961; Atchley 1989]. Concept of active ageing [WHO, 2002] as a paradigm that promotes healthy lifestyles, longer activity of the elderly and their full participation in society is giving policy dimension to this issue. Society's ability to use the potentials of older people could be one thing that makes great difference in outcomes of population policy. As one of the results of Madrid International Plan of Actions on Ageing [2002], this concept will gain wider audience in the following years. Investigating attitudes of already active older people is important since they can be used as guidelines for future recommendations and directions for mitigation of this process.

SURVEY CHARACTERISTICS AND RESPONDENTS STRUCTURE

This is a pilot survey in our country, based on the questionnaire from Special Eurobarometer Report 378 [2012]. Active ageing is a separate topic in this report because 2012 was declared "European Year for Active Ageing and Solidarity between Generations". The need for such report came from a (mis)perceived threat of population ageing, instead of an achievement. Unfortunately, Serbia was not one of the countries where this research was conducted, since this report covered EU Member States and five non-EU countries (Cro-

atia – not part of EU in time of research, Iceland, FYROM, Norway and Turkey). The main themes of this report were concerned with overall perceptions of age and older people, older people in the workplace, retirement and pensions, voluntary work and support for older people and age friendly environment. The main difference between this report and our research is the scope of interviewees, since we included only pensioners while original report encompassed respondents aged 15 and above. Some of the questions were adapted and some, considered not necessary for this research, were omitted. All respondents were very cooperative, giving us the opportunity to conduct in-depth interviews as our main goal, which enriched our findings.

Demographic characteristics of respondents show that 58% were male. Average age of respondents was 66.6 years (ranging from 56 to 80). Geographic distribution of respondents was quite scattered and covered most regions of the Republic of Serbia (22 municipalities). Half of female respondents were widows, 29% married, while 14% were never married and the rest was divorced. Marital structure of male respondents was different, since 70% were married, 20% widowers and the rest equally distributed among the divorced and never married. Educational attainment of respondents also varied, 5% finished only elementary school, half of respondents have a secondary school degree, 30% high school and 8% hold a university degree (2 respondents finished postgraduate studies). The majority of respondents had children and grandchildren (one of them even had a great-grandchild), 15% had no grandchildren yet, and 70% had at least one grandchild. Interviewees without children were never married or were divorced. Age at what the respondents attained pensionable rights varied from 45 years (one respondent on disability pension) to 65 (only two respondents), while the rest were mostly aged between 54 and 60 years. There was a noticeable difference between male and female age of retirement, as supposed, due to legislative framework of pension law.

SETTING OF THE OLYMPIAD

In order to investigate attitudes of active older people, survey was conducted during Sixth Olympiad of Sport, Health and Culture for the Third Age. This event was held in Vrnjačka Banja from September 30 to October 4, 2013. In order to participate in the Olympiad, one had to be a pensioner belonging to a 5-member team competing in different sport sections. Only one of the team members could be younger than 60 years, and gender balance was mandatory (at least one member had to be of opposite sex). Most of the teams represented their municipalities, but there were also representatives of NGOs for example. Competition categories were relay, chess, archery, darts and penalty shootout (there was also fishing, but being an individual sport it was not part of the overall competition score). One of the reasons why we chose this form of gathering of older people was because the most of them were physically fit to compete in moderate demanding sport disciplines. This proved that their health and condition were good enough, so they could be regarded as active and healthy older persons and as ordinary models for active ageing. There were roughly 700 participants in this event, and 5% of them were interviewed for the purpose of this research.

RESULTS

The analyses of answers to various questions we asked were grouped according to different research fields. The first block of questions dealt with self-perceived health, living conditions, life in general, personal relations and independency. Also, there were questions about the perception of age, like “When someone becomes old/young” and personal feelings about one’s life stage. The next block of questions inquired about the attitudes of people aged 55 and above about their role in different spheres of society (in politics and in family) and what they personally thought whether their role in these fields should be greater or not. The questions that followed were about the contribution to different fields, so respondents were asked to what extent people over 55 financially supported their families and cared for their grandchildren. The following block was concerned with individual knowledge about the share of people over age 65 and about life expectancy in Serbia. The next set of questions dealt with retirement and personally perceived ability to continue with work before retirement. The last set of questions dealt with intergenerational perspective in the workplace from the point of view of our interviewees.

Answers to the question about self-perceived health showed that most of the respondents were satisfied with their physical condition (average grade 2.5 out of 3) and this should be highlighted because 20% of interviewed pensioners were in disability pension. Still, the older the respondent, the worst self-perceived health was, with only a few younger participants who said that they had health issues. The worst average grade we got for the question about life in general, and in in-depth interview most of respondents revealed that financial constrains were the reasons for this dissatisfaction. Still, average grade for living conditions was quite high, which mostly reflected the fact that the majority of respondents had their own housing. The greatest satisfaction was noted in answers about personal relationships and ability to perform day to day activities, where almost all of the respondents, regardless of age, were very satisfied with family and neighborhood relations and could live on their own without the help of others.

Table 1. *Average score for answers on the question about the satisfaction with various spheres of life*

| How satisfied are you with: | Average |
|--|---------|
| Life in general | 2.44 |
| Health | 2.50 |
| Living conditions | 2.74 |
| Personal relationships | 2.88 |
| Ability to perform day to day activities | 2.91 |

In order to establish overall perception of old age, all respondents were asked the following question: “In your opinion, thinking about the age when

one starts to be regarded as 'old', at what age would you say that happens?'. Unfortunately, some of the interviewees (3 of them) did not provide answer since this question was too abstract for them, and others had vague ideas about their perception of old age and gave answers in terms "about x age" or "between x and x+t age". Nevertheless, the main finding was not blurred by these limitations, since the rest of respondents answered uniformly in one very important aspect – they determined old age as the age above their own.

The following question dealt with the age when someone was not regarded as "young" anymore. Similar like delimitation of "old", some respondents did not answer, since they could not decide the exact age when someone was not young anymore. The responses of those who answered ranged from 20 years to 80, but with greatest distribution of answers between 40 and 60 years.

We believe that next question was very important, since it highlighted individual perception of respondents about their own stage in life cycle: young, middle-aged or old. Most of people in this interview were over 60 (65) years old, the age used in demography for classification of old age (only two were younger than 60). Although we expected that, on average, our responders would define their "life moment" as old age, even 80% of them described themselves as middle-aged. This characteristic of active old people should be underscored, since the self-perception of individual age can play an important role in people's life. As a result of in-depth interview with one female respondent, we are citing her own words when asked if she felt old: "I do not feel my calendar age, I feel much younger, the number in my ID card does not mean much".

For the next question we asked whether perception of people aged 55 and over was positive or negative in our society. One quarter answered "very positive", only 8% said "fairly positive". On the negative side was one third of respondents with answer "fairly negative", and 17% who said "very negative". The rest were undecided. The results from Eurobarometer showed that Europeans had somewhat different idea about this perception, since their answers were concentrated in "positive" segment.

When asked what the role of older people was in Serbian political life in terms of participating and voting, the majority thought that elderly play major role. Some of them said that this role was minor, and only few answered that people over 55 did not have any role in political life in our country. This is quite in accordance with the fact that there is a political party of united pensioners and that older people are very active when it comes to voting. The assessment of our respondents was very similar to the results of European Survey, since most of the Europeans also believed that older people have major role in this field. Also, most of our interviewees believed that older people should have more influence in society, one third would not mind if this role remained the same, and only 9% said that this role should be smaller.

In order to place the role of older people in family context, as another aspect of everyday life, we asked our interviewees how they saw the importance of older people in families in general. Almost all respondents answered that older people played major role in their families, a few said that this role was minor, and only negligible number said that the elderly did not have any role in the family.

When they compared the existing role of the elderly in families to the optimal one according to their opinion, the half would be for status quo, one third would like that this role was bigger, and the rest were for option “less of the role”.

Next set of questions dealt with the contributions to society made by the elderly in different spheres. Firstly, we asked question related to work, where half of participants in our study said that they believed that people over 55 were contributing greatly as workers, while the rest thought that they contributed a little. We would like to stress that this was one of the rare questions where one of possible modality (do not contribute at all) was not selected by any respondent. The answers from Eurobarometer were quite similar, where only a few percent thought that older people did not contribute, but the rest of the answers were more concentrated in “contribute greatly” than in our research. The same as previous, answering the question “To what extent do you think aged 55 and over contribute as financial support for their families?” no one thought that they did not have any contribution, but it is interesting that 80% believed that people over 55 were contributing greatly to their families in economic terms. Again, this is very close to EU 27 average from mentioned survey. The next question was about taking care of grandchildren, where 91% of our respondents were convinced that people over 55 were contributing greatly (again, “no contribution at all” was not chosen).

Population ageing represents major shift in demographic balance, and as such this process is frequently mentioned in media. We believed that it was important to examine whether interviewees were acquainted with this notion and what it represented. The questions imposed were as follows: “Over the next 20 years, do you think the proportion of people aged 65 and over is going to increase/decrease/stay the same? How concerned are you personally about a possible increase in the proportion of people aged 65 and over?” It turned out that 73% of respondents thought that share of people aged 65 and over was going to increase, which was very close to average for EU-27 (71%). The degree of concern with demographic ageing was measured on the basis of answers in range showed in Table 2, revealing that two-thirds of all interviewees were anticipating future problems as consequences of population ageing. Two-thirds of respondents thought that the indicator of the trajectory of life expectancy increased in the last 30 years. When asked about future developments, the answers were evenly distributed between increase/decline of this indicator.

Table 2. *Distribution of answers of respondents on question about their concerns regarding population ageing.*

| How concerned are you personally about a possible increase in the proportion of people aged 65 and over: | Share |
|--|-------|
| very concerned | 56% |
| fairly concerned | 18% |
| not very concerned | 3% |
| not concerned at all | 23% |

Questions about retirement aimed at discovering important characteristics of active pensioners and how well they were informed about issues concerning retirement. Answers about average use of pension showed that most of respondents were right about the period that pensioners spent in retirement. The next question asked tried to highlight whether respondents could continue to work after getting right to pension. Only one of them gave negative answer. Regarding the possibility to choose whether people were going to retire or continue to work after getting right to pension, more than two-thirds of respondents thought it should be a matter of individual choice. Very interesting finding is that only one-third of interviewees agreed that the retirement age needs to increase by 2030, the same share as in European study. Also, the following answers showed that most of the participants in our interview thought that official age of retirement should be as it was at the time of survey (60 for women and 65 for men in October 2013) or less. Only few said that it should increase in the future. This is a kind of paradox, since the respondents were aware of the incoming problems connected with population ageing, but they would not like changes in age of retirement. What hardly can be comprehended is the fact that 60% of interviewees stated that retirement age should be lower than current, with most frequent answer being 55 for women and 60 for men. When we analyzed this data in relation to education of respondents, the result showed that only those with the highest education thought that age of retirement should be higher than current. However, thanks to in-depth interviews with respondents, there is a simple explanation for this finding. Almost every respondent who said that retirement age should be lower than current was convinced that younger generation should be given chance to work, while older should have time to enjoy rightfully gained pension. We stress this conclusion since we believe that it is very important that active, (self-declared) healthy pensioners did not want to go back to labor market because their perception was that work should be reserved for younger generations. Still, there was some flexibility in their attitudes, since half of respondents would support the possibility to combine a part-time job and partial pension instead of full retirement.

Another set of questions aimed at shedding some light on intergenerational relations in the workplace. The interviewees were asked to compare younger and older workers on the basis of different abilities, characteristics and capabilities. The summarized overview of questions and answers is as follows:

- First question was about reliability, where two-thirds of respondents believed that older people (over 55) were probably more reliable than younger ones.
- Next question can be called a control question since the answer was quite obvious. All respondents thought that older people were more experienced than younger workers.
- Our interviewees seemed to have realistic views, since two-thirds admitted that younger generation was much more up to date regarding technologies. Actually, most of them stressed that this was very important and that experience of older people and technological knowledge of younger generation gave wide opportunities for collaboration.

- Another aspect of generational view that we investigated was connected with ability to make decisions in the workplace. More than half of pensioners from our survey (60%) believed that younger workers made decisions more easily but they contributed this to the inexperience of their younger counterparts.
- Next question was tricky because it demanded from our interviewees to decide who – older or younger workers – were more capable of team work. Most of them said that there was no difference, but the rest were leaning to the side of older workers.
- Answers to the question about ability to find solutions to the problems showed that 65% believed that older workers were better at finding solutions than younger, while the rest of answers were evenly distributed between those who thought that there was no difference and those who “voted” for younger workers when it comes to fixing the problems.
- Only 10% of respondents were convinced that older workers were more open to new ideas, while the rest were prone to believe that younger generation accepted new ideas more easily.
- About a half said that it was much more likely that older workers were more flexible than younger, while more than half said that it was more likely to be the opposite (neither age group favored by the rest of respondents).
- Interest in productivity of different age groups was more than justified, which was the reason why we asked whether younger or older workers were more productive. Even though we did not get uniform answers, there were more pensioners who believed that it was more likely that younger workers were more productive than older workers.
- The last question revealed that two-thirds of respondents were in favor of older workers when asked about who was better in managing stress. Additional comments they made were concerned with the fact that younger workers were impatient, which made it harder to manage stress in the workplace.

CONCLUSION

The concept of active ageing is two-dimensional, meaning that it is good for individuals, and consequently for society, to embrace active way of life and use the advantages of active (old) citizens. In this paper, we presented findings from interviews conducted with participants of Sixth Olympiad of Sport, Health and Culture for the Third Age in Serbia, pensioners who can be regarded as “prototype” models for active ageing approach. Their lifestyle and point of view can be quite useful because it seems that their experience lead them to the state we can call successful or healthy ageing. Their “recipe” for active ageing can be used as a guideline for future recommendations when it comes to population policy. We noticed that their activity and participation in society were important features when combined with social awareness (they were aware that youth unemployment was high and this was reflected in their understanding of retirement issue). Future research of this topic is welcome and planned, since participants in these interviews stated that they felt the older people were rarely asked any questions, and it seemed they had a lot of useful and practical answers.

ACKNOWLEDGEMENTS

The study is a result of research carried out within the scope of the project no. 47007 funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

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ОРИГИНАЛНИ НАУЧНИ РАД

АКТИВНО СТАРЕЊЕ АКТИВНИХ СТАРИХ
– ЕМПИРИЈСКИ ПРИСТУП

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РЕЗИМЕ: Концепт *активног старења* једна је од најбитнијих парадигми која се појавила у скорашњој демографској литератури када је у питању ублажавање последица старења популације. У сржи овог приступа је идеја да је старије становништво веома битан сегмент друштва, који треба сматрати ресурсом, тако да са значајним искуством које оно поседује може допринети добробити свих. Ипак, емпиријска истраживања оних који највише могу допринети (пензионери) и даље недостаје. Иако су пензионери економски неактивни, они имају значајно слободно време и незанемариве материјалне ресурсе. Како би се што боље упознала пракса

активног старења у Србији, спровели смо теренско истраживање базирано на упитнику посебног истраживања Еуробарометар, које се бавило питањима активног старења у Европи. Током Шесте Олимпијаде спорта, здравља и културе трећег доба (Врњачка Бања, 30. IX – 4. X 2014) анкетирани су учесници ове манифестације. Методом дубинског интервјуа сакупили смо емпиријску грађу која се односи на пракса активног старења, као и на ставове испитаника према послу, породици, пензији и младима. Испитаници су дали оцене свог личног задовољства животом (генерално), личним везама, здрављем, животним условима и могућношћу да обављају свакодневне активности. Постављана су питања о почетку старости, трајању младости, о томе да ли се осећају младим, средовечним или старима, колико су цењени и која је улога старијих људи у друштву, да ли постоји забринутост због могућег повећања броја старијих од 65 година, да ли ће очекивано трајање живота у Србији расти итд. Одређени број питања односио се на њихов став о пензионисању (нпр. од колико година је пензионисање потребно законски прописати), као и на упоређење карактеристика старијих и млађих радника. Резултат истраживања показује да су (већ активни) учесници највише задовољни могућношћу да обављају дневне активности и личним везама, док су најмање задовољним животом (генерално), што приписују лошијој материјалној ситуацији. Већина испитаника сматра да старост почиње у старости „старијој“ од њихове, па је већина себе класификовала „средовечним“. Сматрају да старији људи имају прилично велику улогу када је у питању учествовање у политичком животу, посебно у сегменту гласања и ту улогу не би мењали. Такође, чување потомака издвајају као велики допринос старијих код нас. Свесни су проблема старења популације, уздржани када је у питању пораст очекиваног трајања живота и сматрају да би старост за пензионисање требало да буде нижа него данас. Иако звучи парадоксално, дубинским интервјуом сазнали смо да је разлог за овакав став велики број незапослених младих. Даља (или континуирана) истраживања ове проблематике свакако би добродошла, ако се узме у обзир потреба за сагледавањем активног старења из више углова, као и изразита кооперативност коју су старији показали током овог истраживања.

КЉУЧНЕ РЕЧИ: активно старење, пензионери, Србија, интервју, популациона политика

IS SKILLS' RENEWAL IN AGEING WORKFORCE POSSIBLE? EVIDENCE FROM SERBIA

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ABSTRACT: This paper examines the role which different demographic groups (youth, persons of prime working age and older persons) have played in the overall change of the labour force (reproduction), changes in the educational attainment and changes in the distribution of occupations. This paper uses the pseudo-cohort analysis and cross-sectoral data collected from the Labour Force Survey. Main findings show that the educational attainment of new entrants into the labour force was higher than that of retiring workers over the time period of 2004–2014. The composition of occupational changes over the decade confirmed what had been observed for the educational attainment of the labour force. Young new entrants into strongly growing occupations (most of which were highly skilled) by far outnumbered the retirees over the past decade.

KEYWORDS: labour force, ageing, education, occupations, Serbia

INTRODUCTION

As it is known, Serbia will face numerous changes due to demographic factors in the decades to come. Due to longer life expectancy and a decrease of the fertility rate, the overall workforce, as well as the total population, is expected to age more rapidly, and with the retirement of the baby-boomers there will be less people of working age available. In the decades to come, more and more workers will have tertiary education and will be involved in some of the “new” occupations that are emerging nowadays due to structural economic

changes and human capital growth. According to the predictions considering the workforce, the participation rate in Serbia will fall from 67.6% in 2011 to 61.1% before 2050. Supposedly, over the three decades between 2011 and 2041 the number of persons of working age will decrease by 740,000, that is approximately 15% [Sekulić 2011, 2014].

The predicted values for the workforce are a result of demographic trends recorded over the past forty years. In the period between 1971 and 2011 the number of working-age persons decreased by approximately 700,000 (12%) over four decades. The impact of the shrinking workforce, best shown through the dependency ratio, was to a certain extent blurred by the global economic crisis which took away many jobs. The actual scope of the lack of workforce was at first underestimated, which is typical for Serbia, where economic transition and high unemployment rates result in a delusion of labour surplus. However, the demographic changes have taken their toll on Serbia: four decades ago, almost four workers were entering the labour force for each retiring worker, but in 2040 only two workers will be entering the labour force for each older than 65 [Radivojević and Nikitović, 2010].

Besides the labour reproduction problem, ageing also causes changes in the educational and professional structure of the workforce [Gligorijević 2012]. The focus on human capital as a driver of economic growth for developing countries has led to insufficient attention on school attainment [Hanushek 2013]. Improvements in educational attainment are the key to explaining productivity and income growth and the fact that a substantial portion of the demographic dividend is an education dividend [Cuaresma, Lutz and Sanderson 2014]. In attempt to estimate the impact of ageing on the trend of these changes, the methodology of this paper decomposes the respective changes according to the participation of each of the examined subgroups (youth, persons of prime working age, older persons). It was worthwhile to study how the labour force has changed over the last ten years, because that is precisely when the baby-boomers started retiring [Stojilković and Devedžić 2010]. The impending retirement of the baby-boom cohort represents the first time in the history that such a large and well-educated group of workers will exit the labour force. This could imply skill shortages in the economy [Neumark and Johnson 2013].

The first section of this part outlines the general methodological approach that will be used for analysis in the rest of the chapter. The following section decomposes the change in the educational attainment of the labour force over the period of 2004–2014 by demographic group. The same approach is then used to examine the components of change in the distribution of occupations, which underwent considerable alterations over the decade. The final section summarizes and concludes.

METHODOLOGICAL APPROACH AND DATA

This paper uses demographic methods to inspect the changes of the workforce (total growth, educational structure, occupational structure). Increase in the number of workers and the structural changes in the period between 2004

and 2014 are classified according to three age groups: new entrants, prime-age group and retirees. The contribution of each of the three groups was measured using the pseudo-cohort analysis. This means that two instants in time were observed as cohorts 2004 and 2014, and that the effects of emigrations and mortality were also taken into account.

Roughly speaking, the method rests upon the following general equality concerning the measure of change in a particular characteristic between time t_1 and time t_2 :

$\Delta(T) = E + \Delta(PA) - R$, where $\Delta(T)$ = the total change observed in the characteristic over the period, E = new entrants over the period, $\Delta(PA)$ = change in the prime-age group over the period, and R = retirees over the period. New entrants are the difference of the labour force aged between 15 and 34 in 2014 and the persons aged between 15 and 24 who were already in the labour force in the year 2004. This approximates young persons who entered the labour force between 2004 and 2014. Retirees are the difference of the labour force 55+ in 2014 and the labour force 45+ in 2004. Prime-age workers are the difference of the labour force aged between 35 and 54 in 2014 and the labour force aged between 25 and 44 in 2004 [OECD 2012]. The decomposition of change described above can be applied to each educational attainment level within the labour force. This kind of decomposition has been carried out for several characteristics, namely occupation or sector and gender, in order to provide an indication of the demographic changes for each of these characteristics.

In the same way that a real cohort of individuals shown in the panel data set would age by one year each year, the pseudo cohort is created by examining each demographic group over one year, all from that year in the data set the next year, all from that year the following year, and so on. Although the actual individuals making up the annual samples thus created would be different, since the Labour Force Survey (LFS) is a national representative survey, the individuals in pseudo cohort will be representative of the real cohort of this age in the national population [McIntosh 2004]. According to Evandrou and Falkingham [2000], the main advantages of using a pseudo-cohort approach are that it is less expensive and time-consuming, as the data already exist; it covers a long time-period, and sample attrition is not a problem, such as with panel data. Since a fresh sample is drawn from the surviving population each year, the cohort represents remaining representatives of that population. Despite these limitations, the pseudo-cohort analysis can provide useful insights into inter-cohort differences and inform policy making.

The Labour Force Survey was the main source of data for this paper. The reports issued by the National Bureau of Statistics were not sufficient, so we requested additional processing of the survey data. The reports from 2004 and 2014 (first quarter) were used to analyze the total growth, and the structural changes (education and occupation) were analyzed using the specially processed data which crossed education levels and occupation with the data considering relevant age groups. Total growth and the educational structure were analyzed for the active population, while the occupational changes only took into account employed population. The educational structure of the labour

force was analyzed on three levels: low (international equivalent is ISCED 2 – primary education/elementary school), medium (international equivalent is ISCED 3 and 4 – secondary education/high school) and high (international equivalent is ISCED 5, 6 and 7 – tertiary education/ faculty, masters, doctor's study).

NET CHANGE

Over the past ten years, the labour force in Serbia has been decreasing by approximately 1.6% annually, and the demographic composition of this change is presented in Table 1. During the time period of 2004–2014, the labour force has shrunk by 1/6 of its original value, with the younger generations entering the labour market and the baby-boomers leaving it. The retirees leaving the workforce outnumbered the new entrants (young workers). The decrease suffered by the labour force between 2004 and 2014 amounts 16.4% and it was differently affected by each of the three age groups: new entrants, prime-age workers and retirees. Older workers accounted for about 75% of the total change, while the prime-age workers counted for 25%.

Table 1. *Contributions to growth in the labour force by demographic group, Serbia, 2004–2014 (%)*

| | Total growth (A+B+C) | Young workers (A) | Prime-age workers (B) | Older workers (C) | Replacement surplus (A+C) |
|-----------------------|-------------------------|----------------------|-----------------------------|----------------------|---------------------------------|
| Republic of Serbia | -16.4 | 14.8 | -8.0 | -23.1 | -8.3 |

Sources: Labour Force Survey 2004 and 2014.

The overall inflow, was achieved solely by young workers. The replacement surplus in Serbia for the time period of 2004–2014 is -8.3%, which signifies that the simple labour force reproduction process never happened.

Of all the OECD countries, only Denmark has suffered a decrease in the labour force, whereas the other 21 countries' workforces grew by 11% on average between 2000 and 2010. The average replacement surplus in OECD countries is 5%, thanks to the new entrants' cohort which is twice the value of the one in Serbia [OECD 2012]. The enormous outflows of the baby-boomers is noticeable in all of the countries, but more developed economies combat the problem of shrinking workforces by stimulating the growth of women's and immigrants' activity rates. Immigrants participate in the overall labour force inflows of OECD countries by twenty, or in some cases, even forty percent [OECD 2012].

THE COMPOSITION OF CHANGES IN THE EDUCATIONAL ATTAINMENT OF THE LABOUR FORCE

The differences between new entrants and retiring older workers are very large. The portion of young new entrants having low attainment levels of education is 29 percentage points lower than that of the retiring older workers, and the percentage of new entrants having high attainment levels is 21 percentage points higher than in retirees (Table 2). The improvement in the attainment levels of the labour force across generations in Serbia was moderate, the labour force with low attainment levels declined by 30 percentage points, approximately. The results in Table 2 tell us little about volumes, about the relative numbers of entrants and retirees, and possible demographic imbalances resulting from large retiring cohorts compared with declining youth cohorts. To get a clearer picture of the possible imbalances, we proceed to the decomposition of the total absolute change in the labour force by attainment level over the 2004 to 2014 period (Table 3). The objective is to get a clearer perspective of the contributions of various demographic groups to the evolution of educational attainment in the labour force.

Table 2. *Educational attainment of the active population, new entrants and retirees, Serbia, 2004–2014*

| | Low attainment | | Medium attainment | | High attainment | |
|--------------------|--------------------------|--------------------------------|--------------------------|--------------------------------|--------------------------|--------------------------------|
| | Older workers (retirees) | Young workers (new entrants) | Older workers (retirees) | Young workers (new entrants) | Older workers (retirees) | Young workers (new entrants) |
| | Per cent of all retirees | Percentage points +/- retirees | Per cent of all retirees | Percentage points +/- retirees | Per cent of all retirees | Percentage points +/- retirees |
| Republic of Serbia | 34.7 | -29 | 46.4 | +7.7 | 18.8 | +21 |

Notes: The second and third columns of each attainment level give the difference between the percentage of persons in the attainment level within the group compared to the corresponding percentage within the retiring cohort. Sources: Labour Force Survey 2004 and 2014.

Table 3. shows a moderate improvement in the educational structure of the labour force. In the period between 2004 and 2014, the number of highly educated people grew by 9.1% in Serbia. This change was mostly influenced by the group of young new entrants, whose portion in the highly educated category grew by 32.7%. The second largest effect on the rate was made by the retirees whose numbers decreased by 25.5%. The number of highly educated prime-age workers also increased, but insignificantly (only by 1.8%). For the time-being, a simple replacement of the high educated is possible, but the tiny replacement surplus of 7% and index young and older workers 2.2, brings into question further reproduction of the highly educated workforce, because

the younger generations, although more and more educated, are by far outnumbered by the retirees. The result is a modest enhancement, especially in comparison to the OECD countries whose tertiary education rates grew by 50% between 2000 and 2010 allowing the replacement of the retiring labour force cohorts by highly educated new entrants [OECD 2012].

Low educational attainment levels reduced by 40% in Serbia. This change was mainly influenced by the elderly, whose numbers reduced by 35%, and the prime-age generation (a 9% decrease). The younger generations had little impact on the change in low educational attainment levels (Table 3). Apart from the growth of tertiary education, the overall educational structure of the workforce is also improving through the growing secondary education.

Table 3. *Composition of the change in the primary, secondary and tertiary-educated labour force, by demographic group, 2004–2014 (%)*

| | Young workers | Prime-age workers | Older workers | Change |
|--------------------|---------------|-------------------|---------------|--------|
| Low (primary) | 4.1 | -8.9 | -34.8 | -39.1 |
| Medium (secondary) | 13.8 | -10.5 | -17.9 | -14.6 |
| High (tertiary) | 32.7 | 1.8 | -25.5 | 9.1 |

Sources: Labour Force Survey 2004 and 2014

The rates of medium attainment levels in Serbia decreased between 2004 and 2014, which is quite the opposite of the scenario in the OECD countries, where secondary education grew in this time period, with the exception of Estonia and UK [OECD 2012]. The decrease of the medium attainment levels in Serbia was largely affected by the prime-age group with numbers declining by 30%. The group of young new entrants made the change less drastic, since their part in this category increased by 15%. It's obvious that the ageing workforce and the retiring baby-boomers made the medium attainment levels drop, because secondary education was most common in this age group. Since the young new entrants' group is relatively small, so is the number of young people with secondary education. The situation in other countries would be similar, if there wasn't for the immigrants who predominantly hold secondary education diplomas and make up a large portion of the medium attainment level group. According to the OECD report [2012], in most countries, the attainment levels of new immigrant entries into the workforce were also higher than those of retiring cohorts, but not to the same extent as young resident entrants.

DEMOGRAPHIC COMPONENTS OF OCCUPATIONAL CHANGE

The data concerning occupation used for further analysis mainly follow the International Standard Classification of Occupations (ISCO), which classifies occupations into two four-digit levels, and this categorization has been

modified and expanded with a number of occupations from Internal Classification of Occupations of Republic of Serbia. However, for the analysis conducted here, the two-digit classification has been used. It represents an appropriate compromise between fine resolution, on the one hand, and sample variety, on the other, given that change is being measured at the level of individual occupation.

The rise of the demand for highly skilled labour force is a result of technological change. As a consequence of the rising demand for highly skilled labour, the educational attainment levels of young workers are higher, too. Theoretically speaking, higher attainment levels should automatically lead to structural changes, but this process takes time because of the initial problem of over-qualification for the existing occupations. The growth of highly professional occupations induces an expansion of the occupational sectors that employ unskilled labour and a contraction of the occupational sectors that require medium skilled labour. This phenomenon is referred to as job polarization, and it can be explained through the routinisation hypothesis: medium-skilled and manual jobs are substituted by technological improvements and the relative demand for jobs with non-routine tasks increases. Non-routine tasks include not only abstract tasks which require high educational levels, but also non-routine manual tasks, as in numerous service occupations such as elderly care, security services, etc. [OECD 2012]. Job polarization can also be caused by offshoring and outsourcing activities which often limit the number of jobs available in some occupational sectors.

In the period between 2004 and 2014, the number of employees has only grown in four occupations, three of which require highly skilled labour (business and administration associate professionals, general managers, legislators and senior officials and teaching professionals). The number of employees diminished in all other occupational sectors, especially in the ones that hire unskilled labour, such as market-oriented skilled forestry, fishery and hunting workers, market-oriented skilled agricultural workers, metal, machinery and related trades' occupations, building and related trades' occupations, business and administration professionals, assemblers (Table 4).

Table 4 also shows the individual contributions of each of the demographic groups to the overall changes in employment trends observed in each occupational sector over the period of 2004–2014. The number of older workers is decreasing in the growing occupational sectors, while the number of young workers is increasing in the developing occupations and decreasing in the contracting occupational sectors. Older workers outnumber by far the new entrants in all of the contracting occupations, but the situation is quite the opposite in the newly emerging occupational sectors, where the number of new entrants is three times larger than the number of older workers. This imbalance of new entrants and older workers is the key to estimating the net occupational change through generational change in the workforce. Prime-age workers contribute to the growing occupational sectors in a similar manner as the new entrants, while in the contracting occupational sectors they tend to resemble the retirees (Table 4).

Table 4. *Contribution of different demographic groups to occupational growth, Serbia 2004–2014*

| SOC code | Occupations | Growth in labour force (%) | New entrants (young workers) | Prime-age workers | Older workers (retirees) | Share of employment 2004 2014 (%) | |
|----------|--|----------------------------|------------------------------|-------------------|--------------------------|-----------------------------------|------|
| 33 | Business and administration associate professionals | 153.9 | 63.3 | 1034 | -12.8 | 1.8 | 5.6 |
| 11 | Chief executives, senior officials and legislators | 97.3 | 56.1 | 57.4 | -16.1 | 0.2 | 0.4 |
| 81 | Stationary plant and machine operators | 68.3 | 51.1 | 41.7 | -24.4 | 1.4 | 3.0 |
| 23 | Teaching professionals | 64.1 | 34.9 | 37.6 | -8.4 | 2.2 | 4.5 |
| 22 | Health professionals | -15.3 | 15.4 | -0.1 | -3.8 | 1.6 | 1.7 |
| 51 | Personal service workers | -15.8 | 29 | -9.3 | -36.4 | 5.5 | 3.2 |
| 52 | Sales and related occupations | -29.2 | 10.3 | -17.7 | -21.8 | 9.2 | 8.1 |
| 61 | Market-oriented skilled agricultural workers | -28.3 | 6.9 | -43 | -30.9 | 17.4 | 14.0 |
| 72 | Metal, machinery and related trades occupations | -46.6 | 6.5 | -21.4 | -31.9 | 6.0 | 4.0 |
| 71 | Building and related trades occupations (excluding electricians) | -53 | 2.6 | -1.9 | -36.7 | 3.6 | 2.1 |
| 24 | Business and administration professionals | -71 | 9.3 | -34.9 | -45.1 | 3.1 | 1.1 |
| 82 | Assemblers | -85 | -3.4 | -48.8 | -32.7 | 2.1 | 0.4 |
| 62 | Market-oriented skilled forestry, fishery and hunting workers | -96 | -3.1 | -36.5 | -56.1 | 3.6 | 0.1 |
| | All occupations | -16.4 | 14.8 | -8 | -23.1 | 100 | 100 |

Notes: Table does not show all occupations.

Sources: Labour Force Survey 2004 and 2014

Over the past ten years, new occupations have emerged in Serbia and the 2004 LFS does not include them. Table 5. presents these new occupations. These occupations clearly exhibit job polarization and an imbalance of retirees and new entrants. Job polarization is evident from the fact that occupations related to ICT are developing (information and communications technology professionals, information and communications technicians, numerical and material recording clerks), along with various occupations that require unskilled labour, namely protective services occupations, food preparation assistants and personal care workers. Estimating individual contributions of each of the demographic groups to the growth of these new occupational sectors was impossible, but the age structure report from 2014 proves that the average age of the employees in these new occupations is significantly less than in other occupations.

Entries of young workers outcome the retirements of older workers in these new growing occupational sectors.

Table 5. *New occupations in 2014, Serbia (%)*

| SOC code | New occupations | Share of employment | | Age distribution employees | | |
|----------|---|---------------------|------|----------------------------|-------------------|---------------|
| | | 2004 | 2014 | Young workers | Prime-age workers | Older workers |
| 25 | Information and communications technology professionals | 0.0 | 0.6 | 49.5 | 41.2 | 9.2 |
| 54 | Protective services occupations | 0.0 | 2.5 | 33.3 | 56.6 | 1.00 |
| 94 | Food preparation assistants | 0.0 | 0.3 | 35.1 | 57.6 | 7.1 |
| 43 | Numerical and material recording clerks | 0.0 | 2.6 | 27.6 | 54.7 | 17.6 |
| 35 | Information and communications technicians | 0.0 | 0.7 | 22.2 | 61.3 | 16.4 |
| 53 | Personal care workers | 0.0 | 0.5 | 20.9 | 69.9 | 17.1 |

Sources: Labour Force Survey 2004 and 2014

In strongly growing occupations, the large surplus of new entrants over retirees means that many of the jobs were newly created, and there appeared to be no shortage of candidates, among both new entrants and prime-age workers. This generational replacement does not seem to be an issue for Serbia when it comes to the growing occupational sectors, but the same can't be guaranteed for the contracting occupational sectors such as health professionals or personal service workers. These occupations will be more than necessary in the future because an increasing number of elderly people will be in need of fostering.

CONCLUSION

There are three major problems in relation to the workforce. Firstly, the number of persons actively looking for a job or working is diminishing, while the number of retirees is growing rapidly, which increases dependency ratio. Unless certain measures are taken up, the combination of more retirees and less people working will affect the financial stability of the health and pension insurance system, because the growth of pension expense rates over the past few years is not sustainable in the long run [Zdravković, Domazet and Nikitović 2012]. Secondly, the educational structure of the labour force is improving very slowly. A large number of college graduates are retiring from their positions and probably not enough young workers with appropriate college degrees will take all of those jobs. Even though a college degree is seen frequently among young people entering the workforce, there simply are not enough highly qualified new entrants to even out the highly qualified retirees. The ageing workforce provides improvement in a sense, because the portion of unskilled labour in

the workforce is lessening, but on the other hand, many highly skilled people are leaving the labour force, which is a down side. Rejuvenation of the workforce doubles the number of college graduates in comparison to the number of persons with secondary education, but takes no effect on the portion of unskilled labour (elementary school only). The third problem is the dynamic change of the occupational structure. Job polarization of growing occupations in Serbia proves that the problem of an overqualified labour force might be slowly emerging. For the time being, there is no problem with generational shift in the high educated, growing, occupational sectors, but one might arise even when more baby-boomers retire from their positions in health and personal services that require secondary education.

That is why in the developed countries of EU, international migrations of the workforce are regarded as the key factor to closing the gaps that the baby-boomers will create by retiring. The gaps will be manifested in terms of educational imbalance between new entrants, prime-age workers and older workers, as well as in terms of a disproportionate occupational distribution. Until now, in Serbia, international workforce migrations have been regarded as a problem, particularly of the emigrations of highly educated young people. Only the most recent papers raise the question of workforce immigrations to Serbia [Nikitović 2009, 2013; Bobić 2013; Kupiszewski *et al.* 2012]. Today, there are no significant number immigrant workers in Serbia. There is no telling whether this is a good thing or a bad thing, because immigrant workers are usually less skilled than residents and their activities are often not taxed, but still their gains could spill over into the government budget and relieve the labour force. The experience of labour migration countries may be an instructive guide to what the future holds for countries expecting to increase their labour migration in the following decade.

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ОРИГИНАЛНИ НАУЧНИ РАД

ПОСТОЈЕ ЛИ МОГУЋНОСТИ ЗА УНАПРЕЂЕЊЕ
ЉУДСКИХ РЕСУРСА У СРБИЈИ?

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РЕЗИМЕ: У овом раду истражује се улога старосних група (млади радници, примарни радни контингент и старији радници) у променама радне снаге које су се десиле у периоду 2004–2014. У фокусу су се нашла три процеса са којима смо се суочили на почетку овог века: опадање броја радно способних лица, промене образовног састава радне снаге и промене структуре занимања. Резултати истраживања

су показали да су старије кохорте значајније учествовале у бројном кретању радног контингента и „скупљању“ знања и вештина, и поред тога што је образовни састав нових учесника (младих) у радној снази био повољнији у односу на најстарије запослено становништво. Обрнуто, млади радници су највише допринели промени структуре занимања, јер су доминантно учествовали у старосној структури две категорије: занимања која су забележила пораст запослених у периоду 2004–2014. и тзв. „нова занимања“ која у 2004. години нису ни постојала.

КЉУЧНЕ РЕЧИ: радна снага, старење, образовање, занимања, Србија

DIFFERENTIAL MORTALITY IN VOJVODINA ACCORDING TO THE ECONOMIC ACTIVITY AND OCCUPATION

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ABSTRACT: This paper analyses the differential mortality in Vojvodina according to the economic activity and occupations of the population. The analysis covers the period from 1971 to 2011. The aim of the research is to determine the influence of socio-economic factors on differences in the level of mortality among different population groups. In particular, the aim is to detect the impact of working conditions and manner of performing the job to the differences in the mortality of the population with different occupations. Also, the goal is to detect changes in differential mortality according to economic activity and occupations of the population during the analysed period.

KEYWORDS: differential mortality, Vojvodina, economic activity, occupation

INTRODUCTION

Researching differential mortality implies being familiar with the basic characteristics of population mortality, in which possible differences in mortality of certain socio-economic groups of population are revealed. For these reasons, the present mortality level of the population in Vojvodina will be presented and the basic indicators outlined.

According to the data for 2013, there were a little over 27 thousand deaths in Vojvodina. The maximum number of deaths was recorded in 2005 with over 30 thousand deaths. The highest crude death rate of 15‰ was also recorded that year, after which it mildly decreased to the level of 14.1‰ in 2013. The crude death rate level in Vojvodina is determined primarily by the population

age structure. Population ageing in Vojvodina caused the crude death rate to be constantly rising since the 1970s.

Positive changes in population death rate in Vojvodina developed continuously throughout a longer time period, with an exception of a few stagnation periods and even an increase of age-specific rates. This is confirmed by the life expectancy trends. The life expectancy increased continually, except during the 1980s, when a certain decrease was noted (half a year for women, and one year for men). According to the data for 2012, life expectancy in Vojvodina was 71.2 years for men and 76.6 years for women. Nevertheless, it is lower than the republic average and lower in relation to average life expectancy of the population in Central Serbia.

The causes of death of the population in Vojvodina have traits of a contemporary model which is characteristic of developed countries of the world. The basic causes of death are concentrated around a few leading ones. The population in Vojvodina dies from circulatory system diseases (54.3% of total deaths in 2012) and tumors (22.5%). The third ranking cause, depending on the calendar year, is either respiratory system diseases (4.7% of total deaths in 2012) or external causes (3.8% in 2012).

DIFFERENTIAL MORTALITY

Differential mortality analysis implies examining mortality for groups of population which belong to different socio-economic categories or have different regional residence. The aim is to determine whether, and to what extent, certain socio-economic characteristics of the population, or residence in a certain geographical area (relief, climate) or type of settlement (rural, urban), together with as similar as possible population characteristics (age and sex structure), lead to differences in the level of mortality among them.

The most frequently examined differences in mortality refer to the region of residence, whether to a geographical region or a type of settlement. Differences in the mortality levels in relation to social and economic factors were also researched, such as: economic activities and occupations, incomes, achieved education levels, ethnic affiliation and marital state.

Nevertheless, it could be stated that there are no systematic analyses of differential mortality, even in countries which have an ample and reliable statistical data. This is because this kind of analysis is faced with numerous methodological limitations and difficulties to provide reliable indicators.

First of all, this analysis is limited to a census period. Namely, in order to define differential mortality rates for various groups of population, it is necessary to have data on deceased persons from those groups by age and gender, as well as on total population also classified according to same characteristics. Vital statistics provides such data for each calendar year, but the data for total population are available only in census years. Furthermore, the difficulties in this kind of analysis are associated with the socio-professional mobility of population, taking into consideration that population, in a lifetime, changes social groups, economic characteristics, places of residence and similar. Additionally, the

influences of certain factors of socio-economic character change over time. Their intensity, and often interdependence among some of them, does not make it possible to distinguish the impact of each individually on the differences in mortality levels. It is particularly impossible to determine the causative connection with mortality. It is well known that the type of occupation depends on achieved level of education, and on the other hand, income level depends on type of occupation. At the same time, income and education have an impact on the standard and lifestyle, living conditions and population habits, on the formation and satisfaction of various necessities of people which could be significant for their health.

It was long believed that the differences in mortality among different socio-economic groups within a population would completely be lost simultaneously with general economic and social development and especially corresponding medical advancements. It can generally be said that these differences were not completely lost and that socio-economic factors affect the differences in mortality levels of certain population groups. Furthermore, their influence is insomuch less if lower mortality rates are achieved. In such conditions, the differences in mortality among various groups of population are narrowed and the influence of biological factors on mortality becomes dominant.

POPULATION MORTALITY ACCORDING TO ECONOMIC ACTIVITY

The analysis of population mortality in Vojvodina according to economic activity covers the years around the 1971, 1991 and 2011¹ censuses. A relatively long period makes it possible to determine whether the differences in mortality according to economic activity have been maintained or they have been narrowed. However, since there was a different classification of activity traits in the stated census years, the analysis for 2011 will be given separately. Namely, in the censuses up to 2002, population had been classified according to economic activity as: economically active persons, persons with personal income and dependants. In the 2011 census, the total population was categorized as economically active and economically inactive persons.

Table 1 shows the mortality rates by economic activity, sex and age in 1971 and 1991. The difference in the mortality rate among the three groups of population in both observed years is obvious. The lowest mortality is among the active persons, where the crude death rate decreased in 1991 in relation to 1971. The low crude death rate of active persons has to do with their age structure (they are mainly persons aged 15 to 59 with women and 64 with men). In other words, age groups which generally have low specific mortality rates are in question, especially with the female population, with a tendency of further decrease after 1971. Apart from the more favourable age structure, the lower crude death rate of active persons in relation to the other two categories of

¹ Data on deceased persons for the two-year period 1971–1972 were used for the year 1971, and the data on deceased persons for the three-year periods 1990–1992 and 2010–2012 were used for 1991 and 2011.

population (persons with personal income and dependants) derives from the fact that the other two categories include persons with disabilities or serious health impairments, inborn defects and similar, which influences their crude death rate. The highest mortality is among persons with personal income, and there was an increase in 1991 in relation to 1971, which was a consequence of demographic ageing and the increase of persons with personal income in total population. The share more than doubled (from 8% to 16.4%) in that period, and especially with the female population [Statistical Office of Serbia, 1995: 256].

The male population has higher mortality rates among economically active persons and among persons with personal income, which is in conformity with differential mortality by sex. Women have higher crude death rate only among dependants. The reason lies in more unfavourable age structure of the dependant female population compared to the dependant male population. For example, in 1991, one fourth (24.3%) of the dependant women were older than 55, while only 3.8% of dependant men were that age.

Tab. 1. *Death rates by activity, sex and age in Vojvodina, in 1971 and in 1991*

| Activity | Sex | Total | Under 15 | 15–24 | 25–34 | 35–44 | 45–54 | 55–64 | 65+ and unknown |
|---------------------|---------|-------|----------|-------|-------|-------|-------|-------|-----------------|
| 1971 | | | | | | | | | |
| Economically active | All | 8.3 | 1.1 | 1.3 | 1.6 | 2.8 | 6.3 | 15.9 | 73.8 |
| | Males | 11.0 | 1.3 | 1.7 | 2.2 | 3.5 | 8.2 | 19.4 | 87.8 |
| | Females | 2.6 | 0.9 | 0.7 | 0.6 | 1.1 | 2.1 | 5.3 | 28.2 |
| Income recipients | All | 30.1 | 14.1 | 4.5 | 5.0 | 8.0 | 10.7 | 17.8 | 49.4 |
| | Males | 40.9 | 22.6 | 5.8 | 7.1 | 11.3 | 15.1 | 25.3 | 69.4 |
| | Females | 18.0 | 5.2 | 2.8 | 2.7 | 3.7 | 5.3 | 8.1 | 30.1 |
| Dependants | All | 9.2 | 2.7 | 0.6 | 1.2 | 2.3 | 5.8 | 14.7 | 78.3 |
| | Males | 4.2 | 3.0 | 0.8 | 2.7 | 4.7 | 7.7 | 16.3 | 51.3 |
| | Females | 11.5 | 2.3 | 0.6 | 1.1 | 2.3 | 5.8 | 14.6 | 82.7 |
| 1991 | | | | | | | | | |
| Economically active | All | 4.3 | – | 1.1 | 1.3 | 2.5 | 6.0 | 11.1 | 25.2 |
| | Males | 6.0 | – | 1.7 | 2.0 | 3.5 | 7.8 | 13.4 | 32.3 |
| | Females | 1.5 | – | 0.3 | 0.5 | 1.2 | 2.6 | 3.8 | 10.7 |
| Income recipients | All | 51.0 | – | 3.9 | 10.6 | 21.5 | 21.1 | 25.8 | 86.2 |
| | Males | 63.3 | – | 6.3 | 15.6 | 30.5 | 40.3 | 35.5 | 104.2 |
| | Females | 40.0 | – | 1.6 | 5.4 | 12.6 | 9.7 | 14.9 | 71.6 |
| Dependants | All | 8.2 | 1.2 | 0.9 | 2.1 | 3.6 | 6.5 | 12.3 | 67.8 |
| | Males | 4.4 | 1.3 | 1.4 | 7.6 | 22.3 | 37.7 | 31.1 | 83.8 |
| | Females | 10.3 | 1.0 | 0.6 | 1.3 | 2.8 | 5.6 | 11.5 | 65.7 |

Crude death rate of active population in 2011 remained at the same level as in 1991 (Table 1a). A slight increase was noted among inactive population in relation to 1991, even though the process of demographic ageing continued. The reason for the small increase of crude death rate is that a reduction of age specific rates continued at the same time, especially with the younger population. Nevertheless, according to the 2011 Census, there has been a decrease of economically active population in Vojvodina by almost 127 thousand in relation to 2002, as well as their share in total population (from 44.9% to 40.7%). At the same time, the number of inactive persons rose by almost 30 thousand, as well as their share.

Tab. 1a. *Death rates by activity, sex and age in Vojvodina, in 2011²*

| Activity | Sex | Total | Under 15 | 15–24 | 25–34 | 35–44 | 45–54 | 55–64 |
|---|---------|-------|----------|-------|-------|-------|-------|-------|
| Economically active | All | 4.3 | – | 0.7 | 0.9 | 1.6 | 4.8 | 12.1 |
| | Males | 5.9 | – | 1.0 | 1.2 | 2.1 | 6.7 | 14.5 |
| | Females | 2.1 | – | 0.3 | 0.5 | 0.9 | 2.4 | 6.0 |
| Active persons performing an occupation | All | 2.6 | – | 0.3 | 0.5 | 0.9 | 3.0 | 7.2 |
| | Males | 3.7 | – | 0.4 | 0.7 | 1.2 | 4.1 | 8.8 |
| | Females | 1.1 | – | 0.0 | 0.2 | 0.6 | 1.6 | 3.2 |
| Unemployed | All | 1,2 | – | 1.3 | 2.3 | 4.4 | 12.2 | 28.3 |
| | Males | 13.6 | – | 1.7 | 3.2 | 6.6 | 17.8 | 32.9 |
| | Females | 5.7 | – | 0.6 | 1.2 | 2.1 | 5.4 | 15.8 |
| Economically inactive | All | 21.4 | 0.5 | 0.4 | 0.9 | 3.0 | 9.0 | 15.8 |
| | Males | 23.5 | 0.5 | 0.5 | 1.4 | 4.6 | 14.2 | 25.9 |
| | Females | 19.9 | 0.5 | 0.2 | 0.6 | 2.2 | 6.3 | 10.1 |

Within the category of active population, mortality differs among the employed (or active persons performing an occupation) and unemployed persons. According to the data for the three-year period 2010–2012, the death rate of the unemployed was almost four times greater than that of the employed people. The difference in the death rate between the employed and unemployed is more pronounced with the female population.

Unemployment is a grave economic and social problem in Serbia today. According to the 2011 data, the unemployment rate in Vojvodina amounted to 23.9% (22.5% with men and 23.4% with women) [Statistical Office of Serbia, 2014]. Unemployment creates negative consequences on both national and individual level. Direct losses and unrealized production losses, as well as loss

² Table does not show rates for age group 65+. The reason lies in the lack of logic of the data necessary for calculating rates. This is probably the consequence of the different manner of treating economic activity of population in vital statistics and in the 2011 Census. In connection with this, the data on deceased persons by age and occupation refer to the period 2010–2012, and for population according to same characteristics for the year 2011.

of personal income which leads to people becoming poor, are not the only consequences. Among others, they are connected with disturbed statuses in the social sphere leading to social exclusion, problems in personal and family relations, which reflects the health of the individual.

Certain research on death rates showed that premature deaths occur more frequently among the unemployed than the employed persons. It is interesting, though, that the connection between unemployment and greater death rates of the unemployed is viewed in two different ways. Firstly as cause related, which means that a job loss or long-term unemployment, negatively affect the health (physical and mental) of the individual and increase the risk of premature death. Secondly, the connection is viewed through the selection while getting employed. Namely, persons who lose their job or have difficulty finding a new one have a higher death rate due to their personal (physical) or socio-economic characteristics. Persons with poor health are in question, with physical or other defects, which bear a higher risk of unemployment as well as risk of increased morbidity and mortality. A selection of such kind is especially distinguished when long term unemployment is in question [Valkonen and Martikainen 1995].

POPULATION MORTALITY ACCORDING TO OCCUPATION

The occupation of employed persons is one of their basic characteristics. It is greatly determined by the level of acquired education, and at the same time reflects the social status of the employed. The research on the connection between occupation and population death rates was mainly focused on the differences in the level of death rates between manual and non-manual occupations. Whether or not the difference in mortality between them was determined, it is clear that it could not have been explained only by type of work. Namely, non-manual occupations as a rule require a higher level of education which might also positively affect mortality, by greater health care and timely health protection. Furthermore, such occupations are more often carried out in healthier work surroundings, with an absence of the risk of accidents. They are also most frequently better paid jobs which provide higher standards for the employees as well as better life conditions and similar.

In order to get a better insight into the connection of certain occupations and population death rates, it is necessary to have data on the occupations for all deceased persons. This means that there should be data on the occupations pensioners performed before retiring, and not only for the deceased persons who were employed at the time of death. Lack of this data decreases the scope of the actual analysis as it does not permit a complete insight into the influence of an occupation on population death rate. For example, when pensioners are in question, it cannot be concluded whether they died because of the occupation they had been performing or out of other reasons. Additionally, even if the occupation of the deceased pensioner were known, it would remain unclear if that was the only occupation he or she performed. Similar applies to the data for deceased persons from the employed group. People change their occupation in their lifetime, but only the last occupation is noted at the time of death.

Tables 2 and 2a show death rates by occupation of active persons in 1971 and 1991 and employed persons in 2011.

According to data for 1971, the highest death rates by age were for agricultural and similar workers, service workers, especially with male population (traffic and transport workers), as well as with miners, industrial and related workers. Working conditions as well as the manner of performing the job certainly have a great impact on death rates of population of various occupations, but it is certain that the high death rate of agricultural workers was primarily a consequence of the social status, especially in health and social insurance. The high death rate in the oldest age has to do with the fact that agricultural workers, if their health allows them, keep working till the end of their lives. In 1971, there were 94% male agricultural workers per 100 economically active men, and 93.6% female agricultural workers per 100 active women, for ages above the 65.

The death rates of agricultural workers decreased after 1971 for all age groups, as a result of improving work conditions, developing and improving health protection and similar. Nevertheless, death rates of agricultural and related workers were also the highest in 1991. Death rates changed for other occupations as well, but a slight increase of death rates was noted only for some. The rates mainly increased for experts and artists, miners, industrial and related workers, male service workers, as well as protection workers. Such changes in death rates lead to smaller differences in death rates among certain professions. The lowest death rates by age both in 1971 and 1991 were for managers.

Death rates according to occupation of employed persons in 2011 are shown in Table 2a. It should be noted that this analysis refers to a relatively small number of deceased persons. Namely, the number of deceased employed persons accounts for 5.6% of total number of deceased persons in Vojvodina and less than half of the deceased active persons (46.4%).

Tab. 2. *Death rates by occupation, sex and age in Vojvodina, in 1971 and in 1991*

| Occupation | Sex | Total | Under 15 | 15–24 | 25–34 | 35–44 | 45–54 | 55–64 | 65+ and unknown |
|--|---------|-------|----------|-------|-------|-------|-------|-------|-----------------|
| 1971 | | | | | | | | | |
| Agricultural and related workers | Males | 21.2 | 1.4 | 1.5 | 2.6 | 4.0 | 8.9 | 20.4 | 87.2 |
| | Females | 4.2 | 0.9 | 0.6 | 0.3 | 0.6 | 1.6 | 5.1 | 28.9 |
| Miners, industrial and related workers | Males | 4.3 | 0.0 | 1.4 | 1.9 | 3.2 | 6.8 | 17.4 | 124.2 |
| | Females | 1.0 | 0.0 | 0.3 | 0.3 | 1.0 | 2.0 | 10.6 | 36.1 |
| Workers in trade | Males | 3.5 | 0.0 | 1.3 | 1.3 | 2.4 | 6.6 | 8.7 | 78.9 |
| | Females | 0.8 | 0.0 | 0.8 | 0.0 | 0.5 | 3.0 | 7.1 | 0.0 |
| Workers in services | Males | 6.1 | 0.0 | 1.4 | 1.7 | 3.3 | 7.3 | 10.6 | 99.1 |
| | Females | 1.2 | 0.0 | 1.1 | 1.0 | 0.9 | 1.7 | 1.7 | 7.7 |

| | | | | | | | | | |
|--|---------|------|-----|-----|-----|-----|-----|------|------|
| Protection employees | Males | 3.4 | 0.0 | 3.8 | 1.4 | 1.9 | 4.8 | 6.1 | 12.6 |
| | Females | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 6.3 | 0.0 | 0.0 |
| Administrative and related workers | Males | 3.3 | 0.0 | 1.2 | 1.0 | 2.1 | 6.6 | 7.5 | 29.4 |
| | Females | 0.9 | 0.0 | 0.7 | 0.4 | 1.4 | 1.3 | 2.7 | 20.8 |
| Managerial staff | Males | 1.2 | 0.0 | 0.0 | 0.7 | 0.8 | 2.4 | 1.9 | 0.0 |
| | Females | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Experts and artists | Males | 3.9 | 0.0 | 1.1 | 2.1 | 2.9 | 7.1 | 17.9 | 44.8 |
| | Females | 1.0 | 0.0 | 0.5 | 0.7 | 1.1 | 2.6 | 6.1 | 14.9 |
| Other occupations | Males | 7.1 | 0.0 | 0.0 | 0.0 | 3.2 | 4.3 | 13.8 | 50.0 |
| | Females | 5.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 31.3 |
| 1991 | | | | | | | | | |
| Agricultural and related workers | Males | 12.9 | - | 1,8 | 1.8 | 4.0 | 7.3 | 14.5 | 33.2 |
| | Females | 3.8 | - | 0.6 | 0.2 | 0.8 | 1.4 | 2.8 | 11.1 |
| Miners, industrial and related workers | Males | 4.9 | - | 2.7 | 2.1 | 3.8 | 9.2 | 14.4 | 16.5 |
| | Females | 1.4 | - | 0.3 | 0.6 | 1.4 | 3.6 | 7.9 | 8.6 |
| Workers in trade | Males | 2.8 | - | 2.0 | 1.1 | 2.1 | 4.8 | 7.5 | 13.8 |
| | Females | 0.9 | - | 0.1 | 0.3 | 1.1 | 2.6 | 7.0 | 9.3 |
| Workers in services | Males | 4.7 | - | 2.7 | 2.6 | 4.2 | 7.7 | 8.0 | 14.8 |
| | Females | 1.4 | - | 0.7 | 0.7 | 1.1 | 2.3 | 4.8 | 0.0 |
| Social protection employees | Males | 3.8 | - | 2.0 | 2.1 | 3.3 | 5.4 | 8.1 | 9.1 |
| | Females | 0.9 | - | 0.0 | 0.0 | 1.0 | 2.8 | 0.0 | 0.0 |
| Administrative and related workers | Males | 3.5 | - | 1.2 | 1.7 | 2.4 | 4.8 | 10.1 | 0.0 |
| | Females | 1.1 | - | 0.6 | 0.3 | 1.1 | 2.6 | 1.4 | 0.0 |
| Managerial staff | Males | 0.9 | - | 0.0 | 0.5 | 0.6 | 1.0 | 2.5 | 0.0 |
| | Females | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0,0 |
| Experts and artists | Males | 5.2 | - | 5.2 | 2.6 | 3.4 | 7.9 | 11.9 | 17.7 |
| | Females | 1.4 | - | 1.2 | 0.7 | 1.2 | 2.8 | 4.7 | 2.2 |
| Other occupations | Males | 2.8 | - | 0.0 | 1.3 | 3.0 | 3.9 | 6.7 | 0.0 |
| | Females | 4.2 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 21.5 |

Even though the data are not completely comparable with the data from the previously analyzed years, and if death rates for other and unknown occupations are excluded, it is obvious that workers in agriculture, fishing and forestry still had the highest crude death rates. The reason lies in their unfavourable age structure in relation to other occupations. Nevertheless, if death rates are compared according to age groups, workers in agriculture have the highest death rates only for those older than 55. Between the age of 25 and 55, the highest death rates are for legislation, administrative officials and managers. The death rates are relatively high for these occupations in the age groups 55–64 and 65+ as well, especially for women. The observed differences in death rates among certain occupations confirm their continued decrease, which is expected when the death rate of employed persons is expressively low, to the level of 2.6‰ in 2011 (3.7‰ and 1.1‰ for male, namely female population).

This is because the differences in mortality decline with age, reflecting the fact that the influences of socio-economic factors are lost in older years of life and the significance of biological factors increase.

Furthermore, the specific greater protection of “white collar” workers is lost in view of morbidity and mortality in conditions of population ageing and with significant presence of risk factors connected with contemporary way and style of life. This is especially true if the dominance of chronic non-contagious diseases both in population morbidity and mortality is taken into consideration. Including the basic illnesses and death causes in the analysis as well, it may indicate to lesser or greater imperiled health which is brought about by doing certain occupations.

