

Depopulation and deep aging: the former Yugoslav and Western Balkans space between the second demographic transition and emigration

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ABSTRACT

The article introduces the tentative concept of deep aging – a label used for a situation when the overall ageing effects of the second demographic transition, due to fertility below replacement level, are topped by the excessive emigration of the fertile contingent (additional loss of active population). Deep ageing thus accelerates population decline. But the loss of fertile contingent may affect the total fertility rates and its apparent rise (TFR). Here, the tempo effect of fertility plays the decisive role. The article first assesses the demographic change in the European macroregions in the period after the fall of the Iron Curtain (1990–2020). It then analyses the changes in the area of former Yugoslavia to assess the extent of population change in the last intercensal period, 2011–2022. Building on the previous research of population loss and migration flows after the break-up of Yugoslavia, the overall population change in the region is being assessed. It is also shown that tempo distortion of fertility rates considerably affects the realistic level of fertility and that approximate completed fertility rates fell less dramatically. Since the migration data are less reliable, the analysis of intercensal change was applied to assess the migration losses across the ex-Yugoslav space. To assess the extent of deep ageing, the intercensal projection of fertile contingent was introduced. The stage of deep ageing is the most pronounced in Croatia and Serbia, especially at the younger fertile group, while the overall loss of fertile population is profound and will certainly affect the further future decrease in population. Similarly difficult demographic situation is in other post-Yugoslav countries, where only Slovenia has not yet slid into the stage of deep ageing.

KEYWORDS

population ageing, emigration, low fertility, depopulation, second demographic transition

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1 INTRODUCTION

Two concepts are being discussed and reformulated within this research: the concept of demographic transition and the concept of ageing of population. Both have been traditionally disputed, yet the value of both comes to the forefront of the demographic research when dealing with the positioning of a certain population within broader demographic developments. Longstanding low fertility in the so-called economically developed countries uncovered the fears of shrinking population. Low fertility combined with longevity and an increasing life expectancy sparked the debates about how to deal with the changing age structure, whereby larger older age-groups outnumbered

the smaller younger age-groups and threatened destabilization.

A characteristic feature of any population is its movement in time and space. It is characteristic of the global population that its number is directly influenced only by natural movement, i.e. the relationship between fertility and mortality. The relationship between the two is complicated at the regional and local levels, where the relationship between immigration and emigration in an area, i.e. its spatial component, becomes possibly a crucial factor of population growth. The area of former Yugoslavia is one such place where comparative research on population change and its destabilization may importantly contribute to the understanding of general demographic picture of Europe (Table 1).

Table 1 Population change in Europe 1990–2020

	1990	2000	2010	2020	2020–1990	2010–1990	2020–2010
Eastern Europe (with RF, KZK)	348,865,471	340,846,124	331,253,028	331,627,406	-17,238,065	-17,612,443	374,378
Southern Europe	117,013,260	120,064,663	129,227,338	129,697,471	12,684,211	12,214,078	470,133
Western Europe	237,751,243	247,413,956	258,059,355	269,580,520	31,829,277	20,308,112	11,521,165
Northern Europe	23,229,983	24,205,766	25,544,864	27,512,742	4,282,759	2,314,881	1,967,878
Southeastern Europe (ex-YU with ALB)	26,654,927	25,573,250	24,809,667	23,689,451	-2,965,476	-1,845,260	-1,120,216
FORMER SOCIALIST COUNTRIES	375,520,398	366,419,374	356,062,695	355,316,857	-20,203,541	-19,457,703	-745,838
CAPITALIST COUNTRIES	377,994,486	391,684,385	412,831,557	426,790,733	48,796,247	34,837,071	13,959,176
EUROPE TOTAL (with RF, KZK)	753,514,884	758,103,759	768,894,252	782,107,590	28,592,706	15,379,368	13,213,338
EUROPE* (European parts of RF, KZK, TUR)	693,514,884	704,103,759	718,894,252	735,107,590	41,592,706	25,379,368	17,213,338

Source: World Bank 2024; * author's recalculations for the European parts of Russia, Kazakhstan, and Turkey

Since the low fertility areas were ascribed mainly to the western type of welfare states, where the lowering number of births were compensated through net immigration, the situation in Southeastern Europe stood out significantly. Europe, however, has not just been a playground of the longstanding lower fertility and compensating overseas immigration, but was also cut by the deep internal rifts and regional tendencies. While the Mediterranean traditionally contributed population to the industrially developed countries of Western and Northern Europe, the Central and Eastern Europe did so after the fall of the Iron Curtain (Table 1). As an effect of the new redistribution of population in Europe, a new divide emerged between east and west, where the east faced a lasting depopulation far beyond a sufficient compensation of population. Thus, the conditions of deep ageing were established, where the diminishing active population is emigrating and thus affecting both the prospective fertility and the contingencies of mortality.

The major population shift after the fall of the Iron Curtain (notwithstanding East Germany) was directed from Eastern to the western Europe whereby the East replaced the South. Southern Europe ceased to represent a major basin to the industrialized hub of Western Europe by 1990 and was completely replaced by east to west migration (Table 1). With the accession of the central and eastern European countries to the EU in 2004 and the outbreak of the Russian–Ukrainian conflict in 2014, the transfer of population from Eastern Europe was blocked unexpectedly and it has not yet recovered. From the loss of 17.6 mill. in the 1990–2010 period, the population growth in Eastern Europe was thereon positive (+0.374 mill. after 2010).

Southeastern Europe (former socialist Yugoslavia and Albania) represents another type of emigration oriented macroregion. Despite the wars in the 1990's, the biggest emigration happened after the outbreak of the financial crisis in 2008. Its negative balance (–1.85 mill. until 2010) was extended by another –1.12 mill. population loss until 2020 (Table 1). Western (+31.2 mill.), Northern (+4.3 mill.), and Southern (+12.7 mill.) Europe, on the other hand gained some 48.8 million people, while the former socialist countries lost 19.5 million inhabitants. Overall population gain for the capitalist European countries in the 1990–2020 amounted to 69 million inhabitants against that in the former socialist Europe (Table 1).

1.1 THEORETICAL APPROACHES TO LOWERING FERTILITY AND THE TRANSITION THEORY

When a population begins to reproduce itself below the simple replacement level at 2.1 child per woman in fertile period, a second transition begins (Lesthaeghe and van de Kaa 1986, van de Kaa 1987: 5). The second demographic transition (SDT) in the former Yugoslavia first began in northern and western parts (Vojvodina, Croatia, Slovenia, Serbia proper), and then in the rest of the republics (Statistical Yearbooks of Yugoslavia, various volumes Wertheimer-Baletić 1999: 230; Malačič 2000: 86). In a relatively short period after Yugoslavia accomplished the first demographic transition in 1965 (Vogelnic 1965), the country entered the SDT (Černić Istenič 1994).

The fertility decline below the level of simple reproduction of population is a continuation of the process that began in Europe as early as the first half of the 19th century, first in France, yet under

different conditions and circumstances (Wertheimer-Baletić 1999: 132; Malačić 2000: 234; Šircelj 1991: 82–83). The complex multi-factorial theories tried to answer the question of why the former dynamic equilibrium of stable high fertility and fluctuating high mortality occurred. Thus the central demographic theory – the theory of demographic transition – was developed. According to Woods (1979: 4), its origin can be sought in the works of Thompson (1929), Davis (1945), and Notestein (1945). The term “demographic transition” itself was first used by Notestein (Malačić 2000: 240–241). Yet before Thompson, first in 1909 and again in 1934, Landry had put forward three fundamental theories of population that correspond to the three phases of demographic transition. In the theory of demographic transition, according to Notestein (1945), the role of mortality is reduced to the theoretical beginning of the demographic transition, since the transition commences when mortality begins to decline from relatively stable highs (*ibid.*). While the factors for mortality decline were quickly deciphered, its relation to fertility remained entangled in primordial explanations. Nevertheless, in its most succinct version, the demographic transition was defined by Paul Demeny: “... In traditional societies, fertility and mortality are high, and in modern ones both are low. In between, there is a demographic transition...” (Demeny 1972 in Malačić 1985: 42).

The fall of fertility rates prior to mortality rates poses an unbridgeable obstacle if the transition is to be conditioned with the fertility decline. Rather, the relationship between fertility and mortality seems to be more indirect in character. Yet other factors of this reversal need to be examined, such as the effect of higher mortality and

postponed fertility, due to wars and the revolution of 1789.

