## THE DEMOGRAPHIC AGEING OF POPULATION IN BOSNIA AND HERZEGOVINA: CAUSES AND CONSEQUENCES

#### Alma Kadušić

Dr. sc., Assistant Professor Department of Geography, Faculty of Science University of Tuzla, Univerzitetska 4, 75000 Tuzla, Bosnia and Herzegovina e-mail: alma.kadusic@untz.ba

#### Alija Suljić

Dr. sc., Associate Professor Department of Geography, Faculty of Science University of Tuzla, Univerzitetska 4, 75000 Tuzla, Bosnia and Herzegovina e-mail: alija.suljic@untz.ba

#### **Nedima Smajić**

M.S., assistant
Department of Geography, Faculty of Science
University of Tuzla, Univerzitetska 4, 75000 Tuzla, Bosnia and Herzegovina e-mail: nedima.smajic@yahoo.com

UDK: 314.18:914.971.5

COBISS: 1.01

#### Abstract

### The demographic ageing of population in Bosnia and Herzegovina: causes and consequences

In this paper the age structure and the ageing population process in Bosnia and Herzegovina in the second half of the 20th century and the beginning of the 21st century is analyzed. The main reasons that caused changes in the age composition of the population and the population ageing in Bosnia and Herzegovina have been researched. The main causes of the population ageing in Bosnia and Herzegovina in the second half of the 20th century were primarily trends in fertility rates and secondarily trends in mortality rates. The economic growth of Bosnia and Herzegovina after World War II conditioned changes in the economic and educational structure of the population and with that the changes in the natural increase rates and migration balance. The war was the main cause of negative demographic changes in Bosnia and Herzegovina in the period from 1992 to 1995, and the post-war adverse socioeconomic, political and other circumstances have been the cause of negative demographic trends after 1995. The aim of this paper is to determine the level of population ageing in Bosnia and Herzegovina and the consequences this process could have on the demographic future of this country.

#### Key words

Demographic ageing, age structure, population, demographic changes, Bosnia and Herzegovina

#### 1. Introduction

In the second half of the 20th century the age structure of Bosnia and Herzegovina's population was under the influence of many factors from which the most important were the economic, social, political and cultural growth of the country after the World War II. From 1953 to 1991 intensive processes of industrialization, urbanization and deagrarisation have caused significant demographic changes. These processes have conditioned the restructuring of the population from agricultural to non-agricultural activities, i.e., from the primary to the secondary and tertiary economic sector, a need for qualified workforce, a lower illiteracy rate and a higher level of education of the population, increase of the urban population, etc. The aforementioned processes have caused changes in the natural population growth, i.e., lower birth rates which caused a decline in the percentage of children and an increase of older persons in the population of Bosnia and Herzegovina. The migration balance made these trends even more complex in this period. Bosnia and Herzegovina is known for its dynamic migrations which were intensified in the second half of the 20th and the beginning of the 21<sup>st</sup> century (Ibreljić et. al. 2006). In accordance with the general socioeconomic circumstances, Bosnia and Herzegovina was affected by intensive migrations in the sixties and the seventies of the 20th century. The disproportion of the labor force contingent and industrial capacities caused a departure of the Bosnian population on temporary work abroad. However, men were the ones usually working abroad and women mainly went with them as accompanying family members so that temporary stay in foreign countries usually became permanent. It's an important notion that mostly young and productive people 20 to 44 years old were leaving the country in this period.

During the 1990s rapid demographic changes affected all countries of Central and Eastern Europe. The ageing process in these countries is a consequence of a socioeconomic transition from communist to capitalist societies. The decline in fertility rates combined with a greater emigration of the young population and extended lifetime expectancy all contributed to an intensive ageing process in these countries (Hoff 2008, 14). Bosnia and Herzegovina has a special place in this case because it suffered a war between 1992 and 1995 alongside the mentioned socioeconomic changes in the nineties of the 20th century. Around 2,2 million people were displaced inside Bosnia and Herzegovina's borders or abroad. In 1995 a process of repatriation of refugees started and by 2006 442137 refugees and 569869 displaced people returned to their former place of residence (Ibreljić et. al. 2006). Demographic losses in this period had a big impact on the demographics of Bosnia and Herzegovina in the post-war period. In addition to that, adverse economic, political, social and other circumstances have caused negative demographic trends in the post-war period. A noticeable decrease of birth rates, moderate increase of mortality rates and, consequently, low natural increase rates combined with the negative migration balance contributed to the decline of the total number of population in Bosnia and Herzegovina. Since 2007 the population of Bosnia and Herzegovina has had negative population growth rates, and because of adverse social, economic and other circumstances the country is still being abandoned by young and productive population. This affects the ageing process of Bosnia and Herzegovina's population as well as the further decline of its potential bio-dynamics and vitality, which in a long term can have a negative influence on the demographic trends in the future.