Tab. 2a. *Death rates by occupation, sex and age in Vojvodina, in 2011*

| Occupation | Sex | Total | 15–24 | 25–34 | 35–44 | 45–54 | 55–64 | 65+ and unknown |
|--|---------|-------|-------|-------|-------|-------|-------|-----------------|
| Legislation, administrative officials and managers | Males | 3.7 | 0.0 | 1.5 | 1.6 | 4.3 | 7.7 | 9.8 |
| | Females | 1.4 | 0.0 | 0.3 | 0.8 | 2.0 | 2.4 | 41.7 |
| Professionals | Males | 2.7 | 0.0 | 0.2 | 0.6 | 3.5 | 7.2 | 7.7 |
| | Females | 0.7 | 0.0 | 0.2 | 0.4 | 1.2 | 2.2 | 0.0 |
| Technicians and associate professionals | Males | 2.0 | 0.7 | 0.4 | 0.8 | 3.0 | 5.5 | 8.2 |
| | Females | 0.9 | 0.0 | 0.2 | 0.7 | 1.4 | 2.7 | 22.2 |
| Clerical support workers | Males | 1.3 | 0.0 | 0.3 | 0.7 | 2.3 | 3.3 | 0.0 |
| | Females | 0.7 | 0.0 | 0.1 | 0.4 | 1.4 | 2.1 | 0.0 |
| Service and sales workers | Males | 1.5 | 0.7 | 0.5 | 0.9 | 2.4 | 4.4 | 17.3 |
| | Females | 0.6 | 0.0 | 0.2 | 0.4 | 1.0 | 3.3 | 0.0 |
| Skilled agricultural, forestry and fishery workers | Males | 10.0 | 0.3 | 0.6 | 1.5 | 3.3 | 9.2 | 94.3 |
| | Females | 3.5 | 0.0 | 0.0 | 0.2 | 1.5 | 1.9 | 35.4 |
| Craftsmen and related trades workers | Males | 2.0 | 0.2 | 0.6 | 0.7 | 3.0 | 6.2 | 16.8 |
| | Females | 0.8 | 0.0 | 0.2 | 0.5 | 1.7 | 1.6 | 12.3 |
| Plant and machine operators and assemblers | Males | 1.8 | 0.3 | 0.5 | 0.7 | 2.5 | 6.4 | 35.1 |
| | Females | 0.4 | 0.0 | 0.1 | 0.2 | 0.8 | 1.4 | 0.0 |
| Elementary occupations | Males | 1.5 | 0.1 | 0.3 | 0.8 | 2.1 | 5.0 | 12.2 |
| | Females | 0.4 | 0.0 | 0.1 | 0.2 | 0.4 | 1.1 | 3.9 |
| Other and unknown | Males | 56.4 | 5.4 | 8.9 | 19.9 | 146.5 | 482.2 | 588.2 |
| | Females | 65.3 | 4.3 | 9.9 | 44.4 | 132.8 | 207.5 | 393.9 |

CAUSES OF DEATH

The population of Vojvodina is dying according to contemporary model of death causes. They concern the causes which are characteristic for older populations, as well as those connected with the contemporary way of life and

work and greater personal responsibility for health maintenance. These general observations apply to the employed population as well. According to the 2010 data (Table 3), the highest rates among the male population are for circulatory system diseases, followed by tumors, injuries and poisoning. The most frequent causes of death for employed women are the same, except that tumors are in first place followed by circulatory system diseases, injuries and poisoning.

Tab. 3. *Death rates by occupation and sex for leading causes of death in Vojvodina, in 2011 (per 100,000)*

| | Diseases of the circulatory system | | Neoplasms | | Diseases of the respiratory system | | Injury, poisoning and consequences of external factors | |
|--|------------------------------------|---------|-----------|---------|------------------------------------|--------|--|--------|
| | Male | Female | Male | Female | Male | Female | Male | Female |
| Total | 170.4 | 38.1 | 112.4 | 57.5 | 13.0 | 1.2 | 54.6 | 11.1 |
| Legislation, administrative officials and managers | 221.5 | 20.3 | 86.7 | 81.3 | 9.6 | 0.0 | 96.3 | 40.7 |
| Professionals | 90.4 | 12.4 | 130.9 | 39.3 | 3.1 | 2.1 | 18.7 | 6.2 |
| Technicians and associate professionals | 66.9 | 33.3 | 69.2 | 58.7 | 9.2 | 3.9 | 34.6 | 9.8 |
| Clerical support workers | 49.2 | 37.5 | 39.4 | 52.4 | 0.0 | 0.0 | 14.8 | 3.7 |
| Service and sales workers | 55.9 | 15.7 | 55.9 | 33.1 | 2.2 | 0.0 | 36.6 | 7.0 |
| Skilled agricultural, forestry and fishery workers | 663.9 | 310.3 | 245.9 | 95.5 | 56.6 | 0.0 | 71.3 | 11.9 |
| Craftsmen and related trades workers | 96.2 | 24.7 | 53.5 | 43.3 | 2.7 | 0.0 | 44.1 | 0.0 |
| Plant and machine operators and assemblers | 72.5 | 21.6 | 50.9 | 21.6 | 3.9 | 0.0 | 39.2 | 10.8 |
| Elementary occupations | 55.6 | 10.4 | 45.8 | 13.8 | 16.4 | 0.0 | 19.6 | 10.4 |
| Other and unknown | 1,740.8 | 1,547.7 | 1,967.8 | 3,267.4 | 132.5 | 0.0 | 1,040.7 | 687.9 |

Circulatory system diseases are the leading cause of death for most occupations. However, the outstanding highest rate is for workers in agriculture, fishing and forestry. Out of the total number of deceased from circulatory system diseases in 2010, 42.2% were agricultural, forestry and fishing workers. The same applies for tumors. Out of all persons who died from tumors, 19.9% were workers in agriculture, forestry and fishing. Both men and women with these occupations have the highest rates in comparison with other occupations. In addition, almost half of the persons who died from respiratory system diseases were agricultural, forestry and fishing workers. Male agricultural workers have the highest death rates due to respiratory system diseases in relation to other occupations. They also have the highest death rates when injuries and poisoning are in question.

Even though data for only one calendar year are in question and cannot enable more precise conclusions, the following may be observed: the employed female population for all occupations has lower death rates in relation to men for all stated causes of death. Furthermore, the death rate due to circulatory system diseases is considerably greater for legislators, officials and managers than for other employed persons. For other occupations, a greater uniformity is noted in the death rates for analyzed causes of death.

CONCLUSION

In conditions of modified age structure, with pronounced demographic ageing characteristics, as well as low death rates of population younger than 65, the influence of socio-economic factors on the differences in death rates of economically active persons is quite small-scale. Even though the analysis showed there are certain differences in the death rates among the employed persons with different occupations, a direct causative connection cannot be determined. This is because the differences in the occupational structure of the population are tied with their different educational structure, living standards and thus different positions in the system of health care.

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**ДИФЕРЕНЦИЈАЛНИ МОРТАЛИТЕТ У ВОЈВОДИНИ НА
ОСНОВУ ЕКОНОМСКЕ АКТИВНОСТИ И ЗАНИМАЊА****БИЉАНА РАДИВОЈЕВИЋ**

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РЕЗИМЕ: Овај рад се бави диференцијалним морталитетом у Војводини на основу економске активности и занимања војвођанског становништва. Анализа покрива период од 1971 до 2011. Циљ истраживања је да се утврди утицај друштвено-економских фактора на разлике у нивоу морталитета између различитих група становништва. Особито је циљ да се утврди утицај услова за рад, као и начина на који се рад врши, на разлике у морталитету код становништва које се бави различитим занимањима. Такође, циљ је да се региструју промене у морталитету у вези са економским кретањима и занимањима становништва у одређеном периоду који се анализира.

КЉУЧНЕ РЕЧИ: диференцијални морталитет, Војводина, економска активност, занимање

MARITAL BEHAVIOR OF THE ELDERLY POPULATION IN SERBIA¹

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ABSTRACT: The aim of this paper is to examine contemporary marital behavior of the population in Serbia older than 65 years. Models of marital behavior are a reflection of culture, tradition, local customs, economic status, cultural and historical heritage, and as such are subject to change. Extending the life expectancy of the population, and the change of socio-economic and cultural circumstances, had led to changing in marital behavior and marital structure of the old population. To track these changes and comprehend the current situation, we analyzed indicators such as the marriage and divorce rates for this age group, as well as current marital structure, comparing them with previous values. It is particularly noteworthy that for the first time (based on data from the 2011 census), we can analyze the frequency and characteristics of informal marriage unions (cohabitation), which provides important insights into the marital life of the elderly.

KEYWORDS: marital behavior, marriage, elderly population, cohabitation

¹ This paper is the result of the research on project 47007 funded by the Ministry of Education, Science and Technological Development.

INTRODUCTION

Population older than 65 years today represents 17.8% of the total population of Serbia (according to data for year 2013, Statistical Office of the Republic of Serbia). Current demographic trends suggest that number, as well as the proportion of this population, will continue to grow (already with a younger age group from 60 to 64, so population aged 60 years and over represent 25.6% of the total population). However, the marital behavior of elderly population in Serbia hasn't been studied much so far. Namely, study of marriages is usually approached from the perspective of the importance of marriage for reproduction, bearing in mind that marriage is a dominant frame for the population reproduction (76% of all births in our country occurs within marriage). Hence, greater attention is paid to marital behavior of fertile capable population and issues such as the age at first marriage, delay of marriage, divorce, who the children belong to after the divorce etc. However, taking into account the growing number of the population older than 65 years, there is a need for better insight into the marital behavior of this age group. Marital characteristics are often connected and have an impact on social inclusion, health, economic situation, as well as the psychological state and general well-being of elderly people.

A positive correlation between the life of elderly people in the marriage, or widely understood, in the partner community on the one hand, and longevity, as well as better economic, psychological and social situation on the other hand, was perceived long ago. Comparing demographic and socio-economic characteristics with mortality rates, Kaplan and Kronick [2006] found that mortality rates are significantly higher for those individuals who were not married, compared to those who are married and live with their spouses. This effect was more emphasized in individuals who had never concluded a marriage, as well as in men compared to women. Solomou & Co. [1998] reported in their qualitative research (which involved 2,049 persons older than 65 years) that elders who live with their spouses have higher level of life satisfaction and are more involved in the community. Opposite to this, majority of divorced men of this age felt the lack of social support, while men who had always been single felt the least support. The positive relationship between the life of elderly people in marital union and better economic opportunities also should not be neglected. In addition, changes in marital status of elderly people often have an impact on other members of the extended family (children, relatives), due to changes in life circumstances (change of residence, change in property relations, change of economic conditions etc.).

In Serbia, elderly persons are particularly vulnerable, they are often living in poor residential conditions and are exposed to a higher risk of falling into poverty (the poverty risk is higher for 40% to 50% than the risk valid for the total population²). Nearly half of elders live in two-member or single-member elderly households, and the latter of these two are particularly threatened in terms of economic, health and social aspect. In addition, elderly people are

² National strategy for elderly, Ministry of Labour, Employment and Social Policy of Serbia, Belgrade, 2006.

often not integrated enough into the community and participate in social life in a much lesser extent than the rest of the population.

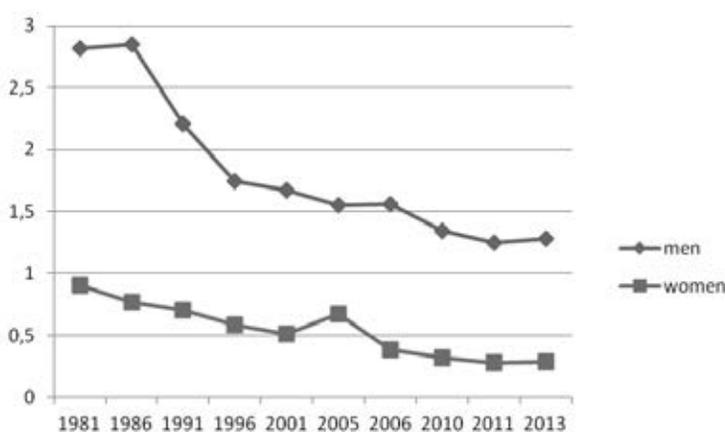
Monitoring and analysis of basic demographic data on elderly population marital status is therefore important for the perception of the general living conditions and well-being of elders. Therefore, this paper aims to clarify basic characteristics of marital structure and marital behavior of older population in Serbia over the last few decades. We believe that this information, especially in correlation with other socio-economic and health characteristics, may be of importance for perceiving the life of elderly people in all its complexity, as well as for finding ways in which these conditions and the situation can be improved.

MARRIAGES

Establishment of new marital unions in the population older than 65 years is not unusual, but it is still relatively rare. During the past 30 years number of marriages in elderly population (65+) is declining, although this population is becoming more numerous. Accordingly, the rate of nuptiality in the mentioned period is also in the fall. It is obvious that marital behavior of this population is changing towards making decision to (re)marry more rarely. This raises the question is it still true that in Serbia “marries both young and too young, old and too old, divorced and widowed” [Jovanović – Batut, prema Radovanović, 2001]. It is obvious therefore that the number of official marriages in elderly population is declining, and that there is a certain change in marital behavior of the population, although it is still not so noticeable.

Considering the total amount of concluded marriages in Serbia, concluded marriages of persons older than 65 years represent a relatively small percentage. Since share of elderly population in the overall population is increasing, it would

Graph 1. *Trends in the rate of nuptiality for male and female population aged 65 years and over, Serbia, 1981–2013 (selected years)*



Source: Demographic statistics for relevant years, RZS, Belgrade.

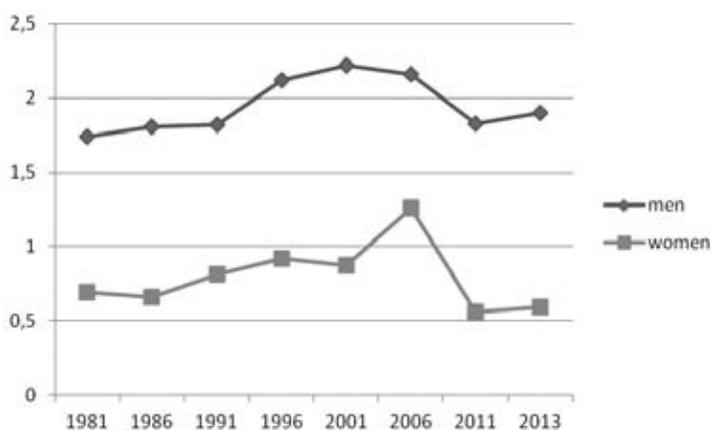
be logical to expect that shares of marriages are also increasing. However, this is not the case, that is to say that share of elderly population concluded marriages in the total amount of concluded marriages maintains at almost the same level over the last 30 years.

The larger number of elderly population marriages is concentrated within the youngest categories, and refers to the category of “younger elders”, that is to the contingent of older people from 65 to 70 years.

As it was expected, there are some differences in rate of nuptiality when it comes to men and women – namely, nuptiality rate throughout the period has higher values for men. In 2013, the rate of nuptiality for men was 1.4, while for women it was about three times lower (0.5). Similar relation existed throughout the monitored period. It is obvious therefore that men in these years decide to marry more often than women. One of the reasons may be the fact that in our society, men more often marry younger women. A smaller nuptiality rate for women of this age is partly the result of bigger number of women compared to men in these years, which is caused by the women’s longer life expectancy. Therefore women older than 65 years have a small selection of potential partners with whom they could (re)enter in the (new) marital union. Almost every second woman who were older than 60 years is a widow (46%), so if we add to this the percent of divorced and unmarried women, the percentage of women older the 60 who may be a potential marriage partner is 55%. On the other hand, only one out of six men in these years is a widower (17%), while only 4% of them are single and 4% are divorced.

Therefore, frequency of marriage in this population is also caused by the unequal gender structure, which is numerically in favor of women, but from the perspective of the possibility to find a potential spouse, it is in favor of men.

Graph 2. *Proportion of concluded marriages of the population older than 65 years in the total number of concluded marriages, for men and women, Serbia, 1981–2013 (selected years)*



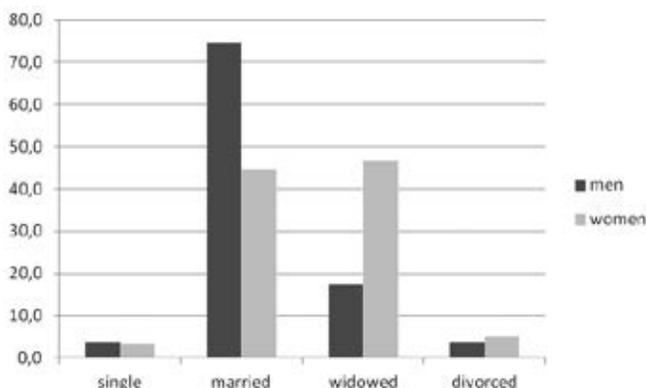
Source: Demographic statistics for relevant years, RZS, Belgrade.

Since nuptiality rate is bigger for male population, percentage shares of this age group's concluded marriages in the total number of concluded marriages are also higher for male population. During the last 30 years this percentage has been about 2%, with small fluctuations from 1.7 to 2.2%. When it comes to female population the share is lower, and for the past 30 years it's been ranging from 0.5 to 1%, with a maximum in 2006 (1.2%).

Different marital behavior of men and women, with differences in life expectancy, also causes their different marital structure. While over 70% of men in this age group are married, this is the case with only about 43% of women, while 45% of them are widows. The percentages of divorced and unmarried men and women are similar and smaller. This structure should also be viewed in context together with the fact that nearly half of senior citizens live in a single or two-member elderly households. With a loss of their spouse, elders are often forced to live alone, which makes them a highly sensitive group. Due to gender-specific mortality rates, women are particularly vulnerable to the risk of staying in one-member households. One-member elderly households are particularly vulnerable in economic terms, but also in terms of social exclusion, neglect, social isolation, health care etc.

On the other hand, studies have shown that marriage has positive health effects among members of elderly population, especially among men, as well as a positive correlation between marriage and general well-being

Graph 3. *Marital structure of men and women older than 60 years, Serbia, 2011*



Source: Demographic statistics for relevant years, RZS, Belgrade.

COHABITATIONS

Besides formally recognized marriages, informal marriage unions, so-called cohabitations, should also be taken into account. In the last census of 2011 data on the number of persons living in consensual unions were collected for the first time. This provided us a valuable insight into contemporary

trends in marital behavior. This information is especially important when it comes to elderly population, bearing in mind that, in the past, cohabitations were typical for people from older age groups, that is for people who are divorced or widowed and who have not based formal marital union due to economic reasons and/or social standards. However, the 2011 census showed that today most of these forms of life partnership is concentrated within younger age groups (29% in the age group 30–39 and 23% in the age group 20–29), which is in accordance with the theory of the second demographic transition [Bobić 2002]. Out of the total number of persons living in cohabitation, 9.7% is older than 60 years. Out of the total number of persons over 60 years, 1.2% lives in this form of partnership. If we take into account only those who are out of marriage, the percentage is slightly higher – 3%.

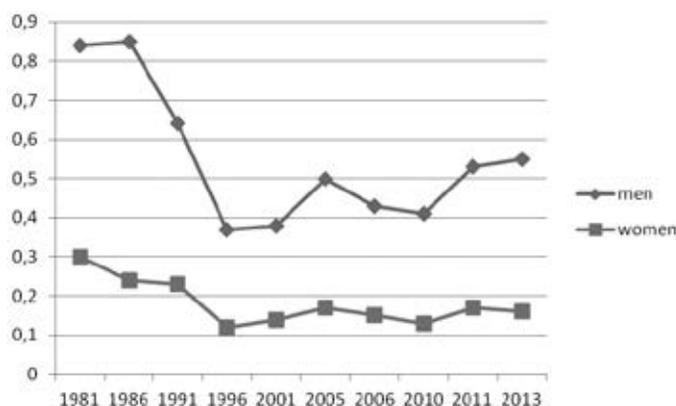
It would be interesting to examine reasons that drive people of this age group to enter into an informal marital union, as well as socio-economic characteristics of this population. Research conducted in the Netherlands [Gierveld 2004], which included respondents aged 55 to 89 years, found that the factors that have impact on a decision about the type of the new partnership (cohabitation, living-a-part-together, formal marriage) are, among others, age in which the last relationship ended, the number of earlier partnerships' break-ups, work activity, and other demographic variables taken into account when weighing the pros and cons of the new (non)formal partner community. Due to the lack of similar researches, we can just assume that similar factors influence the decision in our society, together with some more specific factors (e.g. avoiding change in property rights). A qualitative research on this topic could certainly provide more precise and accurate insights into the matter. From published census data it can be seen that majority of people over 60 years old who live in a cohabitation is urban population (61.9%), and that this form of partnership has higher prevalence in the region of Vojvodina (1.8, i.e. 3.97%) and Belgrade (1.4, i.e. 3.3%), compared to Šumadija and Western Serbia, and Eastern and South Serbia.

DIVORCES

Divorce rates for the observed population have recorded mild fluctuations during the observed period. The highest divorce rates were during the 80s, then dropped in the 90s, and have slightly increased over the last 15 years. Such a flow of the divorce rate is in accordance with the movement of divorce rates for the entire population of Serbia over the observed period. During the dramatic social, political and economic changes in the 90s the divorce rate decreased (because keeping marriage alive and family together is one of the strategies of “surviving” tough times), and before the start of the 21st century it slightly increased. Yet it still didn't reach the values of 80s. Hence it is obvious that frequency of divorce in the population over 65 years follows the general trends when it comes to divorce in Serbia, judging by both its flow of changes and its relatively low values.

Share of divorces of persons older than 65 years in the total amount of divorces is slightly increasing. Thus divorces of men older than 65 years represent

Graph 4. Trends in divorce rates for male and female population aged 65 years and over, Serbia, 1981–2013 (selected years)



Source: Demographic statistics for relevant years, RZS, Belgrade

3.6% of the total number of divorces among men in Serbia, while divorces of women of this age represent 1.4%. During the past 30 years divorce has significantly moved towards later years of married life, that is to say that an increasing percentage of marriages are divorcing after more than 25 years of marriage. Namely, in 1981 that percentage was 8.3%, while today (2013) it rose to 14.1%. Divorce moving to later stages of marriage can partly be explained by the fact that children become independent and leave the parental home during this period, which causes traditional marital union, in which partners are connected by parenting, to lose one of its most important connective elements. In such situations, when the partnership between the spouses is not strong enough so as to be able to compensate for the loss of parental role, divorce often happens. In the past, living in extended families, members of older generation played an important role in keeping grandchildren and family functioning, while today it is often not the case. However, termination of the marital union between persons older than 65 years can greatly affect younger members of the family. Both divorced persons and their families are affected by the need to change their place of residence after the divorce, since one of the former spouses, often goes to live with children / relatives after divorce. Thus, the increased divorce rates of the elderly population, especially elderly male population, should be considered in terms of the consequences that they have on divorced partners, as well as on their extended family members.

Divorce rates in male population throughout the observed period were approximately three times higher than rates for female population. Based on the data, men divorce to a greater degree in this period of life than women, but are also more likely to enter into a new marital union. Thus, the share of divorced within the marital structure is higher for about 3 times in women population than in men population, although the divorce rates are higher among men. The

share of divorced in marital structure has been constantly increasing in both sexes during the last four censuses.

CONCLUSION

Marital behavior of the population older than 65 years has not been the focus of previous marital analysis, since the nuptiality is often studied and analyzed in the context of the impact on fertility trends. However, elderly population constitutes 17% of the total population of Serbia, and there is tendency to future increase their share. In order to have the fulfilled and productive life of the elderly, it is necessary to have the insight in the marriage structure of the elderly population as well as contemporary trends in their marital behavior.

Analysis of basic demographic indicators of elderly marital status in the last 30 years, it has been found that there are no major changes, and the basic tendencies could be summarized as follows: the number and rate of formal concluded marriages had declined; the divorce rates in the last ten years increased slightly but are still significantly lower compared to the values from the 1980's. In the marital structure changes are reflected in the slowly growth of divorced individuals. Male population is characterized by higher both marriage and divorce rates, which is associated with entering into a marriage with a younger partner, as well as with a smaller choice of potential marriage partners for women of this age, due to differences in gender composition.

Changes and trends in the marital life of the elderly should be considered also in the context of impact on the quality of their life, their economic and social security. Elderly individuals living in single-person elderly households are particularly vulnerable category, and it is shown that life in the partnership has positive effects on health, social inclusion and general well-being.

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ОРИГИНАЛНИ НАУЧНИ РАД

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САЖЕТАК: Циљ овог рада јесте сагледавање савременог брачног понашања популације у Србији старије од 65 година. Модели брачног понашања одраз су културе, традиције, обичаја локалне средине, економског статуса и сл. Као такви подложни су променама. Продужавањем очекиваног животног века, као и мењањем социо-економских и културолошких прилика, дошло је и до промена у брачном понашању и брачној структури старог становништва. Како бисмо пратили ове промене и сагледали актуелно стање, анализирали смо показатеље попут стопа нупцијалитета и диворцијалитета за ову старосну групу, као и актуелну брачну структуру, упоредивши их са ранијим вредностима. Посебно је значајна чињеница да по први пут (на основу података из пописа 2011) можемо сагледати и учесталост и карактеристике ванбрачних заједница (кохабитација), што даје посебан увид у брачно понашање старих лица.

КЉУЧНЕ РЕЧИ: брачно понашање, брак, старо становништво, кохабитације

POPULATION AGEING TRENDS IN SERBIA FROM THE BEGINNING OF THE 21st CENTURY AND PROSPECTS UNTIL 2061: REGIONAL ASPECT*

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ABSTRACT: The results of the 2011 Census confirm that Serbia is still among countries with the oldest population in Europe. Persons aged 65+ outnumbered those under the age of 15 by 20% (17.4% versus 14.4%), and the median age was 42.7 years. Population ageing has continued, but it was slower in the intercensal period of 2002–2011 than during the 1980s and 1990s.

Population ageing in Serbia has not only continued but is also widespread at all territorial levels. According to the 2011 Census, in all four statistical regions (NUTS 2), people aged 65 or older outnumbered those under the age of 15 and, in comparison to 2002, regional differences in the key indicators of population ageing increased. Heterogeneity is more present at lower territorial levels (cities/municipalities) with the least favourable age structure which will be pointed out. This paper also explores trends of components of population dynamics in the intercensal period 2002–2011, as well as causal relationship with the change of the age structure.

Current demographic trends (low fertility, negative natural increase, net emigration) and very old age structure severely limit the spectrum of future demographic changes both in the medium and especially in the short term. The situation is particularly influenced by the entrance of the large baby boom generation in the elderly ages. Explorations of future population trends are conducted based on the author's own demographic projections for Serbia until 2061 (revision 2014).

KEYWORDS: population ageing, census of population, population projections, statistical regions, Serbia

Based on the last 2011 Census, and according to all the characteristics of population ageing, Serbian population can be classified in the group of very old populations, not only in Europe but also globally. At the same time, the

* This paper is a result of the project "Investigation of demographic phenomena in the function of public policies in Serbia" (No. 47006), funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

changes achieved in the last decades, especially by the end of 20th and early 21st century indicate that Serbia has been exposed to a very intense population ageing. This process has been manifested in low and steadily declining share of the youth and high and continuously increasing share of the elderly in the total population of the country.

CAUSES OF POPULATION AGEING OF SERBIA

As with other populations, the current age structure in Serbia is formed under the direct influence of all three components of population change (fertility, mortality and migration), but also under the strong influence of the inherited age structure, manifested by the population momentum.

In general, changes in the age structure of Serbian population in the last two intercensal periods, as well as in the second half of the 20th century were primarily influenced by the decline in fertility, but also the inherited age structure. The long-term effects of the inherited age structure on its future changes are more than obvious. Disruptions in the age structure caused by the First and the Second World War, the rapid increase in fertility during the early 1950s, and later relatively intense fertility decrease, were the main direct factors that shaped the age structure of the population of Serbia during the entire second half of the 20th century.

Over time, with increasingly intense biological departure of depleted generations that suffered most in the world wars, the effect of previous disturbances of age structure became less pronounced. Later, in the late 20th century, the impact of long-term effect of low fertility became increasingly pronounced, and in the last twenty years also the impact of turbulent migration.

Population ageing is primarily the result of a large decline in fertility that is also kept at the low level for a long time. In Serbia, for example, during six decades (between 1950 and 2010), the annual number of live births was more than halved (from 163.3 thousand in 1950 to 68.3 thousand in 2010), as well as the average number of children per woman (total fertility rate from 3.1 was reduced to 1.4), which significantly narrowed the basis of the population pyramid (ageing from the base). The achieved level of fertility is very low, thus for over half a century (since 1956) it has not provided a simple population reproduction. Since the mid-2000s, fertility has been by about 30% below the replacement level.

Tendencies present in the field of mortality by age in the past half century have also influenced the age structure of the population. In fact, during the 1950s and 1960s the most significant reduction in mortality was most effective in infants and young children, which significantly slowed down the effects of fertility decline¹.

¹ In Serbia (excluding Kosovo and Metohija), in 1950 infant mortality rate amounted to 113 per 1,000, in 1975 it was reduced to 28 per 1,000, in the early 2000s, the value of this mortality indicator was stabilised at around 10 per 1,000, as of 2003, the infant mortality rate has always been below that level (6.3 per 1,000 in 2011). Reduction of infant mortality has been present in other European countries although, for example, in Western and Northern Europe, the decline has

Since the 1970s, the life expectancy of the elderly has achieved a significant extension in developed western countries, which has greatly contributed to the acceleration of the population ageing from the top of the population pyramid. Regarding Serbia, the situation concerning the extension of life expectancy of the elderly is significantly different. For example, at the period 1970–2000, life expectancy was extended for only 2 (men) and 3 years (women), of which approximately 90% was due to the reduction of infant mortality. Contribution to the reduction of mortality in the aged population (over 60) practically does not exist since at these ages life expectancy virtually stagnated. In recent years, however, the extension of life expectancy of the elderly has been present in Serbia, except that it is of a much less scope than in countries that have the best results in decline of old age mortality², and thus its influence on population ageing was less pronounced.

Until the 1990s, due to the selectivity of migrants by age (younger middle-aged being the largest population) migration influenced differently the formation of the age structure of Serbian population. In time of net immigration, it slowed population ageing, while during net emigration, migration affected the acceleration of the process.

The situation in the intercensal period 1991–2002 was significantly different. Besides the net immigration, migration accelerated population ageing. In fact, during the 1990s, due to the substantially different reasons for migration, there were different age structures of emigrant and immigrant population. Among emigrants younger population was still prevalent, primarily younger middle-aged population (under 40). Consequently, emigration of several hundred thousand people contributed to the acceleration of the ageing of Serbian population [Penev 2006]. At the same time, immigrants, mostly refugees, did not significantly differ from the overall population from countries of origin by the age structure, but also in the immigration zones in Serbia. Therefore, the impact of immigration on changing age structure of the population of Serbia could be generally considered as neutral.

In the last intercensal period (2002–2011), migration again received the earlier *peaceful* character. Emigration continued, but immigration slowed down. It is estimated that net emigration amounted to about 100 thousand people. As its age structure was younger than the overall population structure, migration further influenced the intensification of population ageing in Serbia.

TOTAL POPULATION BY AGE

In Serbia, the 2011 Census registered 1,025 thousand of people under the age of 15. At the same time, there were 1,250 thousand of the elderly (over 65) (Table 1). This means that the number of the elderly, as in the previous 2002

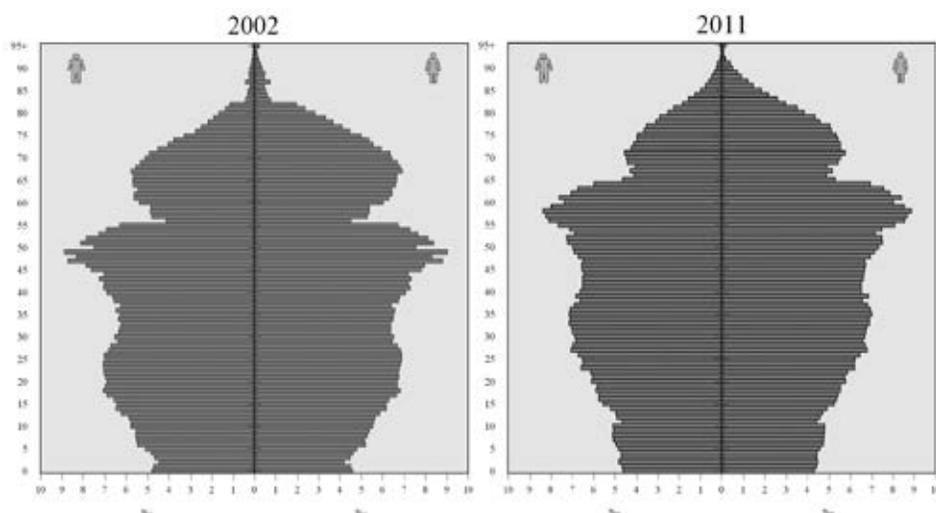
been of less intensity, but the currently achieved level is significantly lower (in some countries under 3 per 1,000).

² In Serbia, between 2001 and 2011, the life expectancy of men aged 60 extended from 16.3 years to 17.3 years and of women from 19.0 to 20.4 years. At the same time, the life expectancy also extended in all other European countries, but in Serbia it was among the lowest.

Census, exceeded the number of young people. In less than 10 years, the number of young people decreased by 150 thousand, whereas the number of the elderly increased by 10 thousand people. The share of young people decreased from 15.8% to 14.3%, while the share of the elderly increased from 16.7% to 17.4%.

The age structure of Serbian population in 2011 can be most vividly seen through the population pyramid (Figure 1). The basis of the pyramid is quite narrowed, mostly conditioned by the low and declining birth rate in the 1990s, and, after a brief increase in the early 2000s, it continued with the declining trend i.e. very low birth rates in the period after 2003.

Figure 1. *Population pyramids. Serbia, 2002 and 2011*



Source: According to the 2002 and 2011 censuses of Serbia [SORS 2014]

The extent of disruptions in the age structure is very clearly indicated viewing the least numerous generations (with less than 65 thousand people). The most numerous from this group, with the population of 64,789 is the age cohort of persons who have reached 66 years of age (born in 1944/1945, i.e. the last years of the Second World War). It is followed by children under the age of one (with the population of 64,400), i.e. infants born between 1 October 2010 and 30 September 2011 (census day). This comparison impressively indicates a small birth rate, which has been one of the main characteristics of demographic trends in Serbia over the last 10–15 years³. The youngest generation registered in the 2011 Census is scarcer than the depleted generation born at the end of the Second World War, the latter further significantly reduced due to mortality and the

³ In 2011, a total of 65,598 babies were born in Serbia. It is, in the observed territory of the Republic of Serbia (excluding territory of Kosovo and Metohija), not only the lowest annual number of live births after the World War II, but in the past 100 years, including the periods during the First and Second World Wars.

intense emigration from the country during the second half of the 1960s and 1970s (when they belonged to the group of younger middle-aged population). It is true that the cohort of children under the age of one is really more numerous than indicated by census results, due to the incomplete coverage caused by the boycott of the ethnic Albanian population, but the undercoverage could not amount to more than 1 percent.

Other generations of children under 10 are more numerous than the generations of infants, but they are all, without exception, scarcer than the people who at the time of the 2011 Census were 70 (born in 1940/1941). At the same time, according to the census results, the age cohorts of children under 10 were on average, per generation, by over 50 thousand scarcer than the generations of persons aged 55–59, i.e. cohorts of those born during the *baby boom* of the first half of the 1950s. At the time of the 2011 Census, the *baby-boomers* were the most numerous generations of the Serbian population, and thus the population pyramid is the widest at the very beginning of its upper half, where the graph presents the generations born in the late 1940s and during the 1950s.

Table 1. *Broad age groups of population according to gender. Serbia, 2002 and 2011*

| Year | Age group | Population | | | Share in total (%) | | |
|------|-----------|------------|-----------|-----------|--------------------|-------|---------|
| | | Total | Males | Females | Total | Males | Females |
| 2002 | Total | 7,498,001 | 3,645,930 | 3,852,071 | 100.0 | 100.0 | 100.0 |
| | 0–14 | 1,176,761 | 604,258 | 572,503 | 15.8 | 16.7 | 15.0 |
| | 15–64 | 5,032,805 | 2,494,719 | 2,538,086 | 67.6 | 68.8 | 66.3 |
| | 65+ | 1,240,505 | 524,630 | 715,875 | 16.7 | 14.5 | 18.7 |
| 2011 | Total | 7,186,862 | 3,499,176 | 3,687,686 | 100.0 | 100.0 | 100.0 |
| | 0–14 | 1,025,278 | 527,308 | 497,970 | 14.3 | 15.1 | 13.5 |
| | 15–64 | 4,911,268 | 2,444,801 | 2,466,467 | 68.3 | 69.9 | 66.9 |
| | 65+ | 1,250,316 | 527,067 | 723,249 | 17.4 | 15.1 | 19.6 |

Source: According to the final results of the 2002 and 2011 censuses of the population of Serbia [SORS 2014]

Note: For 2002, the difference between the sum and the total is the number of persons of an unknown age.

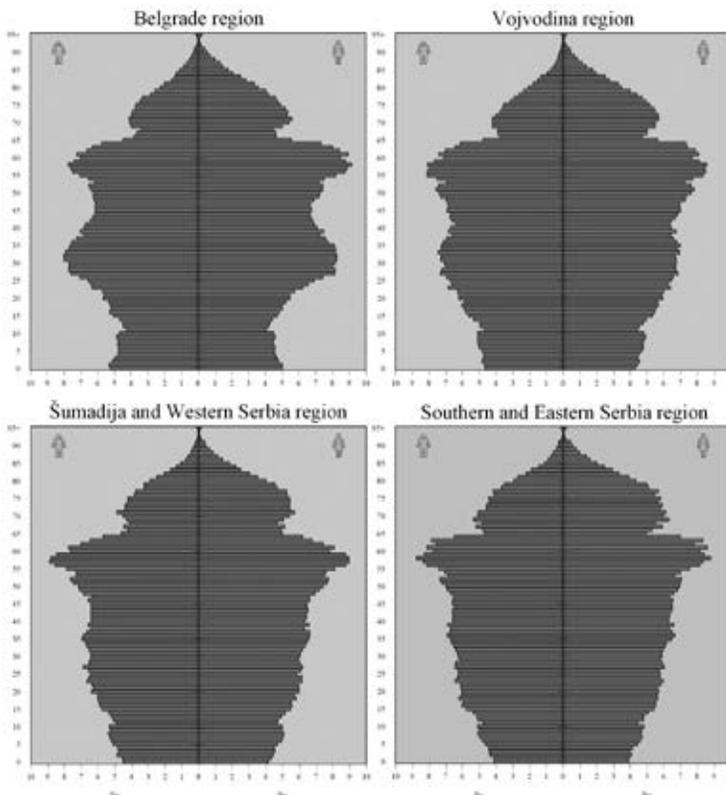
REGIONAL DEFERENCES

Bearing in mind the shape of the pyramid (the central part is the widest, and the base is narrower than the top), it can be concluded that in the early 21st century, the age structure of the population of Serbia had regressive characteristics. Very similar are the contours of the population pyramids of most of the statistical regions (Figure 2). These are primarily the regions of Vojvodina, Šumadija and Western Serbia, as well as the Region of Southern and Eastern Serbia. However, differences among them are distinguished, which are best

noticed in the middle of the pyramid. Specifically, in this part the Vojvodina population pyramide is considerably less thinned than it is the case with the pyramids of the other two mentioned regions. It can, above all, be explained by more intense migration of younger middle-aged population from that area (Serbia-south), both within Serbia (towards the regions of Belgrade and Vojvodina) and abroad. Additionally, the upper part of the population pyramid of the Southern and Eastern Serbia region is noticeably wider, indicating the largest proportion of the elderly in that statistical region.

According to the shape of the population pyramid, the Belgrade region drastically differs from all other regions in Serbia. There are several quite noticeable differences – first, the contours of the very bottom part of the pyramid (presenting the share of persons under 10), show that the base slowly narrows with increasing age (from the youngest to older children). Unlike the Belgrade region, in other regions the pyramid bases slightly widen from the bottom to the top. This indicates that the Belgrade region has an increased number of preschool and lower elementary age children. This can be explained

Figure 2. *Population pyramids of the statistical regions of Serbia, 2011*



Source: According to the 2011 Census data [SORS 2014]

with a slight increase in the annual number of live births (particularly in the period 2005–2009) as well as with the influx of population in the optimal reproductive age (which has the highest fertility rate), from other parts of Serbia, as well as some neighbouring countries.

The appearance of the central part of the population pyramid regarding the Belgrade region is also considerably different. First, it narrows sharply after the age of 35, reaching a minimum width at about 45 (born in the mid-1960s). Above the narrowest, central part, the pyramid suddenly widens, reaching a new peak at the age cohorts of 55–60. A similar form of this part of the pyramid, but without such sharp contours, is noticeable only in the Vojvodina pyramid. Such a hollow does not exist in the population pyramids of the region belonging to the part Serbia-south. They have a shape characteristic for the regressive type of population. The pyramids are the narrowest at the base, and widen more or less intensively towards the top. The pyramid is by far the widest in the upper half, i.e. at the maximal cohorts (aged 55 to 60).

Table 2. *Broad age groups of population. Statistical regions of Serbia, 2002 and 2011*

| Region | 2002 | | | | 2011 | | | |
|-----------------------------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|
| | Total | 0–14 | 15–64 | 65+ | Total | 0–14 | 15–64 | 65+ |
| Belgrade region | | | | | | | | |
| Population | 1,576,124 | 228,925 | 1,091,007 | 247,029 | 1,659,440 | 232,730 | 1,154,948 | 271,762 |
| Share in total (%) | 100.0 | 14.6 | 69.6 | 15.8 | 100.0 | 14.0 | 69.6 | 16.4 |
| Vojvodina region | | | | | | | | |
| Population | 2,031,992 | 322,205 | 1,386,031 | 315,185 | 1,931,809 | 277,470 | 1,337,801 | 316,538 |
| Share in total (%) | 100.0 | 15.9 | 68.5 | 15.6 | 100.0 | 14.4 | 69.3 | 16.4 |
| Šumadija and Western Serbia | | | | | | | | |
| Population | 2,136,881 | 342,904 | 1,418,734 | 359,471 | 2,031,697 | 298,485 | 1,374,202 | 359,010 |
| Share in total (%) | 100.0 | 16.2 | 66.9 | 16.9 | 100.0 | 14.7 | 67.6 | 17.7 |
| Southern and Eastern Serbia | | | | | | | | |
| Population | 1,753,004 | 282,727 | 1,137,033 | 318,820 | 1,563,916 | 216,593 | 1,044,317 | 303,006 |
| Share in total (%) | 100.0 | 16.3 | 65.4 | 18.3 | 100.0 | 13.8 | 66.8 | 19.4 |

Source: According to the final results of the 2002 and 2011 censuses of Serbia [SORS 2014]

Based on the shapes of the population pyramids it can be unequivocally concluded that the population of all four statistical regions of Serbia belongs to the group of demographically older populations characterised by the low share of the youth and high share of the elderly. At the same time, in all four regions the number of the elderly is larger than the number of young people. Broken down by age groups at the time of the 2011 Census, the highest share of the elderly aged 65 and more, was registered in Southern and Eastern Serbia

(19.4%) and the lowest in the regions of Belgrade and Vojvodina (16.4% each). At the same time, the region of Southern and Eastern Serbia is an area with the lowest share of persons aged under 15 (13.8% of the total population). In other three regions, the share of young people is also low (14.0% in Belgrade up to 14.7% in the region of Šumadija and Western Serbia), but the difference relating the percentage share of the elderly (from 2.0 to 3.0 percentage points) is much lower than it is the case in the region of Southern and Eastern Serbia (5.5 percentage points). In this regard, the values of the ageing index can be mentioned (ratio between the number of people over 65 and the number of people under 15). The highest value is for the region of Southern and Eastern Serbia (1.40) and the lowest for the Vojvodina region (1.14). This means that in the first region, the number of the elderly is by 40% higher than the number of young people, and in the second region it is higher by “only” 14%. The value of the ageing index for the region of Šumadija and Western Serbia (1.20) and the Belgrade region (1.17) are slightly higher than the minimum, but significantly lower than the maximum regional values.

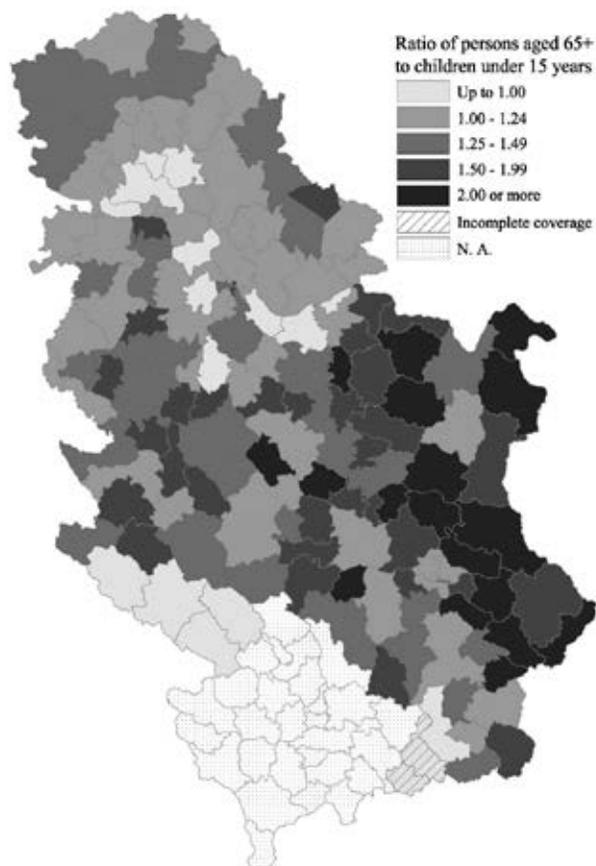
The results of the censuses of 2002 and 2011 point to the conclusion that the populations of all four statistical regions were exposed to demographic ageing. It was manifested by an increase in the share of the elderly, as well as decrease in the share of young people. It means that the population ageing occurred simultaneously from the top and the base of the population pyramid, which was, after all, the main characteristic of ageing of the Serbian population.

All four regions are characterised by the fact that the decrease in the share of young people was more intense than the increase in the share of the elderly. This can be explained, on the one hand, by a significant decrease in the birth rate in the past decade and a half, and on the other hand, by the fact that between the two censuses the contingent of those over 65 encompassed the depleted generations born during the war and the early post-war years after the World War II, which significantly slowed the increase in the number of the elderly.

Interestingly enough, between 2002 and 2011 the largest increase in the percentage of the elderly was recorded in the Region of Southern and Eastern Serbia (from 18.3% to 19.4%), and at the same time, the number of people over 65 decreased from 319 to 303 thousand. However, decrease in the number of young people was even larger (from 283 thousand to 217 thousand of persons under 15). Such different directions and intensities of the changes in the share of the youth and the elderly directly resulted in a significant increase of the ageing index (from 1.13 in 2002 to 1.40 in 2011). In other regions as well, there was an increase in the ageing index, but it was both relatively and absolutely lower than in the Southern and Eastern Serbia region. This suggests not only that the population of that region is demographically the oldest, but also that in the last intercensal period the population ageing process was more intense in that region particularly.

The previous analysis clearly leads to the conclusion that process of population ageing in Serbia has greatly progressed, not only at the national but also at the regional level, with all the negative consequences of demographic, social, economic and political nature. The analysis at the lower territorial level (municipalities and cities) provides a more complete picture of regional differ-

Map 1. *Municipalities and cities by ageing index. Serbia 2011*



Source: According to the 2011 Census data [SORS 2014]

ences in the age structure of population of Serbia, but also the intensity and spatial distribution of population ageing. To be precise, the calculated values of the main indicators of the age structure for 2011 clearly indicate a number of regions without any demographic future [Rašević and Penev 2011].

PROJECTED CHANGES IN THE AGE STRUCTURE OF POPULATION IN THE NEXT FIVE DECADES

Future changes in the population, as well as changes in the population structure, and above all, the age structure can be most reliably seen through calculations of the population projections, based on the data on the initial population structure by age and sex and on certain assumptions about future trends in fertility, mortality and migration.

Bearing in mind the exceptional situation in the early 2000s, not only from the demographic, but also the political, economic and social aspects, the authors of hypotheses about the possible directions of the demographic development of Serbia by mid-21st century believe that it is of paramount importance to properly assess the essence of the current changes, i.e. whether it is a short-term phenomenon, a continuation or the beginning of long-term trends. In this sense, for the Serbian population projections up to the year 2061, it is of exceptional importance to properly set the hypothesis about the direction and intensity of migratory movements. In terms of future trends in fertility and mortality, it seems they are much easier to predict and not only because in the past few decades there have not been any significant changes to contrast the long-term trends, but because in the medium term, especially in the next couple of decades, there will not be any conditions for some major changes in this domain.

This paper reviews the future population trends by comparing the results of the author's population projections of Serbia up to the year of 2061. They represent a revision of the author's population projections of Serbia 2010–2060 [Penev 2013]. The first relates only to the national level, while in the 2014 Revision the decomposed approach was applied [Penev 2014]. This means that the assumptions about the future demographic trends were adopted separately for each of the four regions, and the results for Serbia are the sum of the results for population projections of the regions of Belgrade, Vojvodina, Šumadija and Western Serbia and the region of Southern and Eastern Serbia. The projections were made in six variants (variants of low fertility, medium fertility and high fertility, constant variant, expected variant and zero net migration variant), which differ according to the combination of the adopted assumptions of the changes in fertility, mortality and net migration by age and sex for the period 2011–2061.

The main conclusions that can be drawn based on the results of population projections are that in 2061, by all the variants, Serbia will have less population⁴ and significantly higher share of the elderly than in the initial 2011 Census (from 26.1% to 34.4% compared to the initial 17.3%). The same conclusion applies to all regions. Differences exist only in the values of the rate of population decrease and speed of demographic ageing. The only exception is the Belgrade region, population of which in 2061 would be more numerous than in 2011 and only on the condition of the high or medium fertility variant (increase by 18% and 5% respectively).

In further text, only the most important results of the expected projection variant will be analysed, which could be characterised as a prognostic one. The realisation of the assumptions on expected fertility⁵, mortality⁶ and net migration⁷ would result in a reduction of the total population by a total of 2,176 thousand (from 7,234 thousand in mid-2011 to 5,058 thousand in mid-2061). This would take place in all the regions continuously. The only exception would

⁴ The reduction would be from 3,159 thousand or 43.7% by the constant variant to 784 thousand or 11.8% by the high fertility variant.

⁵ The decline in total fertility rate by 2021 and increase after 2026 up to 1.8 children per woman.

⁶ Continuous extension of life expectancy – up to 82.2 for men and 86.5 for women in 2061

⁷ The decrease in net emigration up to the zero by mid-2030s, and net immigration that would at the national level reach 13.3 thousand persons in 2061.

be the region of Belgrade, and only during the first decade of the projection period (the population would grow by 2021). At the same time, by 2061 the Belgrade region would also have the lowest decrease in the total population (5% compared to 2011). According to the expected variant, the highest decrease would be achieved in the southern regions, as much as by 40% (Sumadija and Western Serbia region) and 43% (Southern and Eastern Serbia region). The reduction of the population of Vojvodina region would be at the national average (30%). Uneven rates of the population decrease would cause significant changes of the population share of the regions. Towards the end of the projection period almost every third inhabitants of Serbia (31%) would be living in the Belgrade region, while 18% of the total population of the country would be living in the Southern and Eastern Serbia. In 2011, the two regions had almost the same number of people (1,658 thousand and 1,610 thousand), while in 1961 the population of the region of Southern and Eastern Serbia was twice as numerous as the population of the Belgrade region.

Realisation of assumptions about future trends in the components of population dynamics on which the expected projection variant is based, but also the initial population structure by age and sex by 2061, would cause a continuous and rapid population ageing in Serbia, as well as in all four statistical regions. Ageing would take place from the top, but also from the base of the population pyramid. At the end of the projection period in Serbia, every third person (33.3%) would be over 65, including one in three over the age of 80 (11.5% of the total population of the country). At the same time, the share of persons under 20 would be reduced to 17% and would be almost half the size of the share of persons over 65.

In all the regions the direction of change in the age structure would be identical, and the difference would be only in the speed of population ageing. The realisation of the expected variant would, for the region of Southern and Eastern Serbia mean keeping the leading position in population ageing process. In that region, the share of the elderly 65 or over would in 2061 exceed 35%, while the ageing index would be slightly lower than 3.0, and the median age would reach 55 years of age. At the same time, according to the values of all the main ageing indicators, the Belgrade region would have the youngest population. However, this demographically youngest region would have characteristics of a very old population with the share of the elderly of exactly 30%, the ageing index of 2.17, and the median age of nearly 50 years (48.9). Such regional differences would be largely the result of the realisation of assumptions about the future trends in net migration. Specifically, it is assumed that Belgrade region will be a permanent immigration zone and Southern and Eastern Serbia region a net emigration zone (despite the assumed net immigration but only after 2041). Such a conclusion is also confirmed by the results of the zero net migration projection variant, by which in 2061 the differences in population ageing would be the smallest, but ageing would be more intense than in the case of the expected projection variant. This, in turn suggests that the intensity of population ageing in Serbia in the future will be heavily influenced by the current old age structure.

Table 3. Total population in broad age groups and the indicators of population ageing, Serbia, by statistical region, 2011 (estimate) and 2061 (expected projection variant)

| Age groups/indicators | Serbia | Belgrade | Vojvodina | Šumadija and Western Serbia | Southern and Eastern Serbia |
|--|--------------------|-----------|-----------|-----------------------------|-----------------------------|
| 2011 | Population | | | | |
| Total | 7,234,099 | 1,658,151 | 1,932,945 | 2,033,203 | 1,609,800 |
| 0–19 | 1,451,704 | 318,125 | 389,549 | 418,546 | 325,484 |
| 20–49 | 2,888,911 | 699,109 | 786,956 | 787,432 | 615,414 |
| 50–64 | 1,645,540 | 371,086 | 441,744 | 469,355 | 363,355 |
| 65–79 | 996,114 | 213,492 | 255,029 | 284,975 | 242,618 |
| 80 + | 251,830 | 56,339 | 59,667 | 72,895 | 62,929 |
| | Share in total (%) | | | | |
| 0–19 | 20.1 | 19.2 | 20.2 | 20.6 | 20.2 |
| 20–49 | 39.9 | 42.2 | 40.7 | 38.7 | 38.2 |
| 50–64 | 22.7 | 22.4 | 22.9 | 23.1 | 22.6 |
| 65–79 | 13.8 | 12.9 | 13.2 | 14.0 | 15.1 |
| 80 or more | 3.5 | 3.4 | 3.1 | 3.6 | 3.9 |
| Ageing index (65+/up to 15) | 1.20 | 1.16 | 1.13 | 1.19 | 1.33 |
| Dependency ratio (65 or more + up to 20)/(20–64) | 0.60 | 0.55 | 0.57 | 0.62 | 0.64 |
| Mean age (years) | 42.1 | 41.7 | 41.7 | 42.2 | 42.8 |
| Median age (years) | 42.5 | 41.4 | 42.1 | 43.0 | 43.6 |
| 2061 | Population | | | | |
| Total | 5,058,283 | 1,576,397 | 1,346,518 | 1,222,964 | 912,404 |
| 0–19 | 874,320 | 295,508 | 231,212 | 200,184 | 147,416 |
| 20–49 | 1,532,266 | 516,276 | 405,897 | 351,085 | 259,008 |
| 50–64 | 969,187 | 290,853 | 256,941 | 241,847 | 179,546 |
| 65–79 | 1,099,513 | 310,924 | 297,251 | 279,034 | 212,304 |
| 80 or more | 583,001 | 162,837 | 155,219 | 150,814 | 114,131 |
| | Share in total (%) | | | | |
| 0–19 | 17.3 | 18.7 | 17.2 | 16.4 | 16.2 |
| 20–49 | 30.3 | 32.8 | 30.1 | 28.7 | 28.4 |
| 50–64 | 19.2 | 18.5 | 19.1 | 19.8 | 19.7 |
| 65–79 | 21.7 | 19.7 | 22.1 | 22.8 | 23.3 |
| 80 + | 11.5 | 10.3 | 11.5 | 12.3 | 12.5 |
| Ageing index (65+/up to 15) | 2.60 | 2.17 | 2.64 | 2.91 | 2.98 |
| Dependency ratio (65 or more + up to 20)/(20–64) | 1.02 | 0.95 | 1.03 | 1.06 | 1.08 |
| Mean age (years) | 49.3 | 47.4 | 49.5 | 50.5 | 50.8 |
| Median age (years) | 51.9 | 48.9 | 52.1 | 53.8 | 54.5 |

Source: For 2011: the official mid-year population estimate by age and sex [SORS 2014]; for 2061: *Projections of population of Serbia, 2011–2061. Revision 2014* [Penev 2014]

The current age structure deeply rooted in low reproductive preferences, age mortality pattern and socio-economic circumstances that have stimulating effects on emigration from the country are some of the most important factors that will decisively affect the demographic development of Serbia in the next half century. The results of the analysed population projections indicate that in the near future it is unlikely to expect the improvement of the demographic situation that will inevitably be characterised by the population decrease and its very intense ageing. However, the successful implementation of measures to boost birth rate, faster and more successful implementation of economic and social reforms and the European integration along with taking long-term sectoral policies, could slow the adverse trends in the future, which would possibly, by the middle of the 21st century create the conditions for a gradual demographic recovery of the country.

At the same time, successful reforms could mitigate the severe economic consequences of population ageing from the labour market, pension policy through health care to savings and capital markets [Chawla, Betcherman and Banerji 2007]. Furthermore, the implementation of active migration policy is particularly important, not only focused on the problem of emigration from Serbia, but increasingly on immigrants from other countries, as an increasingly important component of the population change [ISS 2013].

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ОРИГИНАЛНИ НАУЧНИ РАД

ТРЕНДОВИ СТАРЕЊА СТАНОВНИШТВА СРБИЈЕ С ПОЧЕТКА 21. ВЕКА И ПЕРСПЕКТИВЕ ДО 2061. РЕГИОНАЛНИ АСПЕКТ

ГОРАН ПЕНЕВ

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РЕЗИМЕ: Резултати Пописа 2011 потврђују да Србија и даље спада у групу земаља с демографски најстаријим становништвом у Европи. Стари 65 или више година су за 20% били бројнији од млађих од 15 година (са уделима у укупном од 17,4% и 14,4%), а медијална старост је била 42,7 година. Старење становништва је настављено, али се тај процес у међупописном периоду 2002-2011 одвијао спорије него током 1980-их и 1990-их.

Старење становништва Србије не само да је континуирано, већ је и опште присутно на свим територијалним нивоима. Према Попису 2011, у сва четири статистичка региона (НСТЈ 2) стари 65 или више година бројнији су од лица млађих од 15 година, а у поређењу са 2002, регионалне разлике у вредностима основних индикатора демографске старости су повећане. Хетерогеност је присутнија на нижим територијалним нивоима (НСТЈ 3 и НСТЈ 4). Такође, указано је и на трендове компоненти популационе динамике у међупописном периоду 2002-2011, као и на њихову узрочно-последичну везу са мењањем старосне структуре.

Актуелни демографски токови (низак фертилитет, негативан природни прираштај и нето емиграција) и значајно поремећена старосна структура, битно ограничавају спектар будућих демографских промена на средњи, а посебно на кратак рок. На то посебно утиче улазак бројчано обимних *baby boom* генерација у старосну групу старог становништва. Разматрање будућих популационих трендова је сагледано на основу резултата ауторових демографских пројекција Србије до 2061. године. Посебно је оцењен утицај миграција на будуће популационе трендове у Србији и њеним статистичким регионима.

КЉУЧНЕ РЕЧИ: старење становништва, попис становништва, пројекције становништва, статистички региони, Србија

UDC 364-22-053.9(4)
UDC 314:331.5(4)
DOI: 10.2298/ZMSDN1448701V
REVIEW SCIENTIFIC PAPER

POPULATION AGEING AND ITS IMPACT ON LABOUR FORCE IN THE SOUTH EAST EUROPE COUNTRIES

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ABSTRACT: Population ageing has become an increasing challenge of our time. The process of demographic ageing is more intense in the Balkan countries, some of which have already held the world's top positions. This paper examines the trends of population ageing in the Balkans and the South East Europe (SEE) countries (Albania, Bosnia and Herzegovina, Bulgaria, Greece, FYR of Macedonia, Romania, Slovenia, Serbia, Montenegro, and Croatia) at the beginning of the 21st century and the cross-country differences in the timing of the ageing process. In addition to the analysis of an overall effect of the main factors, this paper examines the influence of population ageing on labour force in the Balkan countries. There are three factors behind the increases in the share of the population aged 65 and over: declining fertility rates in recent decades which have reduced the relative number of young people, the rise in life expectancy and the cohort of baby boomers over the age of 60. The ageing of the Balkan countries population introduces several major policy challenges. Paper highlights the impact of population ageing on human resources and labor supply.