Theory and demographic analysis show that mortality variations at high and stable fertility rates have little impact on the age structure (Breznik 1988: 423, 430). Yet, within the low-fertility countries, age-specific mortality needs to be evaluated. Applying the modelled starting points (abridged lifetables, fixed structure within five-year age-groups, probability and life expectancy across groups), data for post-Yugoslav countries prove the minimal loss through morbidity across the female fertile contingent ranging from 0.02 per cent in 20–29 age group to 2.72 per cent in 40–49 group. Hypothetically, if the modelled population (stationary, stable, and quasi-stable populations) possesses a constant zero typical natural increase, with long-term stable fertility and mortality rates, such type of stable population is labelled stationery (Breznik 1988: 400–405). Here, the quasi-stable model (Breznik 1988: 423, 430) was used for calculating the future number of population (projections, a-posteriori events, fertility rates, mean life-span), as well as for calculating demographic indicators in populations for which there is insufficient data, as was the case for countries without regular censuses (e.g. Bosnia-Herzegovina).

1.2 THE SECOND DEMOGRAPHIC TRANSITION IN EUROPE AND THE UNDERLYING CAUSES

Large excess of births over the number of deaths were the most prominent outcome of the demographic transition in the long run. Yet, on the other hand, the problem of disparate developments in different parts of the world remains. Henceforth, the theory of demographic transition (DTT) is valid rather only

for Europe and few other westernised countries. Thus, it has been losing its universality and globality, yet the assumption of the first demographic transition is necessary to employ the hypothesis of the second demographic transition (SDT) which is of central interest to this debate.

However the decline in mortality has not directly resulted in a decline in fertility globally, still mortality represents a syncretic process of its own (Friganović 1978: 76, 81).

An important difference between the theory of demographic transition and that of the second demographic transition is the way that fertility indicators are applied. While general fertility and mortality rates were sufficient to explain the theory of demographic transition, they are proving insufficient for the past half a century. The weak points of the demographic transition theory (DTT) prompted researchers to try to either supplement an existing theory, or set up a new one. There were three main theories that have dealt with the problem of falling fertility rates and finding the causes of decline: Caldwell's theory of intergenerational flow of well-being (Caldwell 1981), Becker's microeconomic fertility theory (Becker 1981), and the aforementioned theory of the second demographic transition in Europe (van de Kaa 1987). While Caldwell and Becker often look back on history and break down long periods in search of the causes of destabilization (Caldwell 1976, 1978), van de Kaa focused on the last three decades prior to his work. This phase of demographic development in Europe was dubbed the SDT. It began in the 1960's and, similarly to Breznik and Vogelnik, arbitrarily takes 1965 as its starting point, although the enclosed statistics show that such a strict

limit cannot be set (see van de Kaa 1987, Table 5). According to van de Kaa, the classical DTT ended in 1930's, while the interim period until 1965 was marked by WWII consequences and the subsequent baby-boom as a response of the population to war losses (Friganović 1980). Van de Kaa sees the causes for the SDT in the major changes in norms and behaviour, individualism as opposed to altruism, mainly of socio-psychological nature. The first demographic transition was marked by caring for the family and offspring, while the second emphasizes the rights and self-fulfilment (self-realization) of the individual. If industrialization, urbanization, and secularization are indirect determinants of the first demographic transition, as Lesthaeghe and Wilson (1986) convincingly claim, the determinants of the second are significantly harder to define, but strongly linked to the functioning of individuals in the rapidly changing post-war and post-industrial societies (van de Kaa 1987).

Although van de Kaa makes no explicit mention of it, the explanation behind the second demographic transition shows Becker's microeconomic influence: for example, in the case of a shift from family production to paid work that has reduced the economic usefulness of children, and in the case of birth control in a family that has prioritised quality over the quantity of children. Van de Kaa also considers Caldwell's theoretical findings when he says that the net flow of well-being favoured children over their parents.

According to van de Kaa, a further decline in fertility was marked by social and cultural changes in addition to economic benefits. For example, people's emotional needs for a child can be met or satisfied with just one, or at most two children, by reducing their "freedom" in

terms of self-fulfilment as little as possible. There is a clear tendency towards praising the individual with little attention to the collective interest and stable functioning of intergenerational flow of wealth and solidarity among generations (see Caldwell 1978). It is a kind of duality of progressiveness and conservatism, except that more and more people behave progressively. Importantly, the transition to progressivism and post-materialism was strong in Western Europe, and quite independent of economic recessions. The sequence of events in the formation of a family was an important criterion for assessing changes in fertility behaviour. Despite the differences in timing and tempo of fertility between Eastern and Western Europe, the transition to individualism and progressivism according to van de Kaa follows: (1) transition from marriage to cohabitation, (2) transition from children to parents as a focal point of the family, (3) transition from contraception as a tool to prevent unwanted pregnancies to “conception” and family planning, and (4) transition from unity to diversity of families and households (van de Kaa 1987).

Van de Kaa’s contribution is of huge importance also in demo-geographic terms. He defined the position in the sequence of SDT. The first group includes the countries of Northern and Western Europe, except Ireland, Iceland, and Italy (as a Southern European country). The second group includes the countries of Southern Europe, excluding Albania and Turkey, as well as Italy. The third group includes the countries of Eastern Europe without the Soviet Union. In the fourth group are all other unmentioned countries. This demographic regionalisation shows an interesting geopolitical picture of the restructuring Europe yet to come a couple of years later.

To substantiate his claims, van de Kaa (1987) also examines changes in partnerships and household composition, compares fertility rates between countries, with the order of birth of children, with extramarital fertility and fertility below the level of simple reproduction as a final consequence of the drift into the SDT. He pays special attention to the impact of birth control and abortion as a serious problem, especially for Eastern European countries, and also for Yugoslavia. In Romania, the number of abortions at its peak reached 4000 per 1000 births. In Yugoslavia, abortions also exceeded the number of births at the annual level (around 1300 per 1000 births). An important exception among Eastern European countries is Poland with one of the lowest rates of abortion, which can be explained by the influence of the Polish Roman Catholic Church, an important moral and political force in Poland during socialism. Instead of the correlation between the declining mortality and subsequent decline in fertility, van de Kaa rather reflects and highlights the sharp dividing line between Eastern Europe and the rest of the continent in terms of mortality rates and life expectations. The latter is still considerably shorter in Eastern Europe, as was corroborated by Šircelj (1998). The difference between eastern and western Slovenia was about 2.5 years, but it is difficult to say whether this is the dominant pattern in other countries. Due to its transitional geographical position along the Hapjnal’s line, Slovenia may therefore be in transition from the point of view of life expectation, yet the pattern of nuptiality and extra-marital fertility in north-eastern Slovenia match the developments in eastern Serbia (Arsenović et al. 2018) and posits Slovenia within the western framework.

In the perspective of depopulation and the imminent further imbalance in age structure, van de Kaa saw immigration as a possible instrument of demographic policy to mitigate the effects of adverse demographic developments (van de Kaa 1987). This was called into a question by Coleman (2006) in his “third demographic transition”. On the other hand, van de Kaa also mentions the examples of countries that have introduced more or less successful pronatalist actions such as Sweden and France, or Romania of the 1980’s.

1.3 SECOND DEMOGRAPHIC TRANSITION IN THE POST-YUGOSLAV SPACE

Supplementary to van de Kaa’s SDT, the general demographic transition theory (DTT) may be periodized as followed: (1) from mid-18th century France to 20th century SE Europe, (2) shrunken reproduction and below replacement fertility, and (3) oscillation around low levels of fertility (Easterlin 1978). Applying Caldwell’s destabilization paradigm (Caldwell 1978), six major disruptions may be distinguished in the case of post-Yugoslav space:

1. 1989–1991 The fall of the Iron Curtain and the dissolution of the Soviet Union and break-up of Yugoslavia
2. Yugoslav wars 1991–1999 – Huge demographic impact (population resettlement, ethnic cleansing, forced migration, war crimes, economic disaster)
3. 2008 outbreak of the global financial crisis
4. 2012–2013 reverb of the financial and debt crisis
5. 2020–2022 The CoViD-19 pandemic and the excess deaths
6. 2022–2024 Wars in Ukraine and Gaza and the global geopolitical and geoeconomic realigning

As shown by the previous research on demographic effect of the Yugoslav break-up after 25 years, the Yugoslav space experienced some 5 million net demographic loss (Josipovič 2016). Except for the war losses in the 1990’s and the forced resettlement as a result of combat activities, terror, and ethnic cleansing, the major change was provoked by the financial and debt crises which closed many businesses and profoundly reformulated the economic activity (ibid.). With moving of the production, especially towards Asia and the Global South, the population of post-Yugoslav states traditionally oriented towards the guest-work, suffered new waves of emigration (Josipovič 2018). As in many other European countries, whole range of over-indebted companies ended-up defaulted, foreclosed, or moved abroad and shrank their production. The resources of the former socialist countries, generally higher than those in the Western Europe according to the purchase power parity (Josipovič 2011), slowly diminished and forced population towards a pronounced migration to the economic centres, mainly to the countries’ capitals. Such a centralization had manifold demographic effects. First and foremost, it affected rural areas which suffered pronounced depopulation and underwent the process of deep aging (discussed in a separate chapter). And secondly, it affected the tempo of fertility with postponing the childbearing and increased the share of childlessness, both typical for heavily urbanized areas.