#### 2. Methodology

The age structure of the population represents the fundamental characteristic of population structures. It is important because if used it can show the demographic growth of a specific population - the age population composition can show us the potential vitality and bio-dynamics of the population, especially when analysis of population composition by age is performed on five-year age groups (Friganović 1990, 111-121). An omnipresent view is that the ageing of a population is a demographic process that is considered to be a widespread phenomenon (d'Albris, Collard 2013, 618). This is an intensive demographic process of modern society that is characterized by the increase in the share of the population aged 60 or over and the increase in the average age of the population (Kerbler 2015, 305). Many societies have already attained older population while numerous developing countries are in the midst of the demographic transition and they are experiencing a rapid shift in the relative numbers of children and persons aged 60 or over (Mirkin, Weinberger 2001). According to a report from the United Nations from 2015 the number of the world population aged 60 or over had doubled in the last 50 years (Internet 1). Based on information from "UN World Population Prospects: The 2015 Revision", the number of people aged over 60 was 12,3% of the entire world population and it is expected to rise up to 21,5% until 2050.

Bosnia and Herzegovina too was not bypassed by contemporary world trends of population ageing process. To analyze the trends of the population aging of Bosnia and Herzegovina in the second half of the 20th and the beginning of the 21st century the average and median age of population have been calculated alongside the ageing index and the share of persons aged sixty or over in the entire population. The mentioned indicators are calculated on the basis of the population censuses in Bosnia and Herzegovina from 1953, 1961, 1971, 1981 and 1991 and on the evaluations from 2007 because the results from the 2013 census with information for the age structure of the population have not yet been made available to the public, alongside some other sources which publish information about the demographics of Bosnia and Herzegovina (UN reports). The average age of Bosnia and Herzegovina's population is calculated as a weighted arithmetic mean and the median age as a positional mean. Apart from that, the ageing population process and the age structure of the population of Bosnia and Herzegovina is analyzed by calculating the share of persons aged 60 or over in the entire population. The ageing index is calculated as the number of persons aged 60 or over per hundred persons under age 19 (Nejašmić, 2005, 181-183). For the assessment of the population age level, and the degree of ageing process, the so called vitality index was used. It represents the synthesis between the indicators of the natural population components (fertility and mortality) and the age structure of population (Wertheimer-Baletić 1999, 375).

## 3. Age structure and the population ageing of Bosnia and Herzegovina in the second half of the 20th century and the beginning of the 21st century

It is considered that the process of population ageing is present in a population if the average age is over 30 and that this process becomes faster and larger as the average age rises (Tasić 1963, 32). The age structure of the population and the indicators of the population ageing in Bosnia and Herzegovina can be analyzed based on the information about the share of the children, working-age population or mature population, and population aged sixty or over in the entire population. Based on the data from the 1953 census it was determined that the average age of the population

of Bosnia and Herzegovina was 25,5 and the median age was 18.9. Between 1961 and 2007 the average age of the population of Bosnia and Herzegovina has risen from 25,5 to 38,9 years and the median age from 21,2 to 38,2 years. In 2015, the median age of the population of Bosnia and Herzegovina has reached a value of 41,5 years (Tab. 1, Internet 2).

Tab. 1: Age structure of Bosnia and Herzegovina's population from 1953 to 2007.

Year	Age				% of	
	0-19	20-59	60 +	Total	population aged 60 or over	Ageing index
1953	1 431 341	1 268 492	148 957	2 848 790	5,2	10,4
1961	1 529 027	1 550 809	196 066	3 277 935	6,0	12,8
1971	1 701 756	1 741 062	289 070	3 746 111	7,7	16,9
1981	1 567 425	2 206 427	340 497	4 124 256	8,3	21,7
1991	1 387 399	2 404 160	483 012	4 377 033	11,0	34,8
2007	852 413	1 910 527	684 213	3 447 153	19,9	80,3

Source: Population censuses in Bosnia and Herzegovina; Females and males in Bosnia and Herzegovina 2009. Agency for statistics of Bosnia and Herzegovina, Sarajevo.