KEYWORDS: population ageing, labour force, implications of ageing, Balkan countries

INTRODUCTION

The process of rapid population ageing is the reality of the Balkan countries at present. The unprecedented declines of fertility over the past two decades were caused by changes in the reproductive characteristics of population, and in combination with an increase of life expectancy, they resulted in significant changes in the age structure of the population in these countries. Emigrations and their age selectivity helped intensify the process. This paper presents an analysis of the dynamics of demographic ageing in the Balkan countries, points out the differences among the particular countries, and provides a broader context of impacts these demographic changes could have on labour markets. Demographic changes could have a severe impact on the size of the workforce and its productivity, so the last chapter focuses on the links between the ageing of the workforce/population and the supply of labour.

The demographic ageing phenomenon is present in all Balkan countries, but the intensity and the stadium of the process differ, depending on numerous factors. This is a result of cultural, religious and ethnic heterogeneity, as well as different socio-economic and political processes that occurred during the second half of the 20th and the beginning of the 21st century [Kotzamanis 2001]. Kotzamanis argues that determining the effects of socio-economic events on the process of demographic change is vital to a demographic phenomena analyst. In accordance with the findings of this respective author, and acknowledging other relevant studies in this field [Chawla, Betcherman and Banerji, 2007; Penev 2010], we have decided that this research should include all Balkan countries, including Romania and Slovenia¹. All of these countries, apart from Greece, have gone through some distinctive processes over the second half of the 20th century: from the affiliation to the Socialist Bloc aka the Eastern Bloc to the social and economic transition during the 1990s, which manifested itself through armed conflicts in some countries of the former Socialist Federal Republic of Yugoslavia. With the aim to examine the differentiation of the process, to better understand the causes and to point out the complexity of its consequences, we conducted a comparative analysis of the ten countries belonging to the region of South East Europe (Albania, Bosnia and Herzegovina, Bulgaria, Greece, FYR of Macedonia, Romania, Slovenia, Serbia, Montenegro and Croatia).

¹ Regarding the territorial scope of this research, it is necessary to note several things. Geographical and political aspects of the Balkans differ to a certain extent. Although the Balkans is geographically mostly defined by the borders of the Balkan peninsula, the geo-political territory has several definitions. It covers a wider area and it is historically unsettled and neither easily nor strictly bounded area. Considering the fact that the Balkans has a negative connotation, the term South East Europe is more commonly used. At the beginning of the 21st century, in attempt to express the particular historical and political moment, the expression “Western Balkans” (as a geo-political region) was introduced to classify the Balkan society outside the EU [Svilar 2010]. It is interesting how, depending on the historical-political context of the term, the borders of the Balkans and the Balkan countries change, especially in the Western Balkans. Depending on the political or publicity needs and the context of use, some countries such as Slovenia, Romania, Albania or Croatia were only occasionally covered by the term.

POPULATION AGEING: FACTS AND FACTORS

At the end of the first decade of the 21st century the population of the Balkan countries amounted to a total of around 65 million people². Populations of these countries significantly vary in size: Montenegro is the smallest with 618.2 thousand inhabitants, while Romania has the largest population of 21.4 million people which makes up one third of the entire population of South East Europe. Until the 1990s, all the Balkan countries had a constantly growing population (except for Bulgaria, where the census of 1991 indicated the beginning of the process of depopulation), so the number of inhabitants of this region increased by 25% (from 54.9 million to 68.9 million) in the period between 1961 and 1991. The growth trend was the most dynamic in the 1960s and in the 1970s, only to take a descending path in the 1980s. During the last decade of the 20th century, the process of depopulation had begun in nearly every country in the Balkans (Table 1).

Table 1. *Main demographic indicators for SEE countries, 1991–2011*

| Countries | Population (in thousands) | | Natural population change (‰) | | Total fertility rate | | Life expectancy at birth | | Median age | |
|------------------|------------------------------|----------|----------------------------------|-------|----------------------|-------|--------------------------|-------|------------|-------|
| | 1991. | 2011. | 1991. | 2011. | 1991. | 2011. | 1991. | 2011. | 1991. | 2011. |
| Albania | 3,259.8 | 2,831.7 | 18.5 | 6.3 | 3.06 | 1.52 | 71.5 | 77.0 | 23.8 | 30.0 |
| B&H | 4,517.9 | 3,843.2 | 7.7 | -0.9 | 1.65 | 1.15 | 66.4 | 75.6 | 29.7 | 39.4 |
| Bulgaria | 8,669.3 | 7,369.4 | -1.7 | -5.1 | 1.65 | 1.51 | 71.3 | 73.9 | 36.8 | 42.0 |
| Greece | 10,192.9 | 11,309.9 | 0.7 | -0.3 | 1.38 | 1.43 | 76.8 | 80.0 | 36.1 | 42.1 |
| FYR of Macedonia | 1,890.9 | 2,057.3 | 10.5 | 1.6 | 2.10 | 1.46 | 71.5 | 74.7 | 29.5 | 35.9 |
| Romania | 23,192.3 | 21,413.8 | 1.0 | -2.6 | 1.59 | 1.25 | 71.2 | 74.3 | 32.8 | 38.6 |
| Slovenia | 1,999.9 | 2,050.2 | 1.1 | 1.6 | 1.42 | 1.56 | 73.2 | 79.4 | 34.4 | 41.7 |
| Serbia | 7,822.8 | 7,276.2 | 0.7 | -5.2 | 1.73 | 1.40 | 71.0 | 74.1 | 33.6 | 41.5 |
| Kosovo* | 1,956.2 | 1,780.0 | 22.2 | 11.4 | 3.49 | 2.2 | 68.0 | 70.2 | - | 27.8 |
| Montenegro | 615.0 | 618.2 | 9.2 | 2.9 | 2.05 | 1.77 | 75.6 | 75.0 | 30.1 | 36.5 |
| Croatia | 4,782.2 | 4,412.1 | -0.6 | -2.3 | 1.53 | 1.46 | 72.2 | 75.4 | 35.8 | 41.5 |

Source: EUROSTAT statistic database; States statistical offices data; The World Bank (2014)

* Kosovo (under UNITED Nations Security Council Resolution 1244/99)

² Precise statistical tracking of the demographic changes in the Balkans is not possible. This is caused by the warfare in the territory of former Yugoslavia, mass forced migrations, frequent boycotts of statistical actions in Kosovo and Metohija and southern regions of Serbia, census omissions in Bosnia and Herzegovina and Kosovo and Metohija, termination of the census in the Former Yugoslav Republic of Macedonia after a few days of field operations in 2011 as well as methodological changes relevant to the concept of total population that occurred in most countries during the 2000s [Penev 2010].

Two crucial factors, related to a complex system of interdependencies, determine the differences in the timing of the ageing process among the countries: a) distinct paces of demographic transition in the countries, and b) characteristics of the socio-economic and political conditions these countries have been through. As a result of a lengthy and permanent decrease of fertility, the changes have been slow and gradual in some countries, whereas other countries have suffered sudden and abrupt changes provoked by refugee migrations [*Migracije, krize...*, 2011]. Beside Bosnia and Herzegovina, where warfare led to “demographic collapse”, the direct influence of socio-political factors on reshaping the demographic processes was also obvious in other countries. Nearly 700 thousand people left Albania in a short period of only several years. After the continuous growth of the population at a high rate (varying between 2.8% and 1.9%), in the period between 1991 and 2000 the growth rate in Albania turned negative (-0.5%). This created severe imbalance in the gender and age structure of the population, and by the time of the next census (2011), it had already made an impact on the dramatically decreasing natality [INSTAT, 2002]. In Bulgaria and Romania, this period is regarded as a painful transition from a centrally-planned economy towards market-oriented capitalism, and as a demographic crisis also referred to as a “demographic shock” [Vassilev 2005].

Analysis of the causes of population decline indicates that the positive values of the population natural growth rate were characteristic for all examined countries until the 1980s, although, even then, the differences between two groups of countries were apparent: Bosnia and Herzegovina, Albania and FYR of Macedonia had population natural growth values between 10‰ and 20‰, while the rest of the Balkans had a significantly lower population natural growth rates (Table 1). After the 1990s, Bulgaria and Croatia were the first countries to record negative population natural growth rate, and soon they were followed by Romania, Serbia and Greece. According to the data collected in the 2011 census, the countries of the first group still had positive population natural growth rates, though the values were several times smaller than the original ones (Table 1).

The estimation of the implications of the migrations in the Balkans is a complex task. For example, up until the end of the 1980s Romania, Bulgaria and Albania were known for controlled and limited intensity of external migrations. Migrations caused by the crisis in the former Yugoslavia, and later the Kosovo crisis, together with mass Albanian emigration from Albania, form the core of the 1990s emigrant wave from the former socialist republics [Kotzamanis 2001]. These migrations largely determined the general population's dynamics and the changes of the age structure of the population. The pattern is different for each country. In Bulgaria and Romania a negative migration balance intensified the process of depopulation, while in Serbia refugee immigrations neutralised the process to some extent. There are no precise data referring to the population changes during the last decade of the 20th century in Bosnia and Herzegovina and Kosovo and Metohija. However, it is certain that the mass refugee migrations from Bosnia and Herzegovina during the war and a negative population natural growth had serious consequences on the

structure of the country's population. Also, the decrease in population in the period 1991–2000 in Kosovo is assumed to be the result of a negative migration balance exclusively. Unlike any other Balkan country, Greece experienced an increase in population, largely as a result of a positive migration balance caused by the thousands of Albanians immigrating to Greece [Penev 2010].

The main cause of the large decline in the population growth rates after the 1980s and the process of depopulation after the 1990s was the unexpected drop in the total fertility rate (TFR). The pace of the natality shift was not even, provoking the heterogeneity of demographic dynamics and different paces of ageing in the Balkans to go on for decades. Over the past fifty years, the TFR in the Balkans halved (from around 3 children per woman to 1.45 children per woman), and the decline was the most severe in the last decade of the 20th century. Up until the 1980s the TFR in all countries was around or above the level of fertility necessary to ensure a generational replacement³. In Albania and in Kosovo and Metohija, the value of TFR reached nearly 4 children per woman. The high fertility rate in Kosovo and Metohija created the false impression that Serbia had a satisfactory TFR level which enabled the generational replacement to take place until the 1990s, when in fact Serbia had faced the problem of low fertility rate in the largest portion of its territory long before the 1990s crisis. In the early 1990s (Table 1.), there was no population reproduction in the Balkans (apart from Albania and FYR of Macedonia).

In terms of the historic course of the fertility transition, we can roughly classify the Balkans into two groups. Though there are notable differences between them, the first group consists of the countries that had high TFRs in the 1960s: Montenegro with 3.40 children per woman, FYR of Macedonia and Bosnia and Herzegovina with 3.95 children per woman and Albania with nearly 6 children per woman. Intriguingly, these countries have suffered the most severe TFR declines in the whole Balkans. According to the data collected in 2011, Montenegro has the largest value in this group – 1.77 children per woman, for Albania and FYR of Macedonia the value is 1.5 children per woman, while Bosnia and Herzegovina has the lowest TFR value not only in this group, but in the entire Balkans – 1.15 children per woman. The second group comprises the rest of the Balkans, and in accordance with the fertility trends, all of these countries age similarly. The fertility rates in these countries were lower than required for a generational replacement since the mid-1980s, so at the beginning of the 21st century they were considered to be the countries with the lowest fertility rates in the entire Europe. However, there was an evident turn of the declining trends in the last intercensus period in Bulgaria, Greece, Slovenia and Croatia, and only time will tell if this means the revitalisation of fertility for these countries.

Such drastic changes as in Albania, being a country with the highest values of TFR and then one of the countries with the lowest fertility rate, lead to a demographic homogenization of the fertility in the Balkans. The changes

³ Total fertility rate in 1981: Albania 3.99; Bosnia and Herzegovina 1.99; Bulgaria 2.01; Greece 2.09; FYROM 2.39; Romania 2.36; Slovenia 1.99; Serbia 2.14; Montenegro 2.22; Croatia 1.99 [Eurostat statistic database].

and the values being at an extremely low level most certainly lead to depopulation and rapid population ageing. Researches show that the depopulation will continue even if the average TFR reaches 2.1 [Rašević 2007].

Along with the decline in fertility, the life expectancy increased by an average of 10 years (Table 1). The differences among the countries are still present, varying from 80 years in Greece and Slovenia to approximately 74 years in Bulgaria (73.9), Serbia (74.1) and Romania (74.3). Deviations were also present between sexes, and some countries in the Balkans (Romania and Bulgaria) even experienced a cut back on life expectancy among the male population in the 1990s. The Balkans (apart from Slovenia and Greece) is still behind with life expectancy comparing to other developed European countries. Hence, the prosperity in this domain will also be a factor of further population ageing in these countries.

POPULATION AGING: EFFECTS AND IMPLICATIONS

Due to significant changes in fertility, and also due to the 1990s migrations in some countries, the age structure has altered severely, from being characterized by young people to being increasingly dominated by older people. If we observe the populations of the ten countries as a whole, the share of the elderly doubled, while the share of persons over 80 tripled. The share of the 65+ age groups increased from 6.5% in 1961 to 15.9% in 2011. According to the forecasts, the share of the 65+ age groups is expected to grow to 21.3% by 2030 and to 28.8% by 2050 [UN, 2014]. This means that nearly every third person would be over 65 years old. The number of the elderly increased 2.8 times, from 3.7 million to 10.4 million, and according to the projections, it could increase by another 50% by 2050 [UN, 2014]. The values of the ageing index show that each of the countries was characterized by a relatively young population in the 1960s with the values between 0.09 (Bosnia and Herzegovina) and 0.31 (Greece). The values of this parameter today are between 0.44 in Albania and 1.27 in Greece and Bulgaria. The growth of the elderly was the most dynamic in the countries where the overall population growth was stable but the decline in fertility was the most rapid. Albania, for example, still has the lowest share of the 65+ age groups, with the value of 9.9% in 2011, but their absolute number increased 3.7 times. The share of this category in the overall population of Bosnia and Herzegovina grew from 3.5% to 14.2%, with an absolute increase of 5.5 times. Their share in FYR of Macedonia doubled, from 5% to 11.7%, and the absolute value increased 3.5 times. Greece has the largest share of the 65+ age groups (19.3%) as it doubled in value over the past 50 years.

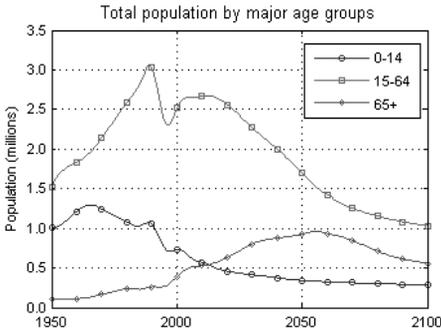
Simultaneously, the number of persons younger than 15 decreased by nearly a third of its original value in the entire Balkans, and is expected to amount half of its value in the 1960s by 2050. At the beginning of the 1960s, young people made up around one third of the total population (16.2 million), only to halve in value by the end of the first decade of the 21st century, and today it is only 16% (10.3 million). The ageing pace, however, varied significantly among the countries. In Albania, the decrease of the share of young people in the total population was noted a decade later. Albania has always

held the highest share among this age group in the Balkans, but the value dropped from 42% in 1961 to 22% in 2011. It is notably interesting that in Romania, the share of young people slightly increased over the period between 1971 and 1981. But the pro-natalist population policy applied at that time was repressive and unpopular and it had only a short term effect, which can be evidenced in the current declines of the younger population. The changes were the most radical in Bosnia and Herzegovina. At the beginning of the observed period, Bosnia and Herzegovina belonged to the group of countries with the highest share of young people, its value being 38.8% (Albania – 41.1%, FYR of Macedonia – 37.2% and Montenegro 36.4%), and at the end of the period it was classified among the countries with the lowest share of youth, its new value being 14.7% (Bulgaria 13.2%, Greece 14.4%, Slovenia 14.2%). The decrease of the share of young people in the population was the most intense during the 1990s, due to the combination of long term declines in fertility and a sudden change of the political and socio-economic climate.

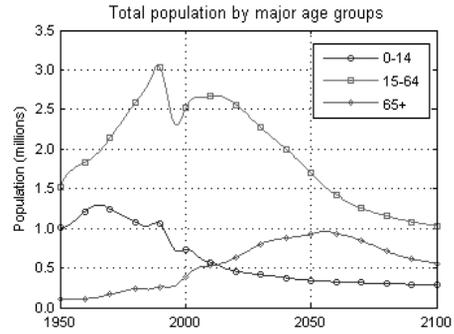
The ageing issues can be put into numerous contexts and there are a number of different topics dealing with this matter. The population ageing will affect every segment of life, because different age groups simply have different needs. This is why the ageing of the population raises numerous issues and challenges, from those dealing with elderly care and social, pension and health system adjustments, to the ones related to economic growth, economic development, employment, consumption and savings. One of the issues raised in this context is how the demographic trends and rapid population ageing will influence the size and the structure of the labour force and to what extent they can be a threat to further human capital development. Basically, the changes in the age structure of the population lead to a complete shift of the young-old relations, and ultimately, to a decline of the working-age population.

The usual trend (Fig. 1) during the first stage of the ageing transition is an increase in the share of working-age persons in total population. In the Balkans, the size of this category had an initial value of 34.9 million at the beginning of the 1960s, and it grew to 45.4 million in 2010. The growth was the largest in the youngest countries. It augmented 1.5 times in Albania, by 75% in FYR of Macedonia, by 52% in Montenegro, and by 39% in Bosnia and Herzegovina. The value is less than it was expected because it was weakened by the effects of refugee migrations and loss of working-age population due to warfare. The share of the working-age category in total population increased proportionately to the increase in the share of young population. In Albania the share of the working-age category reached 75%. As the ageing transition process intensifies in the second stage, the absolute number of working-age persons declines, and so does their share in the total population. Bulgaria, one of the countries with the oldest population, was one of the first countries to experience a decline of the working-age category, although the change was minimal – 3.4%. But, the predictions show that the upcoming decline will be significantly larger, and that in only 20 years the values in the Balkans could fall by over 10%. All Balkan countries are looking at a deterioration of the working-age population, and in Bulgaria the loss could amount to 1.1 million

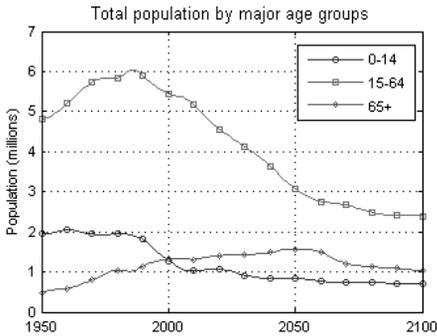
people, which is 22% of its working-age population. Some researches have shown that the rates of the demographic generational replacement among the working-age population have taken a negative trend. Ever since 2006, Bulgaria has not been able to perform a simple generational replacement – for every 100 people leaving the working-age category (aged 60–64) there are 80 people aged between 15 to 19 to replace them (*National Demographic Strategy*, 2006). Apart from Bulgaria, the problem of lacking young people of working age is also present in Greece, Croatia, Romania, Serbia and Slovenia.



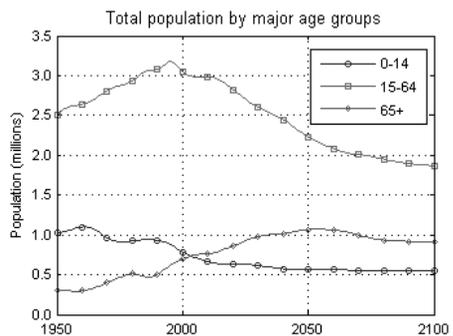
Albania



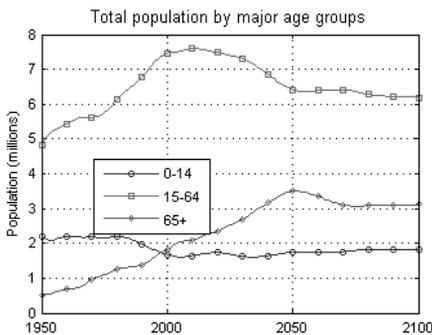
Bosnia and Herzegovina



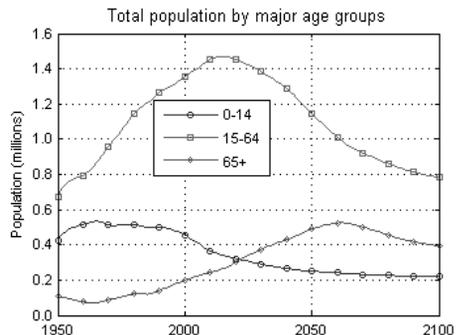
Bulgaria



Croatia



Greece



FYR of Macedonia

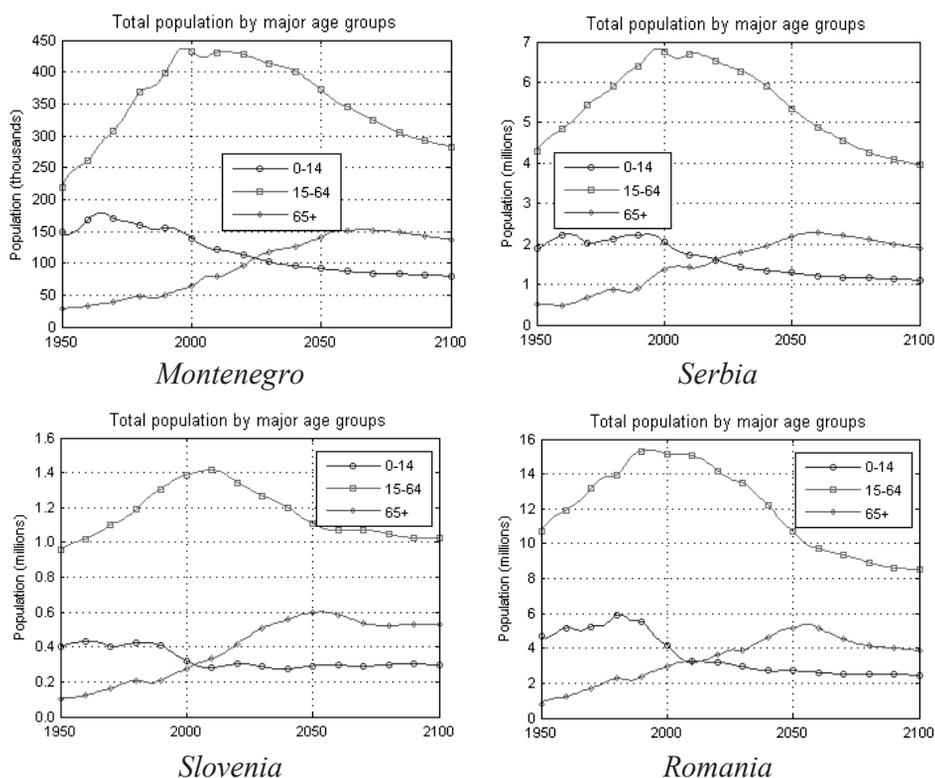


Fig. 1. Dynamics of the total population by major age groups, 1950–2100.
Source: <http://www.un.org/esa/population/unpop.h>

Another point of view is the impact ageing could have on dependency rates. All of the Balkans experienced huge declines of the age dependency indices of young people. Growth of the age dependency index of old people was uneven in the Balkans, and it matched the pace of ageing for each country. So, the smallest increase of this parameter was registered in Albania, FYR of Macedonia and Montenegro, while the rest of the Balkan region experienced a severe growth [Magdalenic 2013]. Large shares of the elderly in the working-age category, and their outflow, especially the baby boomers [Stojilković 2010], will be the most prominent upcoming economic trend in the Balkans and will affect further growth of the age dependency index of old people. The projected values of demographic ageing in Serbia show that the pressure of the 65+ age groups on the working-age population will grow at least by 40%, and most likely by 73%, by 2050 [Zdravković, Domazet and Nikitović, 2012].

CONCLUSION

The demographic profiles of the Balkan countries have altered severely over the past 50 years as their populations continue to age. The scenarios of demographic development for each Balkan country will surely depend on numerous factors. The predictions in this paper point out only the general trends, based on the assumption that changes of the current demographic situation are highly unlikely to happen in the near future, and that rapid population ageing will still be the main trend of demographic development. Having in mind the current age structures and the deeply inherent low reproductive norms of the population, it is certain that the unfavourable demographic trend could only be slowed down, but the growing share of the 65+ age groups in the population will surely intensify the economic implications of rapid population ageing. According to Chawla *et al.* [2007], the Balkans, along with the rest of Eastern Europe, have suffered the effects of a “third demographic transition”, which would be the trend of rapid population ageing occurring under the conditions of unprecedentedly slow and weak institutional development. Chawla *et al.* argue that these countries could avoid the severe economic consequences if they accelerate their economic transition and undertake long-term policies to combat the ageing of the population. The common opinion is that labour supply is essential to economic growth, though the reality is far more complicated and less demographically defined. According to some authors, a shrinking working force does not necessarily cause problems on the labour market, because productivity is far more important than size. In a state of high unemployment rate, the demographic trend which implies a high workforce outflow is regarded as a solution to the problem of unemployment, like in the Balkans. But in the long run, the population ageing will undoubtedly present a threat to economic growth, because it leads to a decline of working-age population and ageing of the labour force. Ageing of the workforce can affect its productivity because older workforce cannot produce at the same level of output a younger one could, though the more recent findings on the issue are assorted [Chawla *et al.* 2007; Bloom 2011; Mendryk and Dylon, 2013]. It is necessary to constantly supervise the situation and introduce relevant policies to combat the effects of population ageing. Handling the situation on the labour market requires reforms of the pension system, educational reforms, policies referring to employment of old workers, appropriate migrations management and structural adjustments of the global economic system.

ACKNOWLEDGEMENTS

This paper is a part of the project N° 047006 exploring how demographic phenomena function in public policies of Serbia, funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

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СТАРЕЊЕ СТАНОВНИШТВА У ЗЕМЉАМА ЈУГОИСТОЧНЕ ЕВРОПЕ
И ПОСЛЕДИЦЕ НА РАДНУ СНАГУ

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РЕЗИМЕ: Реалност данашњице у земљама Балкана је процес рапидног старења становништва. Промене у репродуктивном понашању становништва, које су водиле ка невиђеном паду фертилитета, посебно током протекле две деценије, уз раст очекиваног трајања живота, проузроковале су значајне промене у старосној структури становништва ових земаља. Миграције становништва, и њихова селективност према старости, додатно су доприносиле интензивирању процеса. У раду се даје општи осврт на динамику старења становништва у балканским земљама, указујући на разлике међу њима, и предочавајући неке од импликација на тржишту рада ових земаља. Феномен демографског старења је присутан у свим земљама, али се његов интензитет и достигнути степен разликује у зависности од јачине деловања бројних фактора. Резултат је хетерогености балканских земаља у културном, професионалном и етничком погледу, али и различитог утицаја друштвено-економских и политичких процеса током друге половине 20. и на почетку 21. века.

Посматрајући популацију десет земаља као целину, учешће старих се више него удвостручило, док је учешће популације старијих од 80 година чак утростручено. Учешће старих 65 и више година повећало се са 6,5% у 1961. на 15,9% у 2011. Пројекције укажују да је могуће очекивати пораст њиховог учешћа на 21,3% већ до 2030. и 28,8% у 2050. години. То значи да би скоро сваки трећи становник био старији од 65 година. Број старих у балканским земљама се у апсолутном износу увећао за 2,8 пута, са 3,7 милиона на 10,4 милиона, а према пројекцијама до 2050. године њихов број би могао да порасте за још 50%. Истовремено, број млађих од 15 година смањен је за више од једне трећине, и очекује се да ће се до 2030. године њихов број преполовити у односу на број из 1960-их.

Зато су бројна питања и изазови који се постављају пред друштвом које стари. Једно од питања је и како ће демографски трендови и убрзано старење становништва утицати на величину и структуру радне снаге, и у којој мери ће у скорој будућности то бити изазов за њихов даљи развој. Резултати показују да, дугорочно гледано, промене у старосној структури воде и ка смањењу радно-способне популације. Високо учешће старијих радника у структури радног контингента и њихово одливање из радне снаге, посебно бројних baby-boom генерација, биће најупечатљивији економски тренд у свим балканским земљама и утицати на даљи раст стопе зависности старих. Дobar пример су пројектоване вредности демографског старења Србије

[Здравковић, Домазет и Никитовић, 2012], које показују да ће притисак старих на популацију у радном узрасту до 2050. бити бар за 40% већи него данас.

КЉУЧНЕ РЕЧИ: демографско старење, радна снага, ефекти и последице старења, земље Балкана

ACTIVE AGEING AS LIFESTYLE ON CROATIAN ISLANDS

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ABSTRACT: The main feature of Croatian islands, in addition to their beautiful nature, is the fact that they are demographically and sociologically one of the most threatened areas affected by ageing. The ageing of the island population is the result of a long-term depopulation caused by the continuous emigration of the younger working-active population over the past hundred years, but also by the retirement return migration in the last thirty years. The most critical situation is on small islands where the majority of population is aged over 60 and this has a significant impact on all aspects of island life.

The research conducted on small islands in the Šibenik archipelago in 2011 has shown that older people live alone, with no significant health problems limiting their daily activities, in their own households (homes), on modest pensions, and many of them supplement their income through agriculture. They very often financially help their children, who live mostly in nearby mainland cities. The necessity of self-reliance, due to the lack of younger generations, forces the inhabitants of Croatian island to lead an active life until their old age. Although they are no longer actively employed, they still continue to contribute significantly to the family and society through their involvement in various community activities.

KEYWORDS: Croatia, islands, active ageing, migration, retirement

INTRODUCTION

The main feature of Croatian islands, in addition to their beautiful nature, is the fact that they are demographically and sociologically one of the most threatened areas affected by ageing. According to the 2011 Census results,

there are 47 inhabited islands in Croatia¹, populated by 124,955 people, with the average age of 45.1. Croatian islands reached the pinnacle of their population in 1921 when 174,994 inhabitants lived in this area. However, the emigration induced by the collapse of the vine industry as the foundation of the island economy, acquired mass characteristics by the end of the 19th century and became the most important factor in long-term demographic development of the islands.² While in the first half of the 20th century the island migration mainly focused on overseas countries (USA, Argentina, Chile and Australia), after the Second World War European countries and cities in Croatia have become the destinations of island emigrants for the most part. Increased emigration was a response to the inadequate economic policy of island areas. The inhabitants were massively leaving the island due to better employment opportunities and social benefits available in urban centres on the mainland. In addition to emigration, a negative natural change has been another significant factor of negative demographic trend. It appeared in 1960s as a result of an intensive and long-lasting departure of the reproductive-age population [Lajić 1992]. Due to all these unfavourable demographic processes, the islands had been undergoing a strong depopulation until 1991 when the census recorded population growth that continues to this day. However, the reason for this demographic growth is to be found in the fictive numerating of the population that lives on the islands only part of the year, and these are mostly emigrant islanders and second home owners. Research on the Šibenik islands has revealed that up to 30% of the registered permanent residents are only temporary island inhabitants [Podgorelec and Klempić-Bogadi 2013].

Despite the statistical indicators of demographic growth, the island population is continuously getting older, and this is particularly critical in small Croatian islands³ among which are the Šibenik islands, where the majority of population is aged over 60 (51.5%), while 9.9% are 80 or more years old and this has a significant impact on all aspects of island life. Although some larger and bridged⁴ islands have shown positive demographic processes in certain intercensus periods, small islands have been areas of demographic extinction for decades so that a complete cessation of permanent settlement occurred in some of them. In the last thirty years, there has been a trend of return of emi-

¹ The inhabited Croatian islands are: Krk (19,383 inhabitants), Korčula (15,522), Brač (13,956), Hvar (11,077), Rab (9,328), Pag (9,059), Lošinj (7,587), Ugljan (6,049), Čiovo (5,908), Murter (4,895), Vis (3,445), Cres (3,079), Vir (3,000), Pašman (2,845), Šolta (1,700), Dugi otok (1,655), Mljet (1,088), Lastovo (792), Iž (615), Šipan (419), Prvić (403), Silba (292), Zlarin (284), Vrgada (249), Lopud (249), Molat (197), Kaprije (189), Ist (182), Krapanj (170), Koločep (163), Susak (151), Drvenikveli (150), Olib (140), Rava (117), Žirje (103), Unije (88), Drvenikmali (87), Ilovik (85), Premuda (64), Sestrunj (48), Zverinac (43), Rivanj (31), Ošljak (29), Kornati (19), Biševo (15), Vele Srakane (3) and Male Srakane (2).

² Although former sporadic emigration from Croatian islands became considerably more massive and continuous by the end of the 19th century, it took several decades to reflect on the total population decrease because natural increase has managed to compensate for emigration losses.

³ Small islands are: Ilovik, Male Srakane, Vele Srakane, Susak, Unije, Silba, Olib, Premuda, Ist, Molat, Zverinac, Iž, Rava, Sestrunj, Rivanj, Ošljak, Vrgada, Prvić, Zlarin, Kaprije, Žirje, Krapanj, Kornati, Drvenikveli, Drvenikmali, Biševo, Šipan, Lopud and Koločep.

⁴ Čiovo, Vir, Pag, Murter and Krk are the islands connected to the mainland by bridge whereby they have lost some basic features of islandness.

grant islanders' who had spent their working life on the mainland and upon retirement returned to live on the island. Even though retirement migration has a positive impact on the total number of island inhabitants, it also contributes significantly to island population ageing.

Table 1. *Demographic indicators of ageing, Census 2011*

| | Popula- tion | Average age | Ageing index (60+/0-19) | 0-19 | 20-59 | 60+ | 80+ |
|---------------------------|-----------------|----------------|-------------------------------|---------|-----------|-----------|---------|
| Croatia | 4,284,889 | 41.7 | 115.0 | 896,605 | 2,356,911 | 1,031,373 | 168,704 |
| Croatian Islands | 124,955 | 45.1 | 172.1 | 22,232 | 64,469 | 38,254 | 6,518 |
| Small Croatian islands | 4,587 | 55.4 | 575.9 | 410 | 1,816 | 2,361 | 457 |

The aim of this paper is to confirm the hypothesis of the islands as a space for active ageing by analysing some aspects of life of the elderly population on the Šibenik islands. For this purpose, the paper will be an analysis of the collected survey data on: health condition and functional status, financial status (paid employment, pensions as income and housing conditions as a source of independence), experience of participation in the community by way of insight into the nature and way of spending free time of the respondents, level of mobility, and assessment (comparison) of the quality of life of the elderly on the island and their counterparts on the mainland.

ACTIVE AGEING ON THE ISLANDS

As far as the population ageing of modern societies is concerned, active participation of older people in various aspects of everyday life (in leisure, social, cultural and spiritual⁵ activities) within the family and community has become one of the leading concepts of social policies. Numerous studies confirm that to be continuously active during life or to re-activate (upon retirement) is the best way for old people to preserve the acquired knowledge and skills, to continue to build good relationships with the environment at all levels and to keep the sense of self-esteem, which altogether provides a higher quality of life in older age. Depending on the area/s of life in which an active lifestyle of the elderly as well as the outcomes of such a lifestyle on the society are being observed and promoted, the scientists discuss partially different concepts of the active, creative, successful and/or productive ageing [Ranzijn 2002].

For the purposes of this paper, we will use the concept of active ageing employing it, relying on the definition of several authors, as a multidimensional concept used to explain the value/importance of different types of activities and level of participation of older people in their communities to the overall

⁵ Research on the Kvarner and Dalmatian islands have confirmed that everyday going to church, which apart from spiritual component contains also a form of sociability, is particularly important to older women on the island [Babić, Lajić and Podgorelec 2004; Podgorelec 2008].

quality of life of individuals and society. Thus, according to the definition by the World Health Organization [2002: 12] *active ageing is the process of optimizing opportunities for health, participation and security in order to enhance the quality of life as people age*. As stated by Avramov and Maskova [2003], the concept of active ageing includes a continuous active contribution to domestic tasks, active participation in community life and active leisure activities of individuals. Therefore, research on the activity level of older individuals (pensioners) in a community “should incorporate broader lifestyle issues and address individual participant needs, as multiple factors influence people’s experience of retirement” [Richardson 2003].

Since we are aware of the danger that the definition of certain types of activities (e.g. participation in the labour force) or of certain areas of life of individuals may exclude part of the old population from observation (those in poor health or in the most advanced age) and thus marginalize this big and still important numerous group in the island life, we advocate for the definition according to which active ageing exceeds the obvious physical potentials of the individual. More precisely, the individual should be viewed through active involvement in various aspects of everyday life, regardless of individual health or other restrictions [Rowe and Kahn 1997].

A perspective that has proved extremely useful in observing the ways of life of old islanders [Podgorelec 2008] is the lifecourse perspective that incorporates the idea that the level of activity in the old age is determined by the individual’s lifestyle and activities dealt with during the earlier period of life. Research on the ways and quality of life of the population of Croatian islands [Podgorelec 2008; Podgorelec and Klempić-Bogadi 2013] have found a high activity of the older inhabitants precisely because of the specific way of life which the island area has dictated in the last seventy years, including all limitations (limited resources, underdeveloped economy, rural area, traffic isolation, lack of educational institutions, lack of young people and working-age population, inadequate policies, etc.) and/or advantages (sea, ecologically preserved area, climate, traditional customs, language, etc.). The type and level of the individual’s activity patterns change during the life cycle, depending on the decline or loss of certain skills or finding new strategies for continued active involvement in the life of the family or the community. Therefore, the researchers [Malanowski 2009, in: Boudiny 2013: 1094] argue for an understanding of the dynamic structure of the active ageing process watching it over the four periods of age: “... preretirement (with distinction between those in good and those in poor health), independent living as a retiree, early dependent living and dependent living up until death”. The lifestyle of the islanders, according to research on the Šibenik islands as well as on the Zadar, Kvarner and Split islands [Babić *et al.* 2004; Podgorelec 2008] confirm the above-mentioned dynamic structure, with particular emphasis on three phases: preparing to return to the island in the pre-retirement stage (by adapting parent house or building their own housing, and more frequent arrivals to the island in order to maintain the position in the community and in the existing social network), a high level of independent living in retirement until old age (despite health,

financial and social¹ difficulties) and, in the case of dependence, a significant help of family and community members (mostly neighbours).

Boudiny [2013: 1089] argues that three principles should be included in the strategy and the active ageing policy planning respectively, and we find them to be equally important during the evaluation stage activities of elderly individuals in the community: adaptation to changes throughout life, human factor or observation of the degree of individuals' participation in social networks (narrowing of the wide network in young years toward emotionally close relationships in old age), but also the exceptional value of solitary activities² and "primacy of agency over age-related structural barriers".

Studies on island population lifestyle³ [Lajić, Podgorelec and Babić 2001; Podgorelec 2008; Podgorelec and Klempić-Bogadi, 2013] have confirmed that old people, regardless of their age and health, put enormous energy into various forms of usefully spending their time by active participation in the community and mutual assistance respectively, participation in "work actions" (water front landscaping, construction of fire roads, etc.), cultural and artistic events, and neighbour help; in other words, they value to a great degree the closeness, the solidarity and the mutual support they feel living in a small island community, which gives them a sense of security⁴.

METHODS AND SAMPLE

Research on changes in the way of life in small island communities over the last fifty years was carried out from February to May 2011, applying the questionnaire method. The study was conducted on the combined deliberate and disproportionate quota sample that included a total of 249 respondents on five islands⁵ of the Šibenik archipelago – Krapanj, Prvić, Zlarin, Kaprije and Žirje. The selected islands represent typical examples of small Croatian islands and small island communities in terms of their size, population, distance from the land, way of life, economic (under)development and other indicators. According to the last 2011 census, there were 1,149 registered residents on the Šibenik islands, out of whom 403 on Prvić, 284 on Zlarin, 189 on Kaprije, 170 on Krapanj and 103 on Žirje.

¹ The problem of living alone and loneliness owing to emigrant younger members of the family and losing friends.

² The research has confirmed that more than a third of respondents live in single households and the activities they are engaged in during leisure time they usually perform by themselves. The structure of the sample was the following: 74 or 60.7% were married, 42 respondents (34.4%) were widows or widowers, five respondents were single/unmarried and one divorced. The number of single-person households and widows/widowers, as expected, increases with age (in the group 60–69 years only 7.6%, while in the groups 70–79 and 80+ it is 55%), and most of them are older women (42 out of 37 women).

³ Studies of researchers dealing with environmental gerontology prove that the environment in which older people live, in this case the island with all its elements that define islandness, significantly affects the maintenance of an active lifestyle and social inclusion [Peace *et al.* 2007].

⁴ The sense of security frequently decreases with age due to the loss of close persons and stronger experience of loneliness among older people.

⁵ The island of Murter has not been included in the survey because it is connected to the mainland by bridge.

For the purpose of this paper, results of the research referring to the activity level of older island population have been selected and analysed. The survey comprised 122 residents aged 60 and over, of which 39 respondents were on Zlarin, 32 on Prvić, 18 on Krapanj, 20 on Kaprije and 13 on Žirje. Age limit for the group of older islanders (aged 60 and over) was chosen because in the Republic of Croatia over the last 30 years the population has often went into retirement earlier than the anticipated legal limit of full age pension, primarily due to the many economic problems that have resulted in the collapse of a large number of industrial enterprises in the country. The same situation is to be found on the islands, especially on the small and medium ones, because their inhabitants were employed on the land in large numbers. Therefore, although age and retirement are not synonymous in many ways, the fact is that a large number of the retired, having finished their working period, changed their lifestyles, the level and type of activities, responsibilities and habits. When we are talking about the islanders who had emigrated earlier, a significant part of them⁶ returned from the land to the island.

RESULTS AND DISCUSSION

Health and functional status

Although we advocate for more active involvement of old islanders in everyday life, and application of knowledge and potentials they have regardless of their age and health, health status and functional capacity of the elderly is an important requirement, on the one hand, to realize their desire to participate in various aspects of community life including the possible projects for the revitalization of island life, and, on the other, to perceive their vitality and abilities.

It is obvious from the collected data that younger respondents (aged 60–69) visit the doctor more rarely (less regularly), but still no statistically significant difference regarding the respondents' age has been established. To those who have been to the doctor in the last three months, a question was asked about any health problems. The answers confirm that older islanders usually go to the doctor for check-ups (23.8%) and regular treatment of chronic diseases respectively.

Increase in the intensity of difficulties with the respondents' age has been established in responses to the question about health problems limiting their everyday activities. Thus, 41% of the respondents do not feel any trouble or have little difficulties, and the majority of these are at the ages of 60 to 69. Most among those 28% who have large difficulties and very large problems that indicate possible problems with the autonomy/independence of the individual are the old islanders aged 80 and over.

⁶ Out-migrant returnees mention the need for return to true values, to what is essential in life, stressing the environmental benefits and simplicity of life on the island. "The island is my home, I was forced to leave because there was no job, but I was always dreaming about return – back to this beauty, but also the rigours of the landscape, the closeness I feel toward neighbours with whom I live" (74, woman, returnee from Switzerland).

The respondents highly value the term “good” health, so that in answers to the question which are the three greatest advantages of living on the island they stress components of the environmental quality: peace (72.1%), purity and beauty of nature (48.4%), followed by a healthy lifestyle, which allows them a high activity level even in the old age. Among the three biggest deficiencies of life on the island, convincingly in the first place (39.3% of responses) is the lack of health care on the island, which would help them preserve functional status.

In spite of a considerable number of single-person households (30.3%) and the established relatively high level of individuals’ independence, older persons who live alone are exposed to greater risk of not having anybody to provide them care and support inside their home when they need it, as well as to the feeling of loneliness, often present at older singles. It is a particular problem on the islands where usually there is no organized formal care, yet it is still successfully replaced by a high level of closeness between members and preserved community solidarity, as confirmed by this research [Podgorelec and Klempić 2007; Podgorelec and Klempić-Bogadi 2013].

The ability to use public transport is an important indicator of the functional status of the individual. Older islanders are forced to travel to the mainland and they do it mostly by public transport – by ship or ferry (86.1%). The reasons for travel are usually grocery shopping (49.2%), going to the doctor (30.3%) and visiting friends or family on the land (7%). Younger elderly travel, as expected, significantly more often (at least two to three times a week and more often) than old older respondents ($\chi^2 = 30,474$; $df = 10$; $p = 0.001$). The frequency of travel confirms the preservation of functional ability of a large number of older islanders.

Material situation – the condition of independence

Improvement of health care, and pensions as a secure source of income, enable the development of social activities in the newly acquired free time of the elderly, and thus the space for what unites the phrase active ageing.

Of the 122 respondents, 110 receive a pension, 9⁷ are employed and 3 unemployed. The main material income of older islanders is the pension, the same as it is in the majority of the elderly in Croatia. Thus, one third of the respondents live in households with monthly revenues between 520€ and 780€, a fourth has between 260€ and 520€, while nearly a quarter of households have only 260€ income per month. Despite the fact that their pensions are relatively low, older people often point out that they provide them a certain level of financial security because of their regularity. Aggravating circumstance for a decent material standard of life is also a high cost of living on the islands, because food is on average up to 30% more expensive than on the mainland. The respondents (26.2%) stress expensiveness as the main aggravating condition of island life (second rank, immediately after inadequate health care), which is why they are forced to go to the mainland to do the shopping and in

⁷ At the age of 60 to 64 only four are employed and that is the reason why we chose 60 years as the lower limit to the group of old islanders.

this manner save some money. At the same time, the respondents are aware of the advantages of living on an island that allows them to realize natural income by working in their gardens and fields, by fishing as well as by tourism. Thus, 15.6% of respondents have stated that they have in-house space dedicated exclusively to tourism.

Although the majority of respondents were not able to save significantly during their work-age years to ensure financially for old age, the ownership of the flat/house gives them financial security and independence. Almost all respondents (99.2%) are owners of the dwellings in which they live. The standard of living is satisfactory: more than 90% of dwellings have a kitchen, a bathroom with running water, telephone, etc. The problem is that as much as 63.9% of dwellings were constructed before 1945 so it is not surprising that 41% of the respondents believe that it would be necessary to carry out major repairs to dwellings.

Despite modest financial incomes, older islanders live in their homes mostly on their own and are financially independent. At the same time, they often point out that they help their adult emigrated children, in the first place with agricultural products but financially as well.

Active leisure activities

Researches on the islands have confirmed [Podgorelec 2008; Podgorelec and Klempić-Bogadi 2013] that old people, regardless of their age and health condition, invest enormous energy in useful ways of spending the newly generated time realized after entering into pension.

The choice of leisure activities in old age largely follows the activities in which an individual was involved in the earlier stages of life, generally only the intensity of the practice and the amount of time dedicated to the activity have changed. According to Ekerdt [1986], the active lifestyle of many retirees, as is the case with islanders in particular, is a result of working ethics which encourages an active lifestyle and allows such kind of leisure that brings benefit (like working in the back garden) and fulfills the individual (various forms of participation in the community).

As revealed by studies on other Croatian islands [Podgorelec 2008], the Šibenik archipelago older residents also usually estimate to have enough free time (over 80%) which they carry out in physical activities such as working in the field, garden or olive grove (26.7%) and fishing. The following are watching television programmes (24.7%), reading (8.7%), handicraft (8%), sports, singing and dancing in the cultural and artistic society, playing cards in the pensioners' club, solving crossword puzzles, writing, going to church etc. Statistically significant difference has been established ($\chi^2 = 32,419$; $df = 20$; $p = 0.039$) in relation to the respondents' age and the amount of physical effort required by a certain hobby, whereas, as expected, older respondents (particularly those aged 80 and over) are considerably rarely engaged in agricultural activities, fishing or dancing in the folklore society. Around 15% of respondents complained that they were still working too much, and these are mostly the respondents aged 60 to 69 (12 of them) and 70 to 79 (7 of them).

When asked what they were doing of physical activity in the past week, nearly 60% mentioned working in the back garden or in the olive grove (even 40% were engaged in agriculture among the elderly 80+), 17.2% went fishing (10% among 80+) and 32% did the housework.

More than a third of the sample (36.1%) usually spend their free time alone and most of them are older than 80 years (over 60%). A third of the respondents spend their time in the company of friends (34.4%), then with partners/spouses (32.0%) and neighbours (17.2%). Married couples usually spend their leisure time in joint activities (51.4%) and they often emphasize it as an element that fulfills their life with satisfaction. Similar findings have been confirmed by other studies as well [Podgorelec 2008].

Active leisure, as being conducted in a number of older islanders, has an impact on improving health and well-being, a sense of one's own usefulness in relation to the family and the local community, and all these together prove their vitality and the need to become involved in programmes with which they themselves will also contribute to a higher quality of the island life.

Conclusion

Since their youth, the population of small Croatian islands is accustomed to a life with limited opportunities: economic (poverty and underdeveloped economy), cultural and social (continuous emigration of young people and impoverishment of social capital) and they are forced to live actively relying on their own strength, on the individuals and the local community alike. Notwithstanding all difficulties and limitations of island lifestyle, older islanders, comparing their personal quality of life with that of their peers on the mainland, estimate in large number (44.3%) that older people on islands live better just because of an active lifestyle that the space of the island allows (19.7% of them estimate to live equally well, and 36% worse due to the aforementioned shortcomings).

The ratio of the number of young and old people on Croatian islands requires that the elderly should be equally included as partakers at the local level in all phases of economic and social activities. Even though strategic documents comprise an active ageing component, there are still no concrete measures that could enable elderly islands' population to actively join various activities primarily in its local community. Still, even without the implementation of certain measures and policies, the way of life of island area residents predisposes them to a high level of activities and participation in old age.

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ОРИГИНАЛНИ НАУЧНИ РАД

АКТИВНО СТАРЕЊЕ КАО ЖИВОТНИ СТИЛ НА ХРВАТСКИМ ОСТРВИМА

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САЖЕТАК: Основна особина хрватских острва, уз њихове природне лепоте, је да су то демографски и социолошки један од најугроженијих простора захваћених старењем. Старење острвског становништва последица је дуготрајне депопулације подстакнуте континуираним иселавањем млађег радноактивног становништва у протеклих стотинак година, али и повратничких миграција након пензионисања

у последњих тридесетак година. Најкритичније је стање на малим острвима где већину популације чине старији од 60 година што значајно утиче на све аспекте острвског живота.

Истраживање спроведено 2011. на малим острвима у Шибенском архипелагу показало је да старије становништво живи самостално, без значајнијих здравствених тегоба које ограничавају свакодневне активности, у властитим домаћинствима, од скромних пензија уз које велики број остварује допунски приход из пољопривреде, те врло често финансијски помажу своју одраслу децу која углавном живе у оближњим градовима на обали. Нужност ослањања на сопствене снаге због недостатка млађих генерација присиљава становнике хрватских острва на активан живот до дубоко у старост. Иако они више нису у активном радном односу, и даље значајно доприносе породици и друштву кроз укљученост у различите активности заједнице.

КЉУЧНЕ РЕЧИ: Хрватска, острва, активно старење, миграција, пензионисање

ORIGINALNI NAUČNI RAD

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SAŽETAK: Temeljna je značajka hrvatskih otoka, uz njihove prirodne ljepote, da je to demografski i sociološki jedan od najugroženijih prostora zahvaćenih starenjem. Starenje otočnog stanovništva posljedica je dugotrajne depopulacije potaknute kontinuiranim iseljavanjem mlađeg radno aktivnog stanovništva u proteklih stotinjak godina, ali i povratničkih umirovljeničkih migracija posljednjih tridesetak godina. Najkritičnije stanje je na malim otocima gdje većinu populacije čine stariji od 60 godina što značajno utječe na sve aspekte otočnoga života.

Istraživanje provedeno 2011. na malim otocima u Šibenskom arhipelagu pokazalo je da starije stanovništvo živi samostalno, bez značajnijih zdravstvenih tegoba koje ograničavaju svakodnevne aktivnosti, u vlastitim kućanstvima, od скромnih mirovina uz koje veliki broj ostvaruje dopunski приход из пољопривреде, те врло често финансијски помажу своју одраслу децу која углавном живе у оближњим обалним градовима. Нужност ослањања на vlastite снаге због недостатка млађих генерација присиљава становнике хрватских отока на активан живот до у дубоку старост. Премада они више нису у активном радном односу, и даље значајно придоносе обitelji и друштву кроз укљученост у различите активности заједнице.

КЉУЧНЕ RIJEČI: Hrvatska, otoci, активно старење, миграција, umirovljenje

REGIONAL RESPONSES TO THE FEAR OF EXTINCTION
РЕГИОНАЛНИ ОДГОВОРИ НА БОЈАЗАН ОД ОДУМИРАЊА

UDC 314(497.6 Istočna Hercegovina)^{19/20}

DOI: 10.2298/ZMSDN1448727C

REVIEW SCIENTIFIC PAPER

MAIN CHARACTERISTICS OF DEMOGRAPHIC
DEVELOPMENT OF EASTERN HERZEGOVINA IN
THE SECOND HALF OF THE 20th CENTURY AND
AT THE BEGINNING OF THE 21st CENTURY

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ABSTRACT: At the beginning of the observed period, the population dynamics in Eastern Herzegovina was characterized by stagnation, followed by the decrease of the total population, primarily due to traditionally present emigration, but also due to negative natural population growth. Birth rates decreasing processes, population ageing, and some other predominantly negative demographic processes have been reported for decades. This area has a low population density, while spatial distribution of the population is characterized by concentration in settlements which have the function of a municipal centre. Contemporary demographic indicators (of natural increase of population and migration) indicate further decrease in population of this region, especially of its rural parts. This is also shown by the previous 2013 Census data. Keeping in mind the current demographic indicators and characteristics of the population, side by side with weak economic development of this region, it may be expected that negative trends in population development will continue.

KEYWORDS: population, Eastern Herzegovina, demographic trends, natural increase, emigration

The analyzed region of Eastern Herzegovina is situated in the south of the Republika Srpska and includes seven local government units – six municipalities (Berkovići, Bileća, Gacko, Eastern Mostar, Ljubinje and Nevesinje) and the City of Trebinje. The area of this territory is 3,753.79 km² (15.2% of the territory of the Republika Srpska) and according to preliminary results of the 2013 Census of Population, Households and Dwellings in Bosnia and Herzegovina, there were 72,769 persons (5.5% of the population of the Republika Srpska). It is a sparsely populated area where the population density (19.4

people per square kilometre) is 2.8 times lower than the average for the Republika Srpska.

Since the end of the Second World War, there were seven censuses conducted in the subject area¹. The total population of the then five municipalities² of Eastern Herzegovina (Bileća, Gacko, Ljubinje, Nevesinje, Trebinje) grew in the inter-census period from 1948 to 1953 by 2.55% and from 1953 to 1961 by 2.12%. From 1961 to 1971, the population in this region decreased by 6.41% and until 1981 by additional 5.05%. From 1981 to 1991 the reduction of the total number of population was less intense and was 1.34%. In this inter-census period (1981–1991) the increase of the population was recorded in municipalities of Gacko (by 4.95%), Trebinje (2.05%) and Bileća (0.64%), while the decrease was recorded in municipalities of Ljubinje (7.61%) and Nevesinje (11.50%).

Table 1. *Population by municipalities of Eastern Herzegovina, 1948–1991*

| Municipality | 1948 | 1953 | 1961 | 1971 | 1981 | 1991 |
|--------------|--------|--------|--------|--------|--------|--------|
| Bileća | 13,531 | 14,026 | 14,125 | 13,444 | 13,199 | 13,284 |
| Gacko | 14,424 | 14,628 | 14,033 | 12,033 | 10,279 | 10,788 |
| Ljubinje | 5,776 | 5,665 | 5,476 | 4,837 | 4,516 | 4,172 |
| Nevesinje | 19,384 | 20,434 | 20,287 | 19,333 | 16,326 | 14,448 |
| Trebinje | 27,148 | 27,558 | 30,140 | 29,024 | 30,372 | 30,996 |
| In total | 80,263 | 82,311 | 84,061 | 78,671 | 74,692 | 73,688 |

Source: Croatian Bureau of Statistics (1995), Population of Bosnia and Herzegovina: Ethnic composition of the settlements, Zagreb

The period after the Second World War saw a fairly rapid process of urbanization, so during the period from 1948 to 1991 the population of urban areas, the centres of the aforementioned municipalities, increased from 9,679 to 40,355, i.e. by 316.9%. The fastest growing population was in Bileća (by 495.9%) and Ljubinje (350.29%), followed by Trebinje (327.1%), Gacko (291.8%) and Nevesinje (151.9%).

¹ Changes in administrative and territorial organization of space and methodologies used in censuses make full comparability hard to achieve. The data on population and key events up to the year 1991 relate to five municipalities (Bileća, Gacko, Ljubinje, Nevesinje, Trebinje) in the spatial coverage from the time of the 1991 Census, while the data after 1995 relate to the new administrative division. The main differences are reflected in the fact that the municipalities of Trebinje and Nevesinje had some of their parts separated, which now belong to the Federation of Bosnia and Herzegovina, and the merged area of the current municipality of Berkovići (in 1991 it belonged to the municipality of Stolac) and some parts of the former municipality of Mostar (Municipality of Eastern Mostar). Bearing in mind the size of the population in the area that represents the aforementioned difference in the territorial scope, it can be said that the effect on the intensity of main demographic trends is negligible.

² According to the territorial scope at the time of the 1991 Census.

Along with the growth of urban population in this area, the period from 1953 to 1991 recorded a continuous population decline in rural areas. During this period, the population in rural areas decreased from 71,093 to 33,333, i.e. by 53.11%. Due to poor economic and social conditions, underdeveloped infrastructure in rural areas (poor quality of roads, insufficient water and electricity supply, closing down of village schools, etc.), especially in villages far from the municipal centres, and neglect of the countryside in general, a massive emigration from this area occurred, both to the centers of municipalities and to other regions.

Table 2. *Population in urban and other settlements of Eastern Herzegovina municipalities, 1948–1991*

| | 1948 | 1953 | 1961 | 1971 | 1981 | 1991 |
|----------|--------|--------|--------|--------|--------|--------|
| In total | 80,263 | 82,311 | 84,061 | 78,671 | 74,692 | 73,688 |
| Urban | 9,679 | 11,218 | 15,222 | 21,388 | 30,901 | 40,355 |
| Other | 70,584 | 71,093 | 68,839 | 57,283 | 43,791 | 33,333 |

Source: Croatian Bureau of Statistics (1995), Population of Bosnia and Herzegovina: Ethnic composition of the settlements, Zagreb

Eastern Herzegovina is known as an emigration area and natural increase of population has long compensated for losses due to migrations. During the 1960s the birth rate and population growth were significantly reduced, which led to a decline in population, along with simultaneously intense emigration.

In the period from 1961 to 1991 the number of live births in the five municipalities of the analyzed area decreased, with the exception of slight growth in the mid-eighties. The number of live births first sharply declined from 1,951 in the year 1961 to 1,148 in the year 1971, and then much more slowly to 1,012 in 1981 and 981 in 1991. In the ten year period, from 1961 to 1970, there were 16,204 live births registered, during the next ten years (1971–1980) 10,903 and in the period from 1981 to 1990, 10,689 live births.

In connection with this change in the number of live births, the crude birth rate initially plummeted from 23.2‰ in 1961 to 14.6‰ in 1971. After that, it slightly decreases to 13.5‰ in 1981 and 13.3‰ in 1991. In contrast to the number of live births, number of deaths for the analyzed area in the period 1961–1991 shows considerable stability. From 1961 to 1970 there were 6,082 registered deaths, in the following decade (1971–1980) it was 6,232 and from 1981 to 1990 6,159 persons died. The crude death rate first increased from 7.2‰ in 1961 to 8.1‰ in 1971, and then in 1981 it declined to 7.0‰. In 1991 it was 7.7‰.

Table 3. *Natural movements of population, marriages and divorces in Eastern Herzegovina, 1961–1991*

| Year | Live births | Deaths | Natural increase | Marriages | Divorces |
|------|-------------|--------|------------------|-----------|----------|
| 1961 | 1,951 | 602 | 1,349 | 684 | 12 |
| 1962 | 1,812 | 676 | 1,136 | 687 | 10 |
| 1963 | 1,791 | 649 | 1,142 | 584 | 17 |
| 1964 | 1,699 | 673 | 1,026 | 628 | 11 |
| 1965 | 1,705 | 592 | 1,113 | 652 | 16 |
| 1966 | 1,554 | 572 | 972 | 607 | 20 |
| 1967 | 1,567 | 639 | 928 | 538 | 25 |
| 1968 | 1,452 | 580 | 873 | 559 | 17 |
| 1969 | 1,376 | 571 | 805 | 519 | 13 |
| 1970 | 1,297 | 528 | 769 | 507 | 16 |
| 1971 | 1,148 | 636 | 512 | 540 | 10 |
| 1972 | 1,141 | 650 | 493 | 556 | 9 |
| 1973 | 1,147 | 591 | 556 | 507 | 17 |
| 1974 | 1,082 | 586 | 496 | 587 | 11 |
| 1975 | 1,124 | 679 | 445 | 547 | 23 |
| 1976 | 1,070 | 625 | 445 | 492 | 28 |
| 1977 | 1,059 | 623 | 436 | 536 | 37 |
| 1978 | 1,094 | 629 | 465 | 478 | 34 |
| 1979 | 1,011 | 612 | 399 | 550 | 29 |
| 1980 | 1,027 | 601 | 426 | 487 | 26 |
| 1981 | 1,012 | 524 | 488 | 556 | 24 |
| 1982 | 1,095 | 611 | 484 | 550 | 32 |
| 1983 | 1,111 | 691 | 420 | 568 | 33 |
| 1984 | 1,161 | 677 | 484 | 525 | 27 |
| 1985 | 1,103 | 649 | 454 | 479 | 34 |
| 1986 | 1,109 | 636 | 473 | 464 | 24 |
| 1987 | 1,033 | 664 | 369 | 461 | 18 |
| 1988 | 1,087 | 598 | 489 | 455 | 20 |
| 1989 | 961 | 592 | 369 | 446 | 19 |
| 1990 | 1,017 | 517 | 500 | 368 | 14 |
| 1991 | 981 | 567 | 414 | 264 | 9 |

Source: Republic Institute of Statistics (selected years), Statistical Yearbook of Bosnia and Herzegovina, Sarajevo

Due to changes of the birth rate in the period from 1961 to 1991, with a relatively stable mortality rate, the natural increase rate in the analyzed area decreased from 16.0‰ in the year 1961 to 6.5‰ in 1971. Ten years later, in

1981, the natural increase was at the level of 6.5‰, and in 1991 it was 5.6‰. In the period from 1961 to 1970 the difference between the number of births and deaths was 10,122, during the next decade (1971–1980) the difference was reduced to 4,671, and from 1981 to 1990 to 4,530.

