Towards Understanding of Contemporary Migration

Causes, Consequences, Policies, Reflections

Editors:
Mirjana Bobić,
Stefan Janković

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2.1. The Impact of Migration on Demographic Processes in the Region of Former Yugoslavia

Vladimir Nikitović

Introduction

The socialist Yugoslavia (1945–1991) was recognized as the country with divergent demographic trends among its constituent units (republics and autonomous provinces) primarily caused by the differential natural growth of the population (Josipovič, 2016; Nikitović et al, 2016). Twenty-five years after the dissolution of the country, it is evident that the demographic trends in the region of the former Yugoslavia[1] converge, at least when it comes to the natural components of demographic change. This process is generally understood in the context of the theory of demographic transition (Nikitović, 2016). On the other side, international migration in the region has undergone more complex changes since 1991. After the intensive displacements of autochthonous population within and out of the region, induced by the 1990s wars (Nikitović & Lukić, 2010), the whole region of former Yugoslavia (except for Slovenia) is recognized as an emigrational at the beginning of this century (Fassmann et al., 2014). Former high fertility sub-regions, including Kosovo as a European outlier, no longer exist. of former Yugoslavia was among the first in Europe to experience pop-

1 The term 'former Yugoslavia' is now commonly used retrospectively. In the text, we also use the term ex-Yugoslavia as synonym.

ulation decline (UN, 2015b) mainly due to the long period of below-replacement fertility in its most populous parts, supported by emigration that recently has spread to most of the region.. Furthermore, it lacks an attraction for long-term immigration from third countries. It is recently estimated that the region of former Yugoslavia, except for Slovenia, lost about 4 million inhabitants not including about 1 million of former guest-worker population during the 1990–2015 period (Josipovič, 2016).

On the other hand, the most recent sudden influx of asylum seekers from West Asia and North Africa, whose final asylum destination represent primarily the EU founding member countries, has its transition route through the region of former Yugoslavia. This, so called, Western Balkan route came as a great surprise for most of public and officials given that the immigration issue, at best, has not been recognized in the public discourse and relevant legislation in the region (Rašević et al, 2014; Župarić-Iljić, 2013). Consequently, it quite directly opened an issue of future migration in the region in terms of both the below-replacement fertility of autochthonous population and the demographic surpluses in politically instable origin societies of immigrants.

Given much higher uncertainty of future migration patterns in comparison to fertility and mortality trends, it might seem reasonable to address a long-term perspective of migration impact on demographic change. The point of such an exercise could be similar to the purpose of hypothetic fertility (instant-replacement) and mortality (constant) scenarios – by examining the current limits of demographic development, we try to achieve two goals at the same time: to assess realistic future outcomes and to warn decision makers on future implications of demographic and migration trends.

As it seems that the successor states of former Yugoslavia could experience common migration trends in the future, the central issues of the Chapter are as follows: Is the transition to the net immigration stage across the whole region possible by the mid-century and what might be the effects of expected international migration patterns on future demographic change in the region?

Since the republics and provinces of former Yugoslavia retained their outer or inter-republic boundaries, there are no obstacles to temporal comparisons – we may use empiric evidence straightforward when making assumptions on future demographic trends.

The theoretical and methodological approach: assumptions, data issues, model

In accordance with the goals of the Chapter, it was of particular importance to choose the methodological approach which would enable long-term assumptions on future population dynamics in the region of former Yugoslavia in context of relevant theoretical and empirical background. The projection model that is used by the Population Division of the UN (hereafter the UN model) for its latest releases of the *World Population Prospects* (2012, 2015) meets the criteria as it is based on the recent theoretical achievements in terms of the demographic transition, while draws its strength from the data on fertility and mortality for all countries of the world (Raftery et al, 2014; UN 2015a). The model has also the technical benefits – it is well documented, fully transparent, implemented in the open-source R software, thus, allowing for easy adjustments and modifications of input parameters. On the other side, most commonly used models of future population dynamics by national statistical offices or institutes, including those by *Eurostat*, are not adequately documented, relying in most aspects of a projection procedure only on subjective opinion of authors, with little or no explanation about the reasoning behind chosen assumptions (Keilman, 2008; Nikitović, 2016).

Given the long-term character of the analysis in the Chapter, a specific aspect refers to the distinction recognized at the time of the first modern projections of population in the region of former Yugoslavia (1970) – for the sake of better fertility hypotheses, the republics and autonomous provinces were classified in relation to the replacement-fertility level, thus, implicitly indicating a stage of the demographic transition in which they were. The 'Early starters' sub-region included Slovenia, Croatia, Vojvodina, and Central Serbia, while the 'Late starters' encompassed Bosnia & Herzegovina, Montenegro, Kosovo, and Macedonia. The latter sub-region experienced the decline to the below replacement fertility level two-three decades later than the former (Nikitović, 2016). In terms of net migration, the 'Early starters' had mainly positive balance during the last two decades (1970s and 1980s) of former Yugoslavia,[2] while emigration has been prevailing

2 Except for Central Serbia during the 1970s due to intensive emigration of 'guest workers'. Indeed, the majority of the emigration were almost strictly

since the 1990–95 and 2000–05 in Croatia and Serbia excluding Kosovo, respectively. The 'Late starters' has been typically emigration subregion. Consequently, the results of the projection simulations in the Chapter were considered from the viewpoint of this distinction, too.