As the table shows it is obvious that since 1953 the average age of the population of Bosnia and Herzegovina has been constantly growing. That means that the population ageing process in Bosnia and Herzegovina has started long ago, as is the case in some other countries in the region like Slovenia (Kerbler 2015), Croatia (Nejašmić, Toskić 2013) but also in other European countries. As a rule more developed countries have a larger median age because they also have a larger percentage of population older than 60 (Kinsella, Phillips 2005). The median age of the world population has increased in the period between 1950 and 2010 from 24 to 29 years and it is expected that by 2050 it will reach a value of 36 years. In the more developed countries in the world the median age has risen from 28 to 40 years, and by 2050 it should reach a value of 44 years. According to the same source it is expected that the median age of Bosnia and Herzegovina, Germany, Portugal, Malta, Serbia and Spain will reach a value of 50 years or more (Internet 3).

It is known that the population of a certain area can be classified based on the share of the population older than 60 or younger than 20 in the entire population. If the share of older people is less than 8% than that population is very young and if it is greater than 12 % it is an old population (Wertheimer-Baletić 1999, 367). Thus it can be seen, based on the data shown in Tab. 1, that Bosnia and Herzegovina had a very young population in 1953 because the share of persons aged 60 or over in the entire population was only 5,3%. In 2007 the share of persons aged 60 or over was 19.9% and in 2015 was 22,4% (Internet 2), which means that Bosnia and Herzegovina's population entered the advanced demographic age. The age index of Bosnia and Herzegovina's population increased from 10,4 to 80,3 in this period.

The demographic transition and the ageing population process are shown in the population pyramids of Bosnia and Herzegovina's population (Tab. 2, Fig. 1).

5,19

5,90

0,00

100,0

4,39

4,11

0.00

100,0

Age		1991			2007		
	Total	Male	Female	Total	Male	Female	
0-4	7,59	7,81	7,38	4,33	4,56	4,12	
5-9	7,94	8,15	7,72	5,97	6,25	5,71	
10-14	7,94	8,15	7,74	7,15	7,45	6,86	
15-19	8,22	8,48	7,97	7,27	7,79	6,77	
20-24	8,22	8,64	7,81	7,42	7,70	7,14	
25-29	8,49	8,89	8,10	6,98	7,03	6,94	
30-34	8,27	8,55	7,99	6,27	6,45	6,10	
35-39	7,64	7,88	7,41	6,42	6,48	6,36	
40-44	6,32	6,38	6,25	7,39	7,56	7,22	
45-49	4,60	4,53	4,66	7,99	8,01	7,97	
50-54	5,88	5,74	6,02	6,94	7,22	6,66	
55-59	5,51	5,35	5,66	6,03	5,60	6,44	
60-64	4,54	4,26	4,82	4,76	4,59	4,92	
65-60	2.85	2.20	3 /10	5.26	4.80	5 71	

Tab. 2: The share of five-year age groups in the entire population of Bosnia and Herzegovina in 1991 and 2007.

100,0 Source: Population censuses in Bosnia and Herzegovina; Females and males in Bosnia and Herzegovina 2009. Agency for statistics of Bosnia and Herzegovina, Sarajevo.

1,83

2,71

2,45

4,80

5,03

0,00

100,0

70-74

Unknown

75 +

Total

1,44

2,21

2,34

100,0

1,05

1,71

2,23

100,0

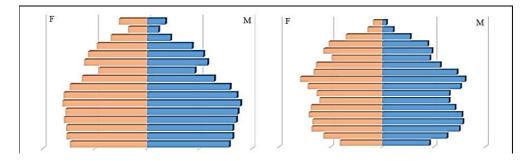


Fig. 1: Population pyramid of Bosnia and Herzegovina in 1991 (left) and 2007

Source: Population censuses in Bosnia and Herzegovina; Females and males in Bosnia and Herzegovina 2009. Agency for statistics of Bosnia and Herzegovina, Sarajevo.