The population of this area in the period 1961–1991 was reduced by 10,373. In the same period, the natural increase of population was around 19,100 people, which indicates that at the same time the migration balance was negative by about 29,500 persons. The migration of primarily young population, the decline in fertility and crude birth rates, as well as longer life expectancy led to ageing of the population. In this regard, the age structure of the population changed, primarily through reduction in the number and share of the young. The size of the population during the period 1971–1991 was reduced by 4,983 or 6.3%, and that in the category of 0–19 years of age by 10,102 persons or 33.1%. Thus, the share of this age group (0–19) in the total population decreased from 38.8% in 1971 to 32.0% ten years later, and in 1991 it was 27.7%.

Table 4. *Age structure of Eastern Herzegovinian population, 1971–1991*

| Year | Total population | 0–19 | 20–39 | 40–59 | 60+ | Unknown |
|------|------------------|--------|--------|--------|--------|---------|
| 1971 | 78,671 | 30,516 | 21,419 | 14,485 | 12,038 | 213 |
| 1981 | 74,692 | 23,919 | 20,817 | 18,280 | 11,606 | 70 |
| 1991 | 73,688 | 20,414 | 22,695 | 16,500 | 12,999 | 1,080 |

Source: Federal Institute for Statistics (1998), Population – comparative data for 1971, 1981 and 1991, *Statistical Bulletin* 265, Sarajevo

Natural changes of the population may be more reliably traced again from the year 1996. In 1996, in the area of seven municipalities of Eastern Herzegovina (Berkovići, Bileća, Gacko, East Mostar, Ljubinje, Nevesinje and Trebinje) there were 848 births and 552 deaths registered, so the amount of natural increase was 296 persons. After a short period of compensation, since 2001, the birth rate decreased again. The year 2003 may be considered as one of the turning points in the demographic development of the area, since when the number of deaths has consistently been higher than the number of births. From 2003 to 2012, the number of live births decreased from 751 to 573 (by 23.7%), along with an increase in the number of deaths from 789 to 850 (by 7.7%). The negative population growth in 2012 reached 277 persons.

Given the fact that the last final census data refer to the year 1991, and to large population movements in the period 1992–1995, it is evident that the detailed analysis of the current demographic situation and recent demographic process lacks many of the data. However, it can be concluded that some of the major trends in the earlier period continued. According to preliminary results of the Census of Population, Households and Dwellings in Bosnia and Herzegovina in 2013, the number of registered persons in seven municipalities of Eastern Herzegovina was 72,769, mostly in the City of Trebinje (31,433), and the fewest in the municipality of East Mostar (280). The trend of concentration

Table 5. *Natural movements of population, marriages and divorces in Eastern Herzegovina, 1961–1991*

| Year | Live births | Deaths | Natural increase | Marriages | Divorces |
|------|-------------|--------|------------------|-----------|----------|
| 1996 | 848 | 552 | 296 | 352 | ... |
| 1997 | 864 | 612 | 252 | 341 | 7 |
| 1998 | 881 | 658 | 223 | 372 | 18 |
| 1999 | 861 | 633 | 228 | 370 | 28 |
| 2000 | 847 | 713 | 134 | 354 | 24 |
| 2001 | 808 | 737 | 71 | 322 | 21 |
| 2002 | 780 | 738 | 42 | 330 | 18 |
| 2003 | 751 | 789 | -38 | 345 | 15 |
| 2004 | 691 | 734 | -43 | 324 | 9 |
| 2005 | 649 | 785 | -136 | 340 | 33 |
| 2006 | 633 | 777 | -144 | 317 | 13 |
| 2007 | 582 | 844 | -262 | 332 | 9 |
| 2008 | 640 | 736 | -96 | 304 | 13 |
| 2009 | 672 | 855 | -183 | 327 | 15 |
| 2010 | 623 | 827 | -204 | 275 | 17 |
| 2011 | 584 | 798 | -214 | 298 | 28 |
| 2012 | 573 | 850 | -277 | 277 | 29 |

Source: Republic Institute for Statistics (selected years), Demographic Statistics, Banja Luka

Table 6: *Preliminary data on the population of the municipality of Eastern Herzegovina according to the 2013 census data*

| | In total | In settlement which is the municipality center | In other settlements |
|-------------|----------|--|----------------------|
| Berkovići | 2,272 | 247 | 2,025 |
| Bileća | 11,536 | 8,220 | 3,316 |
| Gacko | 9,734 | 5,784 | 3,950 |
| East Mostar | 280 | 210 | 70 |
| Ljubinje | 3,756 | 2,744 | 1,012 |
| Nevesinje | 13,758 | 5,464 | 8,294 |
| Trebinje | 31,433 | 25,589 | 5,844 |
| In total | 72,769 | 48,258 | 24,511 |

Source: Republic Institute for Statistics (2013), Census of Population, Households and Dwellings in Bosnia and Herzegovina in 2013 on the territory of Republika Srpska – preliminary results, Banja Luka

of population in the settlements which have the role of the municipal centre continued. The population of the settlements having the role of the municipal centres reached 66.3% of the population of the region. The concentration of population in the municipal centers is higher in the southern part of the area, so in the City of Trebinje it is 81.4%, in the municipality of Ljubinje 73.1%, and in the municipality of Bileća 71.3%. For example, according to these preliminary results showing 31,433 inhabitants of the City of Trebinje, 25,589 of them were enumerated in the settlement of Trebinje, and the remaining 5,844 in 141 settlements, so the average size of other settlements was only 42 inhabitants. The average size of a settlement on the territory of Eastern Herzegovina is 195 inhabitants, with the exception of settlements which are municipality centers and then the average size of other settlements is only 66 inhabitants.

In addition to these trends, one of the main features of this area is a big difference between demographic indicators of urban and rural settlements. Thus in the year 2010, in urban areas there were 76.7% of births and 55.9% deaths, and in other settlements there were 23.3% births and 44.1% deaths. In total, urban areas had an even number of births and deaths (though with a positive population growth of 16 persons) while in other settlements the number of deaths was 2.5 times higher than the number of births. This difference would be even more pronounced if other settlements were divided into two zones: a zone of suburban settlements closer to municipal centres and the remaining area. This remaining area, which primarily includes remote villages, shall see a rapid decrease in population number, which is a particular problem, because more than 9/10 settlements of this area are included. For example, in the year 2010, out of the total number of 277 births in the City of Trebinje, the settlement of Trebinje accounted for 248 births and 249 deaths, and the remaining 140 settlements recorded only 29 births and 103 deaths.

Table 7: *Births, deaths and marriages by the type of settlement in Eastern Herzegovina in the year 2010*

| Type of settlement | Live births | Deaths | Natural growth | Marriages | Divorces |
|--------------------|-------------|--------|----------------|-----------|----------|
| In total | 623 | 827 | -204 | 275 | 17 |
| Urban | 478 | 462 | 16 | 216 | 16 |
| Other | 145 | 365 | 220 | 59 | 1 |

Source: Republic Institute for Statistics (2011), Demographic Statistics, No 14, Banja Luka

According to the preliminary results of the 2013 Census of Population, Households and Dwellings in Bosnia and Herzegovina, the number of enumerated persons in urban areas of East Herzegovina is 1.9 times greater than the number of residents in other settlements of the region. The 2010 data show that the number of marriages in urban areas of the region was 3.7 times higher than the number of marriages of other settlements of the region. This is due to the concentration of younger people in urban settlements and the disturbed age-

gender structure in other settlements. Bearing in mind the fact that in this region the vast majority of births refer to children whose parents are married, the registered decrease in the number of marriages and a very low annual number of marriages in the rural area indicate that the annual number of births will continue to decline.

CONCLUSIONS

It is expected that one of the main trends in demographic development in Eastern Herzegovina during the following period will be the decrease of the population. It is known that this is a traditionally emigration area, which had previously been somewhat compensated by natural increase of population. The number of births has been declining during the past decades, which led to consistently negative natural growth rate since the year 2003. Bearing in mind the age and gender structure of the population, this trend is expected to be continued.

The decline of the population will be especially rapid in rural regions. The causes lie in a very unfavourable age structure of the population, with a disturbed gender structure, which is reflected in the smaller number of women in their reproductive age in relation to the male population. Large parts of rural areas will remain with a very small population or uninhabited, so that the sustainability of the infrastructure will be compromised.

After a rather fast and steady growth of population in urban areas of this region, the following decades may be expected to see stagnation and then decline in the urban population of the region. In addition to the low birth rate, this process will be affected by a diminishing population base in gravity areas of these centres from which the population immigrated during earlier decades. The trend of population ageing will continue due to low birth and fertility rates, migration of the young, but also to the longer life expectancy.

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ПРЕГЛЕДНИ НАУЧНИ РАД

ГЛАВНЕ КАРАКТЕРИСТИКЕ ДЕМОГРАФСКОГ РАЗВОЈА ИСТОЧНЕ ХЕРЦЕГОВИНЕ У ДРУГОЈ ПОЛОВИНИ ХХ И НА ПОЧЕТКУ ХХИ ВИЈЕКА

РАДОСЛАВ ЋОРОВИЋ

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РЕЗИМЕ: Популациону динамику Источне Херцеговине на почетку посматраног периода карактерише стагнација, а потом и смањивање броја становника првенствено због традиционално присутне емиграције, а потом и због негативног природног прираштаја. Процеси смањивања стопе наталитета, старења становништва те неки други, првенствено негативни демографски процеси, присутни су деценијама. Ово подручје има ниску густину насељености, а просторни размјештај становништва карактерише концентрација у насељима која имају улогу општинских центара, дијелом и у приградским насељима, а становништво осталих насеља брзо опада. Савремени демографски показатељи (природног и миграционог кретања становништва) указују на будућу депопулацију овог региона, посебно његовог сеоског дијела, што показују и претходни резултати пописа становништва из 2013. године. Имајући у виду садашње демографске индикаторе и карактеристике становништва, упоредо са slabим економским развојем овог краја, очекује се да негативни трендови у демографском развоју буду настављени.

КЉУЧНЕ РИЈЕЧИ: становништво, Источна Херцеговина, демографски трендови, природни прираштај, емиграција

PRINCIPLES OF ART IN SERBIAN AND EUROPEAN LAWS AND STANDS OF CHRISTIAN ORTHODOX CHURCH ON ART¹

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ABSTRACT: In Serbia, Biomedically Assisted Fertilization is regulated by the Act on Treatment of Infertility with Biomedically Assisted Fertilization Procedures from 2009, and by the Family Act from 2005, the provisions on the family status of the child. In European context, the principles of the application of biology and medicine are regulated by the Council of Europe Convention from 1997 for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine (Convention on Human Rights and Biomedicine). In this paper, Serbian law is compared with European law as well as the stands of Christian Orthodox Church which represents the dominant religion in Serbia.

Comparison of principles stipulated in the Act and the Convention with the stands of the Christian Orthodox Church shows that domestic law, European law and stands of Christian Orthodox Church are based on similar grounds. It is the protection of human being, human dignity, and application of principle of medical justification. However, there is great difference of opinions when the question of acceptable and allowed procedures is raised. For example, there is an opinion that donor insemination is not in compliance with Christian Orthodox stands. On the contrary, positive law accepts donor insemination, both sperm and egg donations. As regards the surrogate motherhood, this is unacceptable for Orthodox Church and it is still not allowed in Serbia, but *de lege ferenda* it might be permitted in Serbia, as the Draft of Civil Code proposes that surrogate motherhood should be permitted and regulated by a new law.

KEYWORDS: Biomedically assisted fertilization, Serbian law, Convention, Orthodox Church

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INTRODUCTION

Artificial reproduction technologies (ART) are regulated in Serbia by the Act on Treatment of Infertility with Biomedically Assisted Fertilization Procedures and by the Family Act (provisions on family status of the child).² In European context, the principles of the application of biology and medicine are regulated by the Convention of the Council of Europe for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine (Convention on Human Rights and Biomedicine).³

In this paper the principles of ART are compared in Serbian and European laws with the stands of Christian Orthodox Church.

PRINCIPLES OF THE SERBIAN ACT ON INFERTILITY TREATMENT BY BIO-MEDICALLY ASSISTED FERTILIZATION

The Act on Infertility Treatment by Bio-Medically Assisted Fertilization contains principles on which ART are based. The first principle is the principle of medical justification, Article 4. The principle of medical justification of BMAF implies the application of the BMAF procedure for infertility treatment in cases when other methods of infertility treatment are not possible or indicate a significantly lower chance of success, providing that the procedure is not an unacceptable risk to the health, life and safety of a mother or a child. It is stipulated that spouses or common-law partners are entitled to BMAF procedure in situations when other medical procedures for infertility treatment are impossible or when contemporary standards of medical science and practice indicate that the conception and birth of the child cannot be achieved by sexual intercourse. As an exception, the spouses or common-law partners are entitled to BMAF procedure in case when this kind of conception can prevent the transmission of a serious genetic disease to the child, Article 27.

According to Serbian law, ART can be used only as a method of treating infertility; the implementation of ART is not allowed in cases which are not medically justified. Subsequently, ART is, for instance, not a solution for a woman without a partner and who, for this reason, wants AID (artificial insemination by donor) procedure to be performed. If AID is performed in such a case, a child would have one legal parent – the mother. Biological father of the child is the sperm donor, but the donor is never considered a legal father by the law. Contemporary family law recognizes, at least, the interest of a child to have both parents, but not the right of a child to have both parents. If the law would allow the woman without a partner to have access to AID, the interest of the child to have both parents would not be respected. On the other hand, recognition of the

² *Zakon o lečenju neplodnosti postupcima biomedicinskog začeća* (Act on Treatment of Infertility with Biomedically Assisted Fertilization Procedures), *Official Journal of Republic of Serbia* 72/2009; *Porodični zakon* (Family Act) *Official Journal of Republic of Serbia*, 18/05. I had the privilege to participate in the composition of the Family Act by being a member of the Committee for drafting it. The president of the Committee was Prof. Dr. Marija Draškić.

³ Convention on Human Rights and Biomedicine 1997, ratified in Serbia: *Official Journal of Republic of Serbia – International treaties*, N° 12/2010.

right to have AID is the right of the woman without a partner to reproduction. The right to free decision making about having children is a constitutional right in Serbia [Kovaček Stanić 2011; Pajvančić 2010]. In addition, the fact is that today a significant number of children grow up in a one-parent family as a consequence of parental divorce or because the child has been born out of wedlock. As with a number of other family law issues, the solution depends on the interest (right) which should be given the priority. In this case, the Act on Treatment of Infertility with Biomedically Assisted Fertilization Procedures gives priority to the interest of the child to have both parents. Serbian Act, as an exception, allows the woman without a partner access to ART, but only if justified reasons are provided. Which reasons can be considered as exceptionally justified is left to two ministers to decide (Minister for Health and Minister for Family Affairs). Medically justified reasons should normally exist. Thus, the fact that a woman does not have a partner or that she is a lesbian should not be considered as justified.⁴ Comparative law allows the woman without a partner to use ART in Spain, Russia, and some states in the USA [Kovaček-Stanić 2010; Kovaček-Stanić 2008]. However, this procedure is forbidden in Sweden [Saldeen 2004], France [Rubellin-Devichi 1994], and Austria [Bernat and Vranes 1996].

The second principle is the principle of human being protection. This principle implies that the BMAF procedure can be implemented to protect the human being individuality and the integrity of the embryo or fetus, Article 5. The third principle is the principle of public interests. The principle of public interests is achieved by performing BMAF procedure for the benefit of the person, the family or the whole society, including the BMAF research, and providing the application of appropriate measures to protect human health, safety, dignity, fairness and basic human rights, Article 6. The fourth principle is the principle related to the protection of the rights of children and persons involved in BMAF. It is achieved by giving the priority in decision-making about BMAF to the health, welfare and protection of the child's rights and rights of other persons in BMAF procedure, particularly to a woman undergoing a BMAF and the child to be born under the procedure, Article 7. The fifth principle is the principle of equality. This principle is achieved by providing equal opportunities for both men and women in the treatment of infertility by BMAF procedure, Article 8. The sixth principle is the principle of free decision-making. This principle is achieved by guaranteeing the right to free decision-making and by providing a free consent of all individuals subjected to the BMAF infertility treatment, Article 9. According to Serbian Act, the consent has to be provided for each BMAF procedure and may be withdrawn in writing until the sperm, unfertilized eggs or early embryos are implemented into the woman's body, Article 37/3. If the consent is withdrawn, the BMAF procedure has to be suspended. Prior to inserting sperm, unfertilized eggs or early embryos, the responsible physician should confirm the existence of consent or its withdrawal, Article 38/2,3.

⁴ In some countries ART for the woman who lives in a homosexual partnership is allowed. In that case a woman who delivers a child is legal mother and her woman partner is considered as legal parent of the child (Sweden, UK).

In case of *Evans v. United Kingdom*, European court for human rights made a decision on the issue of withdrawal of consent. The particularities of the case are as follows:

‘Ms. Evans decided to have some of her eggs removed prior to the cancer treatment, and fertilized with her partner’s sperm. The embryos were kept in storage while she underwent her treatment. However, the relationship broke down, and Ms. Evans’ partner decided that he no longer wanted to have a family with her. He requested the couple’s embryos to be destroyed. Ms. Evans embarked on a lengthy court battle to save her embryos and her right to implant them. At each successive turn, she was turned down, despite the sympathy that judges had with her case. In April 2007, her final appeal was rejected... For many, the judgment was welcomed as an indication that fatherhood is taken as seriously as motherhood and that reproductive technology is not to be allowed to reduce the role of men to that of mere fertilization’ [Deech and Smajdor 2007].

In short, the Court was of the following opinion:

Private life (Article 8 of the Convention on Human Rights) incorporates the right to respect the decision to become or not to become a parent.... The dilemma central to the case was that it involved a conflict relating to the Article 8, the rights of two private individuals: the applicant and J. Moreover, each person’s interest was entirely irreconcilable with the other’s because if the applicant was permitted to use the embryos, J. would be forced to become a father, whereas if J.’s refusal or withdrawal of consent was upheld, the applicant would be denied the opportunity of becoming a genetic parent. In the difficult circumstances of the case, whatever solution the national authorities might adopt, it would result in the interests of one of the parties being entirely disregarded. The legislation also served a number of wider, public interests, such as upholding the principle of the primacy of consent and promoting legal clarity and certainty... Respect for human dignity and free will, as well as a desire to ensure a fair balance between the parties in the IVF treatment, underlay the legislature’s decision to enact provisions according to which no exception would be permitted and which would ensure that every person donating gametes for the purpose of the IVF treatment knows in advance that his or her genetic material would not be used without his or her continuing consent. In addition to the principle at stake, the absolute nature of the rule served to promote legal certainty and to avoid the problems of arbitrariness and inconsistency inherent in weighing, on a case by case basis, what had been described by the domestic courts as ‘entirely incommensurable’ interests....including the lack of any European consensus on the point, the Court did not consider that the applicant’s right to respect for the decision to become a parent in the genetic sense should be accorded greater weight than J.’s right to respect for his decision not to have a genetically-related child with her.’⁵

In comparative context, there are two groups of legislations regarding the withdrawal of the consent. The first group includes laws which permit with-

⁵ Case of *Evans v. The United Kingdom*, No. 6339/05 dated 10/04/2007. Court decided that there was no violation of Article 8 (thirteen votes to four). <http://hudoc.echr.coe.int/sites/eng/pages/search.aspx?i=001-80046>, last visited July 3, 2014.

drawal of the consent at any moment before the implantation of the embryo in the woman's body (e.g. laws in: Denmark, France, Greece, Switzerland, etc). The second group of laws permits withdrawal of the consent only prior to fertilization, after that the woman may decide on her own about the continuation of the process (e.g. Austria, Estonia, Italy). As already mentioned, the consent in Serbia may be withdrawn until implantation.

Further principle is the principle of human dignity protection. It is achieved by implementing the procedure of infertility treatment by BMAF while preserving the human dignity, the right of privacy and health protection, welfare and rights of the child to be born, Article 10. The Act regulates the principle of privacy protection. It is achieved by storing all the information on individuals who are taking part in a BMAF, donors and relevant medical documentation, in accordance with the law on regulating the conditions for collecting and processing personal data, Article 11. Another principle is the principle which regulates safety. It is achieved by performing a BMAF procedure in accordance with the achievements and development of medical science and by applying the highest professional standards and codes of professional ethics, as well as medical and ethical principles based on safety practices of BMAF, Article 12.

Finally, it is important to emphasize that the Act regulates the right to object on the basis of conscience. Health care providers and other individuals have the right to refuse to participate in the BMAF procedure emphasizing their ethical, moral or religious beliefs – based on their conscientious objection. Furthermore, they cannot bear any consequences for submitting the conscientious objection. In exceptional circumstances, they are obliged to participate in the BMAF procedure if it is urgent until another health care provider or an individual authorized to conduct BMAF procedure replaces them, Article 35.

PRINCIPLES OF THE CONVENTION ON HUMAN RIGHTS AND BIOMEDICINE

The fundamental intention of the Convention is to ensure the dignity of the human being and to protect human dignity from misuse of biology and medicine. To achieve this, the need to respect the human being both as an individual and as a member of the human species is recognized. The progress in biology and medicine should be used for the benefit of present and future generations (Preamble of the Convention).

The purpose and objective of the Convention on Human Rights and Biomedicine are defined in Article 1:

‘Parties to this Convention shall protect the dignity and identity of all human beings and guarantee everyone, without discrimination, respect for their integrity and other rights and fundamental freedom with regard to the application of biology and medicine. Each Party shall take in its internal law the necessary measures to give effect to the provisions of this Convention.’

One of the principles of this Convention is the primacy of the human being, Article 2:

‘The interests and welfare of the human being shall prevail over the sole interest of society or science.’

Another principle is the principle of the equitable access to health care, Article 3:

‘Parties, taking into account health needs and available resources, shall take appropriate measures with a view to providing, within their jurisdiction, equitable access to health care of appropriate quality.’

In Article 4, the principle of the professional standards is stipulated:

‘Any intervention in the health field, including research, must be carried out in accordance with relevant professional obligations and standards.’

The principle of free consent is stipulated in Article 5:

‘An intervention in the health field may only be carried out after the person concerned has given free and informed consent to it.’

This person shall beforehand be given appropriate information as to the purpose and nature of the intervention as well as on its consequences and risks. The person concerned may freely withdraw consent at any time.

If the adult person is not capable of giving consent because of mental disability, a disease or for similar reasons, the intervention may only be carried out with the authorization of his or her representative or an authority or a person or body provided for by law, Article 6/3. The previously expressed wishes relating to a medical intervention by a patient who is not, at the time of the intervention, in a state to express his or her wishes shall be taken into account, Article 9.

With regard to medically assisted procreation it is stated that the use of techniques of medically assisted procreation shall not be allowed for the purpose of choosing a future child’s sex, except where serious hereditary sex-related disease is to be avoided, Article 14. Where the law allows research on embryos *in vitro*, it shall ensure adequate protection of the embryo. According to Article 18, the creation of human embryos for research purposes is prohibited. The important issues relating to the research and human embryos analyzed in the literature are: ethical justification of clinical trials [Živojinović 2012], the issue of spare embryos [Kovaček-Stanić 2008].⁶

STANDS OF CHRISTIAN ORTHODOX CHURCH ON ART

In Serbia, Christian Orthodox religion is predominant, as 84.6% of total population have declared themselves as Christian Orthodox. In the table it could be seen the proportion of the Serbian population concerning the particular religion.

Here, the stands of Christian Orthodox Church on ART are presented since the population is predominantly Christian Orthodox⁷. Professor Zdravko Pena, PhD, explains:⁸

⁶ On ethical justification of clinical trials more in: D. Živojinović, Requirements of ethical justification of clinical trials, *Collection of papers of the Law Faculty in Novi Sad 2012*, vol. 46, 1: 331–347. On the issue of spare embryos in: op. cit. [Kovaček-Stanić, *Family legal aspect...*].

⁷ 2011 Census of Population, Households and Dwellings in the Republic of Serbia: Religion, mother tongue and ethnicity, 4, *Statistical Office of the Republic of Serbia*, Belgrade 2013, pp. 38, 39.

⁸ The interview with Professor Zdravko Pena, PhD, Chair for Christian ethics and comparative theology, Faculty of theology, East Sarajevo, Bosnia & Herzegovina, *Pravoslavlje (Orthodoxy)*, N° 1027–1028.

| Population in proportion to religion in Serbia | | | |
|--|--------------------|----------------------|-----------------------|
| | | Number of population | % of total population |
| 1 | Christian Orthodox | 6,079,396 | 84.60% |
| 2 | Catholic | 356,957 | 4.90% |
| 3 | Protestant | 71,284 | 1.00% |
| 4 | Other Christian | 3,211 | 0.04% |
| 5 | Islam | 222,828 | 3.10% |
| 6 | Judaism | 578 | 0.01% |
| 7 | Oriental cults | 1,237 | 0.02% |
| 8 | Other religion | 1,776 | 0.02% |
| 9 | Atheists | 80,053 | 1.10% |
| 10 | Agnostics | 4,010 | 0.05% |
| 11 | Not declared | 220,735 | 3.00% |
| 12 | Unidentified | 99,714 | 1.40% |
| 13 | Total population | 7,186,862 | |

‘Due to the fact that on the issues of cloning, *in vitro* fertilization, birth of children with selected features, ‘creation’ of new organisms, transplantation of human organs and other biotechnological advances, there are no explicit testimonies in the Bible, nor in the works of the Fathers of the Church, it is necessary to resort to general criteria with biblical foundation. At the same time, these criteria must have a foundation in the sacramental life of the Church, where the entire life of its members is performing...’

In addition: ‘Contemporary theology should help not by intruding the strict solutions, suggesting dogmatic principles or prohibiting practices, but in calling upon the people to see life from the perspective of the Church, and in that way to examine the man, and then in the light of biblical anthropology to examine existential dimensions of biotechnological research...The issue of artificial insemination should not be viewed only from the perspective of biology and idealization of law of nature... Favoring natural conception is certainly justified in all those situations where fertilization may occur in this way, or when for some irrational reason that relationship is being avoided. If the artificial insemination is the only solution to obtain offspring, the omission of this possibility, with the excuse that this practice disturbs the natural relationship between the spouses is completely unjustified, not only from biological, but also from a theological point of view... Artificial insemination imitates the natural laws and tries to substitute them if they do not exist or if they are not active.’ In his opinion, the destruction of the so-called spare embryos has to be avoided, and also their usage for the research.⁹

Author Harakas, in his book *Contemporary moral issues facing the Orthodox Christian* [Harakas 1982] explains the stands of the Orthodox Christian

⁹ *Id.*

on embryo fertilization outside the womb. He states the following concerning the artificial insemination:

‘The sacramental unity of marriage and the family...excludes all intrusions...also when an outside party contributing genetic material (whether semen or ovum) towards the creation of a child who ought to belong genetically to not one but both marriage partners...This means the egg must come from the wife’s own ovaries, and that the sperm must be the husband’s own; for a donor, whether male or female, would constitute the intrusion of a third party into the marriage tantamount to adultery.’

Concerning the *in vitro* fertilization (test tube babies), he explains:

‘Serious objection is raised here to the fact that more eggs are fertilized than necessary; those which are not used are discarded... As an act which dehumanizes life and separates so dramatically personal relations of a married couple from child-bearing is very suspect...It would seem that the Orthodox Church should not encourage its members to become involved in *in vitro* fertilization procedures, nor does it seem that it would be wise for society in general to encourage this practice.’

His opinion on surrogate motherhood, for which he uses the term ‘host mother’, is:

‘This procedure seems especially contrary to Orthodox Christian ethic in view of the special natural, spiritual and emotional relationship which exists between mother and a baby during pregnancy.’

Russian Orthodox Church has declared its stands on surrogate motherhood. According to the Document issued by the Synod of the Russian Orthodox Church, parents of the child born by surrogate mother have to remorse before they are able to baptize the child, or the child would be baptized when reaches the majority age and decides by him/herself. Russian Orthodox Church is of the opinion that surrogate motherhood is humiliating practice to woman’s dignity, as her body serves as a sort of incubator.¹⁰

CONCLUSION

Comparison of principles stipulated in the Serbian Act on BMAF with the principles stipulated in the Convention on Human Rights and Biomedicine, and with the stands of the Christian Orthodox Church shows that religious stands, Serbian and European law are based on similar grounds – protection of human being, human dignity, and application of principle of medical justification. However, there is great difference of opinions whether particular procedures should be allowed or not. There is an opinion that donor insemination and *in vitro* procedure are not in compliance with Christian Orthodox Church stands. On the contrary, Serbian and European laws allow these procedures. Surrogate motherhood is still not allowed in Serbia, and it is also unacceptable for Christian Orthodox Church, but *de lege ferenda* it might be

¹⁰ B92 < December 26, 2013>Source: Tanjug

permitted in Serbia, as the Draft of Civil Code proposes that surrogate motherhood should be permitted by Serbian law.

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НАЧЕЛА ПОТПОМОГНУТЕ ОПЛОДЊЕ У ДОМАЋЕМ И ЕВРОПСКОМ ПРАВУ, И СТАВОВИ ПРАВОСЛАВНЕ ЦРКВЕ О ТОМЕ

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САЖЕТАК: Биомедицински потпомогнуто оплођење је у Србији регулисано *Законом о лечењу неплодности њосијуицима биомедицински њошћомоћнуиољ оплођења* из 2009. године и *Породичним законом* из 2005, одредбама о породичном статусу детета. На европском плану значајна је *Конвенција о зашћишћии људских љрава и до-сћојансћива људскољ бића* у погледу примене биологије и медицине Савета Европе из 1997. У овом раду упоређује се домаће позитивно право са европским правом, те ставовима Православне цркве, као доминантне религије у Србији.

Упоређујући начела која су предвиђена у *Закоњу* и у *Конвенцији* са ставовима Православне цркве може се приметити да се домаће право, европско право и ставови Православне цркве базирају на сличним основама. Полази се од заштите људског бића, штити се људско достојанство, примењује се начело медицинске оправданости. Међутим, велике разлике постоје у схватањима који се поступци сматрају прихватљивим и дозвољеним. Тако, изражено је мишљење да донор инсеминација није у складу са ставовима Православне цркве, за разлику од позитивног законодавства по коме је донор инсеминација дозвољена и то и донација семених ћелија и донација јајних ћелија. Што се тиче сурогат материнства, ова пракса је неприхватљива за Православну цркву, у овом моменту није дозвољена ни у Србији, али *de lege ferenda*, Преднацрт Грађанског законика предлаже да се сурогат материнство дозволи и регулише посебним законом.

КЉУЧНЕ РЕЧИ: Биомедицински потпомогнуто оплођење, српско право, Конвенција, Православна црква

PREREQUISITES FOR THE EXISTENCE OF
A STATUTORY DUTY TO PROVIDE CHILD SUPPORT
TO ADULT CHILDREN IN REGULAR EDUCATION
UNDER SERBIAN LAW¹

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ABSTRACT: Even though parental authority ceases to exist with a child's attainment of adulthood, or earlier if the child obtains legal capacity through emancipation, parenthood, as a personal relationship between the parent and the child, is not limited in time. In essence, it presupposes that parents take care of their children, even once the children have established their own families. This continuing support, both emotional and material, is a natural extension of their personal relationship. When this support is lacking, even though necessary, the state intervenes by providing protection (at least to some extent) in the realization of certain rights even to children who have achieved adulthood. This protection entails, above all, the right to education, since this right normally cannot be fulfilled prior to coming of age. To that end, the law establishes a duty to support a child while in regular education, even if the child is no longer a minor. The purpose of this paper is to determine the meaning of the relevant terms with regard to the existence of the duty to provide child support: regular education and obvious unfairness.

KEYWORDS: regular education, obvious unfairness, adult child, statutory duty to provide child support

¹ This article is part of the "The Child in Family Law – Comparative and International Law Aspects" project, which is financed by the Provincial Secretariat for Science and Technological Development of the AP of Vojvodina

The statutory duty to provide child support to an adult child is a natural dislocation of the financial burden of education from the state onto the family, which is considered to be the cornerstone of society [Ribot 2009: 35; similarly Ponjavić 2014: 381]. However, the moral dilemma remains – should a child, who has reached adulthood and attained certain professional qualifications, or even the opportunity of employment in accordance with its vocational education, be legally guaranteed to receive support from its parents, who have already guided the child on to the right track? On the one hand, a person with full legal capacity capable of providing for himself should do so.² However, on the other hand, the right to education is a basic, constitutionally guaranteed, human right (Art. 71, para 1 of the Constitution of the Republic of Serbia, hereinafter: Constitution). In circumstances where these values collide, the question which of them should prevail arises. Serbian legislation contained an obligation on behalf of parents to provide support to their adult child while in education even before the passing of the Family Act (hereinafter: FA); this family solidarity is merely continued in the FA, while the prerequisites for the emergence of this obligation are more closely defined.

I. POSITIVE LAW

According to the FA, an adult child, under the age of 26, who is in regular education, has the right to receive support from its parents in accordance with their capabilities (Art. 155, para 2 of the FA). In case that parents are not alive or are incapable of providing support, blood relatives in the straight ascending line can also be considered obligors of child support (Art. 155, para 3 of the FA). However, if obliging the parents or other relatives to provide child support would represent an obvious unfairness to them, the child will not have the right to be supported (Art. 155, para 4 of the FA).

The stated measures are provided for the establishment of obligation relations between the adult child, as the obligee of child support, and the parents (or other close relatives), as the obligors. The obligation relation is created by statute and is in most cases performed voluntarily. However, it is not uncommon that such performance is refused, in which case the obligees are forced to realize their rights through the courts – by litigating the dispute and, if necessary, in enforcement proceedings. Most often, but not necessarily, this is the case when the obligation to pay child support, established by court decision after the divorce of the parents, ceases to exist.

² This claim can also be understood as an expression of the general position of the individuals according to which their freedom is a fundamental value, but also a responsibility, regardless of the fact that the Republic of Serbia is not perceived as an (extremely) liberal state, but as a social and a legal one (Art. 1 of the Constitution). The value of freedom and responsibility in civil law is manifested through the concept of personal autonomy, which has a normative basis on the constitutional plan – inviolability of human dignity (Art. 23, para 1 of the Constitution), the right to free development of one's personality (Art. 23, para 2 of the Constitution), the guarantee of the right of ownership and other property rights (Art. 58 para 1 of the Constitution). The constitutional guarantee of personal autonomy is, in relation to the stated provisions, a well based concept in German doctrine and jurisprudence [Medicus 2002: 74–78; Köhler 2007: 32; Bundesverfassungsgericht 1 BvR 567/89].

The following paras contain the analysis of the conditions for the existence of the right to child support for an adult child in regular education: the concepts of “regular education” and the absence of obvious unfairness. Regarding the first condition, it is important to emphasize that it is new with regard to the wording of the norm, as the previous Act did not require that the education be “regular” [Ponjavić 2014: 381]. Regardless of this difference in wording, even the doctrine and jurisprudence referring to the old text considered that the child needed to be in regular education. The second condition, however, is a complete novelty, since its existence was entirely negated during the validity of the previous Act, which did not make any mention of such a requirement.

II. THE CONCEPT OF REGULAR EDUCATION

In its most general meaning, education can be defined as an institutional process of acquiring knowledge and skills. In the legal system of Serbia, education is conducted in several phases: elementary, secondary and higher education. The concept of regular education most definitely encompasses elementary education, which is evident from the fact that such education is obligatory. In addition, bearing in mind that elementary education is normally conducted at a very early age, the support of the child is necessarily present, as it is unconditional while the child is a minor (or, in the context of this paper, independent of the fact whether or not the child is attending school or not). As far as secondary and higher education are concerned, the interpretation of the requirement of ‘regular education’, as found in the FA, is disputable, as this term can point to different meanings.

The term regular education is not defined in the positive law of Serbia; instead, it is provided that elementary, secondary and higher education exist. Since elementary education is prescribed as obligatory by the Constitution, it obviously must be considered as a part of regular education. However, it is also apparent that limiting the concept of regular education merely to education that is obligatory, in terms of providing child support to an adult child, would be absurd. Therefore, there should be no doubt that regular education encompasses not only elementary, but also secondary and university education. A problem, nonetheless, arises in the context of existing categories of high school students, since a difference can be made between regular and irregular students. A student is considered to be a regular one if he/she is enrolled in the first grade for the purpose of attaining secondary education or education for work purposes, and is younger than 17 years, (Art. 40 of the Secondary Education Act), while a student is irregular if he/she enrolls into a secondary education institution at an age of 17 or beyond, or is younger than 17, but can justify its incapability of regularly attending classes. Furthermore, if regular students fail to pass an exam they were required to re-take, they can enrol into the next grade as irregular students. If, in line with the context of this paper, this latter category is disregarded (considering that this category consists of minors), it remains unclear if an irregular student in secondary school is in regular education. Considering that secondary education is essentially the first phase in

making a child capable of performing work which will enable it to provide for itself in life, regardless of the fact that it is not considered obligatory in the Serbian system, one cannot ignore the fact that such education is necessary in today's economy and job market. Bearing this in mind, a child's status as an irregular student cannot be considered an obstacle in realizing its right to receive support from its parents, which is in line with the main purpose of this legal institution.³

As far as the manner in which higher education is regulated today, it does not pose any problems, considering that the difference between regular and irregular students does not exist anymore (everybody enrolled in a university is simply considered a student). It is therefore evident that enrolment in academic or professional studies is a fact which gives rise to the creation of a statutory duty to provide support. It is worth mentioning that the requirement of regular education is met even if the student is self-financed [Ponjavić 2014: 381; Supreme Court of Cassation Rev 3461/10; Supreme Court of Serbia Rev 579/82; Appellate Court in Novi Sad Gž2 236/11; County Court in Čačak Gž 64/09]. The fact that the student is enrolled in a private or public university is also irrelevant [Supreme Court of Cassation Rev 3355/10].⁴

With all this being said, all of the questions, however, have not been resolved – quite to the contrary. The further meaning of regular education has been an important issue in practice for quite some time.⁵ The problems can be divided into two parts. The first part relates to the importance of active involvement by the supported adult child in the educational process, while the second part pertains to the qualification level of the studies in the context of regular education.

Regular education, according to the prevailing opinion in doctrine and case-law, does not consist of mere enrolment into a certain educational profile (high school or a bachelor's degree), but also requires actual participation – the fulfilment of the corresponding obligations. In this context, formally having the status of a student is insufficient to fulfil the requirement of 'regular education'; the obligee of child support must take and pass exams and progress in his/her education. This is well established in the practice of the revisional court, and has also been adopted by appellate courts, as well as doctrine.⁶ However, such a definition necessarily invokes the question of defining the criteria for a child's progression in education. Namely, it is entirely possible, for example, for a student not to manage to pass all of the exams from a certain year or even

³ This position was confirmed in practice [Appellate Court in Novi Sad Gž2 8/11], where it appears that the question whether an adult child as an irregular student is in regular education was not even considered as problematic; instead, the dilemma was resolved positively as self-evident.

⁴ The same is true in terms of secondary education, as it too can be realized in private schools.

⁵ Regardless of the fact that the Act preceding the current Family Act did not mention 'regular' education, the existence of this requirement was demanded in practice.

⁶ In the practice of the revisional court from the 1980s onward, the position adopted is that regular education in this context means "taking and passing exams on a regular basis and enrolment in the next year after completing the previous one" [Supreme Court of Serbia Rev 579/82; Supreme Court of Serbia Rev 2575/06; Supreme Court of Cassation Rev 3461/10], which, as was stated, has been followed by the appellate courts [Appellate Court in Novi Sad Gž2 236/11; County Court in Čačak Gž 64/09], and doctrine [Ponjavić 2014: 381].

to fall behind. Practice shows particular sensibility regarding this question; therefore, an additional standard with regard to regular education was established in this respect in terms of “unjustified or considerable falling behind in studies” [cf. Petrović-Škero 2010: 492]. This standard assumes that the existence of the right to child support is in principle possible even though the studies are not proceeding according to plan, while this right will not exist only if the falling behind was caused by carelessness on behalf of the child.⁷ The Supreme Court of Cassation has, in a relatively recent judgment, further developed the aforementioned standard by taking into account the average duration of study in a certain programme when assessing the backlog in studying [Supreme Court of Cassation Rev 3461/10].⁸ Therefore, it can be concluded that the concept of regular education has, above all, a substantial content in terms of achieving the required results of education.

The complex of problems pertaining to the classification of study programmes in terms of regular education is caused, above all, by the existence of different levels of higher education. Namely, bearing in mind the system of higher education in Serbia, the question whether regular education, in terms of providing child support, encompasses education which is conducted after graduation (specialist, master and doctoral studies) necessarily arises. This issue was, for a long time, problematic in the case law, primarily due to the fact that an adult child has, after the completion of bachelor studies, attained all the necessary qualifications for performing professional tasks and duties. Finding employment, apart from some extraordinary positions, does not require further education.⁹ Hence, enrolment in master, specialist or doctoral studies cannot be considered as necessary, as is the opinion in prior case law [Supreme Court of Vojvodina Rev 190/83 according to Petrović-Škero 2010: 493]. Looked at from this perspective, the duty to support an adult child who is in post-graduate studies would be an unjustified burden for the obligor. However, the reasons which justify the right of an adult child to be supported during regular studies do not seem to be exhausted after the completion of bachelor studies. Moreover, the present trend of constantly increasing the general level of education advocates in favour of the opposite conclusion: the duty to provide child support should exist as long as the obligee is in education or professional training. In its absence, it is possible that an adult child, without sufficient means of subsistence nor the possibility to find employment in accordance with his/her level of education (or if employment is impossible due to study obligations),

⁷ Therefore, the fact that all exams have not been passed does not mean that the child is not in regular education and therefore not entitled to child support; in the relevant case, 14 out of the 23 cases had been passed, which demonstrated “a commitment to studying” and therefore the existence of regular education [Appellate Court in Novi Sad Gž2 236/11]. On the other hand, evident lack of interest for studying in the form of a failure to pass a single exam by a 19 year old child as an irregular student of the second grade in high school and the failure to progress to the next grade, clearly shows carelessness [Appellate Court in Novi Sad Gž2 8/11].

⁸ In the case at hand the studies were 3 years long. However, considering that the average time for the completion of the studies was 5 years, the Supreme Court of Cassation considered the completion of a degree programme within this time frame to be regular education.

⁹ A good example is education in law, as it is not a requirement to have a master or doctoral degree in order to work in the judiciary or to practice as a barrister.

will also not have the chance to fulfil the need for further education and professional development. Taking this into consideration, it is in line with the goal of the obligation to provide support to an adult child to consider postgraduate studies as being part of regular education. Furthermore, viewed from a normative perspective, higher education explicitly encompasses post-graduate studies (Art. 25 of the High Education Act). This interpretation is also universally accepted in recent court practice.¹⁰

Another aspect of the same issues is the vocational re-training. Sometimes a student obligee, after graduation but before turning 26, enrolls into a different university, thus starting regular education in the abovementioned meaning with the goal of attaining a completely different degree. In that sense, it is questionable whether such a situation would qualify as regular education and thus give rise to the duty to pay child support. The Supreme Court of Cassation has, in this regard, explicitly taken a position and has rejected the existence of regular education in such a case. It would seem that the main line of argumentation on this point was the Court's further elaboration of its own position on post-graduate education and professional training as being regular education, which can be seen from the following excerpt.

[C]laimant has completed his regular studies by graduating from the Department of Tourism at the aforementioned university, and enrolment in regular studies in a different department at the same university does not represent further professional development [Supreme Court of Cassation Rev 3129/2010].¹¹

It is worth mentioning that in this particular case, the claimant (an adult child) had argued that the reason for enrolling in a different programme was precisely the inability to find employment with his existing degree, which the Supreme Court of Cassation did not find to be a relevant argument. Petrović-Škero, not only a judge of the Supreme Court of Cassation, but the presiding judge in the case, came to the same conclusion in her commentary of the case [2010: 494].

Such an opinion is without a doubt not in line with a textual interpretation of Art. 155 para 2 of the FA; however, this is not of decisive importance. One problematic aspect of taking such a stance is that it results in a contradiction of sorts in terms of following a coherent value system. Namely, if post-graduate studies are recognized as being part of regular education, and with the explanation that they allow additional professional development for the purpose

¹⁰ Petrović-Škero and Milutinović, as judges of the Supreme Court of Serbia (The Supreme Court of Cassation today), name examples in which this position was explicitly taken, and which they themselves support, so it is possible to speak of a prevailing opinion of the revisional court [Škero 2010: 393–394; Milutinović 2008: 257 et seq.]. Considering that the appellate courts also support this position [Appellate Court of Novi Sad Gž2 48/13], it is possible to speak with confidence of an unequivocal opinion in the practice of courts.

¹¹ The Appellate Court in Novi Sad has completely adhered to this position [Appellate Court in Novi Sad Gž2 48/13]; it is important to note that the same position had been taken by the Appellate Court in Kragujevac even before the decision was taken by the Supreme Court of Cassation [Gž 5575/10].

of better prospects of employment, then negating the enrolment into a different educational profile, precisely in order to find employment, which is not possible with the current profile, as regular education, is contradictory. However, precisely in relation to this valuation, it is also possible to reach the opposite conclusion, which justified the result reached by the Supreme Court of Cassation. The purpose of providing child support to an adult child in regular education is to enable it to find opportunities of employment, but the choice of education is left solely to the child. When making a decision which career to follow by enrolling into academic/specialist studies, it is considered that the child, due to the fact that it is full of age, is mature enough to make decisions and bear the consequences in case it makes a wrong one. Moreover, the right to education presupposes a free choice of education even at prior stages in the child's development (while the child is still a minor), when enrolling into secondary school (Art. 63 of the FA). Therefore, it can be said that the right to child support, already at the level of determining the meaning of regular education, presupposes taking responsibility for one's choices, which is completely in line with the constitutional right to free development of one's personality. In that sense, it is possible to make a distinction, both from a realistic and value-based standpoint, between a situation when there is essentially a continuation of education (post-graduate studies) and when there is, in essence, a new start to the education (vocational re-training).

In the end, bearing in mind the fact that in the modern world of increasingly penetrable borders in terms of knowledge, it is becoming more and more common to study abroad (both at the undergraduate and post-graduate levels), there is the issue whether such education abroad can be considered regular education and give rise to the obligation to support an adult child, considering that this normally requires more funds than education at domestic universities. If one adheres to the concept of regular education, bearing in mind the purpose of the obligation to provide child support, the answer is definitely affirmative, as is confirmed by the practice of the courts [Supreme Court of Serbia Rev 2528/06 according to Petrović-Škero 2010: 493]. This fact can be relevant when determining the amount of the support to be paid, but it cannot be accepted, as suggested by Petrović-Škero, that education abroad in itself is a circumstance which gives rise to obvious unfairness [2006: 409]

III. OBVIOUS UNFAIRNESS

From a strictly theoretical standpoint, the absence of obvious unfairness is a negative prerequisite for the existence of the duty to provide child support to an adult child who is in regular education and under the age of 26. However, solely for the purpose of determining the risk of failing to prove concrete facts which relate to this legal standard, it is justified to speak of it as a condition which precludes the emergence of the right to be supported.¹² Bearing in

¹² Differentiating between facts which lead to the emergence of a right (constitutive facts) and facts which prevent the emergence of a right (impeditive facts) is a rule which is explicitly stated for the purpose of bearing the burden of proof (Art. 231, paras 2 and 3 of the CCP). However,

mind that obvious fairness is a legal standard (and a new one in terms of the state of the law prior to the adoption of the FA), it is necessary to attempt to give at least some guidelines for determining its content.

It can be noticed from the case law that different circumstances are taken into account when assessing whether there is obvious unfairness. For example, in one case, the Appellate Court in Novi Sad states that the lack of interest on behalf of the adult child and obvious avoidance of school duties indicates that there is no regular education at hand and that it would be an “obvious unfairness” towards the parents to oblige them to “contribute to the support of a child which fails to fulfil its school duties on a continual basis” [Gž2 8/11]. Similarly, the same Court in another case concludes, after determining that the child in question is meeting all the duties envisioned by the study programme, that it would therefore “not be obviously unfair for the parents to provide it with child support” [Gž2 236/11]. Therefore, it is evident that parameters which relate to the concept of regular education are being used to determine the content of obvious unfairness. This approach has already been criticized in the doctrine [Ponjavić 2014: 381–382], and justifiably so. This is not merely a doctrinarian necessity, i.e. a requirement of terminological clarity and non-contradictoriness, but has practical repercussions in terms of the burden of proof.¹³ The meaning of the term obvious unfairness should be found in circumstances which are completely separate from the developed concept of regular education, as otherwise the explicit existence of the term would not make any sense, which most certainly was not the intention of the legislator. Therefore, when talking of obvious unfairness in this sense, it can be said that it pertains to circumstances which are of material and/or personal character. In any event, the “unfairness” should be of a resounding intensity, as it is required that it is obvious.

Circumstances of material character pertain, first and foremost, to the material capabilities of the obligor. For example, if an adult child who has attained a certain professional title, coming from a family which is not well-off, refuses adequate employment in its field of expertise because it wants to continue its education or professional training. On the one hand, the question of the need for further education is not of existential importance. In this case, it is purely the satisfaction of a personal preference, to which, admittedly, every citizen is entitled. On the other hand, the costs of studying or a post-graduate degree pose an additional burden on the parents and could significantly impact their standard of living. Bearing in mind the meaning of family solidarity,

there is no substantive difference: the right either emerges when all the conditions are met (be they positively or negatively formulated), or it does not arise if they are not met. This has been the prevailing view in doctrine ever since Leipold [Leipold 1966: 38–42; Prütting 2010: 140].

¹³ Considering that regular education is a constitutive fact in terms of the burden of proof in general, the party which is claiming the existence of the right (the obligee of the support) has to meet the burden of proof in this respect (Art. 231, paras 1 i 2 of the CCP). Conversely, obvious unfairness is an impeditive fact in this regard, which means that the burden of proof is on the party which is disputing the existence of the right (the obligor). This reasoning stems from the prevailing view of qualifying facts as constitutive and impeditive, in light of the approaches adopted in the redaction of the FA [cf. Leipold 1966: 51–53].

which is one of the goals strived toward in regulating this inherently private sphere of legal relations, it would seem that the standard of “obvious unfairness” serves precisely in order to protect this solidarity. In other words, obvious unfairness should be a criterion in measuring the interests of the obligee of child support, on the one hand, and the obligor, on the other. If, in the given example, the parents have an income, in line with the provision on providing child support “in accordance with their capabilities” (Art. 155, para 2 of the FA), the right to child support would exist. However, this is precisely where the requirement of the absence of obvious unfairness comes into play. Providing child support for the child’s regular education in this case could represent a significant burden on the parents and jeopardize their day-to-day existence. To the same end is the measure of the FA which provides for the extinguishment of the obligation to provide support if the “obligor loses the capability to provide support or if continuing to provide support becomes an obvious unfairness towards him” (Art. 167 par. 2 of the FA). In addition, if the obligee has a brother or sister who is a minor and is supported by the parents whose incomes are modest, it could also be considered that requiring the parents to pay for child support would be an obvious unfairness. If the provision on “obvious unfairness” is not applied in such a case, it would mean that a child of age is being redistributed a certain amount from the funds necessary for the support of his minor siblings, whose interests should definitely have priority. A similar situation exists when a person who is of a poor material standing has an obligation to support his/her spouse who is unfit for employment.

As far as obvious unfairness of a personal character is concerned, it seems that attributing an adequate meaning to this standard is a much more complicated task, as this concept can be seen in two ways. Firstly, the question whether the personality of the obligee can be of crucial importance in assessing the existence of obvious unfairness (e.g. the child is irresponsible or lazy, as a result of which the parents are aware that it will not fulfil its school responsibilities). Another question is whether providing support for the child can be considered to be obviously unfair if the relationship between the child and the parents is bad on personal level.

With regard to this issue, the doctrine and the courts (admittedly with regard to the previous Act, in which obvious unfairness was not a circumstance which precluded the emergence of the right to child support) have taken the position that (unlike in inheritance law, where one can be unworthy of being an heir) in family law there is no “unworthiness to be supported” [Draškić 1998: 361 et seq.]. This position is somewhat justified. This is the case, above all, when the personality of the child in need of being supported is problematic from a social, or even criminological aspect (the child is demonstrating considerable delinquent behaviour, behaves inappropriately in a social setting or displays other personality traits which are of embarrassment to its parents). In such circumstances, since the Constitution itself establishes that *every* citizen has the right to education, the adult child will have the right to be supported, as long as it fulfils the primary condition: being in regular education. However, leaving bad personal relations between the obligee (the child) and

obligor (the parents or relatives) outside of the scope of the legal standard of obvious unfairness would unjustifiably narrow the meaning of this concept and diminish its corrective purpose. Moreover, such an approach would exaggerate the purpose of child support and lead to some clearly unfair results, for which no justification could be found, for example, if a child conducted itself completely inappropriately towards its parents, by abusing them verbally or even physically.¹⁴ Considering that such behaviour is sometimes even punishable (Art. 197–200 of the FA; Art. 194 of the Penal Code) and not tolerated by the State, there is no reason why it should be tolerated by the parents, who would be obliged to support the child and in doing so increase their own suffering. Furthermore, one cannot lose sight of the fact that such actions by the child could lead to tort liability, in which case the parents would be the obligors.

In addition, it needs to be stressed that “unworthiness” to be supported has not been ignored in the case law. While not explicitly using the term, the courts have understood the meaning of obvious unfairness as a negative condition for the existence of the right to be supported so as to consider the personal relationship between the obligee and the obligor as relevant when assessing whether providing support would be justified. There are numerous cases where it was considered that supporting a former spouse would have been an obvious unfairness because he/she had been unfaithful. In line with this reasoning, such a position can more readily be adopted with regard to child support for an adult child, since in this case, unlike in case of support between former spouses, the obligee’s subsistence need not be at risk. Therefore, even without the support of his parents or relatives, the child would be able to find employment which would enable it to support itself.

In conclusion, obvious unfairness, like any legal standard, is dependent on the circumstances of each particular case. The guidelines for its existence are, on the one hand, financial circumstances, and, on the other, personal relations between the obligee and obligor. In any event, obvious unfairness should be clearly distinguished from regular education, which is the first and fundamental prerequisite for the emergence of the right to be supported for an adult child. This differentiation ultimately has practical effects in terms of the burden of proof.

IV. CONCLUDING REMARKS

An adult child under the age of 26 and in regular education has the right to be supported by its parents (or, in certain cases, by its blood relatives in the straight ascending line) if two conditions are met. First, the child has to be in regular education, which presupposes that it is actually achieving the required results. Apart from secondary education and undergraduate studies, regular education also encompasses pursuing a post-graduate degree. As far as the contentious case of vocational re-training is concerned, the main arguments support both inclusion and exclusion of this type of education in the concept

¹⁴ A good example would be the one where the parents were divorced and the parent from whom the support is sought has started a new family, which prompted the child’s inappropriate behavior towards him/her or his/her new spouse.

of regular education, with the later position prevailing. The second condition is the absence of obvious unfairness, in the sense that providing support, would be an obvious unfairness to the obligor. This requirement is entirely independent from the concept of regular education and failing to achieve the required results does not form part of this term. Obvious unfairness can be present in the material (financial) or personal (moral) sense.

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ПРЕГЛЕДНИ НАУЧНИ РАД

ЗАКОНСКА ОБАВЕЗА ИЗДРЖАВАЊА ПУНОЛЕТНОГ ДЕТЕТА НА РЕДОВНОМ ШКОЛОВАЊУ У СРПСКОМ ПРАВУ

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РЕЗИМЕ: Иако родитељско право престаје пунолетством детета, односно ранијим стицањем пословне способности, родитељство, као лична веза са дететом, није временски ограничено. Суштински, оно подразумева бригу родитеља о деци, чак и када деца заснују своје породице. Ова континуирана подршка, како у емотив-

ном тако и у материјалном смислу, спонтано произлази из њихове међусобне везе. Када је она ускраћена, а неопходна, држава преузима улогу пружајући, до извесне мере, заштиту и пунолетном детету за вршење одређених права. Ту се, пре свега, мисли на право на образовање, будући да се оно, по правилу, не може окончати до стицања пунолетства. У том смислу је и законска одредба којом се установљава обавеза издржавања за пунолетно дете, испод 26 година старости, од стране родитеља (изузетно и крвних сродника), уколико су испуњена два услова. Први је да се дете редовно школује, што претпоставља заправо постизање одређених резултата. Поред средњошколског и основног академског, редовно школовање може да подразумева и последипломско образовање. Иако постоје аргументи којима би се оправдало како укључивање, тако и искључивање овог вида образовања у појам редовног школовања, можемо констатовати да преовладавају афирмативни ставови. Други услов јесте одсуство очигледне неправде, у смислу да је давање издржавања очигледно неправедно за дужника. Овај услов је потпуно независан од претходног, те се у раду посматра само кроз имовински, односно лични аспект.

КЉУЧНЕ РЕЧИ: редовно образовање, очигледна неправда, одрасло дете, законска обавеза издржавања детета

CHALLENGES FOR REGIONAL DEVELOPMENT AND EMPLOYMENT IN TOURISM INDUSTRY (THE CASE OF BULGARIA)

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ABSTRACT: Tourism plays an important role in Europe, and specifically in Bulgaria, and it makes a considerable contribution to employment and regional development. Usually, tourism is among the sectors which are used for introduction and application of different government measures and initiatives which aim at increase of employment. In spite of the commitment of public institutions in Bulgaria to stimulate tourism, as a form of sustainable development, employment and other economic activities, we still find strong disproportions in infra- and super- structure with tourism development being highly concentrated on the Black sea coast.

The aim of this paper was to define the main challenges for regional employment with respect to the specifics of the labor market requirements for new skills and competences, and bridging of the gap between the educational curricula and market demand.

KEYWORDS: employment, Bulgaria, tourism, labor market, regional development

Analysis of the dynamics of employment in Bulgarian tourism sector has proven to be relatively stable besides the turbulences of economic and financial crisis (see Table 1). There was a stable increase in the number of enterprises during the period 2008–2012 as well as in all other indicators such as turnover, production value, personnel costs, wages and salaries, and number of people employed.

Table 1. *Main economic indicators for Accommodation and food service activities*

| Indicator | 2008 | 2009 | 2010 | 2011 | 2012 |
|--|-----------|-----------|-----------|-----------|-----------|
| Number of enterprises – num. | 22,172 | 25,962 | 26,073 | 26,071 | 26,540 |
| Turnover – thous. BGN | 2,916,145 | 2,826,352 | 2,831,185 | 3,133,917 | 3,349,435 |
| Production value – thous. BGN | 2,400,258 | 2,306,582 | 2,231,105 | 2,433,743 | 2,687,312 |
| Value added at factor cost – thous. BGN | 995,970 | 930,015 | 926,145 | 1,027,551 | 1,201,641 |
| Total purchases of goods and services – thous. BGN | 2,240,072 | 2,187,751 | 2,098,259 | 2,281,152 | 2,346,074 |
| Personnel costs – thous. BGN | 513,907 | 592,936 | 588,292 | 671,115 | 740,473 |
| Wages and salaries – thous. BGN | 423,408 | 497,625 | 498,800 | 566,593 | 626,436 |
| Number of persons employed – num. | 128,922 | 140,467 | 138,118 | 142,524 | 140,011 |

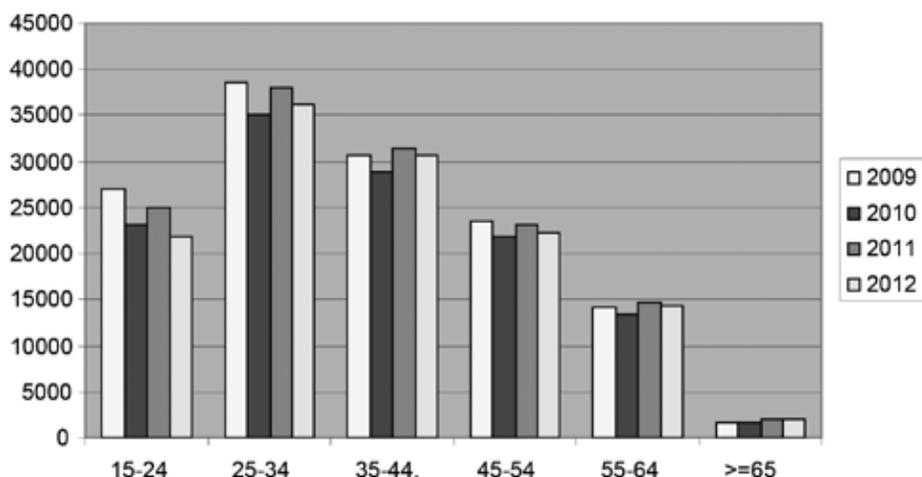
Source: NSI

The statistics shows that, during the period 2008–2012, the biggest number of employed people was concentrated in Restaurants and mobile food service activities (39%), Beverage serving activities (26%), and those employed in Hotels and similar accommodation (22%). Together, these groups represent 87% of total number of employed people in Tourism sector in Bulgaria. Tour operators and people employed in travel agencies represent approximately 4% of all employed people in that sector.