As a result, the generational reproduction was incomplete and further narrowed (Josipović 2016). Adding new disturbances after 2016, such as the global CoViD-19 pandemic, the demographic effects were again negatively palpable: first with the excess deaths and then with the effect of lockdowns and lowered fertility (Josipović 2021). The demographic effect epitomized in the excessive deaths, once again, struck Eastern Europe and especially South-East Europe (Mostert et al. 2024). As regards the effects upon the mortality patterns, each and every year affected the countries differently. For example, the pandemic struck Slovenia more than Croatia in 2020, but in 2021 Slovenia compensated the gap of higher mortality against Croatia (Graovac Matassi and Josipović 2023).

To understand the full effect of the excess deaths upon the total population number, a proper way of employing the projected values as expected without external effects (CoViD-19 related measures) is needed. Here we refer to a comprehensive study across 47 states of the Western world where the Karlinsky and Kobak's estimate model was used (Mostert et al. 2024). This estimation model rendered close results compared to the developed method for the excess deaths in Slovenia (Josipović 2021), and all-cause mortality comparison between Slovenia and Croatia (Graovac Matassi and Josipović 2023). While the study across 47 Western countries (including the European countries and the USA, Canada, Australia, and New Zealand) shows overall 8.8 per cent of excess deaths, this percentage for the former

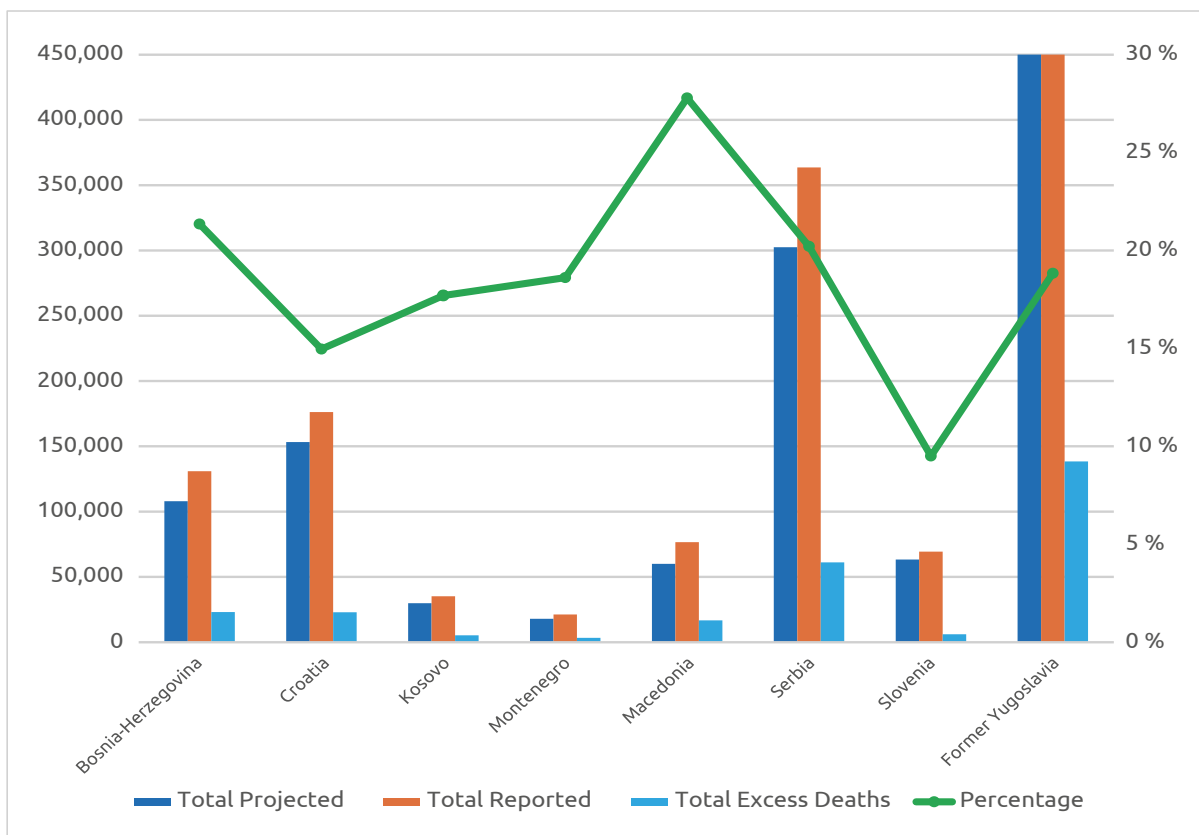


Figure 1 Projected and reported deaths in the region of former Yugoslavia

Source: rearranged after Mostert et al. 2024.

Yugoslavia amounted to 18.8 per cent (Figure 1). The highest absolute number of excess deaths was recorded in Serbia (+61,125), while the highest share relative to the projected (expected) number of deaths was recorded in Bosnia-Herzegovina (+21.4 per cent). The lowest difference between the projected and recorded number of deaths was in Slovenia, where 9.5 percent was slightly above the “western” average (Figure 1). The overall Covid-19 death toll for the former Yugoslav space increased the negative natural balance by 138,402 additional deaths over the three-year period (2020–2022).

2 ESTIMATING THE TOTAL NUMBER OF POPULATIONS FOR THE FORMER YUGOSLAV AREA

To assess the population changes in the post-Yugoslav space, one first had to establish a common denominator for comparison. All countries except Bosnia-Herzegovina carried out classical or register-based censuses (Slovenia) in the 2011–2022 period which allowed for the estimation and re-evaluation of the total population. Thus, it was possible to assess the changes in the last decade, as well as to make the comparison with the changes after the break-up of Yugoslavia until 2011. As to the period prior to 2011, the direct demographic losses amounted to 2.5 million people and the indirect to up to 5 million (Josipovič 2016). With a wave of new censuses around 2022, after or during the Covid-19 crisis, it was possible to further analyse the changes in population structure in the post-Yugoslav space, and to upgrade the findings from the previous research.

The lack of data or any recent official and reasonable estimations for Bosnia-Herzegovina has made it necessary

to find a solution to overcome that gap. Making use of the total excess deaths and its effect to natural change, and the migration statistics of the main immigrant destination countries (Slovenia, Croatia, Serbia, Austria, Germany, Sweden), it was possible to assess the net population change in Bosnia-Herzegovina after 2013. In the 2013–2022 period, Bosnia-Herzegovina lost 50,000 inhabitants to Slovenia (Statistical Office of the Republic of Slovenia 2024), 21,000 to Croatia (Croatian Bureau of Statistics 2024), 20,000 to Serbia (Statistical Office of the Republic of Serbia 2024), 8,000 to Austria (Statistics Austria 2024), 92,000 to Germany (Statistical Office of Germany 2024), 7,000 to Sweden (Swedish Central Bureau for Statistics 2024), and so on. The mass emigration is ongoing and predominantly terminal. Only in the 2018–2023 period, 7,770 citizens of Bosnia-Herzegovina acquired the German citizenship (Statistical Office of Germany 2024). The couple of European countries make for a loss of 192,000 Bosnian citizens, yet many of the emigrants will have entered the schemes of acquiring pertinent citizenships. Considering the emigration to other countries like Italy, Switzerland, France, and the Netherlands, around 15 per cent should be added to the overall assessment – altogether some 220,000. Considering that migration data undergo a certain time gap between the de facto and de iure migration, the contemporary data is certainly underestimated by up to 5 per cent, which brings us to the estimation of 232,000 net migration loss for Bosnia-Herzegovina in the period 2013–2022. Adding the negative natural balance of 107,000 for the same period, including some 23,000 excess deaths in the 2020–2022 period which harshened the natural balance

sheet and deepened the natural loss, the overall net loss amounted to 339,000 inhabitants. So, the total population of Bosnia-Herzegovina is estimated at only 3,192 million by the end of 2022. It is worthwhile mentioning that the Agency of Statistics of Bosnia-Herzegovina assessed the total population at 3,434 million in 2022 (Agency for Statistics of Bosnia and Herzegovina 2024), yet the Agency did lower the mid-year 2023 estimate to 3,346 million. Thus, it approached the estimation reduced for the people that have left Bosnia-Herzegovina after the 2013 census had been carried out, i.e. 3,335 million (see Josipović 2016: 27, cf. Nikitović 2017). Seemingly, the national agency has not corrected the figures coming from the three sources: Bosniak-Croat Federation (FBiH), Republic of Srpska (RS), and the Brčko District (BD). There are striking differences between the two entities. While the FBiH with 2.1 million exercised only 40,000 negative natural balance, the RS entity with 1.1 million suffered a natural decrease of as many as 60,000 people. This points to a further decrease of population of the entity and depopulation of the vast, sparsely populated areas in Eastern Herzegovina, the Drina Valley, and the southern mountainous part of Bosnian Krajina, which already suffered from the consequences of the war and resettlement of population (Marinković and Majić 2018: 57). The rest of negative natural balance in the studied period (–7,000) pertains to the Brčko District, which exercised unexpectedly high negative natural balance of –8.6 per cent of its total population (Agency for Statistics of Bosnia and Herzegovina 2024).