Based on the data presented in Tab. 1 and 2 and Fig. 1 it can be seen that the population of Bosnia and Herzegovina has been affected by an intensive population ageing process. In the second half of the 20th century and especially in the beginning of the 21st century the number of the younger age groups has decreased and the share of the older ones has increased. The vitality index confirms this having been 0,035 in 1991 and only 0,008 in 2007 which points out to a large decline of potential bio-dynamics and vitality of the population of Bosnia and Herzegovina.

#### 4. Causes and consequences of the ageing population process in Bosnia and Herzegovina

Many different factors influenced the demographic ageing process of Bosnia and Herzegovina's population but changes in the natural population growth and migrations (voluntary or forced) are the largest ones.

There is a significant correlation between the natural population growth of Bosnia and Herzegovina and its age structure. The process of demographic transition, i.e., the shift to lower birthrates started in the 18th century in Europe and the rest of the world, but in some countries it started much later. Still, this process was inevitable for every country in the world, and Bosnia and Herzegovina was no exception (Bošnjović 1990, 114). Due to socioeconomic progress after World War II Bosnia was in an early demographic transition stage since the mortality rate decreased below 30% with almost an unchanged level of birthrate which resulted with a high rate of population natural increase.

Tab. 3: Natural increase rates in Bosnia and Herzegovina in the period 1953 to 2013.

			Natural	Births	Deaths	Natural
Year	Births	Deaths	population change	per 1000 people		increase rates in ‰
1953	110 373	41 199	69 174	38,6	14,4	24,2
1961	108 076	29 413	78 663	32,8	8,9	23,9
1971	82 694	24 915	57 779	21,9	6,6	15,4
1981	71 031	26 222	44 809	17,2	6,3	10,9
1991	65 430	31 411	34 019	14,9	7,2	7,8
1996	46 594	25 152	21 442	12,8	6,9	5,9
2007	33 835	35 044	-1 209	8,8	9,1	-0,3
2013	31 103	35 837	-4 734	8,2	9,5	-1,3

Source: Bosnia and Herzegovina population censuses; Demographics of Bosnia and Herzegovina 2008, Thematic Newsletter 02; Natural population change 2013, report number 1, year VIII, Agency for statistics of Bosnia and Herzegovina, Sarajevo.

In Bosnia and Herzegovina, the change from high to moderate rates of natural population increase happened in the seventies of the 20<sup>th</sup> century and stayed that way until 1991. The decline of the natural population increase rates occurred as a result of a certain socioeconomic progress that has been caused by the processes of industrialization, urbanization and deagrarisation, that is, the restructuring of the agricultural population into non-agricultural activities and emigration of the population from agricultural to urban-industrial areas. This socioeconomic development also increased the economic activity and the education level of the population, especially of the female part of the population, which resulted with lower birthrates. From 1953 to 1991 the proportion of the active population in the secondary and tertiary economic sector was growing, the share of the active agricultural population declined from 66,6% to 25,3% while the share of the primary economic sector declined from 68,4 to 27,2%. The illiteracy rate dropped from 30,0 to 8,4%, and the number of people with secondary education, college and university education increased (Population census 1953 and 1991).

The birth rate in this period decreased from 38,6 to 14,9‰, the mortality rate from 14,4 to 7,2‰, and, consequently, the natural population change decreased from 24,2 to 7,8‰. As a result of lower birth rates the share of persons aged 0-19 declined (from 50,2 to 24,7%), and the share of persons aged 60 and older increased (from 5,2 to 19,9%) in the entire population of Bosnia and Herzegovina, which indicates the process of demographic transition and demographic ageing of the Bosnian-Herzegovinian population.

The war in the period 1992 - 1995 caused significant demographic changes in Bosnia and Herzegovina. War casualties and forced migration caused a reduction in the total population of Bosnia and Herzegovina. In addition to the adverse economic, social,

political and other conditions it also caused a decrease of the population growth rates in Bosnia and Herzegovina in the postwar period. Birth rates in Bosnia and Herzegovina since 1996 have been below 14‰, while at the same time a slight noticeable increase in mortality rates was visible. Mortality rates increased from 6,9 to 9,5‰ between 1996 and 2013 due to the higher share of elderly population in the entire population of Bosnia and Herzegovina. These figures show that Bosnia and Herzegovina has entered a post-transition stage of the demographic development, although it is socio-economically lagging behind the highly developed countries where for decades low level of bio-reproduction is recorded (Frejka, Sobotka 2008). Since 2007 Bosnia and Herzegovina recorded a negative natural population change, which in 2013 reached a value of -1,3‰. The consequence of a significant decrease in the birth rates and natural population change rates in the second half of the 20<sup>th</sup> and beginning of the 21<sup>st</sup> century is the reduction of the share of young people and the increasing proportion of older people in the entire population of Bosnia and Herzegovina.