Theoretical reasoning behind the migration assumptions

In the UN model, current levels of net migration across countries of the world were generally kept constant until the mid-century, with the exception of large recent fluctuations. Afterwards, gradual reduction of net migration is assumed in order to reach 50 per cent of the projected mid-century level by 2100. It is considered as a compromise, unlikely to be realized, between the difficulty of predicting the levels of immigration or emigration within each country of the world for such a far horizon, and the recognition that net migration is unlikely to reach zero in individual countries (UN, 2015a: 31). Without disputing the high volatility of future migration, the UN approach could be, also, understood as a coherent with its theoretical background of fertility transition, which assumes global convergence towards (or close) the replacement fertility level by 2100. However, despite the practical considerations that guided the authors of the UN model, the general assumption on constant net migration by 2050 is disputable from the viewpoint of smaller world areas, such as the region of former Yugoslavia, or individual countries. For that reason, we aimed to rely on the theoretical framework which could provide more stable grounds for assumptions on future net migration in the region of former Yugoslavia than the constant hypothesis.

What were the guidelines for making assumptions on net migration in the Chapter? Despite different views regarding the role and significance of the drivers of international migration, there is no doubt that demographic and economic differentials induce the general shape and intensity of migration flows (Bertocci & Strozzi, 2008; Josifidis et

originated from the Northeast of Central Serbia (Penev&Predojević-Despić, 2012). If we exclude this emigration area, migration balance of this territory would not be negative, particularly for the intensive immigration to the City of Belgrade.

al, 2016). It seems that the current strategical goals of all governments in the region are consistent when it comes to the EU accession. Since the basic aim of the Chapter refers to the most probable demographic future from the viewpoint of migration impact, we adopted the official standpoints on the EU future as the pivotal for the long-term assumption on general migration pattern in the region of former Yugoslavia. Slovenia and Croatia became the EU member countries in the recent period – in 2004 and 2013, respectively. In spite of the recent slowdown ('fatigue') of the integration process in the Western Balkans, enlargement of the EU towards the area, that was set as a priority of EU expansion at the 2003 European Council summit in Thessaloniki (European Commission, 2003), still represents the official EU strategy. Even the reasons for the previous enlargements towards south and east of the continent are considered more political than economic, in comparison to the initial association of the countries from Western Europe (Bache et al, 2011), certain economic conditions have to be fulfilled if a country aims to join the EU. Thus, joining the EU implies that a member country, apart from required stability of institutions, achieved the existence of a functioning market economy. In practice, realization of these factors in a member country should provide the living standard and quality of life of its citizens that would reduce outflows and increase inflows of migrants in the country on a long run.

Starting from the general principles of labor migration theories such as 'push and pull' model, we based our reasoning behind the migration assumptions more specifically on the recently developed 'model of the migration cycle' (Fassmann & Reeger, 2012). It assumes that a country adapts to a new demographic and economic conditions by developing a mechanism to handle new or evolving migratory circumstances, which is referred to as a migration cycle. The model is based on evidence from the, so called, old immigration countries in Europe, which experienced the transition from an emigration to an immigration country in conditions of the below-replacement fertility (Fassmann et al, 2014: 151). This heuristic concept seems to be very convenient to explain possible transformation of migration pattern in the region of former Yugoslavia. Furthermore, recent empirical evidence suggest that the model is not only applicable to the Southern European countries, which are becoming typical immigration ones, but that the Eastern European states are heading to the same direction (Fassmann

& Reeger, 2012: 88). Czech Republic is the best example, as it turned from a negative migration balance in the 1980s to a positive one in the 1990s and 2000s (Drbohlav et al., 2009).

According to the migration cycle model, during the process of transition from an emigration to an immigration country, former emigration countries go through at least three different stages which constitute the migration cycle: an initial, pre-transition or preliminary stage (emigration is more important than immigration); an intermediate or transition stage (immigration typically outweighs emigration); and a net immigration or post-transformation stage (immigration is acknowledged as a necessary supplement). This very general process involves system stability, disturbances and, finally, the emergence of a new stability (Fassmann & Reeger, 2012: 67–68).

The migration cycle model, used as the theoretical background for the migration hypothesis in this Chapter, implies gradual long-term transition from net emigration to net immigration. During the intermediate or transition stage of the migration cycle, a former emigration country becomes, step by step, a new immigration country. According to the model, it seems that Slovenia, being the first country from the region of former Yugoslavia that joined the EU, is entering the transition stage. Even if Slovenia was an attractive destination for the immigrants from the region, given its constantly higher level of economic development and standard of living, during the period of socialist Yugoslavia, its attractiveness rose particularly after Slovenia joined the EU in 2004 (Kupiszewski et al, 2012). This evidence from the region supports the concept of the migration cycle as a useful framework for defining our migration hypothesis. In that sense, the region, excluding Slovenia, could be considered as stuck in the initial, pre-transition stage, although some of its territories might be candidates for entering the intermediate stage sooner than others. Similar to the concept of demographic transition, the migration cycle model does not imply that the stages of the cycle last for the same amount of time or exhibit identical characteristics in different countries. It is rather general concept of the transition process according to which some countries that are entering the process later could potentially require a shorter period of time to adapt than the states that transitioned earlier (Fassmann & Reeger, 2012: 67).