Other countries also have problems with reliability of their statistics, especially those on migration. Yet the censuses carried out every decade are a way of

addressing this issue. Since the censuses were not carried out simultaneously, the data were assembled according to the real date of the census with the sole exception of Bosnia-Herzegovina, where the pertinent data was acquired through extrapolation. Methodologically, it does not contribute significantly to the quality results of the assessed direct demographic losses. If all the data were to be extrapolated to the same critical date in 2011 and 2022, the difference would amount to less than five per cent (4.6 per cent or +67,000 in 2022). This is in line with the previous research, where the demographic losses were assessed for a much longer and turbulent period of 1990–2015 (Josipović 2016).

The general conclusion for the territory of former Yugoslavia based on the Table 2 data for 2022 implies further demographic losses in the last intercensal period amounting to between 1,391 and 1,458 million, and the overall decrease to 19,884 million (cf. Nikitović 2017). Only two countries registered an increase of population (Slovenia +3 per cent; Montenegro +2 per cent). The highest losses were recorded in Kosovo (–11 per cent), and Croatia (–10 per cent). Serbia and Bosnia-Herzegovina experienced similar losses (–8 per cent), while Macedonia lost 5 per cent of its population when compared to the last census (Table 2). Among the regions, the most dramatic situation is in the entity of Republic of Srpska in Bosnia-Herzegovina (–12 per cent loss), which evidently lacks demographic resources to repopulate the war-torn areas, and in the autonomous province of Vojvodina in Serbia (–10 per cent), where the highest emigration could be ascribed to minority populations, predominantly Hungarians and Croats along with the subpopulations of Bunjevat–Shokacz, but other minorities

as well. The same process was observed in Macedonia, where smaller minorities lost more (SSO 2024). The changes and the overall losses would be even bigger had the countries not acquired new population from the third countries. Serbia replenished the present population with up to 60,000 foreign citizens by 2022, a doubling of the previous year's figure (34,000). Most of them are coming from China (9,900), Russia (8,000), and Turkey (5,700) (Nikolić and Maksimović 2024). The losses would amount to 600,000 in the last intercensal period. Croatia witnesses the same process of the "third citizens" immigration (Klempić Bogadi et al. 2018; Čipin and Ilieva 2017).

Slovenia, the most demographically successful successor state of Yugoslavia despite low fertility, is a standout case when it comes to migration patterns in the former Yugoslav space. As the migra-

tion register is being a relatively reliable source, the register-based censuses may be carried out every three to four years (2011, 2015, 2018, 2021). The harmonization of the definition of population in Slovenia with the EU and the transition towards the usual residence allowed for comparable interannual datasets from 2008 onwards. Thus Slovenia is one of the statistical forerunners in the former Yugoslav space. As to the migration statistics, yet with some delay and shortcomings stemming from it, the specific selectiveness pattern is discernible from the distribution of net migration to Slovenia in the 2008–2022 period. Slovenia has the highest share of foreign population (about 9 per cent) in the region, most of which (85 per cent) migrated from the former Yugoslav space (Josipovič 2018). With the onset of the 2008 crisis and the outbreak of pandemic in 2020,

Table 2 Intercensal changes (in 000) in the period 2011–2022

	2022	2011	absolute difference	index
Montenegro**	0,633	0,620	+13	102 %
Macedonia	1,837	1,930	−93	95 %
Slovenia	2,109	2,050	+59	103 %
Bosnia-Herzegovina*	3,192	3,484	−292	92 %
FB&H	2,051	2,198	−147	93 %
RS	1,063	1,202	−139	88 %
BD	0,078	0,084	−6	93 %
Croatia	3,872	4,285	−413	90 %
Serbia	6,647	7,187	−540	92 %
Central Serbia	4,907	5,255	−348	93 %
Vojvodina	1,740	1,932	−192	90 %
Kosovo**	1,595	1,786	−191	89 %
Former Yugoslavia	19,884	21,342	−1,458	93 %

Source: Kosovo Agency of statistics 2024; Agency for Statistics of Bosnia and Herzegovina 2024; Croatian Bureau of Statistics 2024; State Statistical Office of North Macedonia 2024; Statistical Office of Montenegro 2024; Statistical Office of the Republic of Serbia 2024; Statistical Office of the Republic of Slovenia 2024; author's calculations; *based on estimations; ** preliminary census results from 2024.

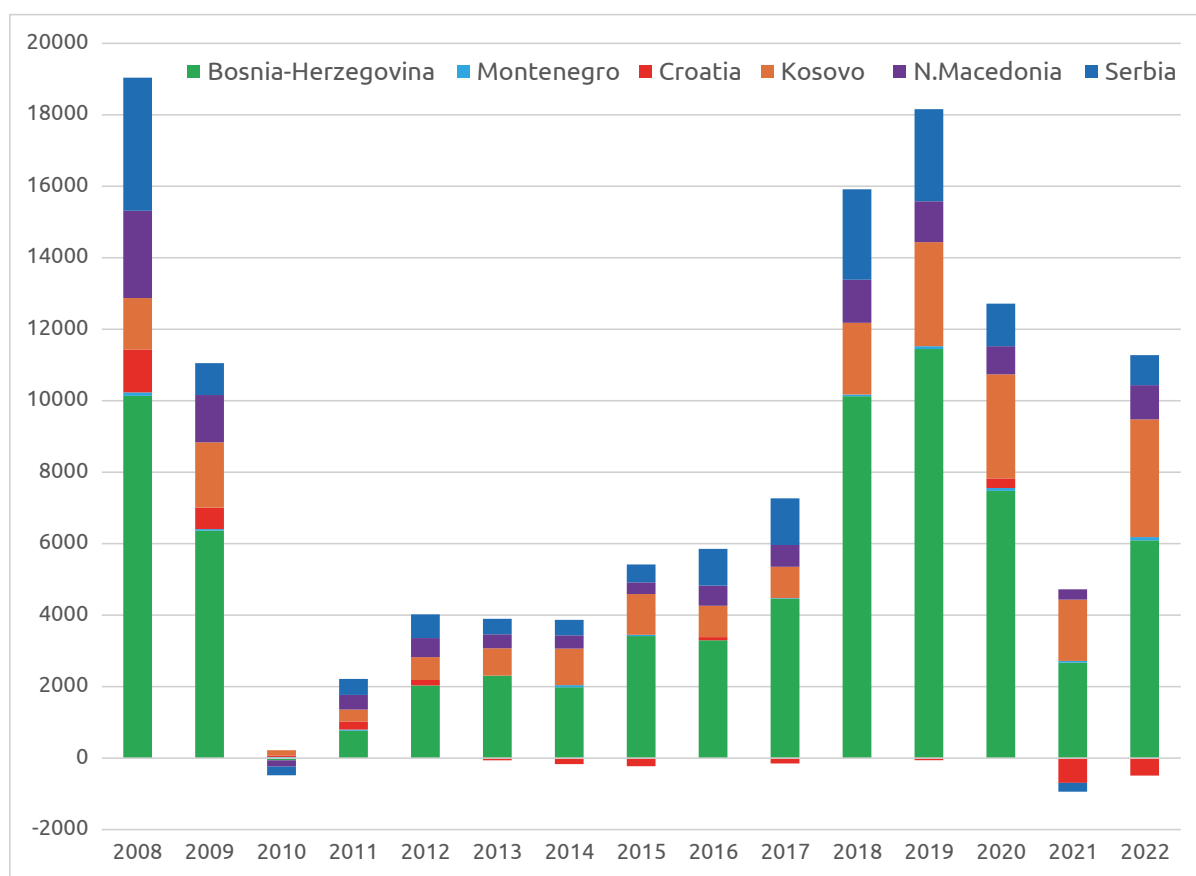


Figure 2 Net migration flows to Slovenia from other ex-Yugoslav countries, 2008–2022

Source: Statistical Office of the Republic of Slovenia 2024; author's calculations

which both heavily influenced economy, together with the ageing of population and mounting needs for labour force, a certain shift in migratory pattern has been underway (Figure 2).