In terms of age structure of those employed in the Tourism sector in Bulgaria, the leading position is occupied by the age groups from 25–34 and 35–44, keeping the distribution of previous years (see Figure 1). As regards the gender differences in terms of employment, the share of employed women was stable (64%) over the last years, in comparison to employed men (36%) and with respect to all analyzed age groups. This imbalance is particularly specific for the Tourism sector and it could be explained by relatively low wages, among the lowest in the country (250 EUR on average), and disadvantages such as seasonality, mobility and employee turnover. This disproportion in gender structure of the employed is higher in Bulgaria compared to the average in EC-27 where women represent approx. 55% of all the employed in the Tourism sector.

With respect to the size of enterprise, it is notable that the major share of all employed people in Tourism is concentrated in SME with average number of employees between 2 and 9. The micro enterprises comprise 41% of total number of enterprises in the Tourism sector hiring between 0–9 people. Small enterprises represent about 33%, medium enterprises 18% and big enterprises just over 8% of total number of enterprises. This trend was relatively constant during the period 2008–2012.

Figure 1. *People employed in the tourism sector by age (2009–2012)*



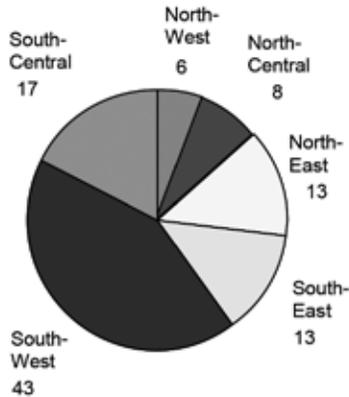
Source: National Social Security Fund

The education level of people employed in Tourism, according to ISCED (International Standard Classification of Education), shows that 59% of the employed is at ISCED level 3-4, followed by 28% at ISCED level 5-6. This distribution shows that Bulgarian Tourism sector employs people whose level of education is higher when compared to the EC-27.

In summary, the dynamic characteristics of labor markets in tourism stand out with (1) high degree of inter-firm mobility, (2) almost equal number of people entering the Tourism sector and leaving it, (3) high level of mobility in occupations. There is no direct statistical data that can confirm the above statements, but a number of official reports and analyses undoubtedly present them as challenges for the labor market of the Tourism sector.

Territorial concentration of the people employed in Tourism sector, based on statistical division, follows the flows of the tourists, and it is mainly in the Black Sea region (Northeast and Southeast statistical regions) – see Figure 2. From the aspect of regions, the most significant is the South-West region (according to NUTS-Nomenclature of Territorial Units for Statistics) with concentration of 43% of all employed in the Tourism sector, followed by the South-Central (17%), and North-East and South-East regions with 13% each. These four regions: South-West, South-Central, South-East, and North East, recorded an increase in terms of concentration achieving 86% of total number of employed in Tourism. One of the possible explanations is that this distribution is based on to the development of tourism infra- and super-structure. When compared with the number of beds and nights spent by the tourists, the above mentioned four regions make 94% of total income from beds and nights spent.

Figure 2. *Distribution of number of employed people, by region (2012)*



Source: NSI, National Social Security Fund

The main challenges for regional development and employment in Tourism are competences, skills and qualification of the workforce. Today, more than ever, skills and qualifications matter. The crisis has speeded up the pace of change in the economy, and employers are increasingly concerned with what workers now, understand and are able to do in practice, rather than focusing on formal qualifications. Additionally, there is a growing understanding of the importance of transversal skills and competences, such as communication skills, digital competency, the ability to learn and a sense of initiative. Several correlated factors define the demand for better and adapted skills: globalization and increased international trade, the transition towards a low-carbon economy, the application of technologies, especially ICT, and changes in work organization, which are partially a consequence of technological and skills change. The next decade will face an increasing demand for a high-qualified and adaptable workforce and more skills-dependent jobs.

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INTERNET SOURCE

National Statistical Institute, 2014: www.nsi.bg

ИЗАЗОВИ У РЕГИОНАЛНОМ РАЗВОЈУ И ЗАПОШЉАВАЊУ
У ОБЛАСТИ ТУРИЗМА
(НА ПРИМЕРУ БУГАРСКЕ)

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РЕЗИМЕ: Туризам игра важну улогу у Европи, а посебно у Бугарској, и даје значајан допринос у области регионалног развоја и запошљавања. Туризам је сектор који се често користи за примену разних владиних мера и иницијатива које за циљ имају повећање стопе запослености. Упркос посвећености јавних институција у Бугарској да стимулишу одрживи развој туризма, запослење и друге привредне активности, наилазимо на изразит несклад између инфраструктуре и суперструктуре јер је развој туризма највише концентрисан на обалу Црног мора. Циљ овог рада је да прикаже главне изазове у вези са регионалним запошљавањем с обзиром на специфичне захтеве тржишта рада који се односе на нове вештине и способности, као и на премошћавање јаза између образовног програма и потреба тржишта.

КЉУЧНЕ РЕЧИ: запослење, Бугарска, туризам, тржиште рада, регионални развој

ОРИГИНАЛНА НАУЧНА СТАТИЈА

ПРЕДИЗВИКАТЕЛСТВА ПРЕД ТУРИСТИЧЕСКАТА ИНДУСТРИЈА ЗА
РЕГИОНАЛНО РАЗВИТИЕ И ЗАЕТОСТ (НА ПРИМЕРА НА БЪЛГАРИЈА)

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РЕЗИЈОМЕ: Туризма играе ключова роља в Европа и в Българија в частност, по отношение на създаването на заетост и подкрепа за регионалното развитие. Отрасълът е сред ключовите за прилагане на различни държавни мерки и иницијативи за насърчаване на заетостта. Независимо от усилията на публичните власти в Българија чрез туризма да се насърчава устойчивото развитие, създава заетост и повишава икономическата активност по места, все още са налице значителни диспропорции както по отношение на инфра – така и за супер- структурата като се наблюдава силно изразената концентрация на развитие на туризма по българското Черноморие. Настоящият доклад цели да изследва основните предизвикателства пред туризма за регионалното развитие и заетост на основата на спецификата на пазара на труда и изискванията за нови умения и компетенции, преодолявайки различията между образование и търсене на пазара.

КЉУЧОВИ ДУМИ: заетост, Българија, туризъм, пазар на труда, регионално развитие

PROBLEMATIC AREAS OF THE REPUBLIC OF SRPSKA WITHIN THE CONTEXT OF DEMOGRAPHIC CHANGES

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ABSTRACT: The paper discusses problematic areas in the Republic of Srpska, from the aspects of spatial distribution of the population and demographic changes during the period between the last two censuses. The paper also treats causes and consequences of an unbalanced spatial development.

Social-economic processes indicate the increase of regional differences, the consequences of which are numerous and they also differentiate the country's area on several grounds. One of the consequences is the unbalanced development and spatial distribution of the population. Assuming that the demographic potential triggers the complex valorization of an area, the paper also indicates limitations and risks of the future development resulting from demographic changes. Starting with 1960s, the poor total demographic potential of the Republic of Srpska area has been particularly strong in rural areas. This further implies the necessity to change the approach to demographic development strategies.

From both theoretical and practical aspects, the paper also addresses the consequences of the unbalanced spatial distribution of the population. The polarized development of the country jeopardizes the economic and geopolitical sustainability of the demographically depressive peripheral areas and makes it difficult to integrate into modern development processes.

KEYWORDS: problematic areas, demographic development, spatial distribution of the population, differentiated spatial development, the Republic of Srpska

INTRODUCTION

In the second half of 20th century, West Balkans witnessed the dynamic development processes along with complex geopolitical, social-economic and demographic consequences. In comparison with the European development centre (European development poles), there are several indicators that define this region as a problematic area. Within this problematic region that lingers due to several incomplete development processes, there is a complex spatial differentiation determined by the type and dynamics of a whole range of development factors. The most negative features are the spatial distribution, population, structure and functional characteristics of the settlement system.

Spatial units characterized by development problems (natural geographic limitations, economic, social, demographic and environmental issues) cover most of the Republic of Srpska territory and these development issues should be treated in compliance with the aforementioned problems. Regional science and regional planning define problematic areas as territorial units with specific development problems.

“Classification of problematic areas or regions should be treated from the aspects of space and time in which the problem appeared [Tošić 2012: 102].” Criteria of classification must match the nature of the problem and its effect on the development of the area in question. More specifically, we refer to the lack of development centre functional capacity with negative influence on demographic migrations and total development. The negative trend of population growth in the second half of 20th century is a direct consequence of development processes. In late 20th and early 21st century, demographic features are the crucial indicator of problematic areas and the limiting factor of revitalization and progress.

Differentiation of problematic regions and the new approaches to finding solutions appeared in 1930s during the great economic crisis that had affected the mining and industrial areas. The genesis of the solutions had lasted for decades and former socialist republics used to treat the problems of unequal regional development via national development plans. Despite the fact that European Union is a highly developed region, it also has its problematic areas that are differentiated on the basis of the same criteria and are dealt with through planned interventions and regional development policies.

More and more territorial units worldwide have been defined as problematic areas (regions) due to the dynamics and characteristics of development processes. Therefore, both scientific and professional focus has been on applicative research in order to find appropriate development policies that might revitalize problematic areas, overcome development disparities and enable social-economic integration into modern progress.

Problematic areas have appeared due to natural surroundings, historical development, development policy, global processes, etc. all of which provoked different methodological approaches and classifications. Among many classifications based upon the cause, the most complex and elaborate one was proposed by Hagel [Hagel 1982] and it focused on four large groups of problematic areas as follows:

- commercially underdeveloped areas;
- overpopulated and overbuilt areas;
- areas of degraded natural background and
- areas threatened by natural disasters.

According to Hagel's classification, the Republic of Srpska's problematic areas belong to the first category (commercially underdeveloped areas) and some even display the characteristics of areas of degraded natural background. Urban and rural systems with poor development options, loss of demographic and social potential, poor infrastructure, peripheral location and commercial exploitations of poorly valorized natural background are typical of problematic areas in the Republic of Srpska. In addition, features of problematic areas are further defined by specific development policies.

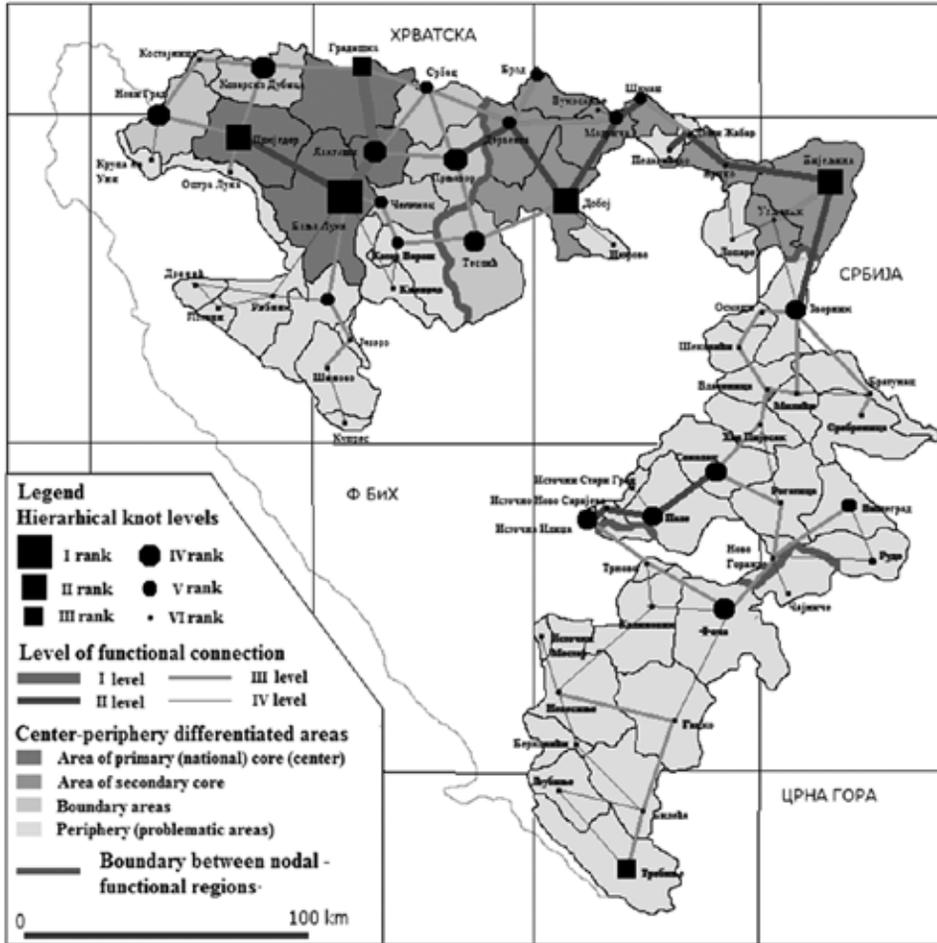
CENTRE-PERIPHERY FOCUSED SPATIAL DIFFERENTIATION OF REPUBLIC OF SRPSKA

The analysis of spatial-structural features of the Republic of Srpska indicates the spatial differentiation. For the purpose of this research, we ran an analysis of spatial population distribution, municipality centres, their functional capacities and levels of functional connection which resulted in centre-periphery focused spatial differentiation of the Republic of Srpska as shown in Table 1. Spatial-functional features were analyzed based on the municipality level (basic administrative-territorial units) which is also the crucial criterion for spatial differentiation of problematic areas. Specifically, we neglected the development differences among municipalities, i.e. among rural areas and municipal centres, as we focused on functional capacities and abilities of each municipality centre to meet the basic needs of the population. According to the functional capacity, the municipal centres were ranked in six categories (Addendum 1, Table 3). Spatial distribution of the population and total demographic capacity were observed from the aspect of deviations from average population density in the country.

Application of the aforementioned criteria differentiated the Republic of Srpska territory into four areas of different development levels and demographic potential (Addendum 1, Table 1).

Over 60% of the Republic of Srpska territory might be referred to as a peripheral or problematic area covering 34% of the Republic of Srpska population [According to preliminary results of the 2013 Census of Population, Households and Dwellings in Bosnia and Herzegovina, for the territory of the Republic of Srpska, Banja Luka, 2013]. These areas are characterized by negative migration balance and population density and they mostly cover eastern and southern parts of the country as well as peripheral areas of Banja Luka region (newly-formed municipalities along the entity borderline). These areas have extremely poor functional capacity and demographic potential (Addendum 1).

Addendum 1. *Republic of Srpska spatial differentiation focused on centre-periphery model*



Source: [Živković M., D. Papić and M. Stanojević 2013: 317].

As a part of South-Eastern Europe, the Republic of Srpska and Bosnia and Herzegovina in general, are peripheral in comparison with economic and cultural power centres in Europe, which further complicates their growth. The marked problematic areas in the Republic of Srpska are its periphery in comparison with national regional centres in the country and in the neighbouring countries as well. Political-economic disintegration of SFR Yugoslavia triggered destructive processes in the region and caused larger problematic areas, which further makes it difficult to establish transboundary cooperation and development. Thus, development strategies to revitalize demographically poor and problematic areas must be based upon territory, local communities and

functional connections with the wider region. It is only the economically developed and demographically vital neighbouring countries that might positively affect the growth of depressive areas. A long-term exposure to crisis might cause problematic areas to deviate from “social-economic modern events and miss the regional integration” [Territorial agenda, 41].

Table 1. *Republic of Srpska spatial differentiation according to center-periphery model*

| Area | No. of municipalities | Surface km ² | Area coverage (%) | Average surface km ² | Population number | Population ratio (%) | People/ km ² | Mean population per municipality | Inner migration balance (2007–2012) |
|--------------------------|-----------------------|-------------------------|-------------------|---------------------------------|-------------------|----------------------|----------------------------|-------------------------------------|--|
| Primary core (center) | 4 | 7,193 | 13 | 798 | 390,354 | 30 | 122 | 97,588 | 7,882 |
| Secondary core | 8 | 3,010 | 12 | 376 | 308,810 | 23 | 102 | 38,601 | 2,889 |
| Boundary area | 7 | 3,340 | 14 | 477 | 174,359 | 13 | 52 | 24,908 | -1,242 |
| Periphery | 43 | 15,044 | 61 | 350 | 453,468 | 34 | 30 | 10,545 | -3,109 |
| RS total | 62 | 24,587 | 100 | 396 | 1,326, 991 | 100 | 54 | 21,403 | |

Source: Statistical yearbook of the Republic of Srpska for 2012. The statistical office, 2012, Banja Luka.

2013 Census of Population, Households and Dwellings in Bosnia and Herzegovina, for the territory of the Republic of Srpska, Banja Luka, 2013

DEMOGRAPHIC DEVELOPMENT OF PROBLEMATIC AREAS

Dynamics of social-geographic processes in the second half of 20th century (mostly industrialization and urbanization) defined the functional development of the settlement network and demographic migrations. A harmonized population distribution was typical of 1960s and 1970s Bosnia and Herzegovina when the rural areas reached their demographic peak. Ratio of municipal centres in total municipal population ranged from 4% in Srbac and Šipovo to 54% in Banja Luka and it illustrated differences in relevance and development among municipal centres. Unequal functional development of municipal centres affected a constant weakening of demographic potential. Hence, the 1981 Census showed that most territorial-administrative problematic areas (municipalities) belonged to depopulated-vital-emigrational type of population number change. Therefore, at the municipal level, population decreased, natural increase was positive and the age structure was still favourable but this natural increase was still affected by negative migration balance. Some municipalities (Goražde, Vlasenica, Srebrenica, Bratunac, Kneževo, Kotor Varoš, Čelinac, etc.) belonged to expanded-vital-emigrational type [The great geographical atlas of

Yugoslavia, 44] and their population increased due to high birth rates. Still, functional underdevelopment of the municipal centres caused emigration that led towards depopulation.

There was also a spatial redistribution of population within municipalities from urban to rural areas, which was more intense during poor infrastructure periods. For the purpose of our analysis, we extracted four types of spatial redistribution of population within territorial-administrative units.

Table 2. *Types of migrations and spatial distribution of the population*

| Type of population spatial distribution | Rural settlements | Municipal centres | Total municipalities |
|---|-------------------|-------------------|----------------------|
| growing – dispersive | growing | growing | growing |
| growing – concentrated | falling | growing | growing |
| depopulation – concentrated | falling | growing | falling |
| depopulation – dispersive | falling | falling | falling |

Up to 1961, the total population growth had been preserved in both rural and urban areas. In 1971, rural area population started to yield and positive trend was maintained only in municipal centres. In 1981, ratio of agricultural population in problematic areas was 30% to 50%, and city population ranged from 10% to 30%, whereas the ageing index varied from 20 to 40 [The great geographical atlas of Yugoslavia, 228–230; Population of Bosnia and Herzegovina, The share of different nationalities in settlements, 1995]. In 1990s, municipalities with fewer urban centres were affected by the process of depopulation that was typical of most municipalities in the Republic of Srpska at the beginning of the 21st century. Current demographic trends indicate that the first two types of population distribution and migration no longer exist, which brings to attention the matter of demographic sustainability of problematic areas. Stagnation and depopulation are also typical of some municipalities, centres of which are also regional centres (Trebinje, Zvornik, Foča), with the exception of East Sarajevo, where population growth was caused by war migrations. In some municipalities, population grows only in centres (Nevesinje, Ugljevik, Kotor Varoš) which polarizes demographic migrations within territorial-administrative units. Urban population ratio ranges from 21% in Rudo to 81% in Trebinje and 100% in East Sarajevo (which is also a compact urban settlement) except newly-formed undersized municipalities with no urban settlements. High level of urban population ratio in some municipalities is not a consequence of urban development but rather of rural exodus caused by the insufficient functional development of municipal centres. Some municipalities (Rudo, Novo Goražde, Kalinovik, Foča, Višegrad, Gacko, Bileća, Trebinje) have a large number of settlements with less than 10 people – 300 of total 765 settlements [According to preliminary results of the 2013 Census of Population, Households and Dwellings in Bosnia and Herzegovina, for the territory of the Republic of Srpska]. Spatially connected, they represent problematic areas of great coverage the sustainability of which is threatened due to alarming demo-

graphic potential. The same processes are typical of some municipalities that are not included in the defined problematic areas in the paper, which only further complicates possible solutions.

Republic of Srpska inner migration balance is positive in areas of primary and secondary cores. Furthermore, problematic areas are characterized by extreme process of emigration, which additionally advocates for our typology of differentiated problematic areas (Table 1).

There are many factors of causal connections that have been affecting current demographic trends such as rural exodus, post-war social and demographic destabilization, and negative post-war transition processes. Constant emigration of the young and working population, weakening of social energy, ageing and depopulation only deepen the regional differences and are all typical of problematic areas. It is troublesome to see that an area of negative demographic trends constantly expands, which further imposes the necessity for demographic development strategies.

Criteria of conditional space typology of population migration show that there are no demographically progressive areas in the Republic of Srpska. Demographically stable areas mostly cover northern peri-Pannonian parts of the Republic of Srpska, i.e. primary and secondary cores with predominantly urban centres of rank I, II and III. Weakened regressive areas are so-called boundary areas with predominant centre network of rank IV. Demographically threatened and extremely threatened areas are peripheral in municipal centres of rank V and VI (Addendum 1, Table 3). Comparative analyses of functional capacities of settlements and population distribution indicate the mutual dependence of these two.

Table 3. *Classification of municipal centers according to the level of functional and demographic capacities*

| Area | Level of functional capacity | | | | | | | Surface | Demographic capacity |
|-----------------|------------------------------|----|-----|----|----|----|-------|---------|----------------------|
| | I | II | III | IV | V | VI | Total | | |
| Primary core | 1 | 1 | 1 | 1 | – | – | 4 | 13% | stable |
| Secondary core | – | 2 | – | – | 4 | 2 | 8 | 12% | relatively stable |
| Boundary area | – | – | – | 4 | 2 | 1 | 7 | 14% | threatened |
| Periphery | – | – | 1 | 5 | 7 | 30 | 43 | 61% | extremely threatened |
| R. Srpska total | 1 | 3 | 2 | 10 | 13 | 33 | 62 | 100% | |

Source: Counting of vehicles on the road network in the Republic of Srpska, 2002 (2003). State office of traffic, Banja Luka

The overview of the number of employed people according to the nature of job in the Republic of Srpska in 2001. Statistical documentation. Statistical office of the Republic of Srpska.

2013 Census of Population, Households and Dwellings in Bosnia and Herzegovina, for the territory of the Republic of Srpska, Banja Luka, 2013

There are a poor percentage of problematic areas within Doboj-Bijeljina nodal-functional region and in southern parts of Banja Luka region whereas the total eastern part of the Republic of Srpska (Sarajevo–Zvornik and Trebinje–Foča nodal-functional regions) is characterized as national problematic areas. Demographic capacity of municipalities of Pale and East Sarajevo is a consequence of territorial division of the city of Sarajevo and war migrations. The lack of commercial activities only further threatens the existing demographic potential.

The fact that most of the Republic of Srpska territory is covered by problematic and demographically threatened areas, makes it necessary to adopt a system of harmonized measures of revitalization. From the geographic point of view, the revitalization of the problematic and demographically threatened areas matches the re-structuralization of their spatial-functional organization, which means:

- redistribution population policy,
- polifunctional development based upon autochthon resources,
- coherent spatial-functional organization.

The aforementioned measures might lead towards the stabilization of population and economic growth in compliance with advantages of an area, i.e. its functional revitalization and sustainability.

CONCLUSION

Spatial distribution of population and trends of demographic migrations in Republic of Srpska indicate congruence with spatial distribution of development centres and features of functional capacity. It is necessary to raise the level of functional connection in order to keep demographic stability and territorial cohesion.

Problematic areas are a consequence of development processes that did not take place in accordance with functionally balanced polycentric development. Despite the territorial capacity, poor social capacity is still a limiting factor of development. The existing spatial-functional organization of problematic areas and demographic development are leading towards economic, environmental and demographic unsustainability that might further cause a potential loss of control over the national resources. On the other hand, global processes are not leading towards spatial coherence and national growth.

Taking into account the borderline position of the country, the policy of transboundary cooperation is crucial for development strategies. Encouragement of total economic development is crucial for the population stabilization and demographic revitalization. Revival of problematic areas currently makes the demographic development strategy a top priority.

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ОРИГИНАЛНИ НАУЧНИ РАД

ПРОБЛЕМСКА ПОДРУЧЈА РЕПУБЛИКЕ СРПСКЕ
У КОНТЕКСТУ ДЕМОГРАФСКИХ КРЕТАЊА

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Босна и Херцеговина

САЖЕТАК: У раду се разматрају проблемска подручја Републике Српске сагледана у контексту комплексних развојних процеса одређених низом развојних фактора. Развојни процеси одвијају се у правцу повећања регионалних социо-економских разлика, диференцирајући простор Републике Српске по више основа. Једна од посљедица је неравномјеран развој и просторни размјештај становништва. Полазећи од претпоставке да демографски потенцијал представља основни покретач комплексне валоризације простора, указује се на могућности, ограничења и разлике у будућем развоју као посљедице измијењених демографских прилика.

Слабљење укупног демографског потенцијала простора Републике Српске, које се у континуитету одвија од краја 60-их година прошлог вијека, посебно изражено у руралним подручјима, намеће као нужност промјену приступа у успостављању стратегија демографског и укупног одрживог развоја.

Радам се, с теоријског и практичног аспекта, указује на посљедице неуравнотежене просторне дистрибуције становништва и изразито поларизованог развоја Републике Српске, чиме се угрожава укупна одрживост демографски депресивних, развојно периферних (проблемских) подручја и отежава њихово интегрисање у савремене развојне процесе.

КЉУЧНЕ РИЈЕЧИ: проблемска подручја, демографски развој, просторни размјештај становништва, диференцирани просторни развој, Република Српска

REGIONAL LEVEL IN THE FUNCTION OF MITIGATING NEGATIVE DEMOGRAPHIC TRENDS IN RURAL AREAS OF SERBIA: CASE STUDY OF THE DISTRICT OF ZAJEČAR¹

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ABSTRACT: Long-term marginalization of villages has caused negative demographic trends in rural areas of Serbia, primarily through forceful depopulation, unfavorable demographic structures and other structural problems. The term “extinction” is the most often related to the recent appearance of demographic shrinkage and economic decline of villages. According to the last population census (2011), 13 settlements without permanent inhabitants have been recorded. The fact that about 1/3 of all settlements in rural Serbia is sparsely inhabited (less than 20 inh/km²) indicates that scales of demographic decline impacts are yet to be seen. The Spatial Plan of the Republic of Serbia (2010) advocates polycentric and balanced regional development. Creation of adequate instruments to mitigate demographic decline in rural areas requires clear definition of regional territorial units. Are they going to be NUTS 3 level, or functional urban areas, as spatially and functionally integrated areas which represent more suitable choice for addressing the issue of demographic and economic decline, or should concrete answers be looked for at the level of identified rural

¹ The paper is supported by Ministry of Education, Science and Technological Development, Republic of Serbia (Grant 47007).

regions [Spatial Plan of the Republic of Serbia, 2010; National Program for Rural Development, 2011]? This paper will research these issues in the District of Zaječar with a good practice in Germany.

KEYWORDS: demographic decline, regional level, rural areas, spatial organization, public services

PROBLEM STATEMENT AND CHOICE OF THE CASE STUDY

District of Zaječar is located in East Serbia. It spreads over 3,623 km² and it has 119,976 inhabitants (in rural areas 50,932) with average age of 46.7 (in rural areas 51.5), and it has 33 inh/km². Based on NUTS 3, the District of Zaječar also comprises four municipalities that have 173 settlements (out of which 168 are rural). District of Zaječar is one of the most vulnerable areas of the Republic of Serbia, not only from an economic point of view but also in terms of the development of the population. The centuries-old influence of a variety of factors led to the formation of unfavorable demographic trends. One of the first recently demographically extinct settlements in Serbia occurred in this region. The last resident of the settlement Repušnica moved out in 1999. On the other hand, District of Zaječar has high share of uncultivated agricultural land (21.7%) and that is one of the consequences of demographic change. This paper emphasizes the methods for combating demographic decline in rural areas of District of Zaječar.

CHARACTERISTICS OF THE CASE STUDY – THE DISTRICT OF ZAJEČAR

Demography

During the period 1981–2011, the population of the District of Zaječar continuously decreased, from 170,682 to 119,967 inhabitants (Table 1). The population of the district decreased by nearly 30% in the past 30 years. The most intensive population reduction was observed in the last intercensal period, when, in just nine and a half years, the population of the district declined by 17,594 inhabitants, or 12.8%.

Table 1. *Population change in the District of Zaječar, 1981–2011*

| Municipality | Population ¹⁷ | | | | Average annual growth rate (per 1000) | | |
|---------------------|--------------------------|--------|--------|--------|---------------------------------------|-----------|-----------|
| | 1981 | 1991 | 2002 | 2011 | 1981–1991 | 1991–2002 | 2002–2011 |
| Boljevac | 21818 | 18424 | 15849 | 12994 | -16.9 | -13.7 | -20.8 |
| Zaječar | 76681 | 71076 | 65969 | 59461 | -7.6 | -6.8 | -10.9 |
| Knjaževac | 48789 | 43551 | 37172 | 31491 | -11.3 | -14.4 | -17.4 |
| Sokobanja | 23394 | 21125 | 18571 | 16021 | -10.2 | -11.7 | -15.5 |
| District of Zaječar | 170682 | 154176 | 137561 | 119967 | -10.2 | -10.4 | -14.4 |

Source: Statistical Office of the Republic of Serbia [2014]. Book 20.

² In the 1981 Census, the total population of a certain place included persons who resided in that place permanently, regardless of whether they were in that place at the

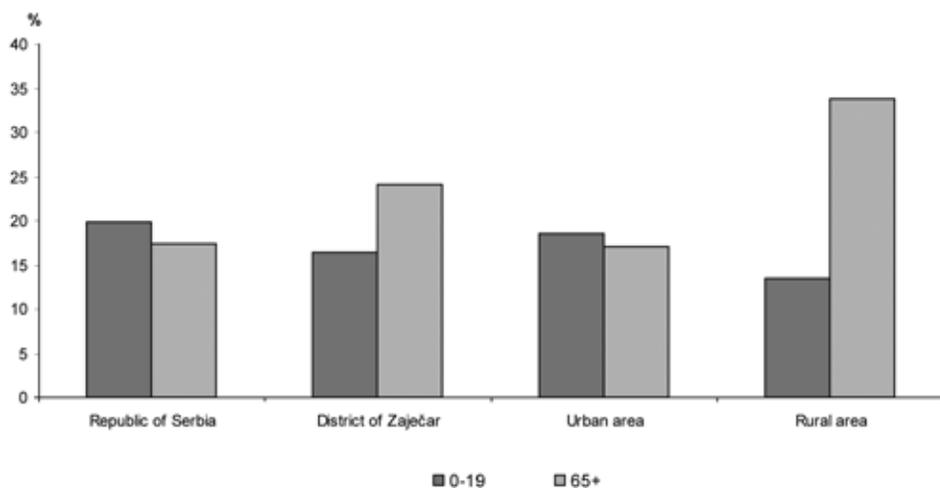
With respect to the district, all municipalities were engulfed in the negative demographic trends, but of different intensity. Until the analyzed period, the City of Zaječar had a population increase, but after 1981, there was a trend of population decrease that had already taken hold over other municipalities of the district. During the three intercensal periods, the municipalities of Knjaževac and Zaječar lost more than 17,000 inhabitants each. The largest loss was observed in the municipality of Boljevac – which is the municipality with the lowest number of inhabitants – which population decreased by over 40% in 30 years. Apart from having the lowest number of residents, the municipality of Boljevac also has the smallest number of settlements in the district. On the other hand, the municipality of Knjaževac includes half of all the settlements, i.e. 86 out of 173. Large number of settlements of different structures initiated different population flows during the analyzed period. During the first intercensal period (1981–1991), apart from municipal centers, another two settlements experienced a population growth: Trgovište in the municipality of Knjaževac, and Rtanj in the municipality of Boljevac, but two other settlements suffered a loss of more than 500 people: Lukovo (municipality of Boljevac) and Jošanica (municipality of Sokobanja). In the following period (1991–2002), two municipal centers maintained a population increase (Zaječar and Sokobanja), which also happened in Zvezdan and Gamzigrad settlements of Boljevac and Zaječar municipalities. Between 1991 and 2002, all settlements of Knjaževac municipality suffered a decrease in population, while the three settlements in municipality of Zaječar (Rgotina, Lubnica and Grlišće) recorded the largest decrease in population. The last intercensal period brought significant changes in population trends at the level of settlements. The only settlement that had a population growth in the period between 2002 and 2011 was Čuštica in the municipality of Knjaževac. On the other hand, community centers Knjaževac and Zaječar lost the greatest number of inhabitants during this period.

The age structure of the District of Zaječar is significantly different from the Republic's average. This particularly depopulating area, due to the effects of spatial, historical and socio-economic factors, has a very unfavorable age structure (Figure 1). The share of young people, i.e. the population from 0-19 years old, is 3.5% lower (16.36%) than the Republic's average, while the percentage of people over 65 years of age is higher by almost 7% (24.17%). Average age of the population in the studies area, according to the 2011 Census, is 46.7 years, and at the national level the average age is 42.2 years. The age structure of urban areas in the District of Zaječar is at the same level as the Republic average age,

critical census moment or they were temporarily absent for any reason. In the 2002 Census, the total population of the Republic of Serbia included citizens who worked and/or stayed abroad for less than a year, as well as the foreign citizens who worked or resided in Serbia for a year or more (population in 1991 was presented by the same methodology). For the purpose of determining the total number of population of a given area, it was in the 2011 Census that the concept of the “usual population” was used for the first time. According to this concept a person is considered to be a resident of the place in which he/she alone (in case of a one-person household) or with the members of his/her household spends most of the time, that is, the day/night rest, irrespective of where this person has his/her residence registered [Statistical Office of the Republic of Serbia, 2014].

while in rural areas, the population is in the phase of severe demographic ageing. The share of young population is only 13.4%, while the share of the elderly in rural areas of the District of Zaječar is almost two times higher than the national average. The average age of the rural population has increased from 50.3 to 51.5 years. The most unfavorable situation is in the rural areas of Knjaževac where the number of the elderly is even four times higher than the number of the young population and in some settlements the average age is over 70 years.

Figure 1. *Share of young population (0–19) and the elderly (over 65) in the District of Zaječar, 2011*



Source: Statistical Office of the Republic of Serbia (2012). Book 2.

Settlement Structure and Public Infrastructure

Settlement network consists of all types of settlements on the particular territory, and it is hierarchically organized, functionally related and chronologically dynamic with regard to demography, morphology and functions [Stamenković and Bačević 1992]. Therefore, fluctuation in settlement structure actually indicates political and socio-economic changes incurred in Serbia.

The settlement network in the District of Zaječar consists of 173 settlements out of which five settlements are urban and 168 are rural (in statistics they are called “other settlements”). The average population size of the settlements has been decreasing continuously since 1981: from 986 inhabitants to 693 in 2011 [Statistical Office of the Republic of Serbia (SORS), 2014]. The change has been more extreme in rural settlements: from 605 to 294. The average size of settlements is 20.9 km², with 4.8 settlements/100km² density (average in the Republic is 6.1 settlements/100km²). The misbalance indicates non-polycentric settlement network and unbalanced urban settlement system

– the consequence of urbanization not timely conducted. Regionally, the settlement network is unbalanced regarding demographic and functional changes between center and periphery, municipal centers and rural settlements. As the result, rural areas are becoming demographically extinct, the number of small settlements continuously increases, and, at the national level, incoherence and asymmetries of the urban system increase, too [Tošić and Krunić 2005].

The settlement network of the District of Zaječar is markedly fragmented. Most of the settlements (83%) belong to a group of small settlements (up to 500 inhabitants). The number of these settlements has been continuously increasing since 1981 when there were 86 settlements, then 113 in 1991, 131 in 2002 and 143 in 2011 [SORS, 2014]. In addition, number of larger settlements (over 1,000 inhabitants) has been decreasing, from 32 to 14 respectively. Two largest obstacles towards polycentric settlement network are the so called “dwarf” settlements (up to 20 inhabitants), which are practically already extinct, and extreme demographic extinction in rural areas. There was only one “dwarf” settlement in 1981, but 13 in 2011. With regard to the demographic tendencies and population age structure in rural areas, additional 38 settlements can be joined to the group at the risk of extinction. If trend of the last intercensus period (2002–2011) continues, the calculations by mathematical projection indicate that there will be 10–20 extinct settlements in 2020, and about a half settlements less in 2050 than those which are currently in the District of Zaječar.

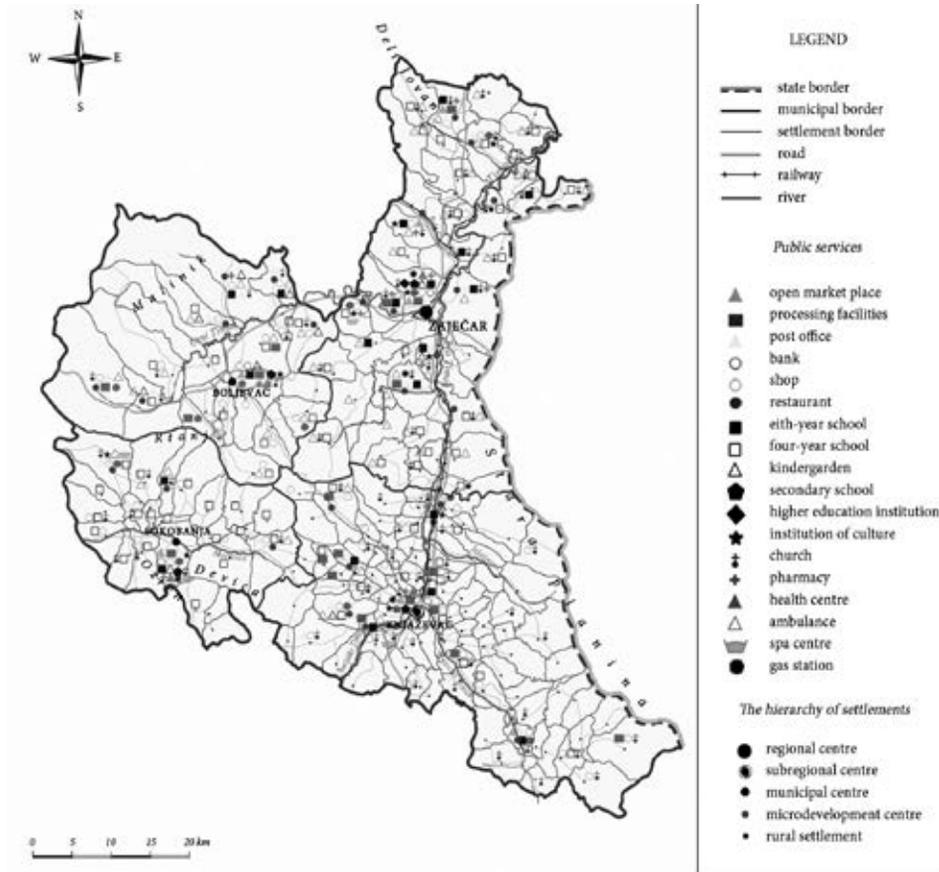
The organization of settlement network in Serbia is based on the concept of decentralized concentration where secondary centers, the centers of settlement communities, and micro-development nucleuses are of the utmost importance [Tošić 1999]. In the District of Zaječar, the settlements are grouped in several hierarchical levels (Map 1): (1) regional center – Zaječar, (2) sub-regional center – Knjaževac, (3) municipal centers – Sokobanja and Boljevac, (4) micro-development centers – centers of settlement communities and secondary centers, and (5) other rural settlements.

Peripheral rural areas in Serbia face heterogenized quality of facilities and accessibility to public services. These matters are arranged by legislation, but in spite of it, due to the terrain configuration, infrastructure marginalization and demographic decline, some areas are still troubled with time-consuming accessibility as a consequence of spatially unbalanced distribution of public services. Accessibility of public services is expected to be equal for all users because it represents fundamental human right (education and health care), and public services are financed by taxes from all citizens.

District of Zaječar is prevailingly mountainous, with poor infrastructure and accessibility; therefore, its rural population faces the problems in particular. There is one regional center – Zaječar, and three smaller urban centers – Knjaževac, Boljevac and Sokobanja, where majority of primary and secondary public services and facilities are provided. Its villages, except few secondary centers, are poorly endowed or in a great number of cases completely endowed with buildings for public services; therefore, their inhabitants need to travel in order to meet their primary needs. The terrain configuration and absence of public transportation are common causes which deprive the population from

services which are considered to be fundamental human right (primary health care and primary school).

Map 1. Network of settlements and public services in District of Zaječar



Source: Elaborated by authors

The population in urban center Zaječar, the largest center in the area covered by the case study, has access to the following services of the highest rank: secondary education, faculties, specialized health care, care centers for persons with specific needs (children with mental disabilities, retirement home, etc.), center of culture, museum, theatre; therefore, the gravitation zone of Zaječar covers even the other three municipalities. The other municipal urban centers ensure the fundamental rights of their citizens with regard to education (primary and secondary) and health care. In addition, Sokobanja has specific functions (tourism and spa). Their gravitation zones cover territories of the municipalities they belong to.

POTENTIAL LEVELS FOR REGIONAL GOVERNING

Rural Regions

Defining rurality is complex task for which indicators are often statistically immeasurable. Due to the character of rural areas, it is necessary to include a whole set of indicators to define them. The most often indicators are: population density, share of population employed in agriculture, heritage of an area, dependence and distance from cities and market, public services, land-use, functions, etc. [Vasilevska 2006; Lukić 2010; Radovanović 2010].

One of the most common rurality indicators in EU is defined by the OECD, according to which rural areas are considered those areas with population density below 150 inh/km². Based on the OECD classification, 4,175 (90%) settlements in Serbia were rural in 2011. Therefore, it appears more suitable to use the threshold of 100 inh/km² in case of Serbia, as assigned by the Agenda 2000, as a starting criterion for defining rural areas in EU. In this case, 85% of the territory of Serbia is rural or 3,954 settlements.

Successful and applicative policy on rural areas also depends on the creation of evaluation indicators and their monitoring [Bogdanov and Stojanović, 2006]. Respecting heterogeneity of the space, over 40 indicators (e.g. age and education structure, employment, activities, land-use, infrastructure) have been used in a cluster analysis, finally bringing several types of rural regions as the output. Aiming at life quality improvement and regional differences' decrease, the document clarified 65,952 km² or 3,904 settlements with 4.3 million inhabitants as rural area of Serbia, recognizing following types [National Rural Development Program, 2009]: region of high-intensity agricultural production and integrated economy; region of small urban economies and intensive agriculture; mountainous region with economy based on natural resources – eastern and south-eastern Serbia; region of high potential in tourism with small agricultural production – part of western and south-western Serbia.

According to this typology, the District of Zaječar belongs to the Mountainous region, which is the largest of all rural regions (29% of Serbia and 34% of rural Serbia) and the sparsest populated (43 inh/km²). It is prevalingly hilly and mountainous, containing about 40% of rural settlements in Serbia, but populated with only 23% of rural population. Severe depopulation, highest aging index and low education level, as well as absence of infrastructure and product market, make this region scarce in labor and socio-economically the weakest among all rural regions in Serbia.

Nomenclature of Territorial Units for Statistics level 3 (NUTS 3)

A NUTS 3 is one of the levels defined by Nomenclature of Territorial Units for Statistics. They are used for collection of statistical indicators established by the European Union [EU], to secure territorial units comparability regarding statistical data, and for making decisions on socio-economic development for EU budget distribution. NUTS levels differentiate in population size: NUTS 1 should embrace above 3,000,000, NUTS 2 between 800,000–

3,000,000, and NUTS 3 between 150,000–800,000 inhabitants [European Commission (EC), 2012]. The NUTS 2 represents base for application of regional policy and measures on territorial cohesion, while NUTS 3 represents small regions with specific characteristics and identity.

As an EU candidate country, Serbia has got the precondition to adjust its statistical and developing territorial units accordingly to NUTS system. According to Regulation of Nomenclature of Territorial Units for Statistics [2009; 2010], NUTS is a set of terms, names and symbols that describe a set of territorial units with levels of grouping. They can be viewed as one of the instruments of regional development, considering that collection of data, information and indicators of performance measures of regional development will be carried out at the NUTS levels (Regulation of NUTS, Article 2, 2009/2010). Therefore, Serbia is divided into two functional territorial units NUTS 1 level, five functional units NUTS 2 level, and 30 areas NUTS 3 level, which are equated with administrative districts.

Serbia can use funds within Instrument for Pre-Accession Assistance [IPA], distributing it within the NUTS levels. The distribution of funds is based on the values of set indicators of the NUTS 2 level, but regional developmental agencies are in charge of choosing development projects and control use of the resource. Until now, 13 regional development offices had been established in Serbia.

The Spatial Plan of the Republic of Serbia from 2010 (SPRS) is another document tackling the role of NUTS levels. Here, NUTS 2 is acknowledged as a region, while NUTS 3 is defined as a region with unique geographic characteristics, natural potentials and cultural-historical heritage. They are (NUTS 3) also equalized with existing administrative districts. In relation to this, the SPRS proclaims establishment of regional development councils, composed of representatives from local self-governances, districts and civil-sector. These have not been organized yet. Besides regional development and decentralization tools, the SPRS relates NUTS 3 also to the concept of functional urban areas [FUA], where networking and establishment of functional relationships are expected to help strengthening of counties' capacities.

Functional Urban Areas [FUA]

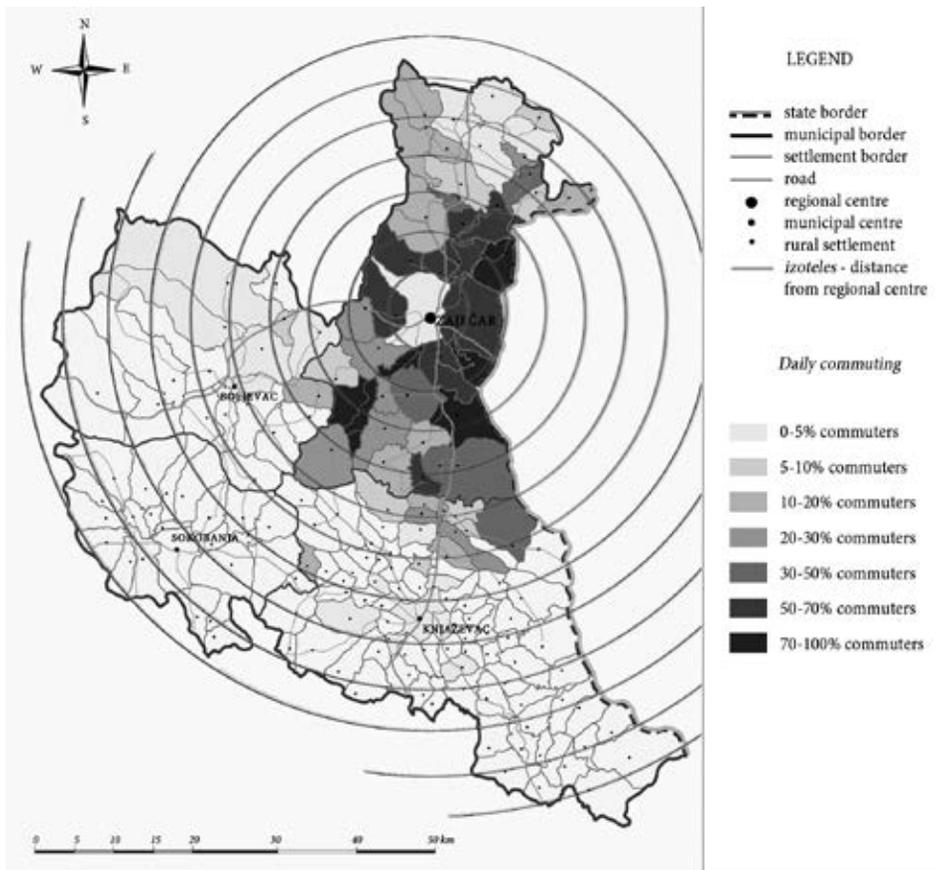
FUA, according to ESPON 1.1.2. (2006), consist of an urban center, i.e. nucleus, and the area around it, which are economically integrated and which represent the commuting area (rural-urban), and the local labor market. This labor market is its main indicator. Therefore, a prerequisite for defining the FUA is the existence of data on commuting.

In smaller countries, such as Serbia, FUA is defined in the following manner: urban core must have at least 15,000 residents but the whole area has to have more than 0.5% of the national population, and it has to gather the functions of economic and regional importance. To determine the FUA on the territory of Serbia, the following indicators were taken into account: number of inhabitants, share of urban and rural population in total (the degree of urbanity),

commuting working population with respect to the total number of persons involved in business activities and contributing to gross domestic product. FUA of Zaječar is classified in the category of national importance.

Daily urban system consists of the city and that part of its environment with which there is interaction exhibited by migration of the workforce and residents who commute daily so as to meet their needs of social, economic and cultural character. It is an area in which there is intensive population mobility between places of residence and places of performing other social-geographic functions [Goodal 1987].

Map 2. *Daily urban system of Zaječar in the District of Zaječar, 2002*



Source: Elaborated by the authors

The model of spatial-functional manifestation of daily urban systems based on the function of work [Tošić 1999] lists five zones of the work center influence. The zones of influence are divided on the basis of the proportion of

employees who commute to the work center daily: (1) intense impact zone (70%), (2) strong impact zone (50–70%), (3) medium impact zone (30–50%), (4) lesser impact areas (20–30%, 10–20% and 5–10%), (5) periphery of the daily urban system (less than 5%).

Zaječar is the center of the FUA, which includes a network of settlements belonging to municipalities of Zaječar, Boljevac, Knjaževac and Sokobanja. According to the 2002 Census³, 8,092 commuters listed Zaječar as their center of work. Most of the commuters, 4,895 of them, i.e. 60% of the total number of commuters who work in Zaječar, are located on the periphery of the daily urban system, and 21% in the zone of strong impact. Other zones are represented with a significantly smaller share. The territorial distribution of commuters has a special form: the largest number of commuters are from the territory of Zaječar (mostly from the following settlements: Veliki Izvor, Grljan and Zvezdan), a smaller number from the settlements in the municipalities of Knjaževac, Negotin and Bor, while the settlements from the municipality of Sokobanja are not present in the daily urban system of Zaječar (Map 2).

GOOD SPATIAL-DEMOGRAPHIC PRACTICE IN GERMANY

The aspect of regional development and the problem of demographically endangered rural areas have been the subject of a considerable body of previous and contemporary scientific research in Serbia. Regional imbalance, as a spatial problem, on the one hand, assumes socio-economic and demographic polarization in a significantly smaller area, mostly limited to the urban environment, and on the other hand, it assumes demographically extinct and economically marginalized rural and peripheral areas, unbalanced urban network, etc.

Based on the Christaller's Central Place Theory, Federal Republic of Germany developed a new spatial concept in the 1960s of the 20th century, particularly taking into account the settlement network, i.e. population distribution, availability of public services and road infrastructure between them. The goal was to establish territorial balance and to minimize regional differences by providing guaranteed approximately equal infrastructural conditions and accessibility to public services for all citizens in the state [Domhardt and Troeger-Weiß 2009].

The idea was to define obligatory conditions in distribution of services for each settlement at national level. Population increase at the time had allowed ambitious planning of public services distribution where each settlement, including rural, was provided with high accessibility. The settlements were ranked according to (1) population size, (2) existing functions and (2) position in space (30 minutes isochrones) [EC, 1999].

However, depopulation has induced adaptation of the concept to new situation, still reflected today in the Concepts and Strategies for Spatial Development in Germany (2006). The document consists, among other, of three

³ Last available data about commuters at settlement level. For 2011, this data will not be processed and published at settlement level.

maps which are based on (1) demographic indicators (size of city, regional population density, population projection for 2050), (2) road network and (3) land use. The analysis of indicators shows that the three maps represent three separate concepts: (1) growth and innovation, (2) securing services of public interest (health care, education, public transport, etc.) and (3) conservation of resources and shaping of cultural landscape.

The *growth and innovation concept* resembles the FUA developed in SPRS (2010). Both approaches are showing network of urban centers, their gravitation zones and smaller centers outside the zones (in Germany called the stabilization areas). The *concept of securing services of public interest* shows areas with demographic increase, areas with demographic increase and stable areas, together with centers of high and medium rank – stable and those under the demographic extinction risk. Hence, the settlements are ranked according to their demographic size (therefore, economic influence, too) and public services which are assigned based on settlement's rank. The map also indicates areas that need improvement of accessibility to high rank road infrastructure (e.g. highway and inter-regional railway) and urban centers which can stay highly ranked (primary centers) only if connected in an urban network, e.g. Dresden, Leipzig and Chemnitz. The obligatory networking between urban centers is intended for the depopulation areas that still preserve development potentials of the cities, but are demographically weakened in rural areas. This decision is embedded in the fact that strengthening of centers of higher rank (at regional level) induces strengthening of smaller settlements in its vicinity, too.

The second concept foresees strengthening of crucial infrastructural systems in depopulated, rural and structurally weak areas – particularly road infrastructure. This is aimed at improving accessibility to public services in higher ranked centers for the citizens inhabiting the structurally weak areas. The aim is to decrease travel costs and travel time to the higher rank centers in the entire territory of Germany, and to make guaranteed public services accessible in 30 minutes in the middle ranked centers.

The third concept implies land-use which is generalized to both urban and rural areas. Some of the rural areas are assigned different types of agriculture, others have gone through transformation from surface mining basins into tourism areas (turning mine pits into water accumulations), and finally, areas next to the state border are assigned to cross-border cooperation.

Generally speaking, there are three pillars in the new approach to demographic extinction and territorial imbalance in Germany: (1) transfer of unsustainable functions from the smallest settlements to the higher rank centers, (2) obligation of each municipality to design its own development strategy and (3) intensification of local and regional cooperation [Domhardt and Troeger-Weiß 2009]. When compared to the German concept, the SPRS (2010) also recommends distribution of public services according to settlement hierarchy, but it is not quite clear which type of center is the first and which centers follow it in this hierarchy. Another parallel between Germany and Serbia is the adoption of local development strategies and establishment of road infrastructure.

Regarding regional transport infrastructure, the SPRS puts the District of Zaječar into the group of “far below the average” regions, simultaneously valuing regional transport infrastructure as one of the inevitable preconditions for mitigation of demographic extinction and development. In addition, the SPRS advocates strengthening of urban and regional centers and redistribution of social services in order to empower hindered rural areas, similarly to German development concepts. Therefore, distribution of social services, transport infrastructure and regionalization are the elements which strongly influence the demographic structures and should be, therefore, analyzed and improved in the regions which are below average, such as the District of Zaječar.

RECOMMENDATIONS TO MITIGATE

Demographic Decline in Rural Areas

In order to emphasize the methods of improvement of mitigation measures for demographic decline in rural areas of District of Zaječar, specifically based on the analyses presented in this paper, the following paragraphs shortly explain the comparison between regional governance levels.

The rural area typology previously presented is based on regional development priorities dividing Serbia in large territorial units. Regarding the heterogeneity of these regions, main guidelines to the regional development can be only general in their nature, but not specific. This is particularly the case in the eastern and southern parts of Serbia that represent natural, demographic and socio-economic mosaic, and as such they need specific priorities and measures for the future development and mitigation of depopulated rural areas. Therefore, rural regions can serve for giving main guidelines on the national level, but in order to implement specific development and demographic measures it is necessary to treat geographically smaller units, so as not to neglect their identity and diversity.

The other analyzed regional governance level is Zaječar FUA. The idea of the concept is applicable in mitigating regional imbalance, but in the case of Zaječar FUA its gravitation zone is significantly limited to the vicinity of Zaječar – the City of Zaječar and few settlements in neighboring municipalities. Peripheral position of this regional center hindered functional relationships with marginal parts of the District, particularly with the settlements located away from the main roads. The SPRS (2010) plans broadening of the gravitation zone in some settlements in Knjaževac and Boljevac municipalities until 2050, while the settlements in Sokobanja municipality are expected to remain out of its functional influence. For this reason, FUA does not seem to be suitable for the establishment of regional governance body in the District of Zaječar.

Finally, the NUTS 3 remains the most suitable choice with regard to its functions and size. Namely, its territory entirely matches the administrative district of Zaječar (the same case with other districts) and it also matches European systems of demographic data collection and regional development financing. This way the whole district would be covered, taking governance role

in decision-making and application of demographic policy in spite of its spatial disintegration in rural areas.

Based on the aforementioned, the recommendation for mitigation of demographic decline in rural areas is development of a new model of spatial organization of settlement network and public services. This requires the following:

- *Decentralized concentration and micro-regional nucleuses*: functional and infrastructural strengthening of rural centers as a counterweight to the urban ones;
- *Public services organization* according to SPRS (2010): accessibility to primary services (30 minutes isochrones) and high rank services (45–60 minutes isochrones). The rural settlements where population travels 45–60 minutes to the nearest urban center for the primary services (e.g. school, ambulance) are suggested to have stimulation for teachers, doctors and others who work in isolated settlements and deprived areas. The other suggestion is enlargement of gravitation zones of public services by providing complementary activities (student's dormitory, day care centers for children and seniors, etc.) and provision of mobile services.
- The concepts of *Growth and innovation* and *Securing services of public interest* from the Guidelines for Spatial Development of Germany [2006] emphasize the idea of settlement networking in rural areas.

Following the recommendations and combining the models of demographic-spatial development of Germany and Serbia, improvement of functional relationships within the settlement network as well as improvement in public service organization can be expected. This should reflect in functional and infrastructural strengthening of micro-development centers and consequently in the mitigation of demographic decline in rural areas. General guidelines should be given at the national level, similar to the rural areas in the National Rural Development Program [2009]. Following the guidelines, a regional governance body, established at the NUTS 3 level, should be responsible for creation of a regional concept founding it on its own ideas, region's identity and population needs. The body would consist of representatives from local communities belonging to the area. Besides local cooperation, the region should practice inter-regional and trans-border cooperation in accordance with EU goals and funding system, which can be particularly beneficial for border regions such as District of Zaječar. Besides maximal use of IPA funds, and later other structural funds too, following the recommendations can help regions to spatially integrate, overcome existing FUA inconsistencies and finally mitigate serious demographic decline in rural areas.

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РЕГИОНАЛНИ НИВО У ФУНКЦИЈИ УБЛАЖАВАЊА НЕГАТИВНИХ
ДЕМОГРАФСКИХ ТРЕНДОВА У РУРАЛНИМ ПОДРУЧЈИМА:
СТУДИЈА СЛУЧАЈА ЗАЈЕЧАРСКИ ОКРУГ

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РЕЗИМЕ: Дугорочна маргинализација села довела је до негативних демографских трендова у руралним подручјима Србије, превасходно кроз интензивну депопулацију, неповољну демографску структуру и друге структурне проблеме. Фокус овог рада је анализа различитих облика управљања на регионалном нивоу, а у циљу препознавања најприкладније форме по питању ублажавања неповољних демографских трендова и структура. Анализа је прилагођена простору Зајечарског округа, који је одабран за студију случаја на основу опште демографске угрожености овог простора. Овај рад на почетку приказује стање демографских токова, насеобинске и јавно-социјалне организације простора Зајечарског округа. У даљој анализи нагласак је стављен на избор регионалног нивоа управљања у циљу ублажавања или евентуалног превазилажења поменутих проблема кроз компарацију различитих регионалних нивоа: руралних региона, НСТЈ 3 просторних јединица и функционално-урбаног подручја и примера добре праксе забележене у Немачкој, која је према мишљењу аутора, најпримеренији модел просторне организације, уз уважавање регионалних специфичности. Напоследку су дате препоруке на тему ублажавања процеса депопулације и њених последица у руралним подручјима.