From the perspective of the 40-year projection horizon (2015–2055) in this Chapter, the stages of the migration transition are inter-

preted in relation to the symbolic turning point of the transition process in the region, which is set to the middle of the horizon (2035) implying that the whole region of former Yugoslavia will certainly be part of the EU by the time. Slovenia is considered as the country in the transition stage during the first 20-year period, while it should enter the final, stable net immigration stage in the second half of the projection. The sub-region of 'Early starters' excluding Slovenia is supposed to exit the initial or pre-transition stage by the end of the first half of the projection horizon (2035), and to experience the intermediate or transition stage in the second 20-year period of the projection. Indeed, some territories of the sub-region could even progress to the post-transformation stage by the end of the projection according to the model interpretation, but that is beyond the considerations in the Chapter. In any case, during the period between 2035 and 2055, it is assumed that immigration typically outweighs emigration in this sub-region.

In comparison to the 'Early starters', the 'Late starters' sub-region is assumed to leave the pre-transition stage some 5–10 years later, thus, entering the intermediate stage of the migration transition in the last 10–15 years of the projection horizon. Kosovo is the only territory in the region of former Yugoslavia which is not supposed to undergo fundamental changes of the system needed for entering the intermediate transition stage during the projection period. The slow reductions in net emigration seemed to be the maximum achievement for this area in the next four decades, which is in accordance with current projection assumptions by Kosovo statistics agency (KAS, 2013), and recent study on Kosovar emigration (Gollopeni, 2016).

Data issues and projection model

Demographic and migration statistics in the region of former Yugoslavia suffered a lot in terms of reliability after the dissolution of the country in 1991 (Josipovič, 2016; Stanković, 2014). Therefore, the 2015 UN dataset (https://esa.un.org/UN/wpp/) is used as the best available source of demographic inputs in the Chapter. However, several preconditions in terms of input parameters had to be fulfilled before the model could be employed for producing simulations of future population in the

region. The initial population has to be adjusted for known weaknesses of the UN data setas regards Bosnia & Herzegovina and Serbia.[3] In case of the former, the 2013 census results were not available to the UN staff when prepared the estimate on initial population structure but the quite distant 1991 census.[4] As for the latter, apart from the absence of population distribution across the tree constitutive parts of Serbia as defined in this Chapter, adjustments of the UN dataset had to be made for population who boycotted both censuses in 2011 – Albanians in Central Serbia and Serbs in Northern Kosovo, and for significant overestimation of the total population by the census conducted in Serbia excluding Kosovo (for details see: Nikitović, 2016).

In terms of assumptions concerning the main demographic components of population dynamics (fertility, mortality, and migration), approach used in the Chapter implied separate hypothesis for the three constitutive parts of Serbia unlike the UN approach.[5] It was particularly important in the case of Kosovo where fertility transition was notably lagging behind the other territories of former Yugoslavia (Josipovič, 2016; Nikitović et al, 2016). Apart from that, this procedure enabled us to get separate projection results for each of the eight territories of the region, as well as for the region as a whole and two of its sub-regions derived for the purpose of the analysis.

From a long-term perspective, changes infertility behavior are decisive for the size and age structure of a given population in the absence of sudden catastrophic events. The UN model, in accordance with the new evidences of recovery of post-transitional fertility (Goldstein et al., 2009), predicts convergence of total fertility rates in the region towards the level of 1.8 by the end of the century. Since the projection horizon in this Chapter ends by 2055, the total fertility rate across the region

3 Reliability of the UN population estimation for Macedonia is also disputable as it is based on distant population census (2002). Since we have no enough grounds for better estimation, we kept the initial population from the UN dataset.

4 While calculating initial population, we took into account a dispute between the two constitutional entities (Republika Srpska and Federation of Bosnia & Herzegovina) on the final results of the 2013 census relying on the recent literature overview on the topic (Josipovič, 2016; Nikitović, 2016).

5 UN data set recognizes only Serbia including disputed territory of Kosovo (it unilaterally proclaimed independence from Serbia in 2008) in accordance with the UNSCR No. 1244/1999.

will experience mild increase, ranging between 1.55 (Bosnia &Herzegovina and Vojvodina) and 1.84 (Slovenia) in the final year. Details on the specific adjustments of input parameters (initial population, fertility, mortality, and migration rates) for the region of former Yugoslavia, which were used for the projection simulations presented and interpreted in this Chapter, are described in: Nikitović (2016).

When transforming previously determined general patterns of net migration hypothesis to projection numbers, we started from the revised UN migration dataset. Technically, we modeled net migration in terms of rates rather than absolute numbers since future net migration does not relate to the future population and, thus, it may take on unrealistic values. A hypothesis about future average annual net migration rate is made for each five-year projection period.[6] There are two reference points in the projection horizon – zero net migration at some point in the period, and the target rate at the end of the projection (net migration per thousand of the 2015 initial population), while for Slovenia and Kosovo only the target rate is made. The rates are changing linearly between these reference points.

The benchmarks for the forecast of net migration rates were both the current population projections by Eurostat (Europop2013) and national statistical agencies, and recent studies on impact of migration on demographic change. For the sub-region of 'Early starters', we referred to Europop2013 target levels for the mid-century (Eurostat, 2016).For Slovenia, the target rate is taken from Europop2013, while for Central Serbia and Vojvodina, it is assumed to be similar to that of Croatia. Yet, unlike the Europop2013, we account for the strong post-accession emigration in Central Serbia, Vojvodina, and Croatia due to increased labor mobility associated with slow economic growth in new EU members by analogy to the evidence from the Eastern enlargement (Kupiszewski, 2006; Kupiszewski et al, 2012), and based on the expectations from the future in the EU (Nikitović, 2013; Rašević et al, 2014).