Traditionally, the strongest donor country from the Yugoslav space is Bosnia-Herzegovina with 59 per cent of the net migration to Slovenia (totalling to 123,052 in 2008–2022 period). Contrary to the traditionally high mutual migration between Slovenia and Croatia, the latter turned out to be insignificant, especially after its EU succession (Valenta et al. 2023). Due to its small population and reviving traditionalisation and patriarchalisation (Rakonjac 2020), Montenegro is being gradually excluded from significant migration exchange with Slovenia and becoming increasingly

peripheral in terms of migration (Nikolić and Maksimović 2024). The rest of the former Yugoslav areas (Kosovo, Serbia, Macedonia) show statistically significant convergence. While Macedonia and Serbia share high correlation ($r=0.96$) of migration flows to Slovenia after 2008, Kosovo is a complete contrast. Its correlation is negative with both Serbia ($r=-0.98$) and Macedonia ($r=-0.92$). This means that Kosovo substituted both the Serbian and Macedonian immigration to Slovenia in the analysed period, especially after the Covid-19 crisis (Figure 2). This is in line with the projected migration trend for Serbia and Kosovo calculated by V. Nikitović (2018). According to his analysis, Kosovo will remain an emigration area par excellence while Serbia will neutralize its net emigration by 2030

and become a net immigrant destination (Nikolić 2018). Some indications (see Nikolić and Maksimović 2024) confirm these expectations.

When considering the period after 2013, when Croatia joined the EU and Bosnia-Herzegovina carried out its only census after 1991, the net migration to Slovenia amounted to 83,153 (2013–2022) where 50,969 or 61.3 per cent was contributed by Bosnia-Herzegovina. The second biggest population donor to Slovenia became Kosovo with 16,756 or 20.2 per cent in the migration balance with Slovenia. Serbia contributed with 10,158 or 12.2 per cent of migrants, and Macedonia with 6,247 or 7.5 per cent. A small net migration (455 persons or 0.5 per cent) was also contributed by Montenegro (Statistical Office of the Republic of Slovenia 2024; Figure 2). Only the net migration with Croatia was negative (–1432) which on one hand indicates a return migration of former migrants from Croatia, while on the other suggests the migration of ethnic Croats and Slovenes, possibly with real estate in Croatia, due to the Croatian EU membership. With the accession of Croatia to the Schengen protocol the trend is expected to continue. According to the Croatian statistical office, the number of Slovenian citizens that immigrated to Croatia amounted to 4,025 in the 2018–2022 period, while at the same time only 1,069 left Croatia (Croatian Bureau of Statistics 2024). On the other hand, the last available data for 2022 show that the net migration with Slovenia amounted to 505 persons (ibid.) while the Slovenian office reported the net loss of 489 people with Croatia (Statistical Office of the Republic of Slovenia 2024). The difference of 3.2 per cent is not negligible, yet it is much smaller than it used to be in previous years. Namely,

the migration data published by the Croatian statistical office were regularly questioned for its reliability (Klempić Bogadi et al 2018).

Considering other data on emigration from the Western Balkans, it is worthwhile observing that emigration soared after 2018. The highest being the emigration from Albania and Bosnia-Herzegovina reaching the EU immigration rate of around 10 per 1,000 inhabitants in the last five years (Nikolić and Maksimović 2024). North Macedonia (5 per 1,000), Serbia (3 per 1,000), and Montenegro (2 per 1,000) also increased the immigration to the EU (ibid.).

3 ANALYSIS AND THE RESULTS

3.1 A MISMATCH BETWEEN TOTAL FERTILITY RATE AND COMPLETED FERTILITY RATE

After the overall population change was elaborated and the extent of migration flows established and assessed, the deeper insight into the main component of natural change is needed. Theoretically we closely examined the changes in the fertility behaviour which led not only to a profound demographic change, but was triggered by vast societal changes (cf. Čipin and Ilieva 2017). The major demographically observed change in the SDT was postponement of childbearing marked by a rising age at childbearing. Thus was affected the generational fertility measure – the TFR. While the TFR is the measure of transversal changes in the main population contingents, CFR measures the end effect of the childbearing period. From this methodological cleavage stem many misinterpretations of the changes in fertility behaviour. Indeed, it can be observed from the data that less women participate in

childbearing due to postponement and rising childlessness. The methodological-interpretational mismatch between the TFR and CFR, not only confined to the tempo effect or tempo distortions, creates several issues. Principally it represents the problem of generational gap, unbalanced age structure, fertility mainly affected by the societal (socio-economic and geopolitical) disruptions, longer continuing education, postponed childbearing, presumable decrease, and recuperation (Josipovič 2004). The use of the TFR indicator shows different paths to below-replacement fertility levels in post-Yugoslav state and the neighbouring Albania (Figure 3). Albania as

politically Western Balkans state is added for the comparative view in understanding of ethnic minorities' effect to fertility rates, especially in Kosovo-Metohija. Despite similar, though not the same, ethnic populations, and Albanian ethnic majority in both these entities, the reproductive behaviour was significantly different. While Albania, though economically underdeveloped, was independent and had lower fertility, Kosovo-Metohija was underdeveloped autonomous part of Serbia with the highest fertility rates. Such a high fertility received a pejorative geopolitical label of an "aggressive breeding" (Stanton 2003), similar to some other areas (Gaza in Palestine).

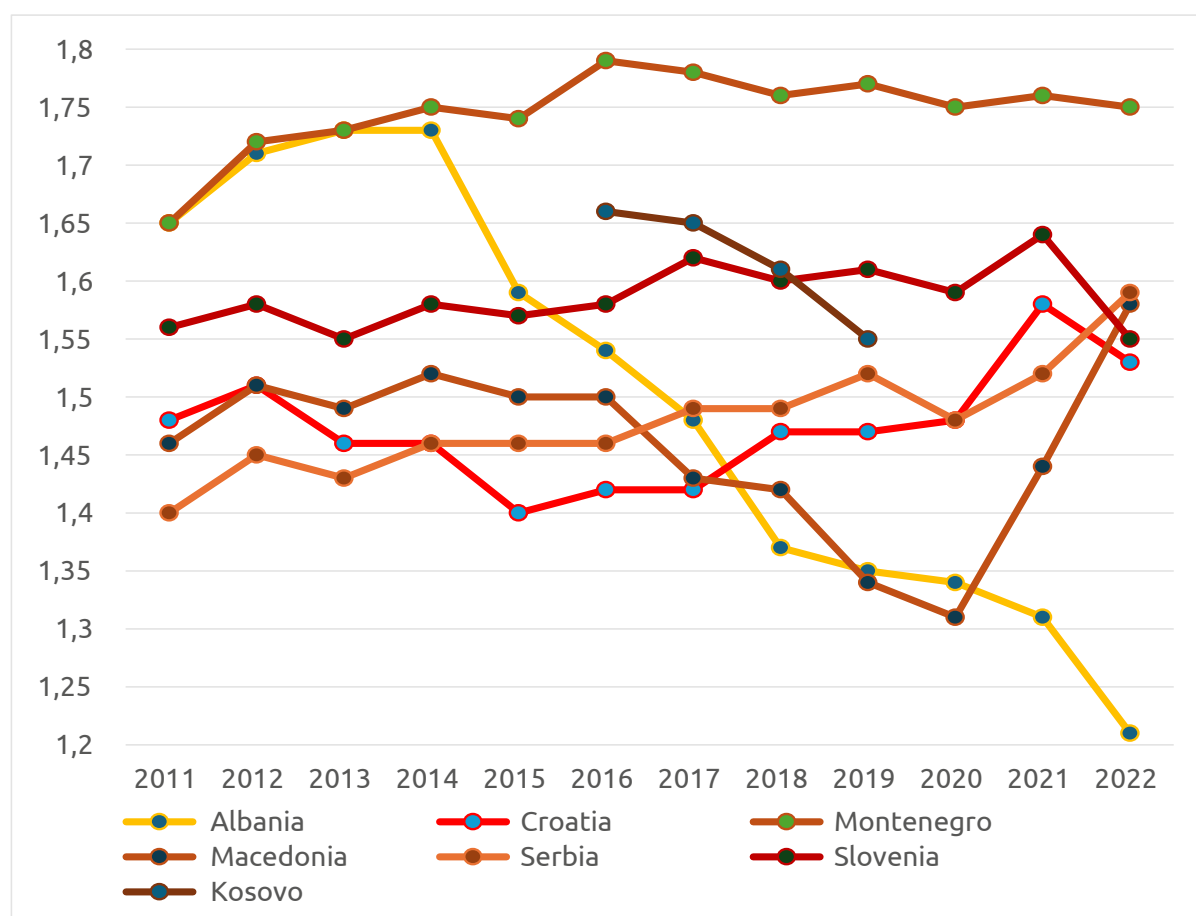


Figure 3 Total fertility rate (TFR) in the Western Balkans (Ex-Yugoslav countries and Albania) in the 2011–2022 period

Source: Eurostat, 2024; *note that Bosnia-Herzegovina was not included due to unreliable data according to Eurostat.