The age structure of the population of Bosnia and Herzegovina was also affected by migration of the population. Emigration caused reduction of the total number of Bosnia and Herzegovina's population and included mostly younger persons (20-40 years), which was directly reflected in the natural population change, and indirectly in the age structure. By 1991, migrations were caused by economic and social circumstances in the former Yugoslavia; men were the ones usually migrating to foreign countries and were named "temporary workers abroad" in the official statistics. They were often joined by family members (Sentić 1971). Bosnia and Herzegovina lost a significant proportion of its population this way and recorded a negative migration balance until 1991. In 1991 there were 234213 Bosnia and Herzegovina's citizens (5,4% of the entire population) working abroad on a temporary basis (Population census 1991, Agency for statistics of Bosnia and Herzegovina, Sarajevo).

In the period from 1992 to 1995 around 1,2 million people were exiled from Bosnia and Herzegovina and around a million people were displaced inside the country. The process of repatriation of refugees and displaced persons has been recorded since 1995. However, according to the preliminary results of the 2013 Population census there were 3791622 persons living in Bosnia and Herzegovina, whilst in 1991 there were 4377033 people which means that due to coercive migrations and war casualties the number of people in this country was reduced by 585311 (2013 Population census, Agency for statistics of Bosnia and Herzegovina, Sarajevo). The causes for the decline in the number of people in Bosnia and Herzegovina are also post-war voluntary economic migrations, so that Bosnia and Herzegovina still have a negative migration balance. For example, 4284 persons emigrated from the country in 2010 while only 309 immigrated to Bosnia and Herzegovina (Bosnia and Herzegovina's Ministry of Security, 2011), and about a third of the emigrants were between 20 and 34 years of age (Bosnia and Herzegovina's Ministry of Human Rights and Refugees, 2012). This means that young and reproductive generation is leaving Bosnia and Herzegovina, which negatively affects its population's natural reproduction. Thus, following 1991, the natural population change, emigration and external factors have all affected the population ageing of Bosnia and Herzegovina, which is reflected in the decrease of the percentage of young generation and the increase of the percentage of old generation within the entire number of population, as well as the increase of its average age and the ageing index.

The ensued changes in the age structure of Bosnia and Herzegovina's population are significant for the future demographic development of the country because this precise development will in the next few decades be dependent on the number of younger age groups in the present moment. The larger the share of the young generation, the larger the population's reproductive value will be. However, based on the current trends upon which the share of the young generation in the total population is decreasing and the share of the old generation is increasing, and with a negative migration balance, it is expected to have lower fertility rates and birth rates and higher mortality rates, and therefore a smaller number of young generation as well. According to the United Nations' estimations, Bosnia and Herzegovina is one of the countries in the world where an intensive ageing of the population is expected and the median age should reach 53,2 years of age by 2050 (Internet 3). Also, the same organization estimates that Bosnia and Herzegovina will be one of the countries where a 15% decrease in the total number of the population is expected in the ensuing decades where Bosnia and Herzegovina's total population should be around 3 million by 2050 and 1,9 million by 2100 (Internet 2). This is precisely why it is necessary to supervise the changes in the age structure of the population considering that it represents a solid basis for a long-term demographic development. However, it is also necessary to devote attention to other demographic components through adopting and implementing different measures of the population policy which will slow down and eliminate the negative demographic trends that Bosnia and Herzegovina has confronted in the past few decades.