Technically, the projection method is cohort-component, widely used among demographers, but the approach for obtaining medium or

6 The age and sex distribution of the future net migration were derived according to the UN model (UN, 2015a: 30) taking into account specific patterns for the region (Kupiszewski et al, 2012: 107).

most probable variant, is based on probabilistic projections of future fertility and mortality. We followed the UN approach to use the median of probabilistic distribution of both future paths of total fertility rate and life expectancy at birth as the most probable variant of these components of demographic change (Raftery et al, 2014). For the sake of an insight in 'theoretical' limits of future demographic change, we have also calculated the UN traditional high and low variants, which differ from the medium variant (forecast) in total fertility rate by +/–0.5 children per woman, respectively. In line with the main goal of the Chapter, we will focus on the medium variant, i.e. the *Forecast* (we will use this term hereafter) and *Zero-migration* variant.

Thus, the results of the projection should be considered as the exercise which implemented theconcept of migration transition (in the framework of the UN model) across the region of former Yugoslavia in order to assess the impact of such a migration future on population dynamics of the region. It should be noted that the turning point from net emigration to net immigration is determined according to the current prospects of further EU enlargement to the Western Balkans. Projection simulations presented in this Chapter were carried out by the means of specific statistical packages within the open-source software R, developed by the team from the University of Washington (Ševčíková et al, 2015a; Ševčíková et al, 2015b; Ševčíková et al, 2016). The packages contain procedures for the execution of the complete population projection according to the methods used for the*2015 Revision of the World population prospects*. For details on the method, including transformations of probabilistic distributions of synthetic indicators (total fertility rate and life expectancy at birth) into age and sex specific rates required for projecting future population, see in: Raftery et al.(2014); UN(2015a).

Results of the projection simulations

General facts on the future population dynamics

According to the most likely path (median of distribution) of the UN based forecast simulation, the total population of the countries in the region of ex-Yugoslavia will drop from 21.20 to 17.61

million between 2015 and 2055, a decrease of −16.9 percent over the next forty years. The main driver of this decrease will be the negative natural change, at −3.468 million, which will be much larger, in absolute terms, than the negative net migration, namely −125 thousand. Significant structural changes should be expected, as the share of population aged 65 and above will increase by 75% (from 16.37% to 28.64%) over the forecast period. If we take a look across the former republics and provinces of Yugoslavia (Figure 2.1.1), only Kosovo will not experience decline in total population. However, the population decrease, as to the median of the prediction interval, will not be of high magnitude in Slovenia (−1.5%), Macedonia (−7.8%), and Montenegro (−8.2%). On the other side, a strong decline is expected in Vojvodina (−31.7%), Central Serbia (−27.2%), Bosnia & Herzegovina (−22.0%), and Croatia (−18.9%). If compared to the period before the dissolution of the socialist Yugoslavia, Slovenia and Bosnia & Herzegovina exchanged their positions with regards to the group of population change they belong to. Net migration appeared to be the main reason of the reversal. Furthermore, Figure 2.1.1. suggests that significant chances for maintaining actual population size by the mid-century refer only to Slovenia and particularly to Kosovo. Yet, the decline of Kosovo's population is expected as of 2035 due to continuing lowering of TFR. For other territories, we can firmly say that the population decline cannot be stopped in the following decades. Most interestingly, the traditional high and low variant in regular UN world population prospects, representing bounds of +/− 0.5 in relation to the TFR of the UN medium variant, are much wider than the 80% prediction interval of the forecast even in the case of Kosovo. It indicates that the role of migration balance could be of greater importance for the region on a long run if compared to the previous periods. It is further discussed in the next sub-chapter as the projection results are decomposed with regards to the impact of net migration.

Figure 2.1.1: Population forecast (median and 80% prediction interval) of the region of former Yugoslavia across its entities, 2015–2055, including traditional UN bounds of the forecast (+/– 0.5 TFR).

Country/ Territory	Year	80% prediction interval			TFR +/– 0.5	
		lower limit	**median**	upper limit	–0.5	+0.5
Slovenia	2015		2,067,526			
	2035	2,034,417	**2,077,694**	2,121,628	1,988,384	2,168,897
	2055	1,942,339	**2,036,564**	2,139,674	1,817,080	2,277,018
Croatia	2015		4,240,317			
	2035	3,671,146	**3,822,536**	3,959,008	3,641,534	4,020,620
	2055	3,057,795	**3,438,240**	3,716,870	3,023,765	3,897,900
Vojvodina	2015		1,855,571			
	2035	1,461,097	**1,500,021**	1,539,506	1,425,636	1,572,327
	2055	1,187,610	**1,268,060**	1,350,326	1,104,714	1,447,986
Central Serbia	2015		5,140,644			
	2035	4,153,445	**4,279,935**	4,389,473	4,070,693	4,487,032
	2055	3,478,100	**3,741,154**	3,976,102	3,272,474	4,260,945
Bosnia & Herzeg.	2015		3,336,159			
	2035	2,910,077	**3,036,299**	3,165,730	2,878,364	3,201,833
	2055	2,336,819	**2,602,087**	2,850,310	2,280,929	2,981,373
Montenegro	2015		625,781			
	2035	584,989	**611,938**	633,595	580,144	645,556
	2055	514,705	**574,424**	624,018	502,387	658,373
Kosovo	2015		1,855,853			
	2035	1,980,099	**2,067,377**	2,155,741	1,942,859	2,195,571
	2055	1,829,773	**2,028,908**	2,244,909	1,753,505	2,353,193
Macedonia	2015		2,078,453			
	2035	2,000,313	**2,054,909**	2,107,681	1,945,838	2,166,371
	2055	1,778,462	**1,917,250**	2,034,864	1,674,383	2,191,691