Figure 3 shows that particularly Albania was the last to enter the SDT. The steep decline in the TFR does not mean that in such a short period the reproductive goals were changed, but rather that the postponement came due to social and economic disruptions (Figure 3). The lack of data prevents us from claiming the same for Kosovo-Metohija, yet the same trend is observable with a slight delay. Montenegro exhibits the quick route to recuperation to 1.8 child per woman in childbearing age, or perhaps some repatriarchalisation as well (Rakonjac 2020). Macedonian case is interesting, since it demonstrates the problem of misjudgement of the size of the fertile contingent. Given that emigration from Macedonia is high, as being shown, the recuperation of fertility is merely fictitious. Slovenia

shows stabilizing values of the TFR, while the last two years show protruding effects of Covid-19 crisis to the fertility as well – only Albania and Croatia had a significant drop (Figure 3).

Using the TFR indicator, two groups of countries emerge from the second demographic transition in SE Europe. The low-fertility countries with earlier transition fell beneath the simple reproduction level around 1980 (Figure 4) with the sole exception of Romania where Ceausescu regime imposed harsh measures to fight high abortion rates as a drastic tool of family planning (cf. van de Kaa 1987). Hence the spike in the 1980's. With the latest developments, all SE countries lie well below the replacement levels, including Kosovo-Metohija and Albania (Figure 3).

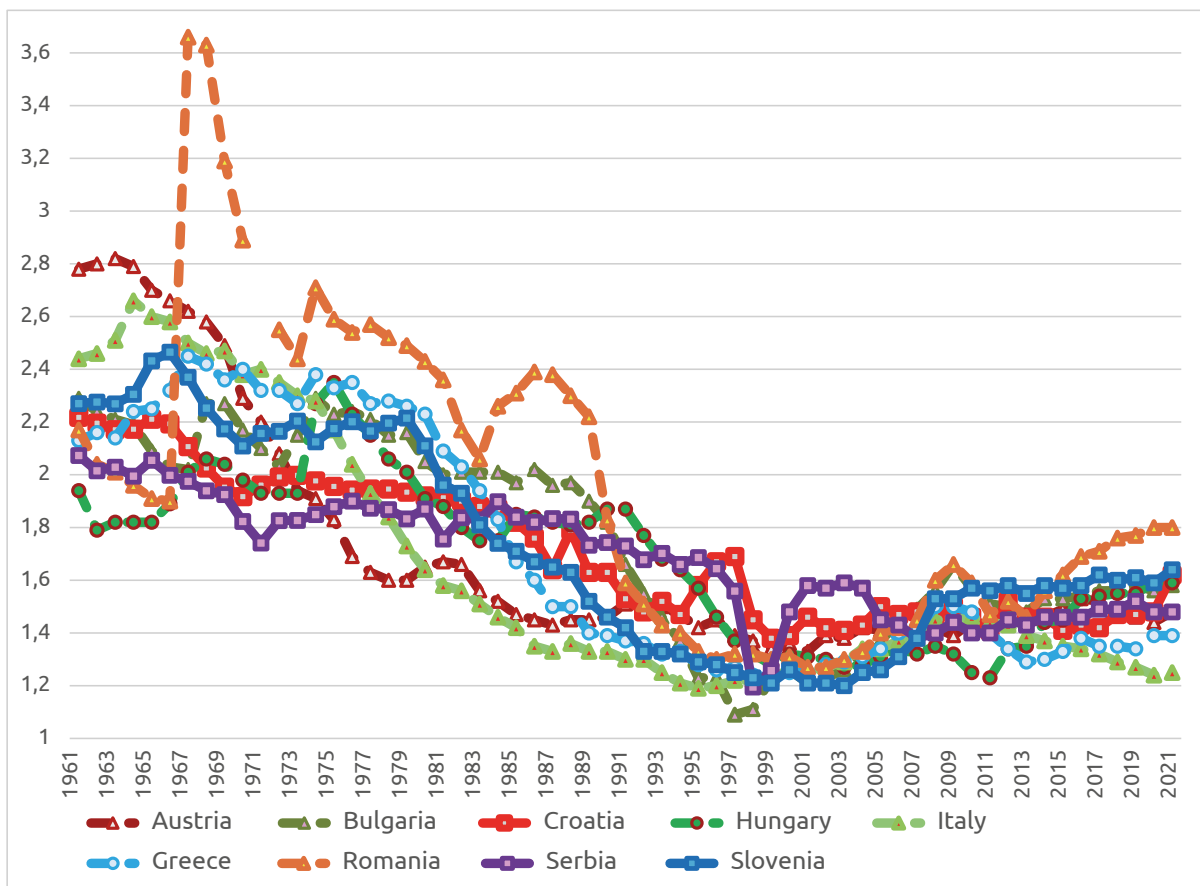


Figure 4 Low-fertility countries of South-Eastern Europe and its vicinity, TFR, 1961–2021

Source: World development indicators, 2024.

The transition to low fertility levels was rapid in the rest of the SEE countries. Macedonia, Montenegro and Bosnia-Herzegovina as mid-fertility countries entered the SDT in the 1980's, yet with some oscillations ("swings") as expected by Easterlin (1978). During the 1990's, Bosnia-Herzegovina saw a rapid decrease of the TFR, whereby its generational transition began already in the 1970's, similarly to Slovenia (Figures 5 and 6).

has been decreasing. From the record on 1 January 2012 and 1.97 million citizens, in ten years the number decreased to 1.923 mil. (i.e. -47,000). Given the positive natural balance in the last decade, these citizens moved abroad (Figure 7). In the same period (2012Q1-2023Q4) the number of foreign citizens rose from 86,000 to 199,000 (+213,000). According to the 2021 census, people born abroad accounted for 293,000, whereby only about a third (105,000)

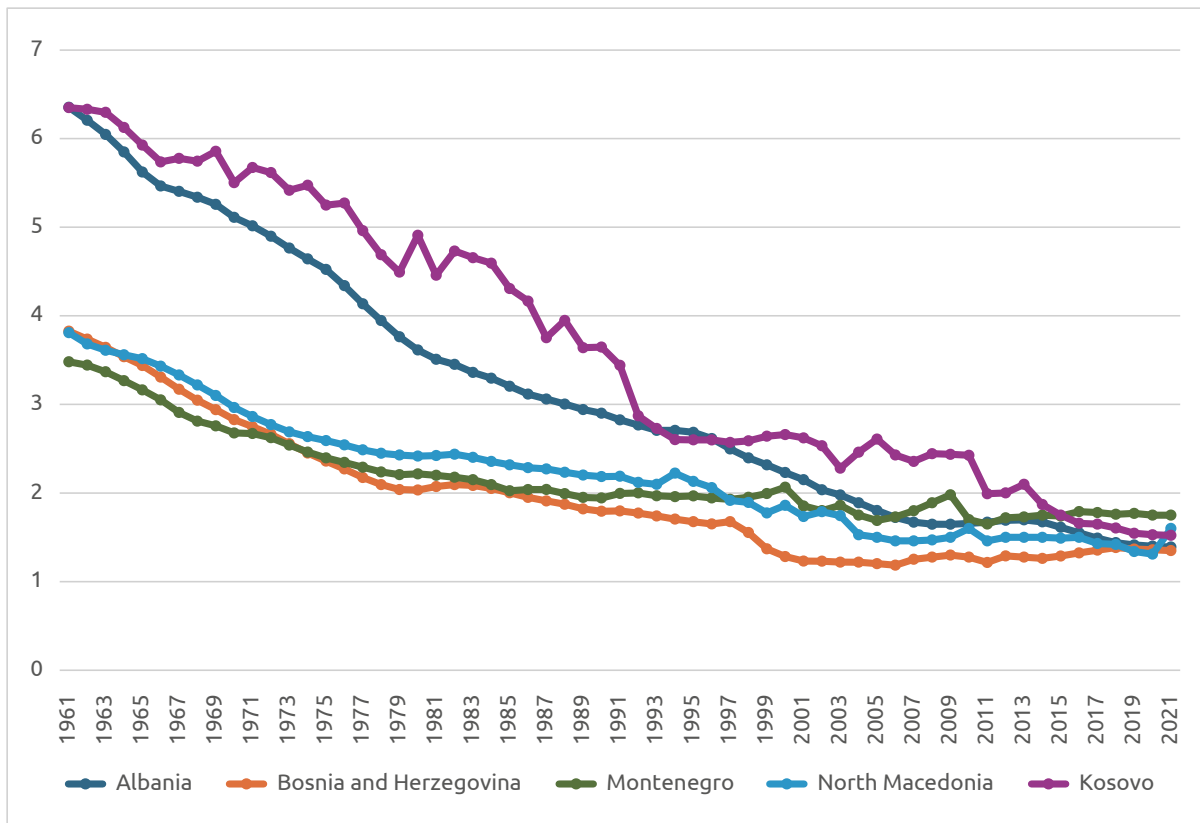


Figure 5 High- and mid-fertility countries of South-Eastern Europe and the vicinity, TFR, 1961–2021
 Source: World development indicators, 2024.