#### 5. Conclusion

Bosnia and Herzegovina is an area of dynamic demographic development. The demographic changes that affected this country's population were especially intensified in the second half of the 20th and the beginning of the 21st century. Those changes occurred as a consequence of socio-economic development in the period 1953 - 1991, the war from 1992 to 1995 as well as adverse economic, political, social and other circumstances in the post-war Bosnia and Herzegovina. In the period from 1953 to 1991 the industrial and economic development of Bosnia and Herzegovina caused restructuring of the population from agricultural to non-agricultural activities. Moreover, economic development caused a need for highly qualified workforce that led to a reduction of the illiteracy rate and an increase of the population's levels of education. Subsequently, all of this affected the natural population change, i.e., the decline of natural increase rates and consequently led to the decrease of the percentage of children and the increase of older persons in the entire population in Bosnia and Herzegovina. The population ageing process in this period was negatively influenced by voluntary economic migrations of Bosnia and Herzegovina's population for the temporary work abroad which, in time, led to a permanent stay. Thus Bosnia and Herzegovina recorded a negative migration balance up until 1991 and the people who emigrated were of the productive generation aged 20-40.

Bosnia and Herzegovina's demographic problems were intensified in the period from 1992 to 1995 when around a half of the population were exiled out of their homes due to forced migrations. Even though a significant number of exiled people returned to their pre-war places of residence, Bosnia and Herzegovina has lost around half a million people directly due to forced migrations, war casualties and post-war economic migrations while the indirect demographic losses are even larger. The loss of a significant number of people in the period from 1992 to 1995, adverse post-war socioeconomic and political circumstances, post-Dayton emigrations (usually of

younger population), and negative natural increase rates have all caused a significant ageing of Bosnia and Herzegovina's population where the percentage of persons aged 60 or over was 22,4% in 2015 and the median age was 41,5. Considering the current demographic trends and the existing socioeconomic circumstances in the country a decrease of potential bio-dynamics and vitality of Bosnia and Herzegovina's population is expected in the future as well.

#### References

- Bošnjović, I. 1990: Demografska crna jama nova zamka industrijskog društva. Veselin Masleša. Sarajevo.
- d` Albis, H, Collard, F. 2013: Age groups and the measure of population aging. Demographic Research, Volume 29, Article 23. doi: 10.4054/DemRes.2013.29.23.
- Demographics of Bosnia and Herzegovina 2008, Thematic Newsletter 02. Agency for statistics of Bosnia and Herzegovina, Sarajevo.
- Females and males in Bosnia and Herzegovina 2009. Agency for statistics of Bosnia and Herzegovina, Sarajevo.
- Frejka, T., Sobotka, T. 2008: Fertility in Europe Diverse, delayed and below replacement. Demographic Research, Volume 19, Article 3. doi: 10.4054/DemRes (2008.19.3).
- Friganović, M. 1990: Demogeografija stanovništvo svijeta. Školska knjiga. Zagreb. Hoff, A. 2008: Population aging in Central and Eastern Europe as an outcome of the socio-economic transition to capitalism. Socialinis Darbas, No. 7 (2). Vilnius.
- Ibreljić, I., Kulenović, S., Kadušić, A., Smajić, S. 2006: Migration flows in Bosnia and Hercegovina after 1992. 46th Congress of European Regional Science Association (ERSA). Volos, Greece. Internet: http://www-sre.wuwien.ac.at/ersa/ersaconfs/ersa06/papers/173.pdf (10.10.2015).
- Informacija o stanju iseljeništva iz Bosne i Hercegovine 2012. Ministarstvo za ljudska prava i izbjeglice. Sarajevo.
- Kerbler, B. 2015: Population Aging in Slovenia A Spatial Perspective. Acta geographica Slovenica, 55-2. Ljubljana. DOI: http://dx.doi.org/10-3986/AGS-1885.
- Kinsella, K., Phillips, D. R. 2005: Global Aging The Challenge of Success. Population Bulletin Vol. 60, No. 1. Population Reference Bureau (PRB). Washington, DC.
- Migracioni profil Bosne i Hercegovine za 2011. godinu. Ministarstvo sigurnosti BiH, Sektor za imigraciju. Sarajevo.
- Mirkin, B., Weinberger, M. B. 2001: The demography of population ageing. United Nations Population Bulletin, Special Issue No. 42/43. New York.
- Natural population change 2013, Report number 1, Year VIII. Agency for statistics of Bosnia and Herzegovina, Sarajevo.
- Nejašmić, I. 2005: Demogeografija stanovništvo u prostornim odnosima i procesima. Školska knjiga. Zagreb.
- Nejašmić, I., Toskić., A. 2013: Starenje stanovništva u Hrvatskoj sadašnje stanje i perspektive. Hrvatski geografski glasnik 75/1. Zagreb.
- Sentić, M. 1971: Naši građani na privremenom radu u inostranstvu. Stanovništvo, Broj 1-2. Institut društvenih nauka, Centar za demografska istraživanja. Beograd.
- Tasić, J. 1963: Dugoročne promjene starosne strukture stanovništva Jugoslavije. Stanovništvo, Godina I, Broj 1. Institut društvenih nauka, Centar za demografska istraživanja. Beograd.