Source: Author's calculations

From the policy point of view, a population decrease, especially of the magnitude forecasted for Vojvodina, Central Serbia, Bosnia & Herzegovina and Croatia should not go unnoticed. Although the times when the significance of states was defined mainly by their population size may long since be gone, large population decreases could result in regional and sub-regional depopulation, both of which have been observed in the region of former Yugoslavia for a fairly considerable length of time (Nejašmić & Štambuk, 2003; Madzevic et al, 2013; Nikitović et al, 2016). A severe population decrease may lead to deficits in labor supply, which could be a strong limitation factor for already weak economies of the region (Zdravković et al, 2012). To date, except for periods of war, the populations in modern economies have been

growing, so we have little empirical evidence of the economic consequences of population decline. Nevertheless, it would be prudent to curb large population decreases by means of policy measures (Kupiszewski et al, 2012).

Impact of migration: the principal inferences from the projection model

Given the expected negative impact of below replacement fertility on population dynamics in the region of ex-Yugoslavia over the following decades, the migration issue comes to the fore in terms of future demographic development. This section summarizes the key results of forecasted migration impact on population change across the region from the aspect of the assumed stages of the migration transition during the projection. To assess this impact, apart from the *Forecast* simulation, we prepared the *Zero migration* simulation based on the assumptions that all the age-specific fertility and mortality rates are as per the *Forecast*, while the net migration is set to zero. The comparison between the two simulations as regards total population size across the former constitutive parts of Yugoslavia is presented in Figure 2.1.2.

Figure 2.1.2: Total population (000) in *Zero migration* and *Forecast simulation* (median), 2015–2055.

Country/ Territory	Initial population in 2015	Population in 2035		Population in 2055	
		Zero migration	Forecast	Zero migration	Forecast
Slovenia	2,067.5	1,983.9	2,077.7	1,811.8	2,036.6
Croatia	4,240.3	3,863.5	3,822.5	3,414.3	3,438.2
Vojvodina	1,855.6	1,599.5	1,500.0	1,330.9	1,268.1
Central Serbia	5,140.6	4,492.2	4,279.9	3,882.8	3,741.2
Bosnia & Herzeg.	3,336.2	3,084.8	3,036.3	2,642.6	2,602.1
Kosovo	1,855.9	2,251.6	2,067.4	2,419.6	2,028.9
Macedonia	2,078.5	2,072.1	2,054.9	1,930.6	1,917.3
Former Yugoslavia (YU)	21,200.3	19,965.7	19,450.7	18,005.7	17,606.7
YU 'Earlystarters'	13,304.1	11,939.1	11,680.2	10,439.8	10,484.0
YU 'Latestarters'	7,896.2	8,026.6	7,770.5	7,565.9	7,122.7

Source: Author's calculations

This impact of migration may be decomposed into a direct and an indirect component. The former consists of the total net migration flows summed over the forecast period, while the latter refers to the births and deaths which the migration either prevented or caused to happen, depending on the overall direction of migration flows, also summed over the forecast period. It should be noted that, in terms of indirect migration impact, no reference is made to the hypothetical demographic events which might have happened to the emigrants had they not emigrated. Figure 2.1.3. shows the calculation of all the migration-related components of population change.

As to the assumptions of the forecast model, the turning point is set to the year of 2035 when it is assumed that large post-accession emigration waves, induced by the EU enlargement towards Western Balkans, will disappear throughout the region (except for Kosovo).

Figure 2.1.3: Impact of migration on population change – difference between *Forecast* and *Zero migration* simulation (median), 2015–2035–2055.

Country/ Territory	Migration impact 2015–2035 (000)					Migration impact 2035–2055 (000)				
	Total	Direct	Indirect (natural change)			Total	Direct	Indirect (natural change)		
			Total	Births	Deaths			Total	Births	Deaths
Slovenia	93.8	85.0	8.8	13.2	4.4	131.0	104.0	27.0	45.0	18.1
Croatia	−40.9	−30.0	−10.9	−9.8	1.1	64.8	71.0	−6.2	−1.7	4.4
Vojvodina	−99.5	−75.4	−24.1	−21.7	2.3	36.6	50.4	−13.8	−14.4	−0.6
Central Serbia	−212.3	−160.3	−52.0	−48.5	3.5	70.6	107.1	−36.5	−33.9	2.5
Bosnia & Herzeg.	−48.5	−38.0	−10.5	−9.3	1.2	7.9	20.0	−12.0	−10.4	1.6
Montenegro	−6.1	−4.0	−2.1	−1.7	0.5	7.4	13.0	−5.6	−1.6	4.0
Kosovo	−184.2	−148.3	−35.9	−32.2	3.7	−206.5	−118.6	−87.8	−79.3	8.5
Macedonia	−17.2	−13.0	−4.2	−4.0	0.3	3.9	12.0	−8.1	−5.0	3.0
Former YU	−515.0	−384.1	−130.9	−114.0	16.9	115.9	258.8	−142.9	−98.2	44.7
YU 'Earlystarters'	−258.9	−180.8	−78.1	−66.9	11.2	303.1	332.5	−29.4	−4.5	24.9
YU 'Latestarters'	−256.1	−203.3	−52.8	−47.2	5.6	−187.1	−73.7	−113.5	−94.5	19.0