The Slovenian case is very instructive for understanding the relationship between the TFR and CFR indicators. It will show how total population change – citizens vs foreign population – affect the indicators. From 2012, the number of Slovenian citizens living in Slovenia

moved to Slovenia prior to the break-up of Yugoslavia. Considering the number at the 2002 census (157,000), the mortality process reduced that population by a third (-52,000) as well (cf. Josipović 2006). By the census of 2011 their number was still around 129,000.

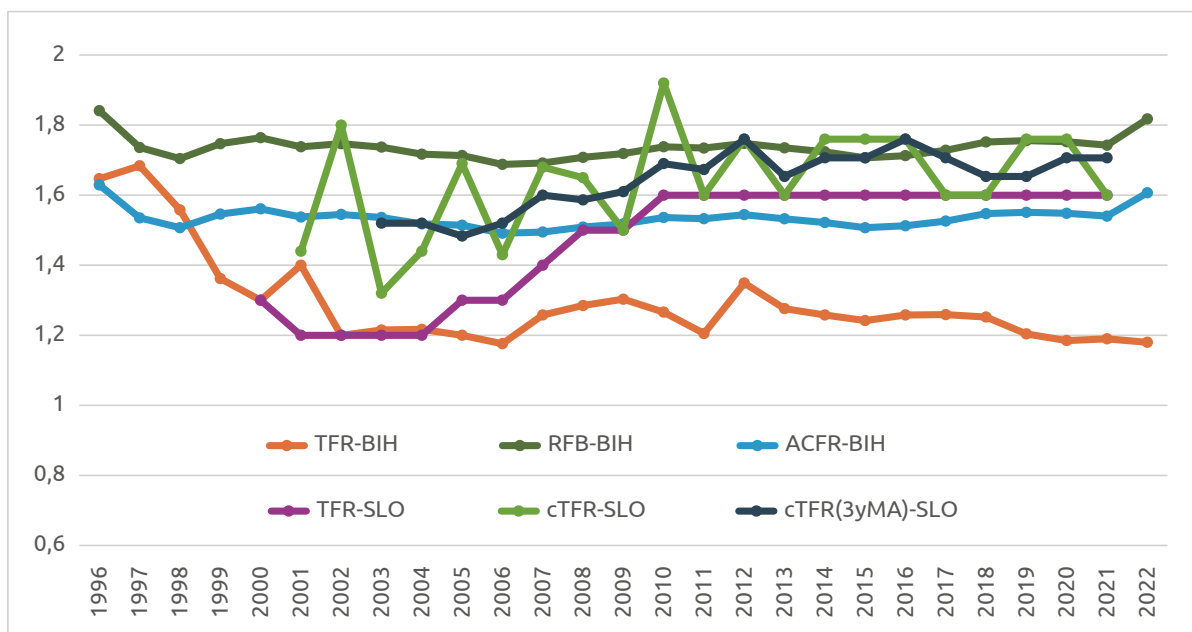


Figure 6 Comparison of Slovenia and Bosnia-Herzegovina, TFR, CFR, tempo distortions, 1996–2022
 Source: Author's calculations; Statistical Office of the Republic of Slovenia 2024; Agency for Statistics of Bosnia and Herzegovina 2024.

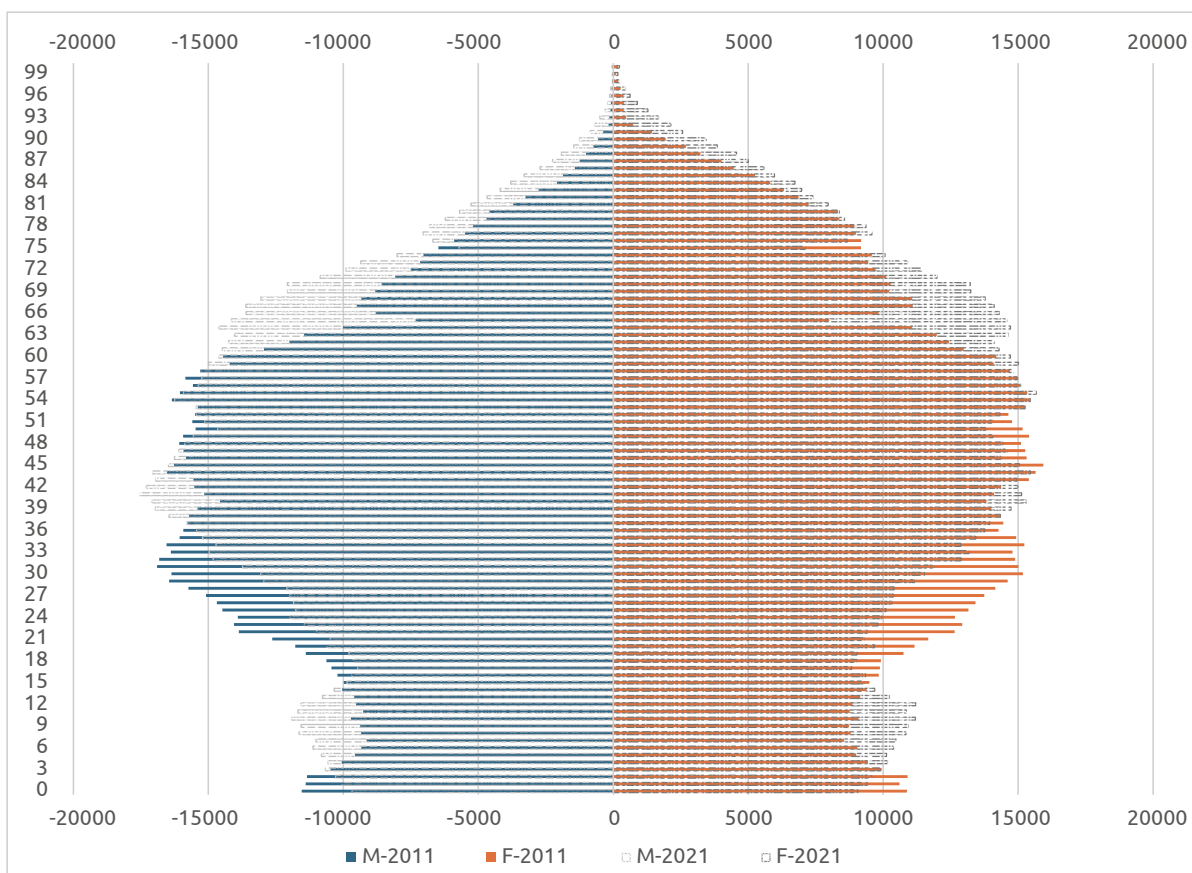


Figure 7 Intercensal changes in age structure in Slovenia, 2011–2021
 Source: Author's calculations based on the official statistical data; Statistical Office of the Republic of Slovenia 2024.