КЉУЧНЕ РЕЧИ: демографски пад, регионални ниво, рурална подручја, просторна организација, јавне службе

THE CHANGES IN NATURAL MOVEMENT OF POPULATION IN THE CITY OF EAST SARAJEVO

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ABSTRACT: One of the main demographic problems of the Republic of Srpska is a negative natural increase which has been recorded from 2002 onwards. The same problem has been registered in the city of East Sarajevo, so this trend and changes in the natural movement of the population of the city will be observed in future work and research. The components of natural movement were observed for the period from 1997 to 2012 because the official statistical records refer to that period. The aim of this paper was to analyze the basic components of natural increase, the birth rate, mortality rate and natural increase in East Sarajevo, and to determine if there is homogeneity in this respect, i.e. whether all municipalities of the city have the same trend when natural movement of population is concerned. This paper will also show how local authorities and local communities deal with certain demographic problems. Does the City Council implements appropriate measures of population policy and can the city of East Sarajevo expect 'a brighter future'?

KEYWORDS: the birth rate, mortality rate, natural increase, the city of East Sarajevo

INTRODUCTION

The City of East Sarajevo is situated in the central and eastern part of Bosnia and Herzegovina, that is, the eastern part of Republic of Srpska. The city is comprised of six municipalities: East New Sarajevo, East Ilidža, Pale, Sokolac, Trnovo and East Old Town. The territory of East Sarajevo includes two parts: a greater northern part (1,380.61 km²) and a far smaller southern part (45.16 km²).

After 22 years, in October 2013, the census took place in Bosnia and Herzegovina, so that for now the preliminary census data are available for demographic research purposes. According to the 1991 Census, the present territory of East Sarajevo was populated by 44,430 inhabitants¹. According to the same census, the City of Sarajevo had population of 527,049 inhabitants, so that only 8.43% of the inhabitants of Sarajevo belonged to the present territory of East Sarajevo, excluding Sokolac municipality.

Numerous important social and economic changes occurred during the war (1992–1995) and affected the demographic changes and their precise assessment. It is the war migrations, in particular, which caused such demographic situation on the territory of East Sarajevo. In 1996, 48.3% of the city population was categorized as refugees or displaced persons, and in 2001 this percentage was 32.9%. War migrations influenced gross reproduction rate and decline in natural increase rate, as well as disruption in gender, age, ethnic, education and economic structure of the city population. However, the migration balance of internal migration in East Sarajevo in the last five years has been positive: the population inflow has been greater than the population outflow. In 2013, according to the preliminary census results [Census of population, households and dwellings in BH, 2013], the City of East Sarajevo has the population of 64,966 i.e. 20,536 persons more than in the beginning of the city establishment which means that in the last 20 years the number of persons on the territory of East Sarajevo increased by 46.3%.

Since 1996, one of the biggest demographic problems of the city has been negative natural increase. The problem of low birth rate has not been adequately tackled either by the local or state authorities in the sense that no adequate measures have been undertaken as a way of solving this problem [Lukić 2011].

COMPONENTS OF NATURAL MOVEMENT OF THE CITY OF EAST SARAJEVO

The term natural population movement presupposes presence of biological, as well as natural factors and processes in this movement. However, natural movement does not depend only on biological occurrences, but social, economical, cultural, psychological and other factors, as well [Nejašmić 2005].

The City of East Sarajevo is confronted with many demographical problems such as birth rate decrease, depopulation process, dying villages, aging of population, youth emigration, but the biggest problem is recurrent negative natural increase. These demographic problems are at the same time the problems of the entire region of Republic of Srpska, which certainly has a range of negative consequences.

By analyzing the Table 1, it is noticeable that the population growth in the City of East Sarajevo has been constantly negative over the last seventeen years. In the time period between 1996 and 2012, the population growth changed from -63 to -263, which is the lowest population growth recorded for

¹ Considering the problem of bordering between settlements, the number of population in East Sarajevo territory for 1991 is imprecise, approximately determined population number.

Table 1. *Absolute number of live births, deaths and population growth of the City of East Sarajevo within the period between 1996–2012*

| y. | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <i>l.b.</i> | 267 | 599 | 461 | 579 | 611 | 509 | 548 | 502 | 519 | 498 | 512 | 498 | 514 | 546 | 527 | 514 | 554 |
| <i>d.</i> | 330 | 589 | 690 | 659 | 810 | 678 | 727 | 742 | 682 | 760 | 731 | 745 | 752 | 783 | 739 | 742 | 790 |
| <i>p.g.</i> | -63 | -1 | -230 | -80 | -199 | -169 | -179 | -240 | -163 | -262 | -219 | -247 | -238 | -237 | -212 | -231 | -263 |

Source: Demographic statistics. Statistical bulletin no: 4, 10, 14, 15 and 16

2012. Furthermore, the year 2005 also had low population growth of -262, and the year 2007 had -247. It should be pointed out that only Sokolac municipality had positive population growth (17) in 2000, while other municipalities of the City of East Sarajevo have constantly had higher mortality than birth rates.

In 2012, only 3 out of a total of 62 municipalities had positive population growth rate in Republic of Srpska. The municipalities of the City of East Sarajevo are among them, with the rate below the average state rate of natural increase, which is -3.0‰ for Republic of Srpska.

Birth rate in East Sarajevo is on the increase when compared to 1996. The number of births per year fluctuated within this 17 year period from 267 in 1996 to 611 in 2000, but in all succeeding years, the smaller number of births was recorded in comparison to 2000. In the period 1996–2012, 8,758 children were born in the City, which is, on average, 515 per year. In 2012, compared to 1996, the number of births increased by 107.5%, but compared to 2000, 9.3% less children were born in 2012.

In the analyzed period, Pale municipality constantly had the highest number of births. It was opposite in Trnovo municipality where only 146 children were born in the 17 year period. They are followed by Old City municipality where only 171 children were born in the same period.

Table 2 shows live births in the City according to the maternal age in the period between 2003 and 2012. This analysis shows that in 2003, most children were given birth to by mothers between 25–29 years of age; mothers between 20–24 years of age are in the second place, and mothers whose age ranges between 30–34 are in the third place. In 2012, most children were still being born by mothers whose age ranges between 25–29. However, some changes have occurred with respect to the beginning of the observed period, so now, mothers between 30–34 years of age hold the second place and mothers between 20–24 years of age are in the third place.

The same trend is noticeable on the level of entire Republic of Srpska where order of the births according to maternal age is the same. However, 14 years ago in Republic of Srpska most women gave birth to children during the period between 20–24 years of age (there is no available information whether the same change occurred in East Sarajevo, but it can be assumed that the same tendency was present there as well), which serves as confirmation that birth border moves, that younger population enters the marriage later, and consequently, the motherhood comes later, as well.

Table 2. *Live births according to the maternal age in the period from 2003–2012*

| year/age | <15 | 15–19 | 20–24 | 25–29 | 30–34 | 35–39 | 40–44 | 45–49 | unknown |
|----------|-----|-------|-------|-------|-------|-------|-------|-------|---------|
| 2003 | – | 26 | 158 | 161 | 90 | 49 | 10 | – | 7 |
| 2004 | 1 | 21 | 184 | 167 | 92 | 41 | 11 | 1 | 1 |
| 2005 | – | 24 | 151 | 168 | 98 | 40 | 14 | – | 3 |
| 2006 | – | 23 | 125 | 214 | 94 | 41 | 8 | 2 | 5 |
| 2007 | – | 21 | 129 | 179 | 107 | 46 | 8 | – | 8 |
| 2008 | – | 20 | 104 | 215 | 126 | 44 | 2 | 1 | 2 |
| 2009 | – | 15 | 96 | 236 | 154 | 35 | 7 | – | 2 |
| 2010 | – | 12 | 92 | 216 | 151 | 46 | 8 | – | – |
| 2011 | – | 12 | 105 | 215 | 125 | 46 | 8 | – | – |
| 2012 | – | 19 | 75 | 208 | 183 | 55 | 13 | 1 | – |

Source: Republic of Srpska Institute of Statistics

Table 3. *Live births according to birth order in the period from 2003–2012*

| year/order of birth | first | second | third | fourth | fifth + | unknown | total |
|---------------------|-------|--------|-------|--------|---------|---------|-------|
| 2003 | 209 | 166 | 45 | 10 | 1 | 70 | 501 |
| 2004 | 237 | 163 | 52 | 6 | – | 61 | 519 |
| 2005 | 225 | 163 | 46 | 6 | 2 | 56 | 498 |
| 2006 | 235 | 178 | 40 | 8 | 2 | 49 | 512 |
| 2007 | 230 | 169 | 47 | 2 | 4 | 46 | 498 |
| 2008 | 221 | 187 | 47 | 7 | – | 52 | 514 |
| 2009 | 240 | 205 | 43 | 1 | 1 | 55 | 545 |
| 2010 | 219 | 201 | 50 | 3 | 2 | 50 | 525 |
| 2011 | 265 | 198 | 40 | 7 | 3 | 1 | 511 |
| 2012 | 279 | 213 | 53 | 6 | 3 | – | 554 |

Source: Republic of Srpska Institute of Statistics

Through the analyzed period, the number of the firstborn was constantly the highest, followed by the second born, and then by the third born (Table 3). The number of firstborn in the City of East Sarajevo in the period between 2003–2012 increased by 33.5%; the increase was present for the second born, as well, of 28.3%, while the third born increased by 17.8%. The biggest number of the firstborn, second born and third born children was recorded in 2012, while the most fourth born were recorded in 2003.

In 2012, out of the total number of babies born according to the birth order, 50.4% of the cases were the firstborn, 38.4% were the second born, and only 11.2% were third born, fourth born, and fifth born jointly (out of which the fourth and fifth born accounted for 1.6%). In this respect, the City followed

the same trend as that of the republic, having the same birth trend according to the birth order in 2012, but the number of firstborn, second and third born was decreasing.

By analyzing Table 1, it is noticeable that the number of deaths in East Sarajevo was on the increase in the observed 17 year period. In the period between 1996–2012, 11,949 people died in the City, which is, on average, 702 per year. In the period between 1996–2012, the number of deaths per year increased from 330 to 790 deceased in 2012, which is 139.4%. All these years have higher number of deaths compared to the year 1996, but in comparison to 2012, the number of deaths is smaller in all succeeding years.

The highest number of deaths is continually in Pale municipality, where 286 deaths were recorded in 2000. After Pale, there is Trnovo municipality where 353 people died in a 16 year period, and Old City municipality with 417 deaths. Although these municipalities have low mortality, they also have low population and smaller birth rate, so the final result is still depopulation.

'The main reason for increased mortality rate in Republic of Srpska is aging of the population, because there is a constant increase in the number of older population groups, and decrease in younger population' [Marinković 2014: 29].

Charts 1 and 2. *Ratio between total number of deaths and number of deaths of those aged over 70 in the period between 2003–2012, and number of deaths according to gender and age for 2012*

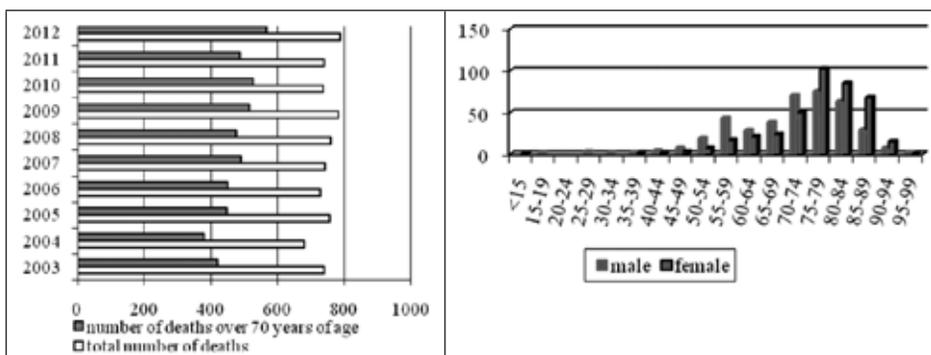


Chart 1 shows that in the period between 2003–2012, the number of deaths of those aged over 70 increased so, in 2003, the percentage of deaths of those aged over 70 was 56.6%, and in 2012 it was 71.5% (the increase of 14.9%). If we look at the distribution of deaths of those aged over 70, according to gender, it is noticeable that mortality in females is higher than mortality in males. In the observed 10 year period, this percentage increased and it was 15.3% for women (in 2012, 80.7% out of total number of deaths in females who were over 70), and 13.9% for men (in 2012, 62.6% of total number of deaths in males who were over 70). In the City of East Sarajevo, mortality of male population was higher than female mortality, except in 2010 and 2012.

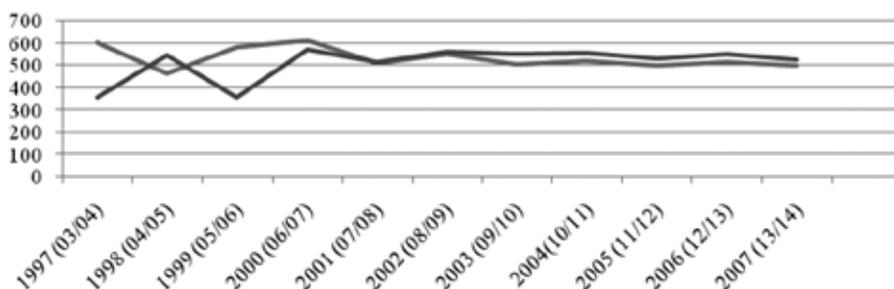
In 2012, the mortality of younger men was higher (Chart 2). Mortality of males under 75 years of age was higher than female mortality of the same age, so out of total number of deaths, 27.3% was mortality of males under 75, and 16% was female mortality. In the age group of those over 75, the number of female deaths was higher, so out of a total number of deaths of those aged over 75 the deaths of females and males accounted for 34.4 and 22.3%, respectively.

The highest percentage of women (25.6%) and men (19.1%) who died in 2012 were in the age between 75–79, followed by women from 80–84 years of age (21.4%), and men from 70 to 74 years of age (17.9%). The highest number of deaths in 2012 was caused by blood circulation disorders (55.7%), tumors (19.7%), and diseases of the glands of internal secretion, diet and metabolism (6.6%) [Republic of Srpska Institute of Statistics].

The key indicator of mortality is the infant mortality, but it is also the indicator of general standard of living and health conditions in certain area. By analyzing infant mortality rate in the City of East Sarajevo, it can be concluded that it was low, although unequal, in the period of last 10 years. The years of 1999, 2000, 2004 and 2006 had zero infant mortality rates, and the highest rate was in 2009 when it was as high as 7.3‰. In 2012, infant mortality rate in the city was 1.8‰, which was 1.9‰ less compared to the average of Republic of Srpska [Demographic statistics. Statistical bulletin no: 4, 10, 14, 15 and 16].

Important demographic indicator which considerably influences the population dynamics is the number of marriages and divorces. In the period between 2003–2012, in the City of East Sarajevo, the number of marriages diminished by 25.2%, and number of divorces increased by 80% in 2012 compared to 2003. In the observed 10 year period, 3,116 marriages were entered into, or 311 per year, on average. Most marriages were entered into in 2007 (369), and least in 2012 (249). The total number of divorced marriages for the same period was 103, or 10 marriages per year, on average. The year with the least divorced marriages was 2008, and 2010 was the year with the most divorced marriages [Republic of Srpska Institute of Statistics].

Chart 3. *Ratio between the number of births and the enrolled in the first grade in the City of East Sarajevo*



The fact is that in Republic of Srpska the number of pupils has been in decrease which is the consequence of emigration of considerable number of reproductive and vital population. The decrease of enrolled pupils in the first grade, naturally, is reflected on the constant decrease of the total number of school population [Pašalić 2008].

The City of East Sarajevo is, in a certain sense, isolated case when compared to the rest of Republic of Srpska. Some oscillations were recorded before the school year 2007/2008, but they were a result of unstable demographic status in war and post-war period. The ratio between number of births and enrolled pupils in school year 2003/2004 fell to 59.6%, and in the following school year 2004/2005, the number increased to 118.2%. Similar ratios were evident in the following two years: 61.5% (2005/2006) and 93.3% (2006/2007) [Pašalić i Dragosavljević 2007].

However, the situation changed as of 2007/2008 school year. The number of births was smaller but the ratio between the numbers of births and the enrolled was on the increase. The ratio between the numbers of births and the enrolled in the period from 2007/2008–2013/2014 school years exceeds the value 100. In the 2009/2010 school year, the ratio between the number of births and the enrolled was 109.2%, and has been in mild decline ever since, so that in 2013/2014 this ratio is 105%. This is a consequence of the population inflow, that is, positive migration rate recorded in the last five years [Basic Education. Statistical bulletin no: 8, 9, 10, 11, 12, 13 and 14].

MEASURES OF THE POPULATION POLICY TO BOOST THE BIRTHRATE

Republic of Srpska does not have a developed unique population policy but, in the last decade, certain institutions carried out different activities as means of stimulating the population policy measures. The Council for Demographic Politics, Department for Family Issues, Council for Children of Republic of Srpska, and Board for Reproductive Health and Demography were established for that purpose [Marinković 2014].

The institutions of Republic of Srpska have been taking some measures to stimulate the birthrate by being involved in the field of work and work relations, health care, children, parents and family protection, and social care.

The most evident are pro-natal measures of the Public Fond for Children Protection: child support, mother support, refund of net compensation during maternity leave, help with infant equipment, gifts for third-born babies, and so on [Pašalić *et al.* 2006].

'Need to activate the local self-government in the population policy originates from the fact that none of the state population policies can give appropriate answer to all needs and expectations of the population, or it can express specificity of living in each environment. Population policy that endeavors to be successful and comprehensive must also be supplemented by measures of local self-government... Local self-government is the most important factor in the society that can recognize the needs of specific parents in the best possible

way and within its boundaries and competences, activate certain mechanisms that can satisfy those needs accordingly' [Marinković 2014: 148].

The City of East Sarajevo does not have a single document, book of rules or decision regarding the population policy issues. Every municipality is, individually, responsible for the measures of population policy, and commissions and book of rules relating to the population politics are brought on the municipality level.

Pale municipality is among the city municipalities that does not realize the urgency of the problem of insufficient births and multiannual negative population growth. The reason could be that this municipality is the one with the highest population number and multiannual positive migration rate.

Pale municipality does not have any commission that refers to the population policy; instead, there is an administrative worker in charge of these issues. Its budget does not foresee any financial means for local population policies. There is a marriage fee and not any financial help for marriages. It does not provide any help for families with many children; the only privilege for families with three and more children is that the third child has free stay in state kindergarten [Information provided by Pale municipality, personal communication, August 2014].

The municipality of East New Sarajevo understood the seriousness of this problem. In this municipality, there is a commission that brought a Book of Rules on Distribution of Financial Means for Support to Pro-natal Policy, and the budget provides 25,000 KM (in 2014) for pro-natal policy. The municipality of East New Sarajevo applies the following measures: co-finances the expenses of one procedure of assisted reproduction (artificial insemination) in the amount of 2,000 KM; every new born baby receives 100 KM as a financial support [Official Gazette of the City of East Sarajevo, 2014].

Trnovo municipality has also regulated the measures of population policy by adopting the Decision for 2014. Population policy measures in this municipality include: 1,000 KM of support for every marriage (spouses have to fulfill certain conditions); 250 KM is given for every first and second born baby; 350 KM is given for every third and fourth baby [Official Gazette of the City of East Sarajevo, 2014].

East Ilidža municipality has not adopted any special strategy for implementing the population policy measures, except for some activities relating to the employment of young people in order to improve the conditions for starting a family, defined in the Development Strategy of this municipality. Social Care Center of East Ilidža municipality provides 250 KM for every birth, and the Union of workers provides 100 KM from their own budget for the workers with a newborn. In 2009, the municipality administered education through some projects in order to boost birthrate and healthy life [Information provided by the municipality of East Ilidža, personal communication, August 2014]

In Old City municipality, one of the least developed municipalities of the City, and also the one with the least population number, certain population policy measures are regulated by the Decision on Determining Criteria and Users of One-Time Basis Financial Help for Marriages and Parenthood. The

municipality provides the following support: 500 KM for marriage; 200 KM for the first and second child; 300 KM for the third child [Official Gazette of the City of East Sarajevo, 2014].

CONCLUSION

The City of East Sarajevo is facing a serious problem of natural depopulation. Ever since 1996, with certain oscillations though, the natural increase has had negative value, which is the case in all municipalities of the City. Decrease in the number of births and increase in the number of deaths from 2000 onwards has been the result of bio-vital, bio-dynamic and migration flows.

Although some institutions of Republic of Srpska are responsible for the population policy and implementation of certain measures in order to boost the birthrate, understanding of the demographic problem by local communities, and their intentions to solve it, is also very important. Over the past 2 or 3 years, this problem has been confronted more seriously by the City of East Sarajevo in the sense that some municipalities have established commissions for population policy and adopted decisions which regulate certain issues relating to pro-natal population policy. However, the awareness of the problem of insufficient birth is not equally developed in all municipalities of the City; for instance, the municipalities of East Ilidža and Pale have not implemented a single measure of population policy to solve the problem, while two smallest and underdeveloped municipalities (Trnovo and East Old City) provide the most financial support for marriages and births.

Still, in order to reach the goal of population policy of Republic of Srpska, which is to realize the fertility rate of 2.1 children per mother, that is to realize the level of stationed population, it is necessary to approach the problem of population policy much more seriously. Bright demographic future can be expected only with well-devised and enforced pro-natal measures implemented at both state and local levels. Such measures should include better stimulation of motherhood, care for mother and child health, but also the quality of life in general, as well as economic and social conditions in order to diminish immigration of young and educated population. The education is of equal importance if one wishes to raise awareness among the population about areas of reproductive health and family planning.

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ОРИГИНАЛНИ НАУЧНИ РАД

ПРОМЕНЕ У ПРИРОДНОМ КРЕТАЊУ СТАНОВНИШТВА
ГРАДА ИСТОЧНО САРАЈЕВО

МАРИАНА ЛУКИЋ ТАНОВИЋ

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САЖЕТАК: Један од основних демографских проблема Републике Српске је негативан природни прираштај, који се бележи од 2002. године. Исти проблем уочен је и у граду Источно Сарајево, па ће се кроз рад и истраживање пратити тренд и промене у природном кретању становништва града. Компоненте природног кретања посматране су за период од 1997. до 2012. године, с обзиром да постоји званична статистичка евиденција за тај период.

Циљ рада је да се анализирају основне компоненте природног кретања становништва, наталитет, морталитет и природни прираштај у граду Источно Сарајево и да се утврди да ли је простор хомоген по том питању, односно да ли све општине града имају исти тренд када се говори о природном кретању становништва. Такође, жели се указати и на то како се локалне власти и локална заједница сусрећу са одређеним демографским проблемима и на који начин их решавају; да ли општине града спроводе одговарајуће мере популационе политике и да ли град Источно Сарајево може очекивати „светлију будућност“?

КЉУЧНЕ РЕЧИ: наталитет, морталитет, природни прираштај, град Источно Сарајево

UDC 314.145(498)
UDC 316.32(498)
DOI: 10.2298/ZMSDN1448803S
REVIEW SCIENTIFIC PAPER

MAJOR DEMOGRAPHIC CHANGES IN THE DYNAMIC AND STRUCTURE OF THE ROMANIAN POPULATION AFTER THE FALL OF THE COMMUNISM

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ABSTRACT: The post-1989 political changes in Romania had a major and at times irreversible impact on the dynamics and structure of the population. The most significant change was a drastic population decrease of over 3 million people within 22 years. Important deviations were also registered in economic sectors, resulting today in a process of artificialization of the population share in the tertiary sector. Urban population increased slightly from around 52% in 1989 to 53.4% in 2012, following the artificial conversion of a significant number of villages into the category of urban areas. There were no significant changes in ethnic structure, except for the Roma population where, due to the self-identification census, 621,573 people declared themselves Roma (2011) as compared to around 300,000 in 1988. The largest minority group, the Hungarians, comprises stable 6.6% of the population. Around 2 million of unemployed people were registered during the last census in addition to an increased number of retired people. This paper examines some of the major demographic changes in the dynamics and structure of the Romanian population influenced by a number of political, socio-economic, cultural and environmental factors. It deals with analytic and moral questions arising from an in-depth overview of the aforementioned

transition period and argues that political unbalances are clear indicators of demographic changes and disturbances in national and regional economic development.

KEYWORDS: Romania, post-communism, demographic changes

INTRODUCTION

Following the fall of communism in Eastern Europe, Romania went through rapid economic changes driven by a cumbersome process of restitution of the private property expropriated during nationalization. This political-economic process reversed the growth trends specific to the previous period (1966–1989) and witnessed dramatic changes in the dynamic and structure of the last century's national demographics (1996–2014) which resulted in much lower birthrates, pro-abortion policies, and outmigration in search for employment. Thus, Romania's population declined considerably over the last 25 years, from 22,810,035 inhabitants in 1992 to 19,603,879 inhabitants in 2014 [National Institute of Statistics] (Fig. 1).

The demographic decline has been accompanied with dramatic structural changes consisting of rapid growth of the elderly population (over 65 years of age) and reduction of the demographically young population (under 14 years of age), the emergence and plummeting of unemployment rates as major socio-economic phenomenon, artificial creation of a tertiary economic sector, and a continuous change of the relationship between rural and urban population with an increase of the latter from 50% in 1985 to 53.8% at present [Vert 1995; Trebici 1996; Mureşan 1999].

METHODS

As methodological support the authors used official statistical information taken from the Statistical Yearbooks elaborated by the National Institute of Statistics for each available census as well as some unofficial documents such as selected unofficial estimates from media, NGOs, municipalities, and Centers for Social Work. Viewpoints of the authors support the current literature whereas additional charts and a map created in ArcGIS graphically represent the structure and evolution of the population within the aforementioned period of time.

RESULTS AND ANALYSIS

In 1966, the communist regime in Bucharest adopted Decree 770 of October 1st 1966 [Flister 2013] that officially banned abortions and regulated the termination of a pregnancy. Article 1 of the Decree provided that *an abortion is forbidden*. Exceptions to this provision were few and very strict. The rationale behind this policy was attributed to slow population growth as compared to the economic progress and the need for labor.

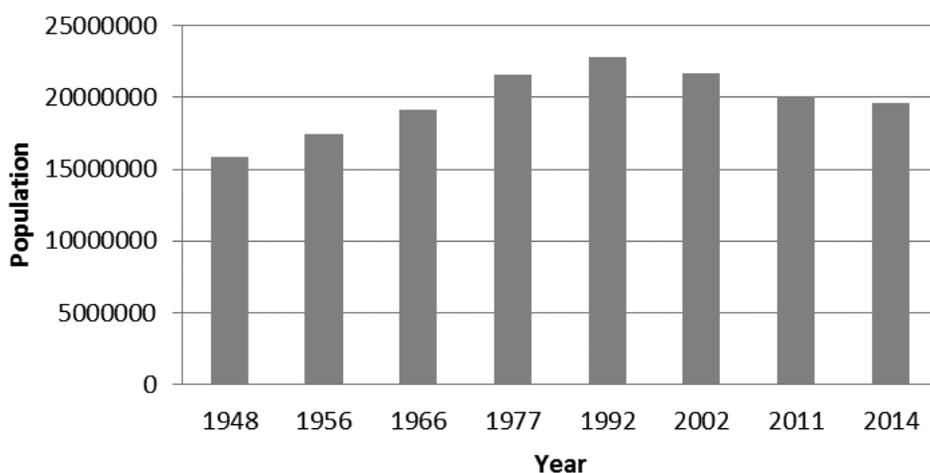
Thus, in just one year after the law was introduced (between 1969 and 1970) the number of births doubled (from 234,000 to 450,000). A real witch-hunt started against physicians and specialized medical staff. Numerous media

headlines denounced the persons involved in abortions. The means of implementing the abortion law was especially brutal in rural areas, resulting in a high mortality rate among pregnant women, especially among the youngest ones. Militia surveys among women who may have undergone clandestine abortion were common ways to identify the abortion routes. Children born in 1969, 1970 and 1971 as the result of this Decree were called “decreței” or Children of the Decree [Kligman 1998; Lataianu 2001; Iepan 2004]. Many of them, unwanted by their mothers, were born with physical deformities and mental disabilities, thus increasing the number of people with disabilities nationwide. Consequently, from a birth rate of 14.3 per thousand, the nation reached a rate of 24.3 per thousand. Hence, despite such legislative efforts, the expected levels of national population have not been reached, especially because of inadequate economic measures for mothers and families in general.

Romanian population increased systematically from 1859 to 1982. Two major factors contributed to this trend: (1) peasant family tradition of having many children (up to the Second World War) and, (2) legislative measures (largely) imposed during the communist period.

Just to name a few statistics: Romania’s population in 1966 included 19,103,163 inhabitants, and the year after the aforementioned Decree the population reached around 20,000,000. From 1969 to 1990 (21 years) the population increased by over 300,000 inhabitants, reaching 23,206,720 inhabitants which was the all-time highest population count for the nation. Since 1992, when the population was 22,810,035, until today Romania witnessed alarming population decline (19,603,870 inhabitants by 2014). In absolute values, considering the highest and the lowest between 1992 (the peak) and present (2014), Romania lost a demographic corpus of 3,602,850 people.

Fig. 1. Numerical evolution of Romania’s population



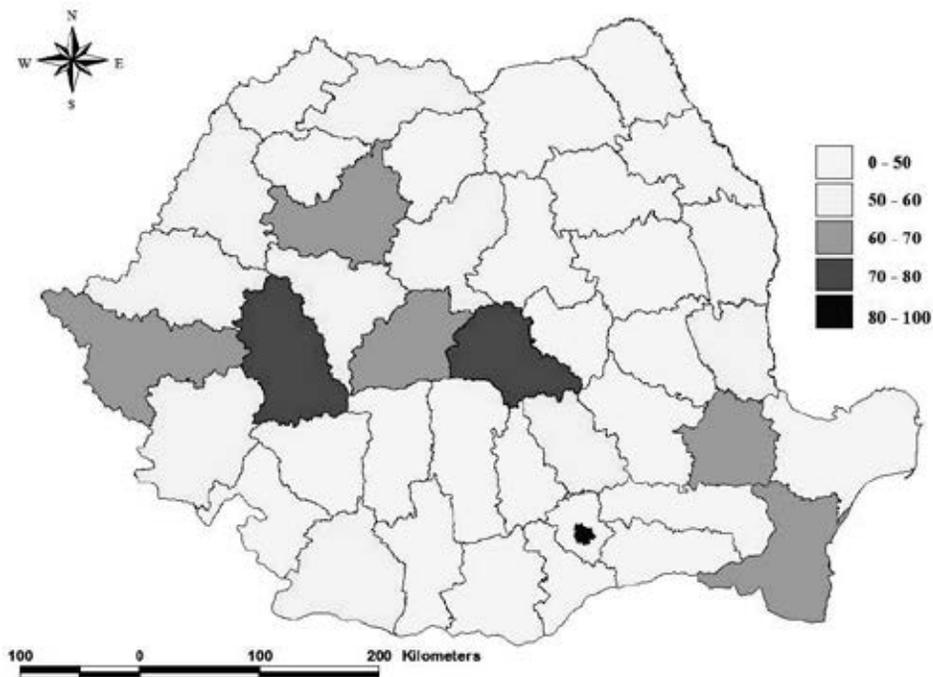
Source: Romanian National Institute of Statistics

After 1989, the process of counterurbanization took place as a consequence of widespread industrial collapse and increasing costs of urban living, which had a major impact on the Romanian demographics. Thus, from 54.3% of urban population share in 1992, 10 years later (in 2002) the urban population share decreased to 52.7%. Romania went through a regrettable anti-historical process in relation to the modern world, where urban population rose and reached values of 70%–80%. Today, as a result of many disputed policies (e.g. the conversion of rural settlements, lacking minimal urban infrastructure, into the urban category) the country managed to artificially reach 53.96% share of the urban population, similar to that of 1992 (Fig. 2).

In terms of the structure of economic sectors, as mentioned before, we are witnessing a process of artificial creation of a tertiary sector of the economy, amid the invasion of foreign products of any kind, from industrial to farm goods, in the Romanian market. Today in Romania “almost no one produces, but everybody sells!” [Surd 2001].

In 1966, the primary sector of the economy employed 57.1% of the working population, 24.6% was employed in the secondary sector (industry and mining), and only 18.3% worked in the tertiary sector. Today, less than 30% of the working population works in the primary sector (Table 1).

Fig. 2. *Urbanized areas of Romania (2014)*



Source: Romanian National Institute of Statistics

Table 1. *Romanian population structure by economic sectors from 1966–2014*

| Year | Primary Sector | Secondary Sector | Tertiary sector |
|------|----------------|------------------|-----------------|
| 1966 | 57.1 | 24.6 | 18.3 |
| 1977 | 36.8 | 38.8 | 24.4 |
| 1992 | 23.0 | 44.6 | 22.4 |
| 1997 | 37.5 | 32.0 | 30.5 |
| 2011 | 24.1 | 40.7 | 35.6 |

Source: Romanian National Institute of Statistics

In terms of ethnic composition, there were no dramatic changes, except for Roma (Gypsy) population whose number increased. The Romanian ethnic population remained at around the same level of 88%–90%, dominating in both absolute and relative aspects (in percentage) in 39 of the 41 Nomenclature of Territorial Units for Statistics (NUTS) level 3 administrative units of the country as well as in Bucharest.

According to 1992 Population Census, Roma population numbered 401,087 (or 1.8% of the population of Romania). In 2002 (the following census), the population of Roma people reached 535,250 persons (or 2.5%). The unofficial leader of this ethnic group, Senator Madalin Voicu, in an interview for Antena 3 Television estimated the Roma population to be between 700,000 and 1.3 million persons. In the 2011 census, the number of Roma people doubled, reaching 621,573 (or 3.3% of the population), of which 390,303 (or 62%) live in rural areas. Almost 35% of the Roma population is concentrated in five counties (Mures – 46,637; Bihor – 33,697; Dâmbovița – 26,281; Dolj – 28,911 and Călărași – 22,974). In Mures County, a number of the Roma population members declared themselves Hungarian, whereas sociological survey results suggested that two thirds of the Roma declared themselves Romanian being ashamed of their Roma ethnicity.

The largest minority group are the Hungarians with 1,227,600 people (Romanian Census, 2011), which represents 6.5% of the population. The entire Székely population in eastern Transylvania, estimated at 670,000 people, declared and considered themselves Hungarians. In the 2002 census, the Hungarian population comprised 1,434,377 people, dropping in 10 years by nearly 200,000 (194,061) persons, while Roma population increased during this period by 83,867 persons. In terms of numbers, the Hungarian population dominates two counties – Harghita (85.21%) and Covasna (73.74%). These counties, along with Mures County, are home to more than 50% of the Hungarian population in Transylvania.

The German ethnic population suffered the sharpest decline in the last 50 years. Today, there are 36,000 members of German population comparing with 382,595 people in 1966, which is a decrease of more than 10 times, with some ongoing weak signals of growth. Among other ethnic groups with over 20,000 people we could mention the Ukrainians (49,547 people) and Turks (20,179 people), followed by other ethnicities with less than 20,000 people, the Russians Lipovans (189,710) and Tatars (18,143).

Table 2. *Counties in Romania with significant shares of Hungarian population in 2011*

| County | Number | Percent |
|-----------|---------|---------|
| Harghita | 257,707 | 85.21 |
| Covasna | 150,468 | 73.74 |
| Mureş | 200,858 | 38.09 |
| Bihor | 138,213 | 34.65 |
| Satu Mare | 112,588 | 25.27 |
| Sălaj | 50,177 | 23.35 |
| Cluj | 103,591 | 15.93 |

Source: Romanian National Institute of Statistics

Table 3. *Ethnic structure of Romania from 1966–2011*

| Year | Total population | Romanians | Hungarians | Roma | Germans | Jewish | Other ethnicities |
|------|------------------|---------------------|-------------------|-----------------|-----------------|----------------|-------------------|
| 1966 | 19,103,163 | 16,746,510 87.6% | 1,619,592 8.4% | 64,197 0.3% | 382,595 2% | 42,888 0.2% | 247,381 1.2% |
| 1977 | 21,599,910 | 18,999,565 88.1% | 1,713,928 7.9% | 227,398 1.8% | 359,109 1.6% | 24,667 0.1% | 235,243 1.2% |
| 1992 | 22,760,449 | 20,347,841 89.4% | 1,620,199 7.1% | 409,723 1.8% | 119,436 0.5% | 9,107 0.04% | 249,004 1.2% |
| 2011 | 19,043,767 | 16,792,900 88.2% | 1,227,600 6.5% | 621,600 3.3% | 360,000 0.1% | 3,271 0.01% | 395,667 2.0% |

Source: Romanian National Institute of Statistics

The ethnic structure correlates with the confessional structure of the population in Romania. Hence, the confessional structure did not suffer significant changes during the studied period if we do not take into account overall national negative population growth. Thus, the Orthodox population share is 86.5% (2011) as compared to 86.8% in 1992, the faith being specific to the majority Romanian population. The percent of the Roman Catholic and Reformed denominations members, belonging mostly to the Hungarian population, reduced to 8.5% and 7.6% respectively. The Pentecostal denomination nearly doubled, from 1% in 1992 to 1.9% in 2011.

The current critical issues are, among others, low income, poverty-related diseases, school dropouts, corruption and poor performance of the authorities. For example, in the state institutions, top monthly incomes are 200 times higher than the lowest monthly earnings. The difference between agricultural pensions of 350 lei/month (about 100 USD) and the earnings of those working for the autonomous state-owned agencies (gas, electricity, urban services) and other areas such as justice, where monthly incomes amount to 20,000 or even 40,000–50,000 lei, is enormous.

Lack of an adequate family environment in the absence of parents gone abroad to seek employment in western and southern Europe, has led to increased number of student dropouts in the primary and secondary school. As a result of widespread economic collapse, it is estimated that at present around three million Romanians live and work abroad. With the money earned, in addition to supporting their families, permanent or temporary migrants build “McMansions” [Baker *et al.* 2013], many of which are empty all year round except for some winter holidays. Last but not least, many universities in Romania have adopted capitalist business models and turned into *diploma factories* [The Economist 2012] instead of being committed to forming future intellectual elites through quality education. Therefore, there is an immediate need for development of higher education system based on the local requirements of the communities and for the reconsideration of the role of education and professional and technical training [Andrei *et al.* 2007].

CONCLUSIONS

In conclusion, following the change of policy frameworks after December 1989, Romania is experiencing the worst demographic crisis in its contemporary history. Steep numerical decline, poverty, unemployment, poverty-related diseases, high rate of crime, corruption, and poor performance in the field of education affect all existential aspects of the Romanian society. Every passing hour we lose 37 Romanians [National Institute of Statistics, 2014]! The population projections for 2012 foresaw population loss by about 1 million people [McKinsey Global Institute – Urban World 1.1]. Such accelerated demographic changes should be considered more seriously by the politicians because they caused and are causing political, educational, social, mental, and economic unbalances that may have drastic (and possibly irreversible) impact on the future well-being of our citizens.

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ПРЕГЛЕДНИ НАУЧНИ РАД

ГЛАВНЕ ДЕМОГРАФСКЕ ПРОМЕНЕ У ДИНАМИЦИ И СТРУКТУРИ
РУМУНСКОГ СТАНОВНИШТВА НАКОН ПАДА КОМУНИЗМА

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САЖЕТАК: Политичке промене у Румунији после 1989. имале су велики и понекад неповратан утицај на динамику и структуру становништва. Најзначајнија промена је драстично смањење популације од преко 3 милиона људи током 22 године. Важна одступања регистрована су у економском сектору, што је данас резултат вештачким учешћем становништва у терцијарном сектору. Градско становништво незнатно је повећано са око 52% у 1989. на 53,4% у 2012, након вештачког пребацивања значајног броја села у категорију урбаних подручја. Није било значајних промена у етничкој структури, осим када је у питању ромска популација где се на попису 621.573 људи изјаснило као Роми (2011) у поређењу са око 300.000 у 1988. години. Највећа мањинска група, Мађари, чини стабилних 6,6% становништва. Поред повећаног броја пензионера, током последњег пописа регистровано је око

2 милиона незапослених људи. Овај рад испитује неке веће демографске промене у динамици и структури румунског становништва на које је утицало више политичких, социо-економских, културних и еколошких фактора. Рад се бави аналитичким и моралним питањима која произилазе из опширног приказа наведеног периода транзиције и тврди да су политичке неуравнотежености јасни показатељи демографских промена и поремећаја у националном и регионалном економском развоју.

КЉУЧНЕ РЕЧИ: Румунија, посткомунизам, демографске промене

LUCRARE ȘTIINȚIFICĂ

SCHIMBĂRILE DEMOGRAFICE PRINCIPALE ÎN DINAMICA ȘI STRUCTURA POPULAȚIEI ROMÂNE ÎN URMA CĂDERII COMUNISMULUI

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REZUMAT: Schimbările politice în România în urma anului 1989 au influențat mult asupra dinamicii și structurii populației. Cea mai importantă schimbare este micșorarea drastică a populației la 3 milioane persoane în curs de 22 de ani. Digresiuni importante sînt înregistrate în sectorul economic, cece a influențat azi la participarea artificială în sectorul terțial. Populația orașelor s-a majorat puțin, aproximativ cu 52% din anul 1989 la 53,4% în anul 2012, în urma treceri artificiale a unor sate în categoria regiunilor urbane. Nu au fost schimbări mari în structura etnică, cu excepția populației romilor care la recensămîntul populației 621.573 persoane s-au declarat romi (2011), în comparație cu 300.000 în anul 1988. Cea mai numeroasă populație de etnie maghiară este stabilă 6,6%.

Pe lîngă numărul majorat al pensionarilor, la ultimul recensămînt au fost înregistrați 2 milioane persoane neangajate. Lucrarea de față examinează schimbările demografice în dinamica și structura populației la care au influențat mai mulți factori politici, culturali și ecologici. Lucrarea se ocupă cu problemele analitice și morale care rezultă din prezentarea amplă în perioada de tranziție și confirmă că destabilitatea politică este indicată de schimbările și tulburările în sfera națională, regională și dezvoltarea economică.

CUVINTE CHEIE: România, postcomunism, schimbările demografice

DEMOGRAPHIC CHALLENGES AND SPATIAL DISTRIBUTION OF THE POPULATION IN THE REPUBLIKA SRPSKA

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ABSTRACT: For the first time in 22 years, an official census of population was carried out on the territory of the Republika Srpska. This is the first time that we have data (preliminary results) based on which we can examine the demographic situation, spatial distribution of the population and certain ongoing demographic processes. Based on the analysis of preliminary results on the total number of enumerated persons and through the analysis of natural increase in migration flows, the article will present the demographic problem faced by the Republika Srpska. The analysis of first results shows that entire regions have low population densities, being affected by depopulation which is caused mainly by negative natural movements and migrations. Rural areas which represented a demographic potential are being depopulated and some of them have no inhabitants at all. The unfavourable spatial distribution, low level of natural regeneration and constant emigration seriously endanger the total number of population in the Republika Srpska, which has been steadily declining ever since 2002. Constant negative socio-economic effects in the short term could jeopardize the development of the population and the very maintenance of infrastructure in settlements in Republika Srpska.

KEYWORDS: The Republika Srpska, density, demographic trends, migration

The first part of this article gives a brief historical overview of factors that affect the territorial distribution of population, as well as categorization to determine the population density. The second part of the article presents the analysis of population distribution and population density to the level of settlements. Results of the population density are compared with the European average and with the Census 1991. In the third part, the authors suggest certain

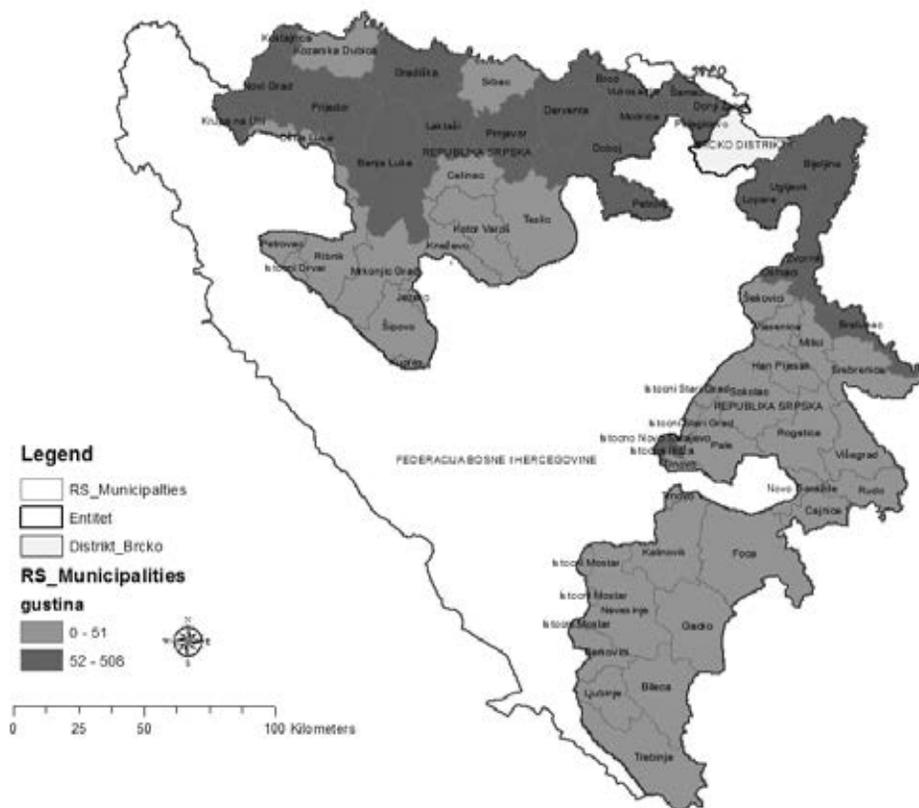
measures for the demographic recovery of the Republika Srpska, in order to improve its demographic structure.

The earliest debates on population were caused by fear from a lack of means necessary for living, as well as by the dread of territorial overpopulation. Even though a big step has been made in the civilization development since then, there is still a fear of overpopulation on the one hand and fear of areas being depopulated, on the other. In the early phases of society development, territorial distribution was determined by the relief, soil quality, climate and other natural resources. In conditions of a predominantly agricultural economic structure, natural-geographical and pure demographic factors played the key role, while in the industrialization and urbanization phases economic and social factors were of the utmost importance [Breznik, 1982]. Along with the phases of social development, the role of geographical determinants has weakened; therefore the hitherto negligible effects have been slowly taking precedence in the territorial distribution. These effects are primarily social organization, level of economic development, economic and professional structure of population, and other social and economic reasons. The effects of complexity and intertwining of various factors on the territorial distribution, require a deep and comprehensive analysis of a wider professional and scientific public. Spatial distribution of the population must be pointed out to local communities (municipalities) for a balanced development of areas at the local level, but also at higher levels of territorial organization. Increasing changes in structures of the population, which have been happening along with the ageing process in the developed part of the world, also affect the population distribution. On the other hand, in the underdeveloped parts of the world, young population tends to improve the living conditions, which results in an uneven spatial distribution. Population density is increasing around the already densely populated areas, while it is decreasing in sparsely populated areas, and there is a tendency of these areas remaining uninhabited.

In the light of the events which occurred during the last decade of the 20th century on the territory of the Republika Srpska, certain processes were in progress which could not have been explained from scientific perspective, due to the lack of official data on the population and its structures. The implementation of the Census of population in 2013 and publication of its preliminary data by settlement provided a basis for certain demographic and spatial analyses of the population in this region and interaction with other continuously monitored demographic trends. Preliminary results, presented by settlement, municipality and city, will provide a clearer image of the population density and, through certain migration components, a clearer image of population movement toward specific centres as well.

The territory of Republika Srpska has a square area of 25,641 km² with an internal territorial organization of 57 municipalities and 6 cities [Statistical Yearbook of the Republika Srpska, 2013]. According to preliminary results of the Census 2013, there are 1,326,991 enumerated persons on this territory.

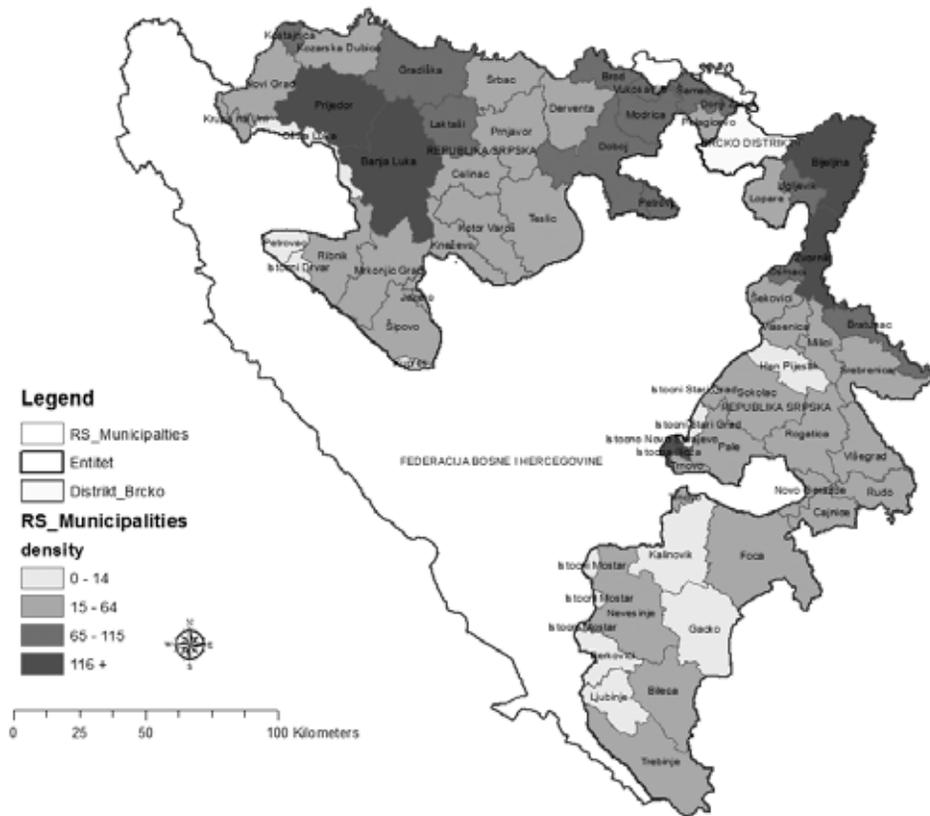
Map 1. Population density in the municipalities of RS compared with density on level RS



The population density in the Republika Srpska is 51.8 inhabitants per 1 km² in 2013, which is equal to the population density in the world in 2012. In 2011, the EU-27 population density was estimated at 117 inhabitants per square kilometre, which means that the EU is twice as densely populated as the territory of the Republika Srpska. According to the data obtained through the Census 2013, there are 36 municipalities and one city (Trebinje) (60%) where the population density was below the general population density of the Republika Srpska, while there are 21 municipalities and 4 cities (40%) which have a population density higher than the general one. The most municipalities below the general population density of the Republika Srpska are in the southern and southeastern parts of the Republika Srpska, from Trebinje to Šekovići. In the central part, Istočna Ilidža and Istočno Novo Sarajevo, as well as the entire eastern part from Bratunac to Bijeljina and Lopare, population densities are higher than the general one at the level of Republika Srpska. For the northern and western parts, higher population densities are recorded, but in these parts there are certain municipalities with population densities below the general one.

There are various categorizations of population density in the scientific literature. Categories for population density can be made in different ways (based on the world population density, based on the European one or based on the national density). The most commonly used categories for the general population density are: a) low population density, with less than 15 inhabitants per square kilometre, b) medium population density with between 15 and 64 inhabitants per square kilometre, c) high population density with between 65 and 115 inhabitants per square kilometre, and d) overpopulation with more than 115 inhabitants per square kilometre [Nejašmić, I. 2005, Population in spatial relationships and processes, page 22].

Map 2. Population density in the municipalities of RS according to the above categorization



Based on this categorization and results of the analysis, 11 municipalities or 18% of them meet the criteria of low population density (Istočni Drvar, Istočni Mostar, Kalinovik, Petrovac, Kupres, Berkovići, Oštra Luka, Han Pijesak, Istočni Stari Grad, Ljubinja and Gacko), 31 municipalities and the city of

Trebinje (52%) meet the criteria of medium population density, 12 municipalities and the city of Doboj (21%) meet the criteria of high population density, while 9 municipalities and the cities of Banja Luka, Bijeljina and Prijedor (10%) are overpopulated. The square area with low population density amounts to 12.6% of the total territory of the Republika Srpska, the square area with medium density covers 59.7% of the territory, the square area with high population density 14.1%, while 13.1% of the territory is overpopulated. Medium population density is the most common in units of local self-government in the Republika Srpska.

General population density represents a measure which shows the total number of population per square area unit, i.e. it presents the average and involves all shortcomings of calculating averages. General population density must be considered in the framework of natural and geographic conditions and economic and social development of an area. In this regard, comparison of the national level with the density at the city/municipality level is more relevant. Certain developed cities/municipalities with general population density over 115 inhabitants per square kilometre are not necessarily overpopulated, while on the other hand certain cities/municipalities with 40 to 50 inhabitants per square kilometre may be overpopulated. Differences in general population density are evident between municipalities, as the ratio between the lowest and the highest population density amounts to 1:254, which is a significant difference (municipality Istočni Drvar has the population density of 2 inh./km², while on the other hand the municipality Istočna Ilidža has the density of 508 inh./km²).

General population density in the EU-27 1,146 inhabitants per km² in 2012, world population density was 51.8 inhabitants per km², USA 32.8 inhabitants per km², China 141 inhabitants per km², India 382.8 inhabitants per km², Japan 334.6 inhabitants per km², South Korea 488.1 inhabitants per km², Russia 8,4 inhabitants per km². Central Paris was by far the most densely populated part of the EU-27 (estimated 21,464 inhabitants per km² in 2012), followed by the London–West (over 10,000 inhabitants per km²). The region with the lowest population density in the EU-27, according to the data from 2012, is Lappi, northern Finland, with 2 inhabitants per km² in 2011.

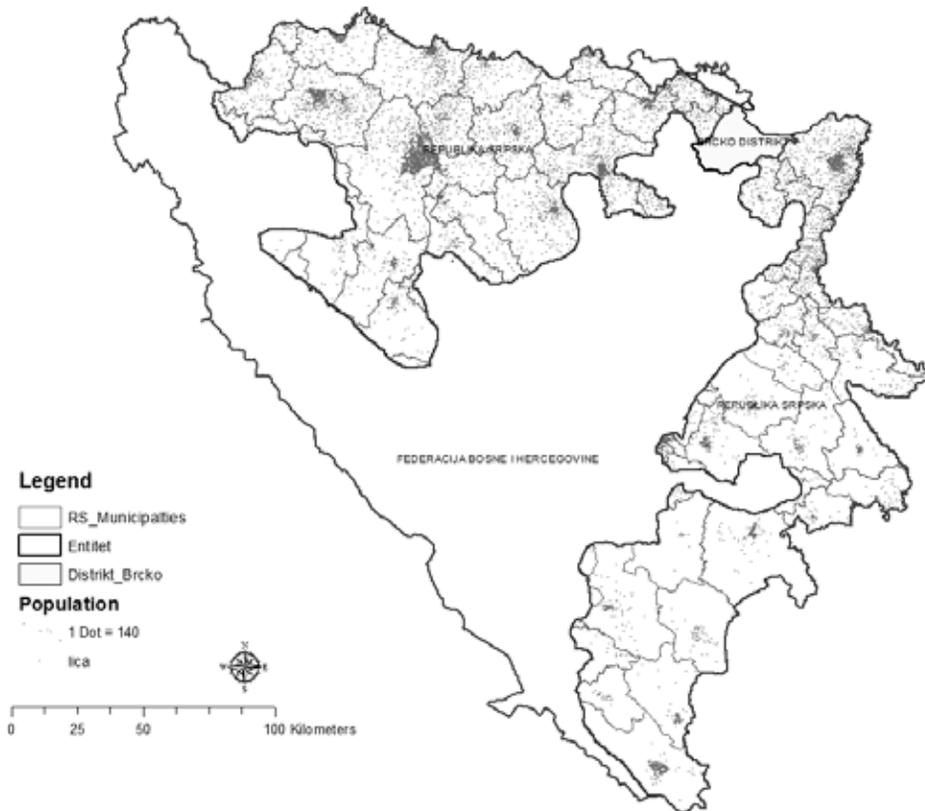
Analysis of the period between the two Censuses in 1991 and 2013 indicates that the population of the Republika Srpska decreased by 231,396 inhabitants, or by 14.8%. Of the total number of cities and municipalities in the interval between censuses, in 51 or 82.2% of them a decrease in population was recorded. The highest decrease was recorded in the eastern parts of the Republika Srpska, in the following municipalities: Berkovići, Bratunac, Višegrad, Vlasenica, Istočni Mostar, Kalinovik, Novo Goražde, Rogatica, Srebrenica, Trnovo, Foča, Han Pijesak and Čajniče [Marinković and Vranješ 2013]. Out of 2,756 settlements, 530 or 19.2% have less than 10 inhabitants. Most of such settlements are located in the eastern part of Republika Srpska, in the municipalities Višegrad (78), Kalinovik (45), Rogatica (34), Novo Goražde (33), Rudo (27), Foča (23) and Gacko (21), as well as in the city of Trebinje (68).

These current trends in population movements in Republika Srpska represent a long-term factor in the development of future demographic processes

and changes. Human resources are not unlimited, and any consideration of the future must take into account the minimum population needed to maintain the existing infrastructure [Đurđev 2007].

The demographic trends indicate a decrease in the number of live births and an increase in the number of deaths. Since 2002, birth rate has been negative. The number of live births has been decreasing for years, and the lowest value was recorded in 2011, with 9,561, while the highest number of deaths was recorded in 2007, with 14,146. The rate of total fertility has been steadily declining since 1960 and it decreased from 3.95‰ to 1.65‰ in 1991, while it is estimated that in 2008 it amounted to 1.26‰. Distribution of fertility rates by age of mother has been changing noticeably, as well as the number of live births of the second child, third child etc. The age of mother at birth of the first child has been increasing. The number of mothers with the first, second, third or more children has been decreasing. The age at marriage has shifted, the average age of bride in 2012 was 27.8 and the average age of groom was 31.5.

Map 3. *Spatial distribution of population in the Republika Srpska*



Migrations of the population have not been sufficiently monitored; therefore it is very difficult to discuss them from the scientific perspective. If we assume that the territory of Bosnia and Herzegovina was emigration-oriented even before the war, then we may conclude that nowadays, in the conditions of insufficient economic and social development, the population emigrates from the territory of the Republika Srpska rather than immigrating. Since 2007, internal migrations between entities have a positive net migration for the entire observed period, but these have to be taken with precaution, because there are occurrences of artificial records of citizens who wish to realize certain interests but who are not really residents of the territory of the Republika Srpska.

The density and distribution of population are main reasons of general demographic events and they are largely dependent on other phenomena and processes. The first step towards achieving a balanced distribution of population is to stop the negative demographic processes.

The question is how to respond to the challenges of transforming a society that is moving in the direction of decreasing birth, longer life expectancy, increasing number of older citizens and lack of socio-economic development, in order to deal with these changes in a proper way. Directions of the development of the population as a whole as well as the development of various demographic structures must be planned and their positive level has to be achieved.

Nowadays, it is absolutely necessary to retain the current demographic trends through measures which would later lead to a slight increase. Demographic analysis should be carried out and, if necessary, administrative-territorial units should be reorganized. Rural areas with demographic potential should be identified and, as such, stimulated through various incentives, thus keeping the remaining population in these areas, while at the same time making efforts to reach an increase in the number of population and improve the quality of the population structure. Timely action among the population who are most likely to leave the country would prevent the departure of all population categories, especially of those who are the most active part of the society. Good habits and customs of the people at the local and republic level should be directed in constructive terms, in order to build stronger and compact communities that would promote family values. With insufficient economic development, unemployment problems, extreme polarization of the population, disturbed population structure and a prominent feeling of relative poverty, there is little chance for the demographic recovery of the population in the Republika Srpska.

CONCLUSION

The population of Republika Srpska is facing a huge challenge, as the total number of citizens has been decreasing since 2002. The main reason for this decrease is the natural movement of population. A decrease in the total number of citizens and insufficient economic development affect the spatial distribution and population density. A consequence of such movements is the polarization of population density. Disproportion in the demographic size of

Banja Luka and other major cities is a result of the incoherent and asymmetrical urban system of the Republika Srpska. The population is concentrated in areas with higher population density, without an organized spatial distribution, which results in the pressure on unprepared and insufficiently developed urban centres on the one hand, while on the other hand, smaller municipalities and remaining rural areas in particular are being depopulated. In terms of population, southern and southeastern parts of the Republika Srpska are the most vulnerable, followed by municipalities in the areas of inter-entity borders. The concentration of population in these parts is the most evident in central parts of municipalities/cities with very low distribution in peripheral residential areas. Central, eastern and western parts are slightly more densely populated, with the highest population density in centres of municipalities/cities, but also with slightly higher concentration in suburbs and peripheries of municipalities/cities when compared with the abovementioned parts of the Republika Srpska. Due to generational changes, the expectations for the future include further decline in birth rates and increase in mortality, as well as a decrease in number of citizens, as a result of these changes. If these foreseen trends really do continue without taking certain measures to stop them, the distribution of population will be polarized to the extent that rural areas, especially in mountain areas, will remain completely uninhabited, while municipality/city centres (regional centres in particular) will accommodate the remaining population from rural areas.