Source: Author's calculations

According to the *Forecast*, the population in the region of former Yugoslavia in 2035 will be smaller by 515 thousand than it would be if there were no migration. The direct impact of migration on population in the *forecast* equals −384 thousand. This is the net migration, aggregated over the period from 2015 to 2035. In the case of negative

net migration, the indirect impact of migration consists of both the loss of births owing to the emigration of potential mothers and the loss of the emigrants' deaths. As Figure 2.1.3 suggests, the effect of the latter is small. The number of births which female emigrants would have delivered had they not emigrated during the first 20-year period of the forecast accounts for 114 thousand. The number of deaths was reduced by 17 thousand by migration; these people might have died anyway, but their death occurred after they emigrated, so it cannot be counted in the figures for ex-Yugoslavia, as they did not number among the population of the region at the time of death. The overall indirect impact of migration is –131 thousand.

Migration induced population decline in the region would be even stronger by 2035 if Slovenia is excluded, with Kosovo, Vojvodina, and Central Serbia as the most prominent emigration area. In relative terms, migration is directly or indirectly responsible for almost 30% of the overall population decline expected in the region over the first 20-year period of the *Forecast*. In the case of Kosovo, net emigration represents strong counterweight to the very high positive natural change (21% of the initial population), thus reducing expected population increase by almost a half by 2035. During the same period, the population size of Slovenia will not decrease exclusively due to net immigration, as it is expected to fully annul the negative natural change over the period (Figures 2.1.2. and 2.1.3.).

About 25% of the migration induced (direct and indirect) decline of population in the region of former Yugoslavia by 2035 is due to migration-related, potential, but not 'consumed', natural change. This share varies between 20% and 35% across the region indicating that for every 3–4 emigrants one more is added on account of prevented natural change (Figure 2.1.3.).

During the second 20-year period of the *Forecast*, the population decrease in the region of ex-Yugoslavia will be smaller by 116 thousand than it would be if there were no migration. However, this benefit from the net migration surplus is twice as high if we exclude Kosovo, which is the only area with negative net migration over the forecast period. Indeed, almost all of the positive migration impact refers to the 'Early starters' sub-region, while Bosnia & Herzegovina, Montenegro, and Macedonia will experience only small migration gains. It is worth noting that despite the reversal of the sign of net migration from negative to positive (direct migration impact) after 2035, the indirect migration

impact (natural change) will remain negative throughout the region over the second 20-year period of the forecast except for continuously immigrant prevailing Slovenia. The rationale for this result stems from the age structure of the population, which is truncated in the most vital parts due to decades long emigration. It clearly suggests that the assumed amount of positive net migration is not large enough to compensate for the negative change in population dynamics induced by previously long history of net emigration and below-replacement fertility. The result for Slovenia supports this finding. Yet, even the rise of positive net migration over the projection horizon in this country could hardly maintain its total population size in conditions of below-replacement fertility.

Impact of migration: a review of the selected demographic indicators

We quantified the impact of migration on selected demographic indicators by calculating the percentage difference between the value of the indicator for 2035 in the *Forecast* and the *Zero migration* simulation, scaled to the latter (Figure 2.1.4.). In the *Forecast*, the total population in the region of ex-Yugoslavia is smaller by –2.6% as a result of migration. Migration also has a significant impact on the age structure of population. As assumed in the *Forecast*, it would decrease the share of population aged 0–14 in the region by 2.8% and increase the share of the population aged 65 and above by 3.9% until 2035. It would also increase the old-age dependency ratio by 4.7% (Figure 2.1.4.). The strongest negative impact of migration is expected in Kosovo, while the only territory where migration will induce increase and rejuvenation of population would be Slovenia.

When we compare projected age structures for 2035 and 2055, the main difference refers to the share of young population – the migration impact is no more negative across the region in 2055, except for Kosovo (Figure 2.1.5.). However, unlike the rest of the region, the negative migration impact on the share of old population is almost twice as high at the end of the projection period in Kosovo if compared to 2035. Finally, Slovenia could be singled out as the best example of how continuous positive net migration can have long-term benefits for the age structure of the population in conditions of below replacement fertility.

Figure 2.1.4: Migration induced changes for selected demographic indicators: percentage difference between *Forecast* and *Zero migration* simulation (median), 2035.

Country/ Territory	Total population	Share of young/old age groups in total				Old-age dependency ratio (65+/20–64)
		Below 15 years	School age (5–24)	Above 65 years	Above 85 years	
Slovenia	4.73	2.85	2.00	–1.80	–2.95	–1.89
Croatia	–1.06	–1.05	–0.68	1.57	1.20	2.00
Vojvodina	–6.22	–5.46	–2.70	8.02	8.11	10.21
Central Serbia	–4.73	–4.07	–1.99	6.07	5.62	7.69
Bosnia & Herzeg.	–1.57	–1.31	–0.85	1.86	2.01	2.38
Montenegro	–0.99	–1.77	–1.76	3.88	2.81	4.55
Kosovo	–8.18	–6.49	–5.01	13.43	11.34	13.57
Macedonia	–0.83	–0.45	–0.18	0.98	0.68	1.17
Former Yugoslavia (YU)	–2.59	–2.82	–1.72	3.92	3.24	4.69
YU 'Earlystarters'	–2.17	–2.17	–0.98	3.50	3.06	4.59
YU 'Latestarters'	–3.19	–3.35	–2.66	4.46	4.00	4.82

Source: Author's calculations

Figure 2.1.5: Migration induced changes for selected demographic indicators: percentage difference between *Forecast* and *Zero migration* simulation (median), 2055.

