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 Slovenia. 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.
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 people. 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

<table>
<thead>
<tr>
<th>Countries</th>
<th>Population (in thousands)</th>
<th>Natural population change (%)</th>
<th>Total fertility rate</th>
<th>Life expectancy at birth</th>
<th>Median age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>3,259.8</td>
<td>2,831.7</td>
<td>18.5</td>
<td>6.3</td>
<td>3.06</td>
</tr>
<tr>
<td>B&amp;H</td>
<td>4,517.9</td>
<td>3,843.2</td>
<td>7.7</td>
<td>-0.9</td>
<td>1.65</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>8,669.3</td>
<td>7,369.4</td>
<td>-1.7</td>
<td>-5.1</td>
<td>1.65</td>
</tr>
<tr>
<td>Greece</td>
<td>10,192.9</td>
<td>11,309.9</td>
<td>0.7</td>
<td>-0.3</td>
<td>1.38</td>
</tr>
<tr>
<td>FYR of Macedonia</td>
<td>1,890.9</td>
<td>2,057.3</td>
<td>10.5</td>
<td>1.6</td>
<td>2.10</td>
</tr>
<tr>
<td>Romania</td>
<td>23,192.3</td>
<td>21,413.8</td>
<td>1.0</td>
<td>-2.6</td>
<td>1.59</td>
</tr>
<tr>
<td>Slovenia</td>
<td>1,999.9</td>
<td>2,050.2</td>
<td>1.1</td>
<td>1.6</td>
<td>1.42</td>
</tr>
<tr>
<td>Serbia</td>
<td>7,822.8</td>
<td>7,276.2</td>
<td>0.7</td>
<td>-5.2</td>
<td>1.73</td>
</tr>
<tr>
<td>Kosovo*</td>
<td>1,956.2</td>
<td>1,780.0</td>
<td>22.2</td>
<td>11.4</td>
<td>3.49</td>
</tr>
<tr>
<td>Montenegro</td>
<td>615.0</td>
<td>618.2</td>
<td>9.2</td>
<td>2.9</td>
<td>2.05</td>
</tr>
<tr>
<td>Croatia</td>
<td>4,782.2</td>
<td>4,412.1</td>
<td>-0.6</td>
<td>-2.3</td>
<td>1.53</td>
</tr>
</tbody>
</table>

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 replacement. 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

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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.
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 [Magdalenić 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].

Fig. 1. Dynamics of the total population by major age groups, 1950–2100.  
Source: http://www.un.org/esa/population/unpop.h
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.

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INTERNET SOURCES


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, прузице се значајне промене у старосној структури становништва ових земаља. Миграције становништва, и њихова селективност према старости, доприносиле су интензивирању процеса. У раду се даје обнава на динамику старења становништва у балканским земљама, указујући на разлике мађу њима, и предочавајући неке од импликација на тражишту рада ових земаља. Феномен демографског старења је присутан у свим земљама, али се његов интензитет и достигнути степен разликују у зависности од јачине деловања бројних фактора. Резултат је хетерогености балканских земаља у културном, конфесионалном 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 утрошћено. Учешће старијих 65 и више година повећало се на 6,5% у 1961. на 15,9% у 2011. Пројекције укazuju 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 старећи од 65 година. Број старијих 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 будуности то бити изазов за њихов даљи развој. Резултати показују да, дугорочно гледано, промене у старосној структури воде и ка смањењу радио-способне популације. Високо учешће старијих радника у структури радног контингента и њихово одливане из радне снаге, посебно бројних baby-boom генерација, биће најпонетљивији економски тренд у свим балканским земљама и утицати на даљи раст стопе зависности старих. Добар 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