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ДЕМОГРАФСКИ ИЗАЗОВИ И ПРОСТОРНИ РАЗМЈЕШТАЈ
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Босна и Херцеговина

РЕЗИМЕ: На територији Републике Српске након 22 године спроведен је званичан попис становништва. По први пут постоје подаци (први резултати) на основу којих се може на егзактан начин сагледати демографска ситуација, просторни размјештај становништва као и поједини демографски процеси. На основу анализе првих резултата о укупном броју пописаних лица, као и анализом природног прираштаја и миграционих кретања долази се до закључка да се укупан број становника смањује преко природних и миграционих компоненти. Размјештај и густина насељености није равномјерна на територији Републике Српске, концентрација становништва је највећа у централним насељеним мјестима општина/градова. У будућности се очекује, због генерацијских промјена даљи пад наталитета, повећање морталитета, и као резултат смањење броја становника. Уколико се наставе претпостављени трендови кретања без предузимања планских мјера за њихово заустављање, размјештај становништва ће се поларизовати до те мјере да ће руралне средине нарочито у брдско планинским областима остати потпуно ненасељене а центри општина/градова (посебно регионални центри) ће смјестити преостало становништво из руралних области.

КЉУЧНЕ РИЈЕЧИ: Република Српска, густина насељености, демографски трендови, миграције

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The author graduated in 2008 (,Pozicioniranje Ribarske Banje u banjskom turizmu Srbije') and defended her master's thesis in 2009 (,Banjski i rekreacioni centri – oblik prilagodavanja banjskog turizma Srbije potrebama savremenog tržišta') at the Faculty of Geography in Belgrade. She entered her doctoral studies in 2010. As of academic school year 2008/2009, she was engaged at the Faculty of Geography, University of Belgrade, as a Teaching Associate for the department of Tourismology. Since 2011 she has been elected a Teaching Assistant for the narrow scientific field – Tourismology. She has published numerous writings in scientific and professional magazines and has participated in scientific conferences.

MARINA BLAGOJEVIĆ-HUGHSON (Belgrade, 1958). A sociologist, expert advisor at the Institute of Criminological and Sociological Research in Belgrade.

She is engaged in the research work in the fields of sociology, social demography and gender studies. She works on the subproject related to social inclusion at the Institute of Criminological and Sociological Research. As an international expert, she has worked for the European Committee, European Parliament, UNIFEM, UN Women, USAID etc. She has participated in expert projects related to gender equality in several countries. The field of interest: gender and development in semi-periphery, masculinity studies, knowledge production, gender policies and everyday life.

Important works: *Seobe Srbai Crnogoraca sa Kosova i iz Metohije: rezultati ankete sprovedene 1985–1986. godine* (with R. Petrović), Beograd 1989; *Srbija krajem osamdesetih* (group of authors), Beograd 1991; *Žene izvan kruga: profesija i porodica*, Beograd 1991; *Društvene promene I svakodnevni život: Srbija početkom devedesetih* (group of authors), Beograd 1995; *Roditeljstvo i fertilitet: Srbija devedesetih*, Beograd 1997; *Položaj žena u zemljama Balkana*, Banjaluka 2004; *Suočavanje s prošlošću: izveštaj za Srbiju i Crnu Goru* (with N. Milenković), Beograd 2004; *Knowledge Production at the Semiperiphery: A gender perspective*, Belgrade 2009; *Žene i muškarci u Srbiji: Šta nam govore brojke?*, Beograd 2012; *Rodni barometar u Srbiji: razvoj i svakodnevni život*, Beograd 2013.

MIRJANA BOBIĆ (Belgrade, 1960). A sociologist and demographer, professor at the Faculty of Philosophy, University of Belgrade.

She graduated from, and earned her Master and Doctoral Degrees at the Department of Sociology, Faculty of Philosophy in Belgrade (Doctoral Thesis “Partnership transition – case study in Belgrade”). She teaches Social demography, Demography of partnership and childbearing, Modern migrations, Challenges of contemporary families, Contemporary family as a challenge and Modern population challenges at graduate, postgraduate and doctoral studies at the Faculty of Philosophy in Belgrade. She is a co-author of various monographs published by the Institute of Sociological Research of the Faculty of Philosophy in Belgrade and of articles published in some of the leading journals in the country and abroad.

Important works: *Brak ili/i partnerstvo: demografsko-sociološka studija*, Beograd 2003; *Postmoderne populacione studije: demografija kao intersekcija*, Beograd 2013; *Beskućnici*, Beograd 2014.

MILKA BUBALO ŽIVKOVIĆ (Bihać, Bosnia and Herzegovina, 1971). Associate Professor at the Department of Geography, Tourism and Hotel Management, Faculty of Sciences, University of Novi Sad.

The author graduated in 1994, earned her master’s degree in 2000 and later PhD degree at the Department of Geography, Tourism and Hotel Management, Faculty of Sciences in Novi Sad in 2003 („Savremene geografske funkcije Novog Sada i njegovo gravitaciono područje“). She has been a Teaching Assistant (1995–2003), Assistant Professor (2004–2011) and an Associate Professor at the Department of Geography, Tourism and Hotel Management since 2011. Field of scientific research: regional geography, geography of settlements, demography. At the undergraduate studies, she teaches: Geography of Serbia, Geography of settlements; at the master’s studies: Regional differences in Serbia, Urban development and conurbation; at the doctoral studies: Global geo-political processes and Serbia, Population policy and family planning. She is a member of the Serbian Geographical Society and Association of the Demographers of Vojvodina.

Important works: *Stanovništvo Bačke*, Novi Sad 2006 (with S. Kicošev and A. Ivkov); *Stanovništvo Banata*, Novi Sad 2006 (with S. Kicošev and A. Ivkov); *Demografski razvoj pograničnih opština Banata u drugoj polovini XX veka*, Novi Sad 2010 (group of authors).

DRAGANA ČORIĆ (Leskovac, 1976). Assistant Professor at the Faculty of Law, University of Novi Sad.

The author graduated from the Faculty of Law in Novi Sad in 2000. After her legal internship, she started working at the Faculty of Law in Novi Sad in 2001, where she still works. The author earned her master’s degree in 2006 and the PhD degree in 2011 („Princip stečenih prava i retroaktivno dejstvo zakona“), at the Faculty of Law, University of Niš. She has been an Assistant Professor at the Faculty of Law, University of Novi Sad, since 2012, for the subjects Introduction to law and The philosophy of law. She has participated in the work of the Moot Court Centre at the faculty, as well as in the preparations for the rhetoric competitions. As of 2011, she has been a member of the Governing board in the vocational Serbian Association for Legal and Social Philosophy. The author deals with legal-theoretical, constitutional, philosophical-legal ethical issues, and pays a lot of attention to ecology and ecological ethics as a branch of applied ethics. She is also one of the members of the association “Parent”. The October Award of the City of Novi Sad was given to her in 2014.

Important work: *Vreme u pravu*, Novi Sad 2007

RADOSLAV ČOROVIĆ (Sarajevo).

The author graduated and got the title of Master of Science at the Faculty of Geography, University of Belgrade. He works in the Agency for Statistics of Bosnia and Herzegovina as a senior advisor for demographic analysis and projections. Areas of special professional interest: fertility, historical demography, population projections, spatial aspects of demographic development and distribution of the population.

DANIJEL DANILOVIĆ (Foča, 1986). He completed his elementary school and High School of Economics in Čajniče. He graduated from the Faculty of Philosophy, University of East Sarajevo in 2009 ('Demografski razvoj opštine Foča') and earned his Master's Degree in 2013 ('Demografski razvoj gornjeg Podrinja'). He was engaged as an associate on the project 'Population as the main factor of sustainable economic development of Republic of Srpska'.

MIRJANA DEVEDŽIĆ (Belgrade, 1959). Full professor at the Faculty of Geography, University of Belgrade.

She graduated (1982) and obtained Master Degree (1988) in Tourism at the Faculty of Sciences, University of Belgrade. She gained her PhD Degree in 1999 when she defended her doctoral dissertation at the Faculty of Geography in Belgrade ('Turizam kao faktor promena u razvoju, razmeštaju i strukturama stanovništva Crnogorskog primorja'). She has been a full professor at the Faculty of Geography, Department of Demography, and University of Belgrade since 2011. She teaches the following: Natural Regeneration of Population and Demographic Structures in the programme of Demography; Population and Tourism in the programme of Tourism. She also teaches the subjects in master and doctoral study programmes. Professionally, she is focused on the studies on population reproduction, population ageing, and socio-economic structures of population, connection between tourism development and demographic development and importance of information technology for demography. She was a project manager on the project of bilateral cooperation between Serbia and Slovenia: Population Development Issues in Border Regions (2010–2011). Regarding the integral and interdisciplinary research programme of the Ministry of Education, Science and Technological Development (2011–2014), she is a manager of the subproject of the Faculty of Geography on Spatial Differentiation of Demographic Phenomena in Serbia. She is a member of editorial board of the magazine *Stanovništvo* and *Demografija*, Associations of Demographers of Serbia, Board for population study of the Serbian Academy of Sciences and Arts, international association DemoBalk based in Greece. In two mandates, she was a head of the Department of Demography at the Faculty of Geography.

Important works: *Belgrade for Young People*, Belgrade 1990; *O prirodnom kretanju stanovništva*, Beograd 2006; *Uticaj turizma na demografski razvitak: primer Crnogorskog primorja*, Beograd 2011.

MARIJA DROBNJAKOVIĆ (Priboj, 1982). Research assistant at Geographical Institute 'Jovan Cvijić' of the Serbian Academy of Sciences and Arts.

She graduated in 2006 and gained Master Degree in 2009 at the Faculty of Geography, University of Belgrade (Department of Spatial Planning). She enrolled doctoral studies at the Faculty of Geography in Belgrade in 2010. She has been employed at the Geographical Institute 'Jovan Cvijić' of the Serbian Academy of Sciences and Arts since 2008. Her field of interest is related to rural planning and rural geography, settlement geography and rural development. She was a member of the work team on the preparation of numerous spatial plans and projects. She is a winner

of the annual award 'Dimitrije Perišić' from the Institute of Architecture and Urban and Spatial Planning of Serbia (for the Master Thesis entitled 'Prijepolje in the function of regional development of south-western Serbia').

Important work: *Prijepolje – faktor regionalne integracije jugozapadne Srbije*, Beograd, 2012.

BOJAN ĐERČAN (Sremska Mitrovica, 1984). Assistant professor at the Department of Geography, Tourism and Hotel Management at the Faculty of Sciences, University of Novi Sad.

He graduated in 2007 from the Faculty of Sciences, Department of Geography, Tourism and Hotel Management in Novi Sad („Geografske karakteristike Vašice“) and then he enrolled in doctoral studies. His professional titles: teaching assistant (2007), research trainee (2007), research assistant (2010), assistant professor (2012) at the Faculty of Sciences, Department of Geography, Tourism and Hotel Management, University of Novi Sad. The field of scientific research: Regional geography, Social geography (Settlement geography, Demography).

BRANISLAV S. ĐURĐEV (Bač, Serbia, 1950). Full professor at the Department of Geography, Tourism and Hotel Management at the Faculty of Sciences, University of Novi Sad.

He earned his Master's Degree (1987) from Berkeley, University of California, and PhD Degree in geography (1986, 'Demographic and geographic analysis of post war immigrations in Vojvodina') from the Faculty of Sciences in Novi Sad. He studied the Role of population in development planning at Moscow State University, Migration related issues at Catholic University of Louvain la Neuve, and Nuptiality related issues at European University Institute in Florence. He is involved in research related to historical demography, population projections and migration related issues. He was Head of the Department for Social Geography, Prorektor for international cooperation at the University of Novi Sad, and from 2012 onwards he has been the Director of Department of Geography, Tourism and Hotel Management. He gives lectures in undergraduate and postgraduate studies in subjects: Geography of population, Demographic models, Historical demography, Introduction to research paper and Methodology of science – research paper. He has been a project manager and project leader of several scientific and development projects.

Important works: *Posleratno naseljavanje Vojvodine: metodi i rezultati demogeografske analize naseljavanja Vojvodine u periodu 1945–1981*, Novi Sad 1995; *Osnovne tehnike u demografiji*, Novi Sad 2001; *Stanovništvo i domaćinstva Autonomne Pokrajine Vojvodine početkom XXI veka*, Novi Sad 2008 (coauthor); *Mere populacione politike lokalnih samouprava Autonomne Pokrajine Vojvodine*, Novi Sad 2011.

MARKO FILIPOVIĆ (Topola, 1983). Research Assistant at the Geographical Institute "Jovan Cvijić", Serbian Academy of Sciences and Arts (SASA)

The author graduated in 2006, completed his master's studies in 2010 („Demografski aspekti prostorne i funkcionalne organizacije Jablaničkog okruga“) and entered his doctoral studies at the Faculty of Geography, University of Belgrade (Department of Demography). He had been an associate of the Institute of Architecture and Urban Studies in Belgrade from 2008 to 2011. As of 2011, he has been working at the Geographical Institute "Jovan Cvijić", SASA. His field of interest is related to demography, population in spatial planning and migrations.

Important work: *Small and Medium Towns of Central Serbia: standpoints and assumptions on development perspectives*, Beograd 2007 (with N. Spasić and J. Petrić).

IRENA GABRIĆ-MOLNAR (Lukino Selo near Zrenjanin, 1954) is a full professor at the Faculty of Economics in Subotica, University of Novi Sad. She graduated from the Faculty of Economics in Subotica (1977); she earned her Master Degree in 1981 and PhD Degree in 1986 ('Role of Union in the Self-Governing Implementation of Labor Class') at the Faculty of Political Sciences, University of Belgrade. In 1997, she was appointed full professor at the Faculty of Economics in Subotica in the field of sociological sciences. She gives lectures in the following subjects at the Faculty of Economics in Subotica: Sociology and Sociology of Human Resources in the region. She also teaches at the Pedagogical faculty, University of Novi Sad (in Hungarian, main office in Subotica), the following subjects: Introduction to sociology, Sociology of education, Sociology of settlement, and Sociology of family. She also teaches a specialized course at 'Juhász Gyula' Pedagogy faculty, University of Szeged: Understanding of Serbia. She has been a member of the public body of Hungarian Academy of Sciences since 2000, and the president of the Scientific Association of Hungarology Research in Subotica since 1995. She was the coordinator of several tenths of projects about research on minorities in Serbia, migrations and sociology of education.

Important works: *A JSZSZK politikairendszere* (with L. Laki and L. Rehak), Subotica 1982; *Gde je akcija sindikalno organizovane radničke klase*, Beograd 1989; *Képzettek a jövő: A felnőtt képzés háttere Észak-Bácska iskolahálózatában* (group of authors), Subotica 2008; *Szociológiai jelenségvizsgálatok a Vajdaságban*, Subotica 2011.

VERA GLIGORIJEVIĆ (Užice, 1970). She is a docent at the Faculty of Geography, University of Belgrade. She graduated from the Faculty of Geography where she also earned her Master Degree and PhD (2012) in Demography. In her research work she has concentrated on studying human capital, labor market, and economic consequences of demographic changes. She has participated in several scientific meetings and conferences in the country and abroad. She is a member of Serbian Geographical Society, Association of Demographers of Serbia and European Society for Population Economics (ESPE).

MARIJA IVKOVIĆ (Pančevo, 1984). A scholar of the Ministry of Education, Science and Technological Development at the Geographical Institute 'Jovan Cvijić' of Serbian Academy of Sciences and Arts in Belgrade.

She graduated from the Faculty of Geography, University of Belgrade in 2009 in social geography with the thesis 'Dnevne migracije radne snage, učenika i studenata prema Jagodini, Paraćinu i Čupriji' and defended her Master Thesis at the same faculty in 2011 in the field of demography entitled 'Razvodi brakova u Srbiji'. In her research, she focuses on studying the population with particular emphasis on marriage models, modern processes and changes in marriage behavior of population. She published numerous papers in science magazines, attended scientific meetings in the country and abroad. She is a member of Association of Demographers of Serbia and Serbian Geographical Society.

Important work: *Učestalost razvoda braka u Srbiji (1947–2010)*, Beograd 2011.

MARIA-CAMELIA KANTOR (Sighetu-Marmatiei, Maramures County, Romania, 1979). Assistant Professor of Geography at the Department of Sociology and History, Faculty of Philosophy and Social Sciences, Claflin University in Orangeburg, South Carolina (USA).

Fields of interest: economic development, health geography, tourism geography, political geography. Her research work has been focused on the dynamics of spatial,

cultural and social-economic revitalization of rural settlements in the countries of Eastern Europe after 1989.

SANJA KLEMPIĆ-BOGADI. Demographer at the Institute of Migrations and Ethnic Studies, in Zagreb.

She graduated in 1998 from the Department of Geography, Faculty of Sciences in Zagreb where she also earned her master's degree in 2003 ('Razvoj stambenih naselja Splita nakon Drugoga svjetskog rata pod utjecajem imigracije'). She received her PhD degree from the same faculty in 2008 ('Demogeografski aspekti suburbanizacije Hrvatske primjer riječke aglomeracije'). She has been a demographer at the Institute of Migrations and Ethnic Studies, in Zagreb since 2000. Scientific fields of interest: demography, urban geography. Projects: Influence of migrations on regional development of Croatia (2007), Influence of recent migrations on development of Croatian settlements (2002–2006), Internal migrations in Croatia (2000–2002).

Important work: *Gradovi potopili škoje – promjene u malim otočnim zajednicama*, Zagreb 2013 (coauthor).

ALEKSANDAR KNEŽEVIĆ (Kraljevo, 1973). Assistant professor at the Faculty of Geography, University of Belgrade.

He graduated from the Faculty of Geography, University of Belgrade in 2001. He completed his specialization at the Alternative Academic Educational Network in 2000 (programme: Environment – Challenge for Science, Technology and Society). He obtained his Master Degree in 2006 and PhD Degree in 2013 at the Faculty of Geography in Belgrade. Dissertation title is: 'Istorijskodemografske I etnodemografske osnove razvitka stanovništva Istočne Srbije'. Since 2001, he has been employed at the Faculty of Geography in Belgrade, Institute of Demography. Narrow scientific field he is interested in is the population statistics and ethnic demography. With respect to scientific research activities, he was part of the research teams in the realization of three national and one international project. He is a member of the Association of Demographers of Serbia and Serbian Geographical Society.

Important work: *Romi (Cigani) u Beogradu – etnodemografska proučavanja*, Beograd 2010.

MARKO KNEŽEVIĆ (Novi Sad, 1984). Teaching Assistant at the Faculty of Law, University of Novi Sad.

He graduated from the Faculty of Law in Novi Sad, in 2006. He completed his master's studies at the same faculty in 2008 when he defended the thesis 'Privremene mere u pravu intelektualne svojine'. He was elected Teaching Associate for the subject of Civil procedural law in 2006 and Teaching Assistant in 2008 for the same subject. In the same period, from 2006-2008, he volunteered in the District Court in Novi Sad. Field of interest: judicial proceedings and principals of judicial proceedings in particular, temporary civil protection orders in court procedures; arbitration law. He speaks English and German.

VLASTA KOKOTOVIĆ (Gospić, Croatia, 1984). Research Assistant at the Geographical Institute 'Jovan Cvijić', Serbian Academy of Sciences and Arts.

The author graduated in 2007 and earned the master's degree at the Faculty of Geography, University of Belgrade, at the Department of demography, entering the doctoral studies in 2010. As of 2011, she has been working at the Geographical Institute 'Jovan Cvijić' as a research assistant on the project 'Geography of Serbia', set up by the Ministry of Science, Education and Technological Development. Fields of research

interest: population dynamics, urban population, demographic potential, migrations. She has been a participant at numerous important national and international conferences. The author is a member of the Association of Demographers of Serbia and the European Population Association.

GORDANA KOVAČEK-STANIĆ (Novi Sad, 1958). Full professor at the Faculty of Law, University of Novi Sad.

The author graduated (1981) from the Faculty of Law in Novi Sad where she also received her master's degree in 1987 ('Materinstvo kao element porodičnog statusa'). She defended doctoral dissertation in 1991, 'Ostvarivanje roditeljskog prava – odnosi lične prirode' at the Faculty of Law in Belgrade and was elected full professor in 2002. She gives lectures on Family law and Inheritance law and optional course on Comparative family law and Case law (Family law) within Practical law education.

Important works: *Pravni izraz roditeljstva*, Novi Sad 1994; *Pravo deteta da zna svoje poreklo*, Novi Sad 1997; *Legislativa o ljudskoj reprodukciji uz biomedicinsku pomoć*, Novi Sad 2008.

SVETOZAR LIVADA (Slunj, Croatia, 1928). Sociologist and demographer. Professor (retired) at the University of Zagreb.

He graduated from the Faculty of Philosophy, University of Zagreb, at the Department of Philosophy and History, and earned his PhD Degree in rural sociology (1975, 'Društveno-ekonomski uzroci i posljedice starenja poljoprivrednog stanovništva') from the same faculty. He was giving lectures in social demography at the abovementioned faculty. He is one of the initiators of the postgraduate studies of gerontology at the Faculty of Medicine in Zagreb. Also, he was one of the editors of *Sociologija sela* ('Sociology of the Village') magazine. He was also the acting director of Agricultural Institute in Zagreb.

Important works: *Etničko čišćenje: Ozakonjeni zločin stoljeća*, Zagreb 2006; Novi Sad 2007; *Stradanja i nadanja*, Sombor 2013.

JELENA LONČAR (Zagreb, Croatia, 1978). Senior assistant at the Faculty of Science, Department of Geography, Zagreb.

She graduated from the Faculty of Science, Department of Geography in Zagreb (2002, 'Processes of globalization and regionalization in Europe and their influence on Croatia'). She defended the thesis entitled 'Geographical elements of spatial planning and regional development' (2005) at postgraduate studies. She defended the doctoral thesis under the title 'Economic-geographic restructuring of Central Croatia in transition period' in 2011. She has worked as a senior assistant at the Department of Geography at the Faculty of Science in Zagreb since 2005. Main research fields of interest are: economic geography, industrial geography, political geography, globalization and regional development. So far, she has had 13 scientific papers published in national and international magazines. She participated in 13 scientific meetings and colloquiums in the country and abroad.

TAMARA LUKIĆ (Novi Sad, 1976). Associate professor at the Department of Geography, Tourism and Hotel Management, Faculty of Sciences, University of Novi Sad.

She graduated (2000) in physical geography and received a Master's Degree (2005) and PhD Degree (2008) in the field of regional geography at the Department of Geography, Tourism and Hotel Management in Novi Sad with the thesis entitled 'Goč i podgorina – geografska studija'. Her field of interest is regional geography and population geography (age structure and ethnic groups). She is a member of Serbian

Geographic Society, European Consortium of Research in Social and Human Sciences at the University of Angers, France (since 2005). She was a member of HERODOT network for geography in higher education, University of Liverpool, Great Britain (2007–2009). She is also a member of editorial board of the magazine 'Proceedings of the Department of Geography, Tourism and Hotel Management'. She gives lectures for undergraduate studies (Regional geography of Europe, Geography of the world, Geography of local environment and Geography of the Western Balkan countries), master studies (Characteristic regions on Earth), and doctoral studies (Regional development of South-East Europe, Comparative analysis of the regions by continents).

Important works: *Opština Subotica*, Novi Sad 2006; *Goč i podgorina*, Novi Sad, 2010.

VESNA LUKIĆ (Sarajevo, 1974). PhD in demographic studies, Research Associate at the Demographic Research Centre, Institute of Social Sciences, Belgrade.

The author graduated at the Faculty of Geography, University of Belgrade, in 1997, earned the master's degree in 2003 (department of demography) and the PhD degree in 2008 ('Konvergentne i divergentne dnevne migracije stanovništva Pančeva'). From 1999 until June 2010, she had worked at the Geographical Institute 'Jovan Cvijić', Serbian Academy of Sciences and Arts (SASA). She is a member of the European Association for Population Studies, the Association of Demographers of Serbia and the Board for the population studies at the Department of Social Sciences, SASA.

Important works: *Dunavsko-moravski koridor: naselja* (with sa B. Tošić and D. Matijević), Beograd 2004; *Izbegličke migracije iz Bosne i Hercegovine u Beograd tokom poslednje decenije XX veka*, Beograd 2005; *Demografski razvitak i funkcionalna struktura Pančeva*, Beograd 2011.

DRAGANA LUKIĆ-BOŠNJAK (Senta, 1980). Employed at the Information centre for the development of the Tisa region in Kanjiža.

The author completed a BA degree in English language and literature and had worked as an English language teacher. She was a translator at the European Film Festival in Palić and she also does translating for the public institutions, magazines and private persons. The author has worked on different projects. She also writes and coordinates international projects.

MARIANA LUKIĆ-TANOVIĆ (Sarajevo, 1984). Teaching assistant at the Faculty of Philosophy in Pale, University of East Sarajevo.

She graduated (2008) and earned her Master's Degree (2013, 'Demografski razvoj grada Istočno Sarajevo – stanje i perspektiva') in geography at the Faculty of Philosophy in Pale, University of East Sarajevo. She was elected assistant professor of Social geography in 2010, and in 2013 she became a senior assistant professor in the same scientific field. She participated in numerous congresses, symposiums and seminars in the field of geography. She is a member of Geographical Research Association 'Jevto Dedier'.

IVANA MAGDALENIĆ (Belgrade, 1986). Graduate demographer. Demonstrator of practicum lessons on the fourth year of undergraduate studies (Department Demography) at the Faculty of Geography, University of Belgrade.

She graduated from the Faculty of Geography in Belgrade, Department of Demography in 2013 and was awarded a title of graduate demographer. She continued with her professional advancement in Demography by enrolling master's studies at

the Department of Demography, Faculty of Geography in 2013. According to the decision made by the Academic Council (2014) of the Faculty of Geography, she obtained the position of a demonstrator of practicum lessons on the fourth year of undergraduate studies (Department of Demography) for the following subjects: Demographic development of Serbia and neighboring countries and Ethnodemography. Her chosen field of interest is population reproduction. She is also focused on all complex occurrences and processes of demographic development, its previous profile and present and acute problems that Serbia is facing (Depopulation, low birth rate, population ageing, etc.).

ALEKSANDAR MAJIĆ (Bihać, Bosnia and Herzegovina, 1986). Graduate geographer. Technical Associate in the position of Teaching Assistant in the study programme of Geography, Faculty of Sciences, University of Banja Luka.

The author graduated in 2011 ('Mortalitet Republike Srpske – faktori i posljedice'). He has been employed at the University of Banja Luka since 2012. His working position is a Teaching assistant at the Faculty of Sciences, Department of Demography and Social Geography, University of Banja Luka.

MIRA MANDIĆ (Nova Gradiška, Croatia, 1961). Associate Professor at the Faculty of Sciences in Banja Luka.

The author received her PhD degree in Social geography, in 2007 ('Savremena prostorno-funkcionalna transformacija Banje Luke'). She is an Associate Professor at the Faculty of Sciences, University of Banja Luka (study programme: Geography and Spatial planning) and an administrator of the study programme Spatial planning. Her research focus is on the settlement development (urban and rural geography), social geography, and methods of teaching geography. She is a member of several scientific and professional associations.

Important work: *Karakteristike urbanog razvoja Banje Luke: savremena prostorno – funkcionalna transformacija grada*, Banja Luka 2013.

DRAŠKO MARINKOVIĆ (Prnjavor, the Republic of Srpska, Bosnia and Herzegovina, 1974). Geographer-demographer. Associate Professor of Social Geography and Demography in the study programme of Geography at the Faculty of Sciences, University of Banja Luka.

The author graduated in 1998, received master's degree in 2001 ('Dnevne migracije stanovništva opštine Prnjavor') and PhD degree in 2004 ('Izbjeglištvo – specifičan vid migracija stanovništva Republike Srpske u periodu 1991–2001') from the Faculty of Sciences, University of Banja Luka. He has been permanently employed at the University of Banja Luka since 1999 (associate professor since 2009) in scientific fields of Social geography and Demography. His position has been a deputy rector for all issues relating to personnel and other at the University of Banja Luka since 2008 and a Head of Department of Social Geography and Demography since 2010. He has been a member of the Council for Demographic Policy of the Republic of Srpska, Board for Reproduction Health and Demography of the Academy of Sciences and Arts of the Republic of Srpska, Association of Demographers of Serbia, Serbian Geographical Society and Geographic Society of the Republic of Srpska for a long time. He is also a president of the Center for Demographic Research in Banja Luka.

Important works: *Dnevne migracije stanovništva opštine Prnjavor*, Banja Luka 2001; *Demografski problem procesa izbjeglištva u Republici Srpskoj*, BanjaLuka 2005; *Republika Srpska: Turistički potencijali*, Istočno Sarajevo 2005 (coauthor); *Reproduktivni potencijal adolescenata u Republici Srpskoj*, Banja Luka 2010 (coauthor).

IVAN MARINKOVIĆ (Kragujevac, 1980). Master of demographic sciences. Research Assistant at the Demographic Research Centre, Institute of Social Sciences, Belgrade.

The author graduated at the Faculty of Geography, University of Belgrade, in 2004. He earned his master's degree at the Faculty of Economics in Belgrade in 2010 (department of demography). The field of scientific research: mortality and population ageing. Between 2005 and 2008, he had received scholarship from the Ministry of Science of the Republic of Serbia. As of 2008, he has been employed at the Institute of Social Sciences in Belgrade. He is a member of the Association of Demographers of Serbia (apart from 2011, also a secretary of the Society).

VENI MARINKOVIĆ (Split, 1989). Expert associate on the projects financed by the EU, at University of Zagreb. S

he finished elementary school in Komiža and grammar school in Vis. Higher education brought her to Zagreb (2008), where she enrolled in the undergraduate research program in geography at the Faculty of Science Department of Geography. In 2010 she continued with the graduate studies of spatial planning and regional development. She earned her MA (in 2013) with the thesis 'Suvremeno geostrateško modeliranje razvoja dalmatinskog otočja'. Her research interests include regional island development, island demographics, and the possibilities of island revitalization. She works at the University of Zagreb as an expert associate on the EU projects SEETechnology and Silver City, and volunteers at the Local Action Group 'Škoji,' where she helps with the creation of spatial analysis reports.

MILAN M. MARKOVIĆ. Research assistant at the Institute of Social Sciences in Belgrade (Center for Legal Research). He is a legal associate of the Initiative for Rights of People With Mental Disabilities MDRI-S and a postgraduate at the University of Graz (Institute of International Public Law). He is a general secretary of the Association of Lawyers for Medical and Health Law of Serbia (SUPRAM). As a legal associate/expert, he has been engaged on several projects financed by the Ministry of Education and Science, and on the FP7 and IPA projects financed by EU. He has had articles and monographs published, and has edited some publications in the field of right to health, human rights, international rights, rights of people with mental disabilities and health rights. He was a visiting researcher at the University of Copenhagen, Max Planck Institute in Heidelberg, University of Vienna and University of Lund.

SONIA MILEVA BOŽANOVA [СОНЯ МИЛЕВА-БОЖАНОВА] (Sofia, Bulgaria, 1975). Professor at University of Sofia 'St. Kliment Ohridski'. She is a director of the Institute of Certification and Accreditation [<http://www.bkonk.bg/za-bkonk/upravitelen-savet?id=40:sonya-mileva>].

She graduated from the University of National and World Economy in Sofia (1999). She received a Master's Degree in international tourism in 1999. She received a PhD Degree in 2003 ('Конкуренция и конкурентоспособност в международния туризъм'). She is a professor and head of the master program for tourism economics and management. Her field of interest is: tourism, tourism economics, tourism marketing, and business process reengineering. She is a vice president of Bulgarian Educational, Scientific and Cultural Organization (BKONK). She speaks English, Russian and Portuguese.

Important works: *Рейнженеринџ и конкуренцијо способност на туристическата продукция*, София 2002; *Рекреација чрез специјализиран туризъм*, София 2004; *Емитивни пазари за дестинација Бџлџария*, София 2011; *Международен туризъм*, София 2011.

NATALIJA MIRIĆ (Kraljevo, 1989). Research Assistant at the Faculty of Geography, University of Belgrade.

The author graduated in 2012 and completed master's studies in 2013, at the Faculty of Geography, University of Belgrade, Department of demography. She entered the doctoral studies at the Faculty of Geography, module-demography, during the academic year 2013/2014. As of 2014, she has been awarded a scholarship by the Ministry of Science, Education and Technological Development for the project 'The research of the demographic phenomena for the aim of public policies in Serbia'. Her field of interest is the economic structures. She has participated in several national scientific meetings and conferences and she published several writings in national magazines and proceedings. She is a member of the Association of Demographers of Serbia.

MARIJA MUCIĆ (Zemun, 1984). PhD student at the Faculty of Geography, University of Belgrade.

The author graduated in 2009 ('Demografske karakteristike fertilnog kontingenta u Srbiji') and earned master's degree in 2011 ('Razmeštaji koncentracija fertilnog kontingenta u Srbiji') at the Faculty of Geography in Belgrade. Doing some research and being one of the coordinators, she participated in the scientific-research project called 'Radan' (2009–2012) organized by the Society of Young Researchers 'B.Bukurov'. During her internship, she had worked in the Republic Statistical Office, Department for the population census. She has published numerous writings in scientific magazines and participated in numerous national and international scientific meetings. She is a member of the Association of Demographers of Serbia.

VLADIMIR NIKITOVIĆ (Užice, 1973). Research associate at the Center for Demographic Research, Institute of Social Sciences in Belgrade.

He earned his academic titles at the University of Belgrade: graduated in geography from the Faculty of Sciences (1998), earned his Master Degree in Demography at the Institute of Demography, Faculty of Geography (2003), and his PhD in demography at the Faculty of Economics in Belgrade (2009). From 1999 to 2005 he was engaged as a research associate at the Geographical Institute 'Jovan Cvijić' of Serbian Academy of Sciences and Arts. He published three monographs which are the result of his research work, and 30 articles in national and international magazines. He cooperated in numerous studies, including some international projects and participated in large number of scientific meetings in the country and abroad. The fields of his scientific interest are the models of population dynamics, population ageing, population migrations and spatial aspects of demographic phenomena. He has been an editor of magazine *Stanovništvo* since 2011.

Important works: *Tačnost projekcija stanovništva Srbije*, Beograd 2004; *Demografska budućnost Srbije: imigracija kao izvesnost?*, Beograd 2010; *Uticaj demografskih imigracionih tokova na Srbiju*, Beograd 2012 (with M. Kupiševski and D. Kupiševska).

BOGDAN-NIKOLAE PĂCURAR (Cluj-Napoca, Romania, 1984). Councilor on environmental issues at the Cluj County Council, Cluj-Napoca, Cluj County, Romania

The author graduated from the Faculty of Geography, Babeş-Bolyai University in Cluj-Napoca, in 2007. His principal subjects were Geography and English Language and Literature. During his master's studies, he dealt with territorial administration and management of human resources. He defended his master's thesis at the Babeş-Bolyai University in Cluj-Napoca in 2008. Principal subjects at his doctoral studies

were urban geography, urban planning, sociology and geopolitics and he earned his PhD degree in 2011. He had worked as an English language professor at the 'Anghel Saligny' Technical College Cluj-Napoca (2007–2008) and a chief surveyor at The Regional Statistics Department Cluj (October 2011–November 2011). As of 2008, he has been a Councilor on environmental issues at the Cluj County Council in Cluj-Napoca. His main responsibilities are: management of 'Cheile Turzii' and 'Cheile Turenilor' Natura 2000 sites, advising on environmental issues for the 'Participatory and conservative management in Cheile Turzii and Cheile Turenilor NATURA 2000 sites' project, issuing urbanism certificates and notices for urbanism certificates, issuing notices for any activities taking place in the county nature reserves and translation of the institution's documents (English/Romanian). He has published several book and numerous scientific articles.

Important work: *Planul urbanistic al Municipiului Cluj Napoca*, Cluj Napoca 2010 (coauthor); *Funcțiile terțiare ale Municipiului Cluj Napoca*, Cluj Napoca 2011.

BOJAN PAJTIĆ (Senta, 1970). Associate professor at the Faculty of Law, University of Novi Sad.

He graduated in 1995, earned his Master's Degree in 2000 („Fiducijarni sporazumi kao sredstvo obezbeđenja obligacionopravnih potraživanja“) and PhD Degree in 2008 („Bračni imovinski ugovor“) from the Faculty of Law in Novi Sad. In 1996, he was elected probationary assistant for the subject of the Law of obligations at the Faculty of Law in Novi Sad. In 2009, he was elected docent for the subject of the Law of obligations, and associate professor at the Faculty of Law in Novi Sad in 2014. He is the author of several scientific papers published in the leading national journals. Field of interest: law of obligations, contract law, debt securities.

Important works: *Jemstvo*, Novi Sad 2014.

MARIJANA PANTIĆ (Belgrade, 1983). Spatial planner. Principal technical associate in the Team for social inclusion and poverty reduction.

The author graduated in 2006 and earned her master's degree in 2008 ('Umrežavanje gradova kao potencijal razvoja turizma – Senta, Subotica, Sombor') at the Faculty of Geography, University of Belgrade. She earned her doctoral degree in 2014 ('Sustainable Development Perspectives for Serbian Mountain Areas: Lessons from the European Context') at the Faculty of Environmental Sciences, Technical University of Dresden. Main field of interest: development of the mountainous regions, demographic and touristic development. She has participated in numerous national and international conferences, international workshops, spatial planning and scientific projects in Serbia. The author has also published about ten articles in national and international publications.

Important work: *Sustainable Development Perspectives for Serbian Mountain Areas: Lessons from the European Context*, Dresden 2014.

DRAGANA PAUNOVIĆ (Belgrade, 1984). PhD student at the Faculty of Geography, University of Belgrade.

The author graduated in 2009 („Planiranje porodice i reproduktivno zdravlje u Finskoj"). Her master's degree was defended in 2011 („Tranzicija populacione politike prema migracijama u EU") at the Faculty of Geography in Belgrade. The same year, with the scholarship given by the Ministry of Science, Education and Technological Development, she was engaged in the project „Istraživanje demografskih fenomena u funkciji javnih politika u Srbiji". Scientific fields of interest: population policy, medical demography, migrations, devastated areas.

GORAN PENEV (Veles, Republic of Macedonia, 1954). Expert advisor at Demographic Research Center at the Institute of Social Sciences in Belgrade.

He graduated in 1978 (department: Economic politics and planning) and earned his Master's Degree in 1987 at the Faculty of Economics, University of Belgrade ('Osnovne determinante, karakteristike i posledice starenja stanovništva Jugoslavije'). He has been employed at the Institute of Social Sciences in Belgrade since 1979 (as a scientific advisor since 2006). Field of scientific interest: demographic projections, population ageing and population development. He was a project manager (coordinator) of: 'Population and households in Serbia according to the 2002 Census' (2002–2005), 'Assessment of UNHCR-FUNDED collective centers in Serbia' (2000), 'Projections of population in Yugoslavia' (1996). He is a member of the following professional organizations and associations: International Scientific Association 'Demobalk' (vice president), Association of Demographers of Serbia, Association Internationale des Démographes de Langue Française (AIDELF), Statistical Society of Serbia, Gerontological Society of Serbia, Committee for the study of population at the Department of Social Sciences at Serbian Academy of Sciences and Arts.

Important works: *Projekcije stanovništva Savezne Republike Jugoslavije: 1991–2021* (with Lj. Sekulić and D. Cicović), Beograd 1996; *Žena i rađanje na Kosovu I Metohiji*, Beograd 1998; *Demografski trendovi u Crnoj Gori od sredine 20. vijeka i perspektive do 2050. godine*, Podgorica 2008.

DARA PETKOVIĆ (Sremska Mitrovica, 1979). Principal methodologist at the Republika Srpska Institute of Statistics in Banja Luka.

The author completed graduate studies at the Faculty of Sciences, University of Banja Luka, in 2003 and earned master's degree at the Department of Spatial Planning, Faculty of Geography in Belgrade, in 2009 ('Regionalne funkcije Sremske Mitrovice'). As of 2004, she has been working at the Republika Srpska Institute of Statistics in Banja Luka. She has participated in numerous seminars and professional development events in country and abroad, among which the most important ones are trainings on the population census and the internship in the European Commission (Eurostat). She is also a member of the Executive board of the Demographic Research Centre of the Republika Srpska and a member of the Demographic Institute of Serbia.

SONJA PODGORELEC. Senior research associate at the Institute of Migrations and Ethnic Studies, in Zagreb.

She graduated from the Department of Sociology, Faculty of Philosophy, University of Zagreb in 1985. She received her master's degree in Sociology from the Faculty of Philosophy in Zagreb, in 1998, defending the thesis entitled 'Starenje na dalmatinskim otocima', and her PhD Degree in 2004, with doctoral dissertation entitled 'Kvaliteta života starijeg stanovništva u izoliranim sredinama – primjer hrvatskih otoka'. She has been working at the Institute of Migrations and Ethnic Studies in Zagreb (since 1985). Scientific fields of interest: sociological (social-gerontological) aspects of population ageing in Croatia (particularly the ageing of population on islands and quality of life of the elderly) individual orientations and social-cultural models of behaviour of the youth.

Important works: *Otoci – ostati ili otići? Studija o dnevnoj cirkulaciji sa šibenskih otoka*, Zagreb 2001 (coauthor); *Otoci dviju generacija*, Zagreb 2004 (coauthor); *Ostarjeti na otoku – kvaliteta života starijega stanovništva hrvatskih otoka*, Zagreb 2008; *Gradovi potopili škoje – promjene u malim otočnim zajednicama*, Zagreb 2013 (coauthor).

JELENA PREDOJEVIĆ-DESPIĆ (Belgrade, 1970). Research Assistant of the Demographic Research Centre, Institute of Social Sciences, Belgrade.

The author graduated from the Faculty of Philology, University of Belgrade in 1994 (Department for the Albanian language and literature). She earned her master's degree at the Department of Demography, Faculty of Economics in Belgrade, in 2002 ('Reprodukcija stanovništva u radovima autora sa Kosova i Metohije'). As of 1997, she has been working as a Research Assistant of the Demographic Research Centre, Institute of Social Sciences, Belgrade. She is a member of the Association of Demographers of Serbia.

Important work: *O fertilitetu stanovništva Kosova i Metohije*, Beograd 2003.

BILJANA RADIVOJEVIĆ (Kičevo, 1953). Doctor of Economic Sciences. Full professor at the Faculty of Economics, University of Belgrade.

She graduated in 1976, received a Master's Degree in 1981 and PhD Degree in 1988 from the Faculty of Economics, University of Belgrade. Her positions were: teaching assistant trainee in 1977, assistant in 1981, assistant professor in 1989, associate professor in 1997. Regarding the demographic research, she is oriented to the field of mortality. Apart from carrying out the analyses, she also explores theoretical-methodological issues. Her second field of interest is demographic structures, especially economic. She completed Teacher Certification Course in London, Great Britain in 1986. She is a member of the Statistical Society of Serbia and Association of Demographers of Serbia.

Important works: *Zakon mortaliteta*, Beograd 1990; *Kohortni mortalitet stanovništva Jugoslavije: sa tablicama za generacije rođenih 1890–1969* (with Lj. Gačeša), Beograd 1993.

SANJA RADOVANOVIĆ (Goražde, 1976) Assistant Professor at the Department of Civil Law Studies, Faculty of Law, University of Novi Sad.

She graduated (1999) and earned her master's degree (2004, 'Naknada imovinske štete u autorskom pravu') from the Faculty of Law in Novi Sad. She defended her doctoral dissertation 'Ugovor o licenci softvera' at the Faculty of Law in Belgrade, in 2010. She is an Assistant Professor at the Faculty of Law in Novi Sad, at the Department of Civil Law Studies, for the subject of Law of obligations. The field of her scientific interest is general theory of civil rights, contract law, consumer rights and intellectual property right. From 2001 to 2003, she was the secretary of the Department for Civil Law Studies.

MIRJANA RAŠEVIĆ (Belgrade, 1955). Research associate and director of the Institute of Social Sciences and Full professor at the Department of Demography at the Faculty of Geography, University of Belgrade.

The author graduated from the Faculty of Medicine (1983), earned her master's degree from the Centre for Multidisciplinary Studies, University of Belgrade (1988), PhD degree in Sociology, from the Faculty of Philosophy in Belgrade (1992). The results of her research work have been published in ten books and several articles in national and international journals. She cooperated in the work on several studies and participated in large number of scientific meetings held in country and abroad. She was a project manager of numerous projects including some strategic projects as well. With respect to scientific research, the fields of her interest are population fertility, planning of a family, reproductive health, population ageing and political response to demographic challenges.

Important works: *Ka razumevanju abortusa u Srbiji*, Beograd 1993; *Fertilitet stanovništva SR Jugoslavije*, Beograd 1994 (coauthor); *Iskustva populacione politike*

u svetu, Beograd 1996 (with M. Petrović); *Planiranje porodice kao stil života*, Beograd 1999; *Obnavljanje stanovništva Srbije i populaciona politika države i lokalne samouprave*, Beograd 1999 (with A. Gavrilović); *Fertilitet i reproduktivno zdravlje stanovništva Republike Crne Gore*, Podgorica, 2001; *Voljna sterilizacija: potrebe, barijere, rešenja*, Beograd, 2002 (with K. Sedlecki); *Planiranje porodice kao filozofija i praksa*, Beograd, 2002; *Fenomen namernog prekida trudnoće*, Beograd, 2003; *Obnavljanje stanovništva i reproduktivno zdravlje*, Vašington 2005 (with K. Sedlecki); *Van institucionalna zaštita starijih ljudi u Srbiji*, Beograd 2007 (with N. Satarić); *Oni ne mogu da čekaju: studija o siromašnim starim licima u Srbiji*, Beograd 2009 (with N. Satarić and N. Miloradović); *Pomeraćemo granice*, Beograd 2012 (coauthor).

AGNEŠ SLAVIĆ (Subotica, 1977). An Assistant Professor at the Faculty of Economics in Subotica, University of Novi Sad.

The author graduated from the Faculty of Economics in Subotica (2001, 'Uticaj afekta i kognicije na potrošače organskih poljoprivrednih proizvoda') and earned her master's degree (2006, 'Organizovanje marketing aktivnosti agencija za zapošljavanje'). She defended her doctoral dissertation entitled 'Metodološka analiza istraživanja zadovoljstva zaposlenih Dolgozómagyarok' in 2006 at the University of Szent István in Gedeleu (Hungary) and earned her PhD in management and business. As an Assistant Professor, she gives lectures for undergraduate studies in HR Management, Management of urban environment and Organizational behaviour at the Faculty of Economics in Subotica. She gives lectures on International HR management for postgraduate studies and has had a university textbook published: *Menadžment ljudskih resursa*, Subotica 2006).

Important work: *Allásvadász kézikönyv diplomás pályakezdőknek*, Subotica 2008.

MILICA SOLAREVIĆ (Sremska Mitrovica, 1986). Assistant professor at the Department of Geography, Tourism and Hotel Management, at the Faculty of Sciences, University of Novi Sad.

She graduated (2009) and received a Master's Degree (2010) in Geography at the Department of Geography, Tourism and Hotel Management in Novi Sad. She enrolled doctoral studies at the same Department in 2010. She conducts research in the field of demography. She is a member of research teams on the projects financed by competent ministries and secretariats. She is responsible for practicum lessons in the following subjects: Introduction to research paper, Political geography, Basics of geographic information system (GIS), Information technologies in tourism, Social basis of tourism, Regional policy of the European union, and Application of geographic information systems (GIS) in socio-geographic disciplines.

ALEKSANDRA SPALEVIĆ (Belgrade, 1984). Research Associate at the Geographical Institute 'Jovan Cvijić' of the Serbian Academy of Sciences and Arts.

The author graduated from the Faculty of Geography, University of Belgrade in 2008 (Department of Spatial Planning). She received master's degree from the same Department and enrolled in doctoral studies in 2012. She has been engaged on the project 'Geography of Serbia' of the Ministry of Education, Science and Technological Development. Her interest in research is related to: urban planning, urban geography, spatial planning and the use of land in urban environment. The author has attended numerous national and international conferences.

Important work: *Transformacija periurbanog prostora Beograda*, Beograd 2013.

BILJANA STANKOVIĆ (Loznica, 1956). Principal Technical Associate at the Demographic Research Centre, Institute of Social Sciences, Belgrade.

The author graduated from the Faculty of Philosophy, Department of Psychology, University of Belgrade, in 1985. She completed her post-graduate studies of demography at the Faculty of Economics in Belgrade and defended the master thesis in 2003 ('Demografski i socio-psihološki aspekti fertiliteta adolescenata'). She had worked in the Consultancy for the choice of a partner and life in a couple (1984–1987), Ministry of family welfare (1997–2001), Ministry of social affairs (2003–2004) and the Demographic Research Centre, Institute of Social Sciences (2001–2002), where she has still been working since 2006. She has participated at meetings and scientific conferences.

Important work: *Fertilitet i reproduktivno zdravlje mladih*, Beograd 2004.

JELENA STOJILKOVIĆ-GNJATOVIĆ (Vranje, 1985). Research Assistant at the Geographical Institute 'Jovan Cvijić', Serbian Academy of Sciences and Arts (SASA).

The author graduated in 2008 (Department of Demography) and defended the master's thesis 'Penzioneri – rastuća kategorija stanovništva' in 2009, at the Department of Demography, Faculty of Geography, University of Belgrade. She entered the doctoral studies in 2010. At the City Office of Statistics, she did some volunteering in 2009. She had worked as a Teaching Associate at the Faculty of Geography (academic years 2009/2010 and 2010/2011). As of 2011, she has been working at the Geographical Institute 'Jovan Cvijić', SASA. The field of interest is the population ageing. She has been active at the Gerontological Society of Serbia since 2010. The author has also participated in numerous scientific meetings in the country and abroad.

SNEŽANA STOJŠIN (Novi Sad, 1973). Docent at the Department of Sociology, Faculty of Philosophy, University in Novi Sad.

She graduated from the Department of Sociology, Faculty of Philosophy, in Novi Sad (1999). She received her Master's Degree in 2007, defending the thesis entitled 'Поступци и извори за истраживање друштвеног аспекта намерног прекида трудноће'. She defended her doctoral dissertation in 2013 and earned the title of PhD in Sociology (dissertation: 'Примена анализе садржаја у истраживањима политичке пропаганде'). Fields of research and scientific interest are: sociological method, demography – natural migrations of population, media and teaching methods of sociology.

Important works: *Аборџус: друштвени аспекти и могућности његовог истраживања*, Нови Сад 2008; *Студенти и реформа високог образовања*, Нови Сад 2008 (коауторка).

VASILE SURD (Micești, near Alba Iulia, Romania, 1946).

The author graduated from the Department of Geography, University of 'Babes-Bolyai', Cluj-Napoca, in 1972. From 1973 until 1982, he had been employed at the Department of Geography, University of 'Babes-Bolyai', Cluj-Napoca, passing all possible ranks from Junior Teaching Assistant to Assistant Professor. In 1982, at the University of Bucarest, he defended his doctoral thesis 'The geography of settlements in the upper confluence of the river Aries, with the specific observation of the social and economic aspects' ('Geografia așezărilor din bazinul superior al râului Arieș, cu privire specială asupra sistematizării economico sociale'). As of 1974, he has been a member of the National Geographic Society.

Important works: *Geografie economică mondială*, Cluj-Napoca 1978; *Populația, așezările și economia mondială*, Cluj-Napoca 1982; *Geografie economică, Caiet de*

lucrări practice, Cluj-Napoca 1983; *Introducere în geografia rurală*, Cluj-Napoca 1983; *Așezările din bazinul montan al Arieșului*, Cluj-Napoca 1993; *Geografia dezvoltării și a decalajelor economice contemporane*, Cluj-Napoca 1997; *Geodemografie*, Cluj-Napoca 2001; *Introducere în geografia spațiului rural*, Cluj-Napoca 2002; *Geografia așezărilor*, Cluj-Napoca 2003; *Geography of Settlements*, Cluj-Napoca 2009; *Micești (Micuș), un sat transilvănean*, Cluj-Napoca 2013.

DANICA ŠANTIĆ (Belgrade, 1976). Docent at the Faculty of Geography, University of Belgrade.

She graduated (2000) from the Faculty of Geography in Belgrade. Her master thesis „Миграције становништва Београда: демографска анализа“ was presented in 2006. Doctoral dissertation „Размештај становништва Србије у контексту теорија о популационом оптимуму“ was defended in 2013 at the Faculty of Geography in Belgrade. She has been employed at the Faculty of Geography since 2001, first as an assistant professor and then, in 2014, she became a docent. She holds practicum lessons for the following subjects: Geography of population and Theory of population, in the study program Geography, Migrations of population and Demographic development of the world. Field of her interest is the population studies. She has published 30 scientific and research papers, either as the author or co-author, in national and international journals. She has presented the reports at various scientific meetings in the country and abroad. She was engaged in four national and one international projects. She is a member of Serbian Geographical Society, Association of Demographers of Serbia, and IUSSP (International organization for population studies).

ANKICA ŠOBOT (Kragujevac, 1969). Research Associate at the Demographic Research Centre, Institute of Social Sciences, Belgrade.

The author graduated from the Faculty of Philosophy, University of Belgrade, at the Department of Sociology in 1995 (‘Roditeljstvo u uslovima krize i tranzicije’). She defended her master’s thesis at the Faculty of Economics, University of Belgrade in 2002 (‘Perspektive rađanja u uslovima društvenih promena’). At the same faculty, in 2012, she defended her doctoral thesis ‘Demografski i socijalni aspekti rodne neravnopravnosti u Srbiji, od polovine 20. Veka’. She had worked at the Institute for the Sociological Studies, Faculty of Philosophy in Belgrade, as a research trainee (1996–1997). As of 2003, she has worked at the Institute of Social Sciences. She has participated in numerous national and international conferences.

Important work: *Rodna neravnopravnost u Srbiji – demografsko gledište*, Beograd 2014.

JOVANA TODORIĆ (Belgrade, 1983). Research Assistant at the Geographical Institute ‘Jovan Cvijić’, Serbian Academy of Sciences and Arts.

The author received her Bachelor’s degree (2008) and Master’s degree (2011) from the Faculty of Geography, University of Belgrade (in social geography). Her field of expertise is socio-economic and urban geography. In her previous work, she was focused on the study of urbanization process in Belgrade, its phases, socio-economic and demographic determinants of urban development. She directed her attention to the study of the process of reurbanization – movement of people to urban core, city lifestyle, residential preferences and residential location choice, quality value and perception of residential area in Belgrade. She has been employed at the Geographical Institute ‘Jovan Cvijić’ of the Serbian Academy of Sciences and Arts (since 2012). Her field of interest is social and urban geography, etc. She published a

monograph, numerous papers in scientific magazines and attended scientific meetings and conferences in the country and abroad. She is a member of the Serbian Geographical Society.

Important work: *Analiza stambenih preferencija u kontekstu reurbanizacije Beograda*, Beograd 2013.

PETAR VASIĆ (Smederevo, 1980). Teaching Assistant at the Faculty of Geography, University of Belgrade.

The author presented his master's thesis on demography at the Faculty of Economics in Belgrade (2010). He has been the Teaching Assistant at the Faculty of Geography in Belgrade since 2006. The research fields he is interested in are the population policy, population as a factor of economic phenomena and population projections. He has participated in several scientific and expert meetings and conferences. He is a member of Serbian Geographical Society and Association of Demographers of Serbia.

RADMILA VELJOVIĆ (Jagodina, 1977). Student of master's studies at the Faculty of Geography, University of Belgrade.

The author graduated from the Faculty of Geography in Belgrade ('Geografske osnove razvoja turizma u Berlinu'). She has enrolled in master's studies at the department of Demography at the same faculty where she is currently finishing the final part of her Master Thesis about the postponement of childbearing. Narrow spheres of her interest and scientific research are fertility, reproductive behaviour and natural regeneration of population. She has participated in several scientific meetings and symposiums.

Important work: *Odlaganje rađanja – savremeni demografski fenomen*, Beograd, 2014.

GORDANA VOJKOVIĆ (Skopje, 1957). Associate Professor at the Faculty of Geography, University of Belgrade.

The author earned her PhD degree after the Doctoral dissertation defense in 2003. She started her scientific career in 1988 at the Geographical Institute 'Jovan Cvijić' of the Serbian Academy of Sciences and Arts where she became a research associate in 2004. She was elected Assistant Professor in 2005, and Associate Professor in 2011 at the Faculty of Geography, University of Belgrade. The author is engaged in teaching the following courses in the study group of Demography: Historic Demography and Demographic Development of Serbia and Neighbouring Countries and Applied Demography in the study group of Spatial Planning. The sphere of scientific research she is interested in is related to population: historical demography, demographic aspects of regionalism, demographic development of Serbia and neighbouring countries.

Important works: *Smrtnost stanovništva Beograda*, Beograd 1992; *Stanovništvo kao element regionalizacije Srbije*, Beograd 2007.

RAJKO VRANJEŠ (Banja Luka, the Republic of Srpska, Bosnia and Herzegovina, 1978). Senior associate at the Republic of Srpska Institute of Statistics.

The author earned his master's degree at the Faculty of Geography in Belgrade (2010, 'Prostorno-funkcionalna organizacija opštine Prijedor') and currently works as a coordinator of activities related to the census of population in the Republic of Srpska. He participated in numerous seminars and professional trainings in the country and abroad and some of the most important trainings were related to population censuses, assessments and projections. The author has around ten published articles in scien-

tific journals, professional magazines and proceedings in the field of demography and spatial distribution of population. He participated in several empirical researches and specialized research on demographic movements, assessments and population projections.

ZORA ŽIVANOVIĆ (Ljig, 1977). Teaching Assistant at the Faculty of Geography, Institute of Spatial Planning, University of Belgrade.

Upon completion of Grammar School in Ljig (1996), she enrolled in the programme of Spatial Planning at the Faculty of Geography, University of Belgrade from where she graduated (2001, 'Savremene tendencije procesa urbanizacije Kolubarskog okruga') and gained Master Degree (2006, 'Beograd u funkciji regionalnog razvoja Srbije'). She defended her doctoral dissertation entitled: 'Uloga gradova srednje veličine u ravnomernom regionalnom razvoju Centralne Srbije', in 2012. Since 2001, she has been employed at the Faculty of Geography in Belgrade as a Teaching Assistant. She was awarded the title of assistant in the study programme of Spatial Planning at the Faculty of Geography in 2007. She teaches the following subjects: Regional planning, Introduction to Spatial Planning, Urban Economics and Methods of Development Planning. The author has worked on numerous scientific-research projects as well as on preparation of planning documentation at national, regional and local level.

Important work: *Značaj Beograda u regionalnom razvoju Srbije*, Beograd 2008.

MILENKO ŽIVKOVIĆ (Širinci, Nova Gradiška, 1956). Assistant Professor at the Faculty of Sciences, University of Banja Luka (study programmes: Geography and Spatial planning).

He received PhD Degree in 2008 in the field of regional geography ('Fizionomsko-funkcionalna transformacija prostora u gravitacionoj sferi Gradiške'). He is an Assistant Professor at the Faculty of Sciences, University of Banja Luka (study programmes: Geography and Spatial planning). His field of expertise is regional geography from the aspects of theory and application. He is a president of the Geographic Society of the Republic of Srpska and a member of numerous scientific and professional associations and an editor and member of editorial board of numerous scientific and professional publications. He is a co-author of one university textbook and the author of several books used in elementary and high school education.

Important work: *Zapadna Slavonija – okučansko-pakrački kraj: regionalno-geografski pristup*, Banja Luka 2001.

Translated into English
Olivera Krivošić, Miljana Tasić, Ljiljana Tubić

АУТОРИ У ОВОМ БРОЈУ

ДАНИЕЛА АРСЕНОВИЋ (Вурден, Холандија, 1983). Доцент на Департману за географију, туризам и хотелијерство, Природно-математичког факултета, Универзитета у Новом Саду.

Дипломирала (2007) и мастерирала (2008) из области географије на Департману за географију, туризам и хотелијерство у Новом Саду где је и докторирала 2014. године на тему „Утицај температуре ваздуха на сезоналност морталитета у Новом Саду”. Ужа научна област интересовања јој је демографија. Члан је неколико истраживачких група на више пројеката финансираних од стране надлежних министарстава и фондова Европске уније. Члан је Уредништва часописа *Geographica Pannonica*. Члан је Друштва демографа Србије, Европске асоцијације за популационе студије (European Association for Population Studies) и Статистичког друштва Војводине. Изводи вежбе на предметима Географија становништва, Демографски модели и Историјска демографија.

МАРИЈА БЕЛИЈ (Крушевац, 1985). Асистенткиња на смеру Туризмологија, Географског факултета Универзитета у Београду.

Дипломирала је 2008 („Позиционирање Рибарске Бање у бањском туризму Србије”), одбранила мастер рад 2009 („Бањски и рекреациони центри – облик прилагођавања бањског туризма Србије потребама савременог тржишта”) на Географском факултету у Београду. Докторске студије уписала 2010. године. Од школске 2008/09. ангажована је на Географском факултету Универзитета у Београду као сарадник у настави на студијској групи Туризмологија, а од 2011. године изабрана је у звање асистента за ужу научну област Туризмологија. Објавила је више радова у научним и стручним часописима и учествовала на научним конференцијама.