Country/ Territory	Total population	Share of young/old age groups in total				Old-age dependency ratio (65+/20–64)
		Below 15 years	School age (5–24)	Above 65 years	Above 85 years	
Slovenia	12.41	4.25	4.96	–6.79	–7.40	–9.51
Croatia	0.70	1.12	0.86	–0.30	0.18	–0.09
Vojvodina	–4.72	2.62	0.90	3.40	7.28	5.82
Central Serbia	–3.65	1.92	0.41	2.62	5.63	4.51
Bosnia & Herzeg.	–1.53	0.08	–0.18	1.31	2.26	2.14
Montenegro	0.23	0.47	0.00	1.36	4.03	1.93
Kosovo	–16.15	–8.70	–7.22	20.49	24.43	25.85
Macedonia	-0.69	0.00	–0.15	0.96	1.61	1.37
Former Yugoslavia (YU)	–2.23	0.00	–0.36	2.73	4.15	4.12
YU 'Earlystarters'	0.42	2.39	1.63	0.07	1.65	0.85
YU 'Latestarters'	–5.86	–3.25	–2.93	6.70	7.99	8.72

Source: Author's calculations

Conclusions

If we accept that Europe is in the process of transformation into an immigration continent, as well as the process generally spreads from the northwest to the southeast, similarly to the widely accepted demographic transition, it was assumed that the region of former Yugoslavia will be soon heading to the same direction despite its currently unfavorable demographic and migration indicators. Given that the transition to net immigration directly depends on economic progress, enlargement of the EU towards the Western Balkans is taken as a prerequisite for the model and empirical considerations in the Chapter. In accordance with the principles of the migration cycle concept, which is used as the theoretical framework for the migration assumptions, and the experiences of new immigration areas in Europe, we assumed a longer period would be needed for societies in the region of former Yugoslavia to adapt to the new reality. Not only the migration cycle model, but also a longer historical perspective of empirical evidence from this region (not explicitly stated in the Chapter), indicate that the region will probably experience new immigration on the long run as it already was the case throughout the history.

Despite the decisive role of natural change, particularly that of fertility, on the decrease and ageing of population in the region of former Yugoslavia by the mid-century, the simulations of future population dynamics based on the theoretical considerations of the post-transitional mild increase of fertility and long-term transition to net immigration suggest that migration component could have important impact on demographic change, especially in terms of moderating the effects of below-replacement fertility on the age structure.

In addition, the notable indirect migration impact on the decline and ageing of population during the net emigration stages highlighted significance of side effects of typically young profile of emigrants (loss of future births). On the other hand, the sooner a country leaves the pre-transitional stage, the faster the country's age structure will face positive impact of migration. Thus, the transition to stable net immigration will increasingly gain in importance over the next decades given the negative demographic momentum in the region, which will affect even Kosovo – the youngest European population. Furthermore, achieving the long-term post-transformation stage of stable net immi-

gration, as showed in the simulations for Slovenia, should be the ultimate policy goal for the whole region. However, the region of former Yugoslavia is currently being far from both the significant increase of fertility and the attractiveness to immigrants. Thus, the reduction of net emigration should be one of the primary tasks of population and economic policies in the next decades.

References

Bache, I., George, S., and Bulmer, S. 2011. *Politics in the European Union*. New York: Oxford University Press.

Bertocci, G. and Strozzi, C. 2008. International migration and the role of institutions. *Public Choice*, Vol. 137: 81–102.

Drbohlav, D., Lachmanová-Medová, L., Čermák, Z., Janská, E., Čermáková, D. and Dzúrová, D. 2009. *The Czech Republic: on its way from emigration to immigration country*. Idea Working Paper 11. http://www.idea6fp.uw.edu.pl/pliki/WP11_Czech_Republic.pdf .

European Commission. 2003. EU-Western Balkans Summit, Thessaloniki, 21 June 2003. Available at: http://europa.eu/rapid/press-release_PRES-03–163_en.htm.

Eurostat. 2016. *Eurostat on-line database*, Accessed December 15th 2016, http://ec.europa.eu/eurostat/data/database.

Fassmann, H. and Reeger, R. 2012. 'Old' immigration countries in Europe. The concept and empirical examples, in: Okólski, Marek (ed.). *European Immigrations: Trends, structures and policy implications*. IMISCOE Research Series. Amsterdam: Amsterdam University Press.

Fassmann, H., Musil, E., Bauer, R., Melegh, A., and Gruber, K. 2014. Longer-Term Demographic Dynamics in South-East Europe: Convergent, Divergent and Delayed Development Paths. *Central and Eastern European Migration Review*, Vol. 3, no. 2: 150–172.

Goldstein, J. R., Sobotka, T., and Jasilioniene, A. 2009. The end of lowest-low fertility? *Population and Development Review, Vol.*35, no. 4: 663–700.

Gollopeni, B. 2016. Kosovar emigration: Causes, Losses and Benefits. *Sociologija i prostor*, god. 54, br. 3: 295–314.