Alma Kadušić, Alija Suljić, Nedima Smajić: The demographic ageing of population in Bosnia...

Wertheimer-Baletić, A. 1999: Stanovništvo i razvoj. Mate-Zagreb. Zagreb. Internet 1: World Population Aging 1950-2050. Population Division 2015. United Nations.

http://www.un.org/esa/population/publications/worldageing19502050/pdf/80cha pterii.pdf (29.09.2015).

Internet 2: World Population prospects: The 2015 Revision. United Nations Department of Economic and Social Affairs/Population Division. http://esa.un.org/unpd/wpp/publications/files/key\_findings\_wpp\_2015.pdf (04.01.2015).

Internet 3: World Population Aging 2013. United Nations Department of Economic and Social Affairs/Population Division. New York. http://www.un.org/en/development/desa/population/publications/pdf/ageing/WorldPopulationAgeing2013.pdf.

(08.01.2015).

# THE DEMOGRAPHIC AGEING OF POPULATION IN BOSNIA AND HERZEGOVINA: CAUSES AND CONSEQUENCES Summary

The ageing population process in Bosnia and Herzegovina is a result of dynamic demographic changes that happened in this country in the second half of the 20<sup>th</sup> and the beginning of the 21<sup>st</sup> century as a consequence of economic, social, political and other changes.

In the period from 1953 to 1991 the development of industry and other economic activities have led to population migrations from rural to urban areas, restructuring of the population from agrarian to non-agrarian activities, and in accordance with that, an increase in economic activity and the population's level of education, the improvement of life standard and health conditions, etc.

The aforementioned changes caused a decline in natural increase rates, which dropped from 24,2% to 7,4%. The decline of the natural increase led to the decrease in the share of persons aged 0-19 (from 50,2% to 24,7%) and the increase of persons aged 60 or over (from 5,2% to 19,9%) in the entire population in Bosnia and Herzegovina, as well as to the increase in the average and median age of the population.

Voluntary economic migrations of Bosnia and Herzegovina's population to temporary work abroad which turned into a permanent stay in those countries affected the age structure of the population of Bosnia and Herzegovina in the period 1953 to 1991. People aged 20 to 40 were the ones who usually emigrated abroad, which reflected negatively on the bio-dynamics and vitality of Bosnia and Herzegovina's population. According to the 1991 Population census, 234213 citizens or 5,4% of the entire population of Bosnia and Herzegovina were abroad. Moreover, the war in the period 1992-1995 affected the demographics in Bosnia and Herzegovina negatively. The war casualties and forced migrations caused the decrease in the total number of the population, and therefore the potential bio-dynamics and vitality of the population. There were 4377033 people living in Bosnia and Herzegovina in 1991 and 3791622 in 2013 which means that country lost over 0,5 million people, whilst the indirect losses are even larger.

Adverse post-war economic, social, political and other circumstances are all affecting the demographic trends in Bosnia and Herzegovina in a negative way. The natural population change continued to decrease after the war and it has been negative since 2007 (in 2013 reached a value of -1,3%). The migration balance is also negative and mostly the young population aged 20-34 still migrate abroad. The median age of Bosnia and Herzegovina's population increased from 38,2 in 2007 to 41,5 in 2015 while the share of persons aged 60 or over in the total number of population was 22,4% in the same year. Estimations show that Bosnia and Herzegovina will have around 3 million people by 2050 while the median age will increase to 53,2 years of age which would make Bosnia and Herzegovina's population among the oldest in the world. An intensive decline in the potential bio-dynamics and vitality of Bosnia and Herzegovina's population is noticeable and close attention needs to be paid to the age structure and ageing population process since it represents the basis for a long-term demographic development of Bosnia and Herzegovina. Creating and implementing adequate population policy measures is necessary since these can at least slow down the negative demographic trends in Bosnia and Herzegovina.

Alma Kadušić, Alija Suljić, Nedima Smajić: The demographic ageing of population in Bosnia...