МАРИНА БЛАГОЈЕВИЋ ХЈУСОН (Београд, 1958). Социолошкиња, научна саветница у Институту за криминолошка и социолошка истраживања у Београду.

Бави се истраживањима у области социологије, социјалне демографије и родних студија. Ауторка је преко 130 научних публикација и већег броја књига. У Институту за криминолошка истраживања ангажована на потпројекту везаном за социјалну инклузију. Као међународна експерткиња радила је за Европску комисију, Европски парламент, UNIFEM, UN Women, USAiD, итд. Ангажована на експертским пројектима везаним за родну равноправност у више земаља. Област интересовања: род и развој на периферији, маскулинитети, производњу знања, родне политике и свакидашњи живот.

Важнија дела: *Сеобе Срба и Црногораца са Косова и из Меџохије: резултати анкете сprovedене 1985–1986. године* (са Р. Петровић), Београд 1989; *Srbija krajem osamdesetih* (група аутора), Београд 1991; *Žene izvan kruga: profesija i porodica*, Београд 1991; *Društvene promene i svakodnevni život: Srbija početkom devedesetih* (група аутора), Београд 1995; *Roditeljstvo i fertilitet: Srbija devedesetih*, Београд 1997; *Položaj žena u zemljama Balkana*, Вања Лука 2004; *Suočavanje s*

prošlosti: izveštaj za Srbiju i Crnu Goru (s N. Milenković), Beograd 2004; *Knowledge Production at the Semiperiphery: A gender perspective*, Belgrade 2009; *Žene i muškarci u Srbiji: Šta nam govore brojke?*, Beograd 2012; *Rodni barometar u Srbiji: razvoj i svakodnevni život*, Beograd 2013;

МИРЈАНА БОБИЋ (Београд, 1960). Социолошкиња и демографкиња, професорка Филозофског факултета Универзитета у Београду.

Дипломирала, магистрала и докторирала на Одељењу социологије Филозофског факултета у Београду (докторска теза „Транзиција партнерства – студија случаја у Београду”). Предаје Социјалну демографију, Демографију партнерства и рађања, Савремене миграције, Изазове савремене породице, Савремену породицу као изазов, Савремене популационе изазове на основним, мастер и докторским студијама на Филозофском факултету у Београду. Коауторка је бројних монографских публикација Института за социолошка истраживања Филозофског факултета у Београду, као и чланака у водећим часописима у земљи и иностранству.

Важнија дела: *Brak ili/i partnerstvo: demografsko sociološka studija*, Beograd 2003; *Postmoderne populacione studije : demografija kao intersekcija*, Beograd 2013; *Бескућници*, Београд 2014.

МИЛКА БУБАЛО ЖИВКОВИЋ (Бихаћ, БиХ, 1971). Ванредни професор на Департману за географију, туризам и хотелијерство Природно-математичког факултета, Универзитета у Новом Саду.

Дипломирала (1994), магистрала (2000) и докторирала на Департману за географију, туризам и хотелијерство Природно-математичког факултета у Новом Саду (2003, „Савремене географске функције Новог Сада и његово гравитационо подручје”). Асистент (1995–2003), доцент (2004–2011) а од 2011. године ванредни професор на Департману за географију, туризам и хотелијерство. Област научног истраживања: регионална географија, географија насеља, демографија. На основним студијама држи предавање из предмета: Географија Србије, Географија насеља; на мастер студијама: Регионалне разноликости Србије, Урбани развој и конурбација; на докторским студијама из предмета: Глобални геополитички процеси и Србија, Популациона политика и планирање породице. Члан је Српског географског друштва и Друштва демографа Војводине.

Важнија дела: *Ситановничийво Бачке*, Нови Сад 2006 (са С. Кицошевим и А. Ивков); *Ситановничийво Баната*, Нови Сад 2006 (са С. Кицошевим и А. Ивков); *Demografski razvoj pograničnih opština Banata u drugoj polovini XX veka* (grupa autora), Novi Sad 2010.

ПЕТАР ВАСИЋ (Смедерево, 1980). Асистент на Географском факултету, Универзитета у Београду.

Дипломирао је на Географском факултету, а одбранио магистарску тезу из демографије на Економском факултету у Београду (2010). Запослен је на Географском факултету, Универзитета у Београду, од 2006. године. Области истраживачког рада су му популациона политика, становништво као чинилац економских феномена и пројекције становништва. Учествовао на више научних и стручних скупова и конференција. Члан је Српског географског друштва и Друштва демографа Србије.

РАДМИЛА ВЕЉОВИЋ (Јагодина, 1977). Студент мастер студија на Географском факултету у Београду.

Дипломирала на Географском факултету у Београду („Географске основе развоја туризма у Берлину”). Похађа мастер студије на смеру Демографија на матичном факултету. Тренутно се налази у завршној фази израде мастер рада који се бави тематиком одлагања рађања. Уже области интересовања и научног истраживања су фертилитет, репродуктивно понашање, природно обнављање становништва. Учествовала је на више научних скупова и симпозијума.

Важнија дела: *Одлагање рађања – савремени демографски феномен*, Београд, 2014.

ГОРДАНА ВОЈКОВИЋ (Скопље, Македонија, 1957). Ванредни професор Географског факултета, Универзитета у Београду.

Дипломирала 1981. године на Одсеку за географију и просторно планирање Природно-математичког факултета Универзитета у Београду. Академски назив магистра географских наука стекла је 1990. године, а 2003. године, одбраном докторске дисертације, стекла је академски степен доктора географије („Основе демографске регионализације Србије”). Научну каријеру започела је 1988. године у Географском институту „Јован Цвијић” САНУ, где је 2004. године стекла звање научног сарадника. У звање доцента изабрана је 2005. године, а у звање ванредног професора 2011. године на Географском факултету Универзитета у Београду. Ангажована је у извођењу наставе на студијској групи Демографија из предмета: Историјска демографија и Демографски развитак Србије и суседних земаља и Примењена демографија на студијској групи Просторно планирање. Област научног интересовања везана је за науку о становништву: историјска демографија, демографски аспекти регионализма, демографски развитак Србије и суседних земаља. Учествовала је у реализацији и руководила тимом за израду студија демографског развоја за Стратегију просторног развоја Републике Србије 2009–2013–2020. и Просторног плана Републике Србије 2010. Члан је Одбора за проучавање становништва САНУ, Научног већа Центра за историјску географију и историјску демографију при Филозофском факултету у Београду, Српског географског друштва и Друштва демографа Србије. Обавља дужност продекана за наставу на Географском факултету Универзитета у Београду.

Важнија дела: *Смртност становништва Београда*, Београд 1992; *Становништво као елементарна регионализација Србије*, Београд 2007.

РАЈКО ВРАЊЕШ (Бања Лука, Република Српска, БиХ, 1978). Виши стручни сарадник у Републичком заводу за статистику Републике Српске.

Магистрирао на Географском факултету у Београду (2010, „Просторно функционална организација општине Приједор”). Тренутно ради као координатор на пословима пописа становништва у Републици Српској. Учесник је бројних семинара и стручних усавршавања у земљи и иностранству, међу којима су најзначајније обуке о попису становништва, процјене, прогнозе и пројекције становништва. Објавио десетину чланака у научним и стручним часописима или зборницима из области демографије и просторног размјештаја становништва. Учествовао у више емпиријских истраживања и специјализованих истраживања о демографским кретањима, процјенама и пројекцијама становништва.

ИРЕНА ГАБРИЋ МОЛНАР (Лукино село код Зрењанина, 1954). Редовни професор на Економском факултету у Суботици, Универзитета у Новом Саду.

Дипломирала на Економском факултету у Суботици (1977), магистрирала 1981. и докторирала 1986 („Улога синдиката у самоуправној интеграцији радничке класе”) на Факултету политичких наука Универзитета у Београду. На Економском

факултету у Суботици за редовног професора из области Социолошких наука изабрана је 1997. године. Изводи наставу на Економском факултету у Суботици: Социологија и Социологија људског ресурса региона. На Учитељском факултету Универзитета у Новом Саду (мађарски наставни језик, седиште у Суботици) држи наставу из предмета: Увод у социологију, Социологија образовања, Социологија насеља и Социологија породице. На Педагошком факултету „Јухас Ђула” Научног универзитета у Сегедину држи специјалистички курс: Познавање државе Србије. Од 2000. године члан Јавног тела Мађарске академије науке и од 1995. године председник Научног друштва за хунгаролошка истраживања у Суботици. Координирала је више пројеката из области истраживања мањина у Србији, миграције и социологије образовања.

Важнија дела: *A JSZSZK politikai rendszere* (sa L. Laki i L. Rehak), Subotica 1982; *Gde je akcija sindikalno organizovane radničke klase*, Beograd 1989; *Képzettek a jövő: A felnőttképzés háttere Észak-Bácska iskolahálózatában* (група аутора), Subotica 2008; *Szociológiai jelenségvizsgálatok a Vajdaságban*, Subotica 2011.

ВЕРА ГЛИГОРИЈЕВИЋ (Ужице, 1970). Доцент на Географском факултету Универзитета у Београду. Дипломирала, магистрирала и докторирала (2012) на Географском факултету у Београду којим је стекла академско звање доктора демографије. У научно-истраживачком раду усмерена је на проучавање људског капитала, тржишта рада и економских последица демографских промена. Учествовала на више научних и стручних скупова и конференција у земљи и иностранству. Члан је Српског географског друштва, Друштва демографа Србије и Европског друштва за економску демографију (ESPE).

ДАНИЈЕЛ ДАНИЛОВИЋ (Фоча, 1986).

Основну и средњу Економску школу завршио у Чајничу. Дипломирао (2009) на Одсеку за географију Филозофског факултета Универзитета у Источном Сарајеву („Демографски развој општине Фоча”). Магистрирао 2013. године на тему „Демографски развој горњег Подриња”). Учествовао као сарадник на пројекту „Становништво као основни фактор одрживог економског развоја Републике Српске”.

МИРЈАНА ДЕВЕЦИЋ (Београд, 1959). Редован професор Географског факултета Универзитета у Београду.

Дипломирала (1982) и магистрирала (1988) у области туризмологије на Природно-математичком факултету Универзитета у Београду. Звање доктора географских наука стекла је 1999. године одбранивши докторску дисертацију на Географском факултету у Београду („Туризам као фактор промена у развоју, размештају и структурама становништва Црногорског приморја”). У звању редовног професора Географског факултета Универзитета у Београду (смер Демографија) је од 2011. године. Изводи наставу на предметима: Природно обнављање становништва и Демографске структуре на смеру Демографија; Становништво и туризам на смеру Туризам. Такође изводи наставу на мастер и докторским студијама. Професионално је усмерена на изучавање репродукције становништва, демографског старења, социо-економских структура становништва, веза између развоја туризма и демографског развитка и значаја информатике за демографију. Руководила је пројектом билатералне сарадње Србије и Словеније: *Population Development Issues in Border Regions* (2010–2011). У оквиру програма интегралних и интердисциплинарних истраживања Министарства за просвету, науку и технолошки развој (2011–2014) руководи потпројектом Географског

факултета „Просторна диференцираност демографских феномена у Србији”. Члан је редакције часописа *Сѣановнишћѣво* и *Демоѣрафија*, председништва Друштва демографа Србије, Одбора за проучавање становништва САНУ, међународне асоцијације ДемоБалк са седиштем у Грчкој. У два мандата је обављала функцију шефа Катедре за демографију Географског факултета.

Важнија дела: *Belgrade for Young People*, Belgrade 1990; *О љиродном креѣању сѣановнишћѣва*, Београд 2006; *Uticaj turizma na demografski razvitak: primer Crnogorskog primorja*, Beograd 2011.

МАРИЈА ДРОБЊАКОВИЋ (Прибој, 1982). Истраживач сарадник у Географском институту „Јован Цвијић” Српске академије наука и уметности.

Дипломирала је 2006. године и завршила мастер постдипломске студије 2009. године на Географском факултету Универзитета у Београду (смер Просторно планирање). Докторске студије уписала је 2010. на Географском факултету у Београду Од 2008. запослена је у Географском институту „Јован Цвијић” САНУ. Област интересовања везана је за рурално планирање и руралну географију, географију насеља и рурални развој. Била је члан радног тима на изради више просторних планова и пројеката. Добитница годишње награде „Димитрије Перишић” Института за архитектуру и урбанизам Србије (за мастер рад са темом „Пријепоље у функцији регионалног развоја југозападне Србије”).

Важнија дела: *Пријепоље – факѣор регионалне инѣѣѣрације јуѣозајадне Србије*, Београд, 2012.

БОЈАН ЂЕРЧАН (Сремска Митровица, 1984). Асистент на Департману за географију, туризам и хотелијерство Природно-математичког факултета, Универзитета у Новом Саду.

Дипломирао је на Департману за географију, туризам и хотелијерство у Новом Саду (2007, „Географске карактеристике Вашице”) где уписује и докторске студије. На Департману за географију, туризам и хотелијерство Природно-математичког факултета у Новом Саду прошао је звања: сарадник у настави (2007), истраживач приправник (2007), истраживач сарадник (2010) и асистент (2012). Област научног истраживања: Регионална географија, Друштвена географија (Географија насеља, Демографија).

БРАНИСЛАВ С. ЂУРЂЕВ (Бач, 1950). Редовни професор на Департману за географију, туризам и хотелијерство Природно-математичког факултета, Универзитета у Новом Саду.

Магистрирао (1987) је на Берклију (University of California, Berkeley), а докторирао (1986, „Демографско-географска анализа послератних имиграција у Војводину”) на Катедри за географију Природно-математичког факултета у Новом Саду. Улогу становништва у планирању развоја изучавао на Московском државном универзитету, миграциону проблематику на белгијском Католичком универзитету Louvain la Neuve. Проблематику нупцијалитета изучавао на Европском универзитетском институту у Фиренци. Бави се историјском демографијом, пројекцијама становништва и проблематиком миграција. Био је шеф Катедре за друштвену географију, проректор за међународну сарадњу на Универзитету у Новом Саду, а од 2012. године је директор Департмана за географију, туризам и хотелијерство. Изводи наставу на основним академским и докторским студијама и на предметима: Географија становништва, Демографски модели, Историјска демографија, Увод у научни рад и Методологија научно-истраживачког рада. Руководио је и руководи са више научних и развојних пројеката.

Важнија дела: *Послератно насељавање Војводине: методи и резултати демогеографске анализе насељавања Војводине у периоду 1945–1981*, Нови Сад 1995; *Основне технике у демографији*, Нови Сад 2001; *Становништво и домаћинства Аутономне Покрајине Војводине почетком XXI века*, Нови Сад 2008 (коаутор); *Мере популационе политике локалних самоуправа Аутономне Покрајине Војводине*, Нови Сад 2011.

ЗОРА ЖИВАНОВИЋ (Љиг, 1977). Асистент на студијској групи Просторно планирање на Географском факултету, Универзитета у Београду.

Након завршене гимназије у Љигу (1996) уписала је Просторно планирање на Географском факултету Универзитета у Београду где је дипломирала (2001, „Савремене тенденције процеса урбанизације Колубарског округа”) и магистрирала (2006, „Београд у функцији регионалног развоја у Србији”). Докторску тезу под називом: „Улога градова средње величине у равномерном регионалном развоју Централне Србије”, одбранила је 2012. године. Запослена од 2001. године на Географском факултету у Београду као асистент приправник. Звање асистента на групи Просторно планирање Географског факултета стекла је 2007. Предаје на предметима: Регионално планирање, Увод у просторно планирање, Урбана економија и Методе програмирања развоја. Учествовала је у више научно-истраживачких пројеката као и у изради планских докумената националног, регионалног и локалног нивоа.

Важнија дела: *Значај Београда у регионалном развоју Србије*, Београд 2008.

МИЛЕНКО ЖИВКОВИЋ (Ширинци код Нове Градишке, 1956). Ванредни професор Природно-математичког факултета, Универзитета у Бањој Луци (студијски програми Географија и Просторно планирање).

Докторирао 2008. године из области регионалне географије („Физиономско-функционална трансформација простора у гравитационој сфери Градишке”). Ванредни је професор Природно-математичког факултета Универзитета у Бањој Луци (студијски програми Географија и Просторно планирање). Бави се регионално-географском проблематиком с теоретског и апликативног аспекта. Председник је Географског друштва Републике Српске и члан више научних и стручних удружења. Уредник је и члан редакцијских одбора више научних и стручних издања. У коауторству је објавио један универзитетски уџбеник и неколико уџбеника за основну и средње школе.

Важнија дела: *Зайадна Славонија – окупанско-накрачки крај: регионално-географски преглед*, Бања Лука 2001.

МАРИЈА ИВКОВИЋ (Панчево, 1984). Стипендисткиња Министарства просвете, науке и технолошког развоја на Географском институту „Јован Цвијић” САНУ у Београду.

Дипломирала је на Географском факултету, Универзитета у Београду (2009) у области друштвене географије на теми „Дневне миграције радне снаге, ученика и студената према Јагодини, Параћину и Њуприји” и одбранила мастер рад на истом факултету из области демографије (2011, „Разводи бракова у Србији”). У научном раду фокусира се на проучавање становништва, са акцентом на брачне моделе, савремене процесе и промене када је у питању брачно понашање становништва. Објавила је више радова у научним часописима, учествовала на научним скуповима у земљи и иностранству. Члан је Српског географског друштва и Друштва демографа Србије.

Важнија дела: *Учесталост развода брака у Србији (1947–2010)*, Београд 2011.

МАРИЈА-КАМЕЛИЈА КАНТОР (Марамуреш Сигет, Жупанија Марамуреш, Румунија, 1979). Доцент географије на Одсеку за социологију и историју Филозофског факултета и друштвених наука Клафлин универзитета (Claflin) у Оранжбургу (Orangeburg) у Јужној Каролини (САД).

Поља интересовања: економски развој, здравствена географија, туристичка географија и политичка географија. Истраживање јој је фокусирано и на динамику просторне, културне и друштвено-економске обнове руралних насеља у земљама Источне Европе након 1989. године.

САЊА КЛЕМПИЋ БОГАДИ. Научни сарадник Института за миграције и народности у Загребу.

Дипломирала 1998. на Географском одсеку ПМФ-а у Загребу где је и магистрирала 2003. године („Razvoj stambenih naselja Splita nakon Drugoga svjetskog rata pod utjecajem imigracije”). Докторирала на истом факултету 2008. године („Demogeografski aspekti suburbanizacije Hrvatske: primjer giječke aglomeracije”). Демограф у Институту за миграције и народности у Загребу од 2000. године. Научно интересовање: демогеографија, урбана географија. Пројекти: „Утјецај миграција на регионални развој Хрватске” (2007), „Утјецај новијих миграција на развитак насеља Хрватске” (2002–2006), „Унутарње миграције у Хрватској” (2000–2002).

Важнија дела: *Gradovi potopili škoje – promjene u malim otočnim zajednicama*, Zagreb 2013 (коаутор).

АЛЕКСАНДАР КНЕЖЕВИЋ (Краљево, 1973). Доцент на Географском факултету Универзитета у Београду.

Дипломирао 2001. године на Географском факултету, Универзитета у Београду. Специјализирао 2002. године на Алтернативној академској образовној мрежи (смер: Животна средина – изазов науци, технологији и друштву). Магистрирао 2006. и докторирао 2013. године на Географском факултету у Београду („Историјскодемографске и етнодемографске основе развитка становништва Источне Србије”). Од 2001. године је запослен на Географском факултету у Београду на студијској групи Демографија. Ужа научна област му је статистика становништва и етнодемографија. Био је ангажован у истраживачким тимовима на реализацији три домаћа и једног међународног пројеката. Члан је Друштва демографа Србије и Српског географског друштва.

Важнија дела: *Роми (Цигани) у Београду – етнодемографска истраживања*, Београд 2010.

МАРКО КНЕЖЕВИЋ (Нови Сад, 1984). Асистент на Правном факултету, Универзитета у Новом Саду.

Дипломирао на Правном факултету у Новом Саду (2006). Дипломске академске студије (мастер) на истом факултету завршио је 2008. године, одбранивши рад „Привремене мере у праву интелектуалне својине”. За сарадника у настави за предмет Грађанско процесно право изабран је 2006. године, за асистента за предмет Грађанско процесно право изабран је 2008. године. Упоредо са радом на Правном факултету, од 2006. до 2008. године волонтирао је у Окружном суду у Новом Саду. Област интересовања: парнични поступак, нарочито начела парничног поступка; привремена правна заштита у грађанским судским поступцима; арбитражно право. Говори енглески и немачки језик.

ГОРДАНА КОВАЧЕК СТАНИЋ (Нови Сад, 1958). Редовни професор Правног факултета Универзитета у Новом Саду.

Дипломирала је на Правном факултету у Новом Саду (1981) на којем је и магистрала 1987. године („Материнство као елемент породичног статуса“). На Правном факултету у Београду је 1991. године одбранила докторску дисертацију „Остваривање родитељског права – односи личне природе“. За редовног професора је изабрана 2002. године. Предаје Породично право и Наследно право на Општем смеру и Смеру унутрашњих послова, као и опционе предмете Упоредно породично право и Судска пракса (Породично право) у оквиру Практичног правног образовања.

Важнија дела: *Pravni izraz roditeljstva*, Novi Sad 1994; *Pravo deteta da zna svoje poreklo*, Novi Sad 1997; *Legislativa o ljudskoj reprodukciji uz biomedicinsku pomoć*, Novi Sad 2008.

ВЛАСТА КОКОТОВИЋ (Госпић, Хрватска, 1984). Истраживач сарадник Географског института „Јован Цвијић“, САНУ.

Дипломирала (2007) и завршила мастер студије на Географском факултету Универзитета у Београду на Катедри за демографију. Докторске студије уписала 2010. године. Запослена у Географском институту „Јован Цвијић“ у звању истраживач сарадник (од 2011) на пројекту „Географија Србије“ Министарства науке, образовања и технолошког развоја. Истраживачка интересовања: популациона динамика, градско становништво, демографски потенцијал, миграције становништва. Учесник је бројних конференција националног и међународног значаја. Члан је Друштва демографа Србије и Европске популационе асоцијације.

СВЕТОЗАР ЛИВАДА (Слуњ, Хрватска, 1928). Социолог и демограф. Пензионисани професор Свеучилишта у Загребу.

Дипломирао је на Филозофском факултету, Свеучилишта у Загребу, на Групи за филозофију и историју и докторирао (1975, „Društveno-ekonomski uzroci i posljedice starenja poljoprivrednog stanovništva“) на истом факултету из области руралне социологије. На поменутом факултету предавао је социјалну демографију. Један је од оснивача последипломских студија геронтологије на Медицинском факултету у Загребу. Такође, био је један од уредника часописа *Социологија села*. Једно време је вршио функцију в.д. директора Аграрног института у Загребу.

Важнија дела: *Etničko čišćenje: Ozakonjeni zločin stoljeća*, Zagreb 2006; Novi Sad 2007; *Stradanja i nadanja*, Sombor 2013.

ЈЕЛЕНА ЛОНЧАР (Загреб, Хрватска, 1978). Виши асистент на Географском одсеку, Природословно-математичког факултет, Свеучилишта у Загребу.

Дипломирала је на Географском одсеку Природословно-математичког факултет у Загребу (2002, „Procesi globalizacije i regionalizacije u Europi i njihov utjecaj na Hrvatsku“). На последипломским студијама одбранила рад „Географски елементи просторног планирања и регионалног развоја“ (2005). Докторску дисертацију „Економско-географско реструктурирање Сређишње Хрватске у увјетима транзиције“ одбранила 2011. године. На Географском одсеку је виши асистент Природословно-математичког факултета у Загребу (од 2005). Главне области научног истраживања: економски, индустријска и политичка географија, глобализација и регионални развој. До сада је објавила више научних радова у домаћим и страним часописима те учествовала на међународним и домаћим научним скуповима.

ВЕСНА ЛУКИЋ (Сарајево, 1974). Доктор демографских наука, научни сарадник у Центру за демографска истраживања Института друштвених наука у Београду.

На Географском факултету Универзитета у Београду дипломирала (1997), магистрала (2003, смер: Демографија) и докторирала (2008, „Конвергентне и дивергентне дневне миграције становништва Панчева”). Од 1999. до јуна 2010. године била запослена у Географском институту „Јован Цвијић”, САНУ. Члан је Европског удружења за проучавање становништва, Друштва демографа Србије и Одбора за проучавање становништва Одељења друштвених наука САНУ.

Важнија дела: *Дунавско-моравски коридор: насеља (са Б. Тошић и Д. Матијевић), Београд 2004; Избегличке миграције из Босне и Херцеговине у Београд током последње деценије XX века, Београд 2005; Демографски развојак и функционална структура Панчева, Београд 2011.*

ТАМАРА ЛУКИЋ (Нови Сад, 1976). Ванредни професор на Департману за географију, туризам и хотелијерство Природно-математичког факултета, Универзитета у Новом Саду.

Дипломирала је (2000) из области физичке географије, а магистрала (2005) и докторирала (2008) из области регионалне географије на Департману за географију, туризам и хотелијерство у Новом Саду на тему „Гоч и подгорина – географска студија”. Ужа научна област интересовања јој је регионална географија и географија становништва (старосне структуре и етничке групе). Члан је Српског географског друштва, Конзорцијума европског истраживања у друштвеним и хуманистичким наукама Универзитета у Анжеу, Француска (од 2005). Била је члан ХЕРОДОТ мреже за географију у високом образовању Универзитета у Ливерпулу, Велика Британија (2007–2009). Члан је уредништва часописа *Зборник радова Дејаршмана за географију, туризам и хотелијерство*. Изводи наставу на основним (Регионална географија Европе, Географија света, Географија локалне средине и Географија земаља Западног Балкана), мастер (Карактеристичне регије на Земљи) и докторским студијама (Регионални развој Југоисточне Европе, Компаративна анализа регија по континентима).

Важнија дела: *Општина Суботица, Нови Сад 2006; Гоч и подгорина, Нови Сад, 2010.*

ДРАГАНА ЛУКИЋ БОШЊАК (Сента, 1980). Запослена у Информационом центру за развој Потиског региона у Кањижи.

Завршила енглески језик и књижевност. Радила као професор енглеског језика. Превођилац на Фестивалу европског филма на Палићу. Преводи за јавне институције, часописе и приватна лица. Учествовала у раду на пројектима разноврсних тема. Ради на писању и спровођењу међународних пројеката.

МАРИАНА ЛУКИЋ ТАНОВИЋ (Сарајево, 1984). Виши асистент на Филозофском факултету на Палама, Универзитета у Источном Сарајеву.

Дипломирала (2008) и магистрала (2013, „Демографски развој града Источно Сарајево – стање и перспектива”) на Катедри за географију Филозофског факултета на Палама, Универзитета у Источном Сарајеву. У звање асистента за ужу научну област Друштвена географија изабрана 2010. године, а 2013. за вишег асистента на истој научној области. Учествовала је на бројим конгресима, симпозијумима и семинарима из области географије. Члан је Географског истраживачког друштва „Јевто Дедијер”.

ИВАНА МАГДАЛЕНИЋ (Београд, 1986). Дипломирани демограф. Демонстратор на вежбама основних студија четврте године (смер Демографија) на Географском факултету, Универзитета у Београду.

Дипломирала на Географском факултету у Београду (2013, смер Демографија) и стекла звање дипломираног демографа. Усавршавање у демографској проблематици, наставља на Географском факултету и смеру Демографије, уписавши мастер студије 2013. године, које тренутно похађа. Одлуком Наставно-научног већа (2014) Географског факултета, постаје демонстратор на вежбама основних студија четврте године (смер Демографија) на следећим предметима: Демографски развитак Србије и суседних земаља и Етнодемографија. Фундаменталну и ужу сферу интересовања представља репродукција становништва. У фокусу интересовања су и све сложене појаве и процеси демографског развитака, његов некадашњи профил и актуелни акутни проблеми са којима се суочава Србија (депопулација, недовољно рађање, демографско старење итд).

АЛЕКСАНДАР МАЈИЋ (Бихаћ, 1986). Дипломирани географ. Стручни сарадник у звању асистента на Студијској групи географија Природно-математичког факултету Универзитета у Бањој Луци.

Дипломирао 2011. године („Морталитет Републике Српске – фактори и последице”). Од 2012. године стално запослен на Универзитету у Бањој Луци. Стручни сарадник у звању асистента на Катедри за демографију и друштвену географију Природно-математичког факултета Универзитета у Бањој Луци.

МИРА МАНДИЋ (Нова Градишка, Хрватска, 1961). Ванредни је професор Природно-математичког факултета, Универзитета у Бањој Луци.

Докторирала је 2007. године из области друштвене географије („Савремена просторно-функционална трансформација Бање Луке”). Ванредни је професор Природно-математичког факултета у Бањој Луци (студијски програми Географија и Просторно планирање). Руководилац је Студијског програма Просторно планирање. Бави се проблематиком развоја насеља (урбана и рурална географија), социјалном географијом и методиком наставе географије. Члан је више научних и стручних удружења.

Важнија дела: *Карактеристике урбаног развоја Бање Луке: савремена просторно – функционална трансформација града*, Бања Лука 2013.

ВЕНИ МАРИНКОВИЋ (Сплит, Хрватска, 1989). Стручни сарадник на пројектима које финансира Европска унија при Свеучилишту у Загребу.

Основну школу завршила у Комижи а гимназију у Вису. Школовање наставила у Загребу (2008) где се укључила у истраживачки програм на Факултету природних наука, Одсек за географију. Последипломске студије Просторног планирања и регионалног развоја наставила 2010. године. Мастер рад „*Suvremeno geografsko modeliranje razvoja dalmatinskog otočja*” одбранила 2013. године. Истраживачке области којима се бави су регионални развој и демографија хрватских острва и могућности њихове ревитализације. Ради на Универзитету у Загребу као стручни сарадник на пројектима које финансира ЕУ: „Технологија у земљама Југоисточне Европе” и „Сребрни град”, волонтира при локалној акцијској групи „Шкоји” на извештајима о просторним анализама.

ДРАШКО МАРИНКОВИЋ (Прњавор, Република Српска, БиХ, 1974). Географ-демограф. Ванредни професор на ужим научним областима Друштвена географија и Демографија на Студијској групи географија Природно-математичког факултета, Универзитета у Бањој Луци.

Дипломирао 1998. године, магистрирао 2001 („Дневне миграције становништва општине Прњавор”) и докторирао 2004 („Избјеглиштво – специфичан вид миграција становништва Републике Српске у периоду 1991–2001”) на Природно-математичком факултету у Бањој Луци. Од 1999. године стално запослен на Универзитету у Бањој Луци (ванредни професор од 2009. године) на ужим научним областима Друштвена географија и Демографија. Од 2008. године обавља функцију проректора за кадровска и друга питања Универзитета у Бањој Луци. Од 2010. године обавља дужност Шефа катедре за друштвену географију и демографију. Дугогодишњи је члан Савјета за демографску политику Републике Српске, Одбора за репродуктивно здравље и демографију Академије наука и умјетности Републике Српске, Друштва демографа Србије, Српског географског друштва и Географског друштва Републике Српске. Председник је Центра за демографска истраживања у Бањој Луци.

Важнија дела: *Дневне миграције становништва општине Прњавор*, Бања Лука 2001; *Демографски проблеми процеса избјеглиштва у Републици Српској*, Бања Лука 2005; *Република Српска: Туристички потенцијали*, Источно Сарајево 2005 (коаутор); *Репродуктивни потенцијал адолесцената у Републици Српској*, Бања Лука 2010 (коаутор).

ИВАН МАРИНКОВИЋ (Крагујевац, 1980). Магистар демографских наука. Истраживач-сарадник у Центру за демографска истраживања Института друштвених наука у Београду.

Дипломирао на Географском факултету Универзитета у Београду (2004). Магистрирао на Економском факултету у Београду (2010, смер Демографија). Област научног истраживања: морталитет и старење становништва. Био стипендиста Министарства науке Републике Србије у периоду 2005–2008. Од 2008. године запослен у Институту друштвених наука у Београду. Члан је Друштва демографа Србије (од 2011. секретар Друштва).

МИЛАН М. МАРКОВИЋ. Истраживач сарадник на Институту друштвених наука у Београду (Центар за правна истраживања). Правни сарадник Иницијативе за права особа са менталним инвалидитетом МДРИ-С и докторанд на Универзитету у Грацу (Институт за међународно јавно право). Генерални је секретар Удружења правника за медицинско и здравствено право (СУПРАМ). Као правни сарадник/експерт, ангажован је на више пројеката које финансира Министарство просвете и науке, као и на пројектима из ФП7 и ИПА оквира ЕУ. Објавио је чланке, монографије и уређивао публикације у области права на здравље, људских права, међународног права, права особа са инвалидитетом и здравственог права. Као гостујући истраживач, боравио је на Универзитету у Копенхагену, Макс Планк Институту у Хајделбергу, Универзитету у Бечу и Универзитету у Лунду.

СОЊА МИЛЕВА БОЖАНОВА [СОНЈА МИЛЕВА-БОЖАНОВА] (Софија, Бугарска, 1975). Професор на Софијском универзитету „Свети Климент Охридски”. Директор Института за сертификацију и акредитацију [<http://www.bkonk.bg/za-bkonk/upravitelen-savet?id=40:sonya-mileva>].

Дипломирала на Универзитету за националну и светску економију у Софији (1999). Магистратуру из области међународног туризма стекла 1999. године. Докторирала 2003. године („Конкурентност и конкурентоспособност в международния туризъм”). Професор и шеф магистарског програма за економију и менаџмент у туризму. Област научног интересовања: туризам, економика у туризму,

маркетинг у туризму, реинженеринг у пословном процесу. Потпреседник Бугарског удружења за образовање, науку и културу (БКОНК). Говори енглески, руски и португалски језик.

Важнија дела: *Реинженеринг и конкурентноспособност на туристическия продукт*, Софија 2002; *Рекреација чрез специјализиран туризъм*, Софија 2004; *Емитивни пазари за десинација Българија*, Софија 2011; *Международен туризъм*, Софија 2011.

НАТАЛИЈА МИРИЋ (Краљево, 1989). Истраживач сарадник на Географском факултету Универзитета у Београду.

Дипломирала (2012) и завршила мастер студије (2013) на Географском факултету у Београду, смер Демографија. Докторске студије уписала на Географском факултету (модул Демографија). Од априла 2014. године стекла статус стипендисте Министарства на пројекту „Истраживање демографских феномена у функцији јавних политика у Србији”. Поље интересовања су јој економске структуре. Учествовала је на неколико националних научних скупова и конференција и објавила неколико радова у националним часописима и зборницима. Члан је Друштва демографа Србије.

МАРИЈА МУЦИЋ (Земун, 1984). Докторанткиња демографије на Географском факултету, Универзитета у Београду.

Дипломирала (2009, „Демографске карактеристике фертилног контингента у Србији”) и одбранила мастер рад (2011, „Размештај и концентрација фертилног контингента у Србији”) на Географском факултету у Београду. Као истраживач и један од координатора учествовала је у научно-истраживачком пројекту „Радан” (2009–2012) Друштва младих истраживача „Б. Букуров”. Радила на стручној пракси (2013–2014) у Републичком заводу за статистику у Одељењу за попис становништва. Објавила је више радова у научним часописима и учествовала на више домаћих и међународних научних скупова. Члан је Друштва демографа Србије.

ВЛАДИМИР НИКИТОВИЋ (Ужице, 1973). Научни сарадник Центра за демографска истраживања Института друштвених наука у Београду.

Академска звања стекао на Универзитету у Београду: дипломирао географију на Природно-математичком факултету (1998), магистрирао демографију на Институту за демографију Географског факултета (2003), докторирао демографију на Економском факултету у Београду (2009). Од 1999. до 2005. радио је као истраживач-сарадник у Географском институту „Јован Цвијић” САНУ. Као резултат истраживачког рада објавио је три монографије, и више од 30 чланака у националним и међународним часописима. Сарађивао је у низу студија, укључујући међународне пројекте, и учествовао на већем броју скупова у земљи и иностранству. У сферу научног интересовања спадају модели популационе динамике, популационо старење, миграције становништва и просторни аспекти демографских појава. Од 2011. уредник је часописа *Становништво*.

Важнија дела: *Тачнось и пројекција становништва Србије*, Београд 2004; *Демографска будућност Србије: имиграција као извесност?*, Београд 2010; *Утицај демографских и миграционих токова на Србију*, Београд 2012 (с М. Купишевским и Д. Купишевском).

БОЈАН ПАЈТИЋ (Сента, 1970). Ванредни професор Правног факултета, Универзитета у Новом Саду.

Дипломирао (1995), магистрирао (2000, „Фидуцијарни споразуми као средство обезбеђења облигационоправних потраживања”) и докторирао (2008, „Брачни имовински уговор”) на Правном факултету у Новом Саду. За асистента приправника за наставни предмет Облигационо право на Правном факултету у Новом Саду изабран је 1996, за доцента на предмету Облигационо право 2009, а за ванредног професора Правног факултета у Новом Саду изабран је 2014. године. Аутор је неколико радова који су објављени у водећим домаћим часописима. Област интересовања: облигационо право, уговорно право, средства обезбеђења потраживања.

Важнија дела: *Jemstvo*, Novi Sad 2014.

БОГДАН-НИКОЛАЕ ПАКУРАР (Клуж, Румунија, 1984). Саветник за проблеме животне средине у Окружном већу Области Клуж (Румунија).

Дипломирао је на Факултету за географију, Универзитет „Бабеш-Бољај” у Клужу 2007. године. Током мастер студија, углавном се бавио просторним управљањем и људским ресурсима. Одбранио је мастер рад на Универзитету „Бабеш-Бољај” у Клужу 2008. године. Докторирао је 2011. године. Главни предмети на докторским студијама су му били географија, урбано планирање, социологија и геополитика. Радио је као професор енглеског језика на Техничком факултету „Ангел Салињи” у Клужу од 2007. до 2008. те као главни надзорни орган у Регионалном статистичком уреду у Клужу од октобра до новембра 2011. Од 2008, ради као Саветник за проблеме животне средине у Окружном већу Области Клуж у Клужу. Главна задужења су му: руковођење сајтовима „Клисура Турди” и „Клисура Туренилор” Натура 2000, саветовање по питању проблема животне средине за пројекат „Учествовање у раду и одржавање сајтова Клисура Турди и Клисура Туренилор Натура 2000”, издавање урбанистичких дозвола и уверења за дозволе, издавање било каквих уверења у вези са активностима које се дешавају на територији обласних природних резервата као и превођење докумената за институцију у којој је запослен (енглески-румунски). Објавио је неколико књига и бројне научне чланке.

Важнија дела: *Planul urbanistic al Municipiului Cluj Napoca*, Cluj Napoca 2010 (coauthor); *Funcțiile terțiare ale Municipiului Cluj Napoca*, Cluj Napoca 2011.

МАРИЈАНА ПАНТИЋ (Београд, 1983). Просторни планер. Стручни консултант Тима за социјалну инклузију и смањење сиромаштва.

Дипломирала (2006) и одбранила мастер (2008, „Умрежавање градова као потенцијал развоја туризма – Сента, Суботица, Сомбор”) на Географском факултету Универзитета у Београду. Докторирала (2014, „Sustainable Development Perspectives for Serbian Mountain Areas: Lessons from the European Context”) на Факултету за науке животне средине на Техничком универзитету у Дрездену. Главна поља интересовања: развој планинских подручја, демографски и туристички развој. Учествовала је на више домаћих и међународних конференција, на међународним радионицама, на просторним плановима и научним пројектима у Србији. Објавила је десетак чланака у домаћим и међународним публикацијама.

Важнија дела: *Sustainable Development Perspectives for Serbian Mountain Areas: Lessons from the European Context*, Dresden 2014.

ДРАГАНА ПАУНОВИЋ (Београд, 1984). Студент докторских студија на Географском факултету Универзитета у Београду.

Дипломирала је 2009. године на тему „Планирање породице и репродуктивно здравље у Финској”. Мастер рад („Транзиција популационе политике према

миграцијама у ЕУ”) одбрала је 2011. године на Географском факултету у Београду. Исте године као стипендиста Министарства просвете, науке и технолошког развоја ангажована је на пројекту „Истраживање демографских феномена у функцији јавних политика у Србији”. Научне области интересовања: популациона политика, медицинска демографија, миграције, девастирана подручја.

ГОРАН ПЕНЕВ (Велес, Македонија, 1954). Стручни саветник Центра за демократска истраживања Института друштвених наука у Београду.

Дипломирао 1978. године (смер: Економска политика и планирање), и магистрирао 1987. године на Економском факултету Универзитета у Београду („Основне детерминанте, карактеристике и последице старења становништва Југославије”). Од 1979. године запослен у Институту друштвених наука у Београду (од 2006. године научни саветник). Област научног интересовања: демографске пројекције, старење становништва и развитак становништва. Био руководилац (координатор) пројеката: „Становништво и домаћинства Србије према попису 2002. године” (2002–2005), „Assessment of UNHCR-FUNDED collective centers in Serbia” (2000), „Пројекције становништва СР Југославије” (1996). Чланство у професионалним организацијама и удружењима: Међународно научно удружење „ДемоБалк” (потпредседник), Друштво демографа Србије, Association International des Démographes de Langue Française (AIDELF), Статистичко друштво Србије, Геронтолошко друштво Србије, Одбор за проучавање становништва Одељења друштвених наука САНУ.

Важнија дела: *Пројекције становништва Савезне Републике Југославије: 1991–2021* (са Љ. Секулић и Д. Цицовић), Београд 1996; *Žena i rađanje na Kosovu i Metohiji*, Beograd 1998; *Demografski trendovi u Crnoj Gori od sredine 20. vijeka i perspektive do 2050. godine*, Podgorica 2008;

ДАРА ПЕТКОВИЋ (Сремска Митровица, 1979). Главни методолог у Заводу за статистику Републике српске у Бањој Луци.

Основне студије завршила на Природно-математичком факултету, Универзитета у Бањој Луци (2003), магистрирала на смјеру Просторног планирања на Географском факултету у Београду (2009, „Регионалне функције Сремске Митровице”). Запослена у Републичком заводу за статистику Републике Српске у Бањој Луци од 2004. године. Учествовала је на бројним семинарима и стручним усавршавањима у земљи и иностранству, међу којима су најзначајније обуке о попису становништва, стажирање 2011. године у Европској комисији (Еуростат). Члан је Извршног одбора Центра за демографска истраживања Републике Српске и члан Демографског института Србије.

СОЊА ПОДГОРЕЛЕЦ. Виши научни сарадник Института за миграције и народности у Загребу.

Дипломирала социологију на Филозофском факултету, Свеучилишта у Загребу (1985). На Одсјеку за социологију Филозофског факултета у Загребу магистрирала 1998 („Starenje na dalmatinskim otocima”) и докторирала 2004 („Kvaliteta života starijeg stanovništva u izoliranim sredinama – primjer hrvatskih otoka”). Запослена у Институту за миграције и народности у Загребу (од 1985). Област научног истраживања: социолошки (социјално-геронтолошки) аспекти старења становништва Хрватске (посебно старење острвског становништва и квалитета живота старијег становништва), индивидуалне оријентације и социокултурни обрасци понашања младих.

Важнија дела: *Otoci – ostati ili otići? Studija o dnevnoj cirkulaciji sa šibenskih otoka*, Zagreb 2001 (коаутор); *Otoci dviju generacija*, Zagreb 2004 (коаутор); *Osta-*

rjeti na otoku – kvaliteta života starijega stanovništva hrvatskih otoka, Zagreb 2008; *Gradovi potopili škoje – promjene u malim otočnim zajednicama*, Zagreb 2013 (коаутор).

ЈЕЛЕНА ПРЕДОЈЕВИЋ ДЕСПИЋ (Београд, 1970). Истраживач-сарадник Центра за демографска истраживања Института друштвених наука у Београду.

Дипломирала на Филолошком факултету, Универзитета у Београду 1994. године (Одсек за албански језик и књижевност). Магистрирала на Одсек за демографију Економском факултету у Београду 2002 („Репродукција становништва у радовима аутора са Косова и Метохије”). Од 1997. запослена као истраживач-сарадник Центра за демографска истраживања Института друштвених наука у Београду. Члан је Друштва демографа Србије.

Важнија дела: *O fertilitetu stanovništva Kosova i Metohije*, Beograd 2003.

БИЉАНА РАДИВОЈЕВИЋ (Кичево, 1953). Доктор економских наука. Редовни професор на Економском факултету, Универзитета у Београду.

Дипломирала 1976, магистрирала 1981. и докторирала 1988. на Економском факултету у Београду. Ток службе: асистент приправник 1977, асистент 1981, доцент 1989, ванредни професор 1997. У оквиру демографских истраживања орјентисана је првенствено на област морталитета у оквиру којег се осим анализе бави и теоријско-методолошким питањима. Друга област интересовања су демографске структуре, посебно економске. Боравила на стручном усавршавању 1986. године у Лондону, Велика Британија. Члан је Статистичког друштва Србије и Друштва демографа Србије.

Важнија дела: *Zakon mortaliteta*, Beograd 1990; *Kohortni mortalitet stanovništva Jugoslavije: sa tablicama za generacije rođenih 1890–1969* (с Љ. Гаћешом), Beograd 1993.

САЊА РАДОВАНОВИЋ (Горажде, 1976). Доцент при Катедри грађанско-правних наука на Правном факултету, Универзитета у Новом Саду,

Дипломирала (1999) и магистрирала (2004, „Накнада имовинске штете у ауторском праву”) на Правном факултету у Новом Саду. На Правном факултету у Београду 2010. године одбранила је докторску дисертацију „Уговор о лиценци софтвера”. Доцент је на Правном факултету у Новом Саду, на Катедри грађанско-правних наука, на предмету Облигационо право. Област научног интересовања јесте општа теорија грађанског права, уговорно право, потрошачко право и права интелектуалне својине. Од 2001. до 2003. године била је секретар Катедре грађанско-правних наука.

МИРЈАНА РАШЕВИЋ (Београд, 1955). Научни саветник и директор Института друштвених наука и редовни професор на Катедри за демографију Географског факултета, Универзитета у Београду.

Дипломирала на Медицинском факултету (1983), магистрирала у Центру за мултидисциплинарне студије Универзитета у Београду (1988), докторирала на Катедри за социологију Филозофског факултета у Београду (1992). Као резултат истраживачког рада објавила је десетак књига, више чланака у националним и међународним часописима. Сарађивала у низу студија и учествовала на већем броју скупова у земљи и иностранству. Руководила је различитим пројектима, укључујући и пројекте стратешког типа. У сферу научног интересовања спадају фертилитет становништва, планирање породице, репродуктивно здравље, популационо старење и политички одговор на демографске изазове.

Важнија дела: *Ka razumevanju abortusa u Srbiji*, Beograd 1993; *Фертилитет и становништва СР Југославије*, Beograd 1994 (коауторка); *Iskustva populacione*

politike u svetu, Beograd 1996 (с М. Petrović); *Planiranje porodice kao stil života*, Beograd 1999; *Обнављање ситановништва Србије и популациона полиитика државе и локалне самоуправе*, Beograd 1999 (с А. Гавриловић); *Фертилитет и репродуктивно здравље ситановништва Републике Црне Горе*, Подгорица, 2001; *Вољна ситерилизација: пошребе, баријере, рещења*, Beograd, 2002 (с К. Седлецки); *Планирање породице као филозофија и пракса*, Beograd, 2002; *Феномен намерно прекида шрудноће*, Beograd, 2003; *Обнављање ситановништва и репродуктивно здравље*, Вашингтон 2005 (с К. Седлецки); *Ванинститиуционална заштитна ситаријих људи у Србији*, Beograd 2007 (са Н. Сатарих); *Они не могу да чекају: ситудија о сиромашним ситарим лицима у Србији*, Beograd 2009 (са Н. Сатарих и Н. Милорадовић); *Poteraćemo granice*, Beograd 2012 (коауторка).

АГНЕШ СЛАВИЋ (Суботица, 1977). Доценткиња на Економском факултету у Суботици Универзитета у Новом Саду

На Економском факултету у Суботици дипломирала (2001, „Утицај афекта и когниције на потрошаче органских пољопривредних производа“) и магистрала (2006, „Организовање маркетинг активности агенција за запошљавање“). Докторску дисертацију под насловом „Методолошка анализа истраживања задовољства запослених Dolgozó maguagok“ одбрала 2006. на Универзитету „Szent István“ у Геделеу (Мађарска) и постала доктор наука у области менаџмента и бизниса. Као доцент на Економском факултету у Суботици изводи наставу на основним студијама на предметима Менаџмент људских ресурса, Менаџмент урбане средине и Организационо понашање. На докторским студијама изводи наставу из предмета Међународни менаџмент људских ресурса. Објавила универзитетски уџбеник *Менаџмент људских ресурса*, Суботица 2006.

Важнија дела: *Allás vadász kézikönyv diplomás pályakezdeknek*, Subotica 2008.

МИЛИЦА СОЛАРЕВИЋ (Сремска Митровица, 1986). Асистент на Департману за географију, туризам и хотелијерство Природно-математичког факултета, Универзитета у Новом Саду.

Дипломирала (2009) и мастерала (2010) из области географије на Департману за географију, туризам и хотелијерство у Новом Саду. Године 2010. уписала докторске студије на поменутом Департману. Бави се истраживањем из области демографије. Члан је истраживачких група на пројектима финансираним од стране надлежних министарстава и секретаријата. Члан је Друштва демографа Србије и Српског географског друштва. Изводи вежбе на предметима: Увод у научни рад, Политичка географија, Основе ГИС-а, Информационе технологије у туризму, Друштвене основе туризма, Регионална политика Европске уније, Примена ГИС-а у друштвено-географским дисциплинама.

АЛЕКСАНДРА СПАЛЕВИЋ (Београд, 1984). Истраживач сарадник Географског института „Јован Цвијић“, САНУ.

Дипломирала на Географском факултету у Београду 2008. године (Катедра за просторно планирање). Завршила мастер студије на истоименој Катедри. Докторске студије уписала 2012. године. Ангажована на пројекту „Географија Србије“ Министарства науке, образовања и технолошког развоја. Истраживачка интересовања: урбано планирање, урбана географија, просторно планирање, коришћење земљишта у урбаним срединама. Учесник је бројних конференција националног и међународног значаја.

Важнија дела: *Трансформација шериурбано шроситора Београда*, Београд 2013.

БИЉАНА СТАНКОВИЋ (Лозница, 1956). Стручни саветник у Центру за демографска истраживања Института друштвених наука у Београду.

Дипломирала на групи за психологију Филозофског факултета, Универзитета у Београду (1985). Последипломске студије демографије завршила на Економском факултету у Београду и одбранила 2003. године магистарску тезу („Демографски и социо-психолошки аспекти фертилитета адолесцената“). Била запослена у Саветовалишту за избор партнера и живот удвоје (1984–1987), Министарству за бригу о породици (1997–2001), Министарству за социјална питања (2003–2004) и Центру за демографска истраживања Института друштвених наука (2001–2002) где и данас ради од 2006. године. Учествовала на скуповима и научним конференцијама.

Важнија дела: *Фертилитет и репродуктивно здравље младих*, Београд 2004.

ЈЕЛЕНА СТОЈЛКОВИЋ ГЊАТОВИЋ (Врање, 1985). Истраживач-сарадник Географског института „Јован Цвијић“ САНУ.

Дипломирала 2008 (смер Демографија), одбранила мастер рад са темом „Пензионери – растућа категорија становнишва“ (2009) на смеру Демографије Географског факултета, Универзитета у Београду. Уписала докторске студије 2010. Волонтирала у Градском заводу за статистику (2009). Радила као сарадник у настави на Географском факултету (2009/2010 и 2010/2011). Од 2011. ради у Географском институту „Јован Цвијић“ САНУ. Ужа област интересовања је старење становништва. Активна је у Геронтолошком друштву Србије (од 2010). Учествовала је на већем броју научних скупова у земљи и у иностранству.

СНЕЖАНА СТОЈШИН (Нови Сад, 1973). Доцент на одсеку Социологије Филозофског факултета, Универзитета у Новом Саду.

Дипломирала на смеру Социологија на Филозофском факултету у Новом Саду (1999). Магистрирала 2007. године на тему „Поступци и извори за истраживање друштвеног аспекта намерног прекида трудноће“. Докторску тезу одбранила 2013. године и стекла звање доктора социолошких наука (теза: „Примена анализе садржаја у истраживањима политичке пропаганде“). Област научног интересовања и истраживања: социолошки метод, демографија – природно кретање становништва, медији и методика наставе социологије.

Важнија дела: *Абортис: друштвени аспекти и могућности његовог истраживања*, Нови Сад 2008; *Студент и реформа високог образовања*, Нови Сад 2008 (коауторка).

ВАСИЛЕ СУРД (Микешти, код Клужа [Micești, Cluj], Румунија, 1946). Дипломирао је на Одсеку географије, Универзитета „Бабеш Бољаи“ (Babes-Bolyai) у Клужу 1972. године. Од 1973. до 1982. запослен на Одсеку географије на Универзитету „Babes-Bolyai“ у Клужу пролазиви кроз све академске хијерархије, од асистента приправника до доцента. Докторску дисертацију одбранио је 1982. на Универзитету у Букурешту на тему „Географија насеља у горњем сливу реке Ариес, с посебним освртом на друштвени и економски аспект“ („Geografia așezărilor din bazinul superior al râului Arieș, cu privire specială asupra sistematizării economice sociale“). Од 1974. је члан Националног друштва за географију.

Важнија дела: *Geografie economică mondială*, Cluj-Napoca 1978; *Populația, așezările și economia mondială*, Cluj-Napoca 1982; *Geografie economică, Caiet de lucrări practice*, Cluj-Napoca 1983; *Introducere în geografia rurală*, Cluj-Napoca 1983; *Așezările din bazinul montan al Arieșului*, Cluj-Napoca 1993; *Geografia dezvoltării*

și a decalajelor economice contemporane, Cluj-Napoca 1997; *Geodemografie*, Cluj-Napoca 2001; *Introducere în geografia spațiului rural*, Cluj-Napoca 2002; *Geografia așezărilor*, Cluj-Napoca 2003; *Geography of Settlements*, Cluj-Napoca 2009; *Micești (Micuș), un sat transilvănean*, Cluj-Napoca 2013.

ЈОВАНА ТОДОРИЋ (Београд, 1983). Истраживач-сарадник у Географском институту „Јован Цвијић” САНУ у Београду.

Дипломирала (2008) и одбранила мастер рад (2011) на Географском факултету Универзитета у Београду (области друштвене географије). Бави се социоекономском и урбаном географијом. У свом досадашњем раду фокусира се на испитивање процеса урбанизације у Београду, његових фаза, социоекономских и демографских детерминанти урбаног развоја. Пажњу је усмерила на испитивање процеса реурбанизације – досељавање становника у урбано језгро, градски начин живота, стамбене преференције и избор стамбене локације, квалитативно вредновање и перцепција стамбеног простора у Београду. Запослена је на Географском институту „Јован Цвијић” САНУ (од 2012). Главна поља интересовања су јој социјална и урбана географија итд. Објавила је једну монографију, више радова у научним часописима и учествовала је на научним скуповима и конференцијама у земљи и иностранству. Члан је Српског географског друштва.

Важнија дела: *Анализа стамбених преференција у контексту реурбанизације Београда*, Београд 2013.

ДРАГАНА ЋОРИЋ (Лесковац, 1976). Доцент на Правном факултету, Универзитета у Новом Саду.

Дипломирала на Правном факултету у Новом Саду (2000). Након адвокатско-приправничког стажа, запослила се на Правном факултету у Новом Саду (од 2001). Магистрирала (2006) и докторирала (2011, „Принцип стечених права и ретроактивно дејство закона”) на Правном факултету Универзитета у Нишу. Доцент на Правном факултету у Новом Саду је од 2012. године за предмете: Увод у право и Филозофија права. Учествовала је у раду Центра за симулацију суђења на факултету, као и у припремама такмичења у беседништву. Од 2011. године члан Управног одбора струковног Српског удружења за правну и социјалну филозофију. Бави се правнотеоријским, уставним, филозофско-правним и етичким питањима, а значајнију пажњу посвећује екологији и еколошкој етици као грани примењене етике. Једна је од оснивача удружења грађана „Родитељ”. Добитница је Октобарске награде Града Новог Сада за 2014. годину.

Важнија дела: *Време у праву*, Нови Сад 2007.

РАДОСЛАВ ЋОРОВИЋ (Сарајево). Дипломирао и магистрирао на Географском факултету Универзитета у Београду. Ради у Агенцији за статистику Босне и Херцеговине као стручни савјетник за демографске анализе и пројекције. Области посебног интересовања: фертилитет, историјска демографија, пројекције становништва, просторни аспекти демографског развоја и размјештаја становништва.

МАРКО ФИЛИПОВИЋ (Топола, 1983). Истраживач-сарадник у Географском институту „Јован Цвијић” Српске академије наука и уметности.

Дипломирао (2006), завршио мастер последипломске студије (2010, „Демографски аспекти просторне и функционалне организације Јабланичког округа”) и уписао докторске академске студије на Географском факултету Универзитета у Београду (смер Демографија). Био сарадник Института за архитектуру и урбанизам

(2008–2011). Од 2011. године запослен је у Географском институту „Јован Цвијић” САНУ. Област интересовања везана је за демографију, становништво у просторном планирању и миграције.

Важнија дела: *Small and Medium Towns of Central Serbia : standpoints and assumptions on development perspectives*, Београд, 2007 (с Н. Спасићем и Ј. Петрић).

ДАНИЦА ШАНТИЋ (Београд, 1976). Доцент на Географском факултету Универзитета у Београду.

Дипломирала (2000) на Географском факултету у Београду. Магистарски рад „Миграције становништва Београда: демографска анализа” одбранила је 2006. Докторску тезу „Размештај становништва Србије у контексту теорија о популационом оптимуму” одбранила 2013. на Географском факултету у Београду. На Географском факултету запослена је од 2001. године у звању асистента, а од 2014. је доцент. Ангажована је у извођењу вежби из предмета: Географија становништва и Теорије о становништву на студијској групи Географија; Миграције становништва и Демографски развитак света на студијској групи Демографија. Област научног истраживања је наука о становништву. Објавила је самостално или у коауторству 30 научних и стручних радова у домаћим и страним публикацијама. Учествовала је са рефератима на више скупова у земљи и иностранству. Сарађивала је на четири домаћа и једном међународном пројекту. Члан је Српског географског друштва, Друштва демографа Србије и IUSSP-а (Међународне организације за проучавање становништва).

АНКИЦА ШОБОТ (Крагујевац, 1969). Научна сарадница у Центру за демографска истраживања Института друштвених наука у Београду.

Дипломски рад одбранила на Одељењу за социологију Филозофског факултета Универзитета у Београду (1995, „Родитељство у условима кризе и транзиције”). Магистарску тезу одбранила на Економском факултету Универзитета у Београду (2002, „Перспективе рађања у условима друштвених промена”). На истом факултету је одбранила и докторску тезу „Демографски и социјални аспекти родне неравноправности у Србији, од половине 20. века” (2012). Као истраживач приправник (1996/97) радила је у Институту за социолошка истраживања Филозофског факултета у Београду. У Институту друштвених наука запослена је од 2003. године. Учествовала је на више домаћих и међународних научних конференција.

Важнија дела: *Родна неравноправности у Србији – демографско гледиште*, Београд 2014.

Владимир М. Николић

Зборник Матице српске за друшћивене науке издаје Матица српска
Излази четири пута годишње

Уредништво и администрација: Нови Сад, Улица Матице српске 1
Телефон: 021/420–199; 021/6615–798

Quarterly for Social Sciences published by Matica Srpska
Editorial and publishing office: Novi Sad, 1 Matica Srpska Street

Phone: (00381) 21 420–199
(00381) 21 6615–798

E-mail:

vnikolic@maticasrpska.org.rs

zmsdn@maticasrpska.org.rs

Редакција *Зборника Матице српске за друшћивене науке* закључила је
148 (3/2014) свеску 23. октобра 2014.

За издавача: доц. др Ђорђе Ђурић

Стручни сарадник Одељења: Владимир М. Николић

Лектори и преводиоци: Оливера Кривошић, Миљана Тасић и
Љиљана Тубић

Коректори: Мирјана Карановић, Миљана Тасић и Љиљана Тубић

Технички уредник: Вукица Туцаков

Штампање завршено 2014. године

Компјутерски слог: Владимир Ватић, ГРАФИТ, Петроварадин

Штампа: САЈНОС, Нови Сад

Тираж: 400

CIP – Каталогизација у публикацији

Библиотека Матице српске, Нови Сад

3(082)

Зборник Матице српске за друштвене науке /
главни и одговорни уредник Часлав Оцић ; 1984, св.
76–. – Нови Сад: Одељење за друштвене науке, 1984–
. – 24 cm

Четири пута годишње. – Резиме на енг. језику. –
Наставак публикације: Зборник за друштвене науке

ISSN 0352-5732

COBISS.SR-ID 3360258

Штампање овог *Зборника* омогућио је
Покрајински секретаријат за здравство, социјалну политику и
демографију у сарадњи са
Природно-математичким факултетом (Департманом за географију,
туризам и хотелијерство) и
Матицом српском