Josifidis, K, Lošonc, A. and Supić, N. 2016. Političko-ekonomske protivrečnosti međunarodne migracije ('Political-economic Contradictions of International Migration'). *Stanovništvo*, Vol. 54, no. 1: 65–82.

Josipovič, D. 2016. The Post-Yugoslav Space on a Demographic Crossway: 25 Years after the Collapse of Yugoslavia. *Stanovništvo*, Vol. 54, no. 1: 15–40.

KAS. 2013. *Kosovo Population Projection 2011–2061*. Pristina: Kosovo Agency of Statistics, online, December 4th 2014. http://ask.rks-gov.net/ENG/publikimet/doc_download/1126-kosovo-population-projection-2011–2061.

Keilman, N. 2008. European Demographic Forecasts Have Not Become More Accurate Over the Past 25 Years. *Population and development review*, Vol. 34, no. 1: 137–153.

Kupiszewski, M. 2006. Migration in Poland in the Period of Transition – the Adjustment to the Labour Market Change, in: Kuboniwa, M. and Nishimura, Y. (eds.). *Economics of Intergenerational Equity in Transnational Economies.* Tokio: Maruzen Co. Ltd.

Kupiszewski, M., Kupiszewska, D., and Nikitović, V. 2012. *Impact of demographic and migration flows on Serbia*. Belgrade: International Organization for Migration – Mission to Serbia.

Madzevic, M., Apostolovska-Toshevska, B., and Iliev, D. 2013. A Process of Demographic and Economic Polarization in the Republic of Macedonia. *Geographica Pannonica*, Vol. 17, no. 2: 37–45.

Nejašmić, I. and Štambuk, M. 2003. Demografsko stanje i procesi u neurbanim naseljima Republike Hrvatske ('Demographic Condition and Processes in Non-urban Settlements in Republic of Croatia'). *Društvena istraživanja; časopis za opća društvena pitanja*, Vol. 12, no. 3–4: 469–493.

Nikitović, V. 2013. Migraciona tranzicija u Srbiji: Demografska perpsektiva ('Migratory Transition in Serbia: Demographic Perspective'). *Sociologija*, god. 55, br. 2: 187–208.

Nikitović, V. 2016. Dugoročne demografske implikacije niskog fertiliteta u regionu bivše Jugoslavije ('Long-term Demographic Implications of the Low Fertility Rates in the Region of Former Yugoslavia'). *Stanovništvo*, god. 54, br. 2: 27–58.

Nikitović, V., Bajat, B., and Blagojević, D. 2016. Spatial patterns of recent demographic trends in Serbia (1961–2010). *Geografie*, Vol. 121, no. 4: 521–543.

Nikitović, V. and Lukić, V. 2010. Could Refugees Have a Significant Impact on the Future Demographic Change of Serbia. *International Migration*,Vol. 48, no. 1: 106–128.

Penev, G. and Predojević-Despić, J. 2012. Prostorni aspekti emigracije iz Srbije. Tri "vruće" emigracione zone ('Spatial Aspects of Emigration from Serbia. Three "Hot" Emigration Zones'). *Stanovništvo*, god. 50, br. 2: 35–34.

Raftery, A. E., Alkema, L., and Gerland, P. 2014. Bayesian Population Projections for the United Nations. *Statistical Science*, Vol. 29, no. 1: 58–68.

Rašević, M., Nikitović, V., Lukić-Bošnjak, D. 2014. How to motivate policy makers to face demographic challenges? *Zbornik Matice Srpske za društvene nauke*, god. 148, br. 3: 607–617.

Stanković, V. 2014. *Srbija u procesu spoljnih migracija* (‘*Serbia in the Process of External Migration*’). Popis stanovništva, domaćinstava i stanova u Republici Srbiji. Beograd: Republički zavod za statistiku Srbije.

Ševčíková, H., Alkema, L., and E. Raftery, A. 2015a. Bayes TFR: An R package for probabilistic projections of the total fertility rate. *Journal of Statistical Software*, Vol. 43, No.1: 1–29.

Ševčíková, H., and E. Raftery, A. 2015b. Bayes Life: Bayesian Projection of Life Expectancy. R package version 3.0–0. Available at: http://CRAN.R-project.org/package=bayesLife.

Ševčíková, H., and E. Raftery, A. 2016. Bayes Pop: Probabilistic Population Projection. R package version 6.0–1.A vailable at: http://CRAN.R-project.org/package=bayesPop

United Nations. 2015a. *World Population Prospects – The 2015 Revision. Methodology of the United Nations Population Estimates and projections*. New York: United Nations – Department of Economic and Social Affairs, Population Division.

United Nations. 2015b. *World Population Prospects – The 2015 Revision. Key Findings and Advance Tables*. New York: United Nations – Department of Economic and Social Affairs, Population Division.

Zdravković, A., Domazet, I., and Nikitović, V. 2012. Uticaj demografskog starenja na održivost javnih finansija u Srbiji (‘Influence of Demographic Aging on Sustainability of Public Finances in Serbia’). *Stanovništvo*, god. 50, br. 1: 19–44.

Župarić-Iljić, D. 2013. Percepcija tražitelja azila u javnosti i medijski prikazi problematike azila u Hrvatskoj (‘Perception of Assylum-Seekers in the Public and Media Representations of Problematic of Assylum in Croatia’), in: Župarić-Iljić, D.(ed.). *Prvih deset godina razvoja sustava azila u Hrvatskoj*. Zagreb: Institut za migracije i narodnosti; Centar za mirovne studije; Kuća ljudskih prava.