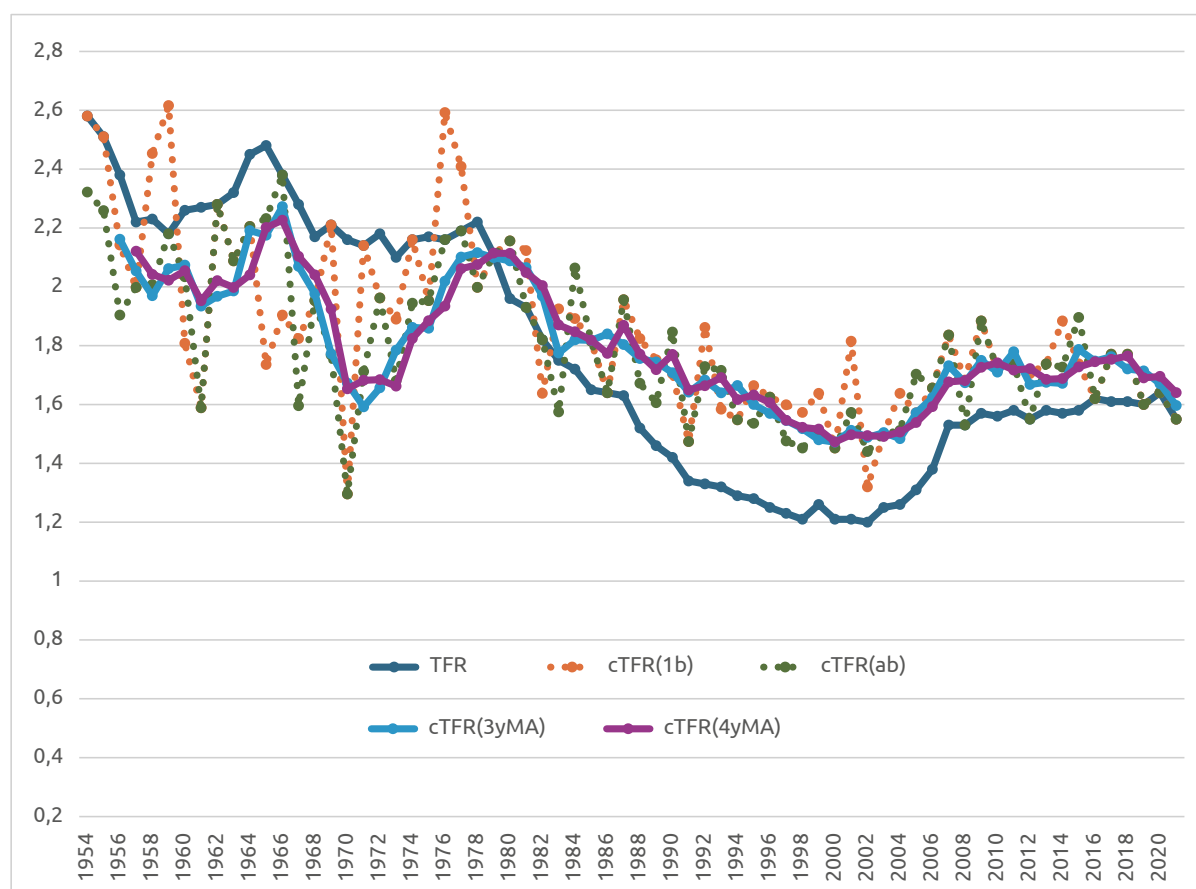


Figure 8 Comparison and the mismatch of various CFR indicators with the TFR, Slovenia, 1954–2021

Source: Statistical Office of the Republic of Slovenia 2024; additional calculations according to the author's method.

Generationally, the effective replacement lies at 1.51 child per woman in a childbearing age. Thus, the shortfall is at about 25 per cent, which is being gradually replaced through later age-groups. Given that the TFR is lower than the CFR by 0.3, the expected completed fertility still mounts up to 1.8 children per women. So, the main issue is the accommodation of the changed pattern of delayed tempo in fertility behaviour (Figure 8).

4 POPULATION AGEING – THE CONCEPT AND METHODOLOGY APPLIED

Having elaborated the tempo effects at lowering fertility, the generational gap is being established. Such a gap affects the relationship between a larger contingent of the population and skewing towards older age-groups. But how does further emigration of fertile contingent affect the ageing of population? Population ageing in demography is a quasi-process described by the rising mean population age. Contrary to the fundamental biological progression of becoming older, at population ageing

the share of elderly against the share of young was of primary analytical objective (Robine and Michel 2004). It is most typically described as the age index expressed as a quotient between the share of elderly population (65 years and above) and the share of young (below 15 years of age). Yet, theoretically, the ageing of young adults starts after about 40 years. Following the Robine-Michel's framework, the theory of population ageing is based on three assumptions: (1) rising life-expectancy, (2) rising debilitating processes and disabilities, and (3) tendency toward the rectangular morbidity (*ibid.*). Since many populations exceeded the turning point at 100 age-index points (i.e. more elderly than young in a given population), a combined usage of index with the 80+ or 85+ age groups should be considered. Yet, with such an index little can be explained, except the rising share of elderly population comparable only if the life-expectancy does not exceed 80 years. Khan (2018) demonstrated the rising mean age at death, where the trend analysis shows that the 80+ populations follow an exponential growth rate, and will grow "beyond imagination" (Khan 2018). Hence, some suggest the inclusion of novenaries and centenaries as the life-expectancy is prolonging although the values are being overestimated (Bongaarts and Feeney 2010). This confirms the two decades-old Vallin's observation that longevity is one of the most intriguing and unpredictable demographic phenomena. Neither can it be predicted for how long can life expectancy increase, nor how far can population aging go (Vallin 2004). Moreover, the rising education period, especially at the tertiary level, calls for rethinking of the use of 15 years of age as a margin. Indeed, the age-dependency

ratio seems to be more logical if set to 25 years for the duration of schooling (i.e. up to 24 years of age). Thus, we get another form of temporal dependency ratio based on the EU average expected retirement age after 40 years of working period with the tendency of prolonging. This brings forth completely different ratios, which, again, obscure or divert the attention towards the active population. Given that active population, according to the proposed scheme of non-young (24+) and non-retired (65–), represents roughly one half of the population, a more meaningful scheme of defining the active population and a pertinent ageing relationship should be considered (i.e. the quotient between those older than 64 and those younger than 25). In Slovenia, for example, the initial age-index amounted to 145.3 in 2023. On the contrary, incorporating the new age-dependency quotient, it would amount to only 81.4 in 2023 (Statistical Office of the Republic of Slovenia 2024). After decades, such marginal ages need to be reconsidered to allow for a meaningful planning perspective.

Apart from adjusting the structure of indicators of the ever ageing population, attention needs to be paid to both extremities of the process. The population ageing is seen as a process representing a relationship between the effects of fertility and mortality decline (Robine and Michel 2004). Here, fertility is seen as an extension of generational reproduction, and it is represented by a variety of transversal indicators (i.e. total fertility rate – TFR). Mortality, on the other end, designates a temporal capacity of human beings to endure for a certain but varying amount of time. Therefore, the differing temporal odds complicate the relationship with fertility and involves certain probabilities.

There is normally an expected discrepancy between the indicators of life expectancy and the mean age of death (i.e. the real length of the lifespan), an idea put forward by Bongaarts and Feeney (2010). At this point the relationship between mortality and fertility gets blurred since countries exhibit varying differences. Adding the effects of the net migration into the equation of an age-dependent population change, the demographic picture gets more complicated, therefore the concept of deep ageing is being introduced.

4.1 CAN THERE BE A PROCESS OF DEEP AGEING IN THE AGEING POPULATION?

Let us assume a population where total fertility rates are below the reproduction level and technically within the SDT. In addition, the proportion of young is diminishing while the share of elderly is rising. Temporarily, the active population outnumbers both the young and the old, but after some time, the active contingent starts to shrink. The first direct consequence is an artificial increase of the TFR through the diminishing fertile contingent, yet the realistic birth rates have not increased. Assume that the shrinking fertile contingent is increasingly participating in the net emigration for whatever reason. Consequently, the dependency ratio is disturbed and skewed more and more towards the elderly population. When the three conditions are satisfied, it is justifiable to speak of a state of deep ageing resulting from the compound process of accelerated ageing. Such a process tends to accelerate the wholesome population loss and accumulate the generational loss by lowered fertility below the replacement level, while the

share of elderly population rises. At the same time, the country becomes or remains a net emigration area with the additional loss of the most propulsive active population's age-groups which in turn renders the situation of the so-called deep ageing with profound structural changes within the country's diminishing population. Deep ageing is thus not just a process of an ever-increasing share of elderly population, but also involves an additional and fundamental loss of fertile contingent through excess emigration. For illustrating the meaning and purpose of deep ageing, the tentative indices are introduced. The indices are based on the quotient of the expected (projected) and factual change (growth or decline) in the fertile age-groups 20–29, 30–39, and 40–49 from within the intercensal periods.

Since the general direction of migrations in Europe considerably changed (formerly from East and South towards West and North of Europe), the role of South-Eastern Europe in deep ageing is critical. Although a comparably smaller European macroregion, the South-Eastern Europe exerts migration pressure on Western Europe. It has been shown earlier that the overseas migrations to Europe add up to the disproportionate increase of population in Western and Northern Europe, while the Western Balkans' states face profound depopulation. Based on the 1990 borders, Yugoslavia was supposed to have the projected population of 26 million in 2015 (Josipovič 2016). Today (the beginning of 2024), the projected figure is dramatically lower, i.e. 18.9 mill., or –7 mill. compared to 1990. Additionally lowered fertility due to pandemics, as well as higher mortality topped with pronounced emigration, created the conditions and compounded the effect of deep ageing.

Assuming that stable TFRs require minimal age-structure skewness, the uneven age-structure (as shown in the case of Slovenia and Bosnia-Herzegovina) renders even greater tempo effect of fertility and its distortion. By comparing the two reproductively most active age-groups of the female fertile population: 20–29 and 30–39 across a ten-year (intercensal) period, it is possible to infer how the main component of deep ageing was affected. For the analysis of the sequence within or outside the deep ageing, we compared four ex-Yugoslav countries with the biggest populations (above 2 mill). Slovenia, for example, over the last decade (2011–2022), added about 4000 women in the 30–39 age-group, which represents the rise of 3.3 per cent (Figures 9 and 10).

Since all four states compared exercised below-replacement fertility and natural decrease of population over the last twenty years, the intercensal changes in fertile subpopulations play a decisive role in determining the position within the deep ageing process. Methodologically, the position is determined upon the actual progression (or retraction) of the 20–29 to 30–39 and 30–39 to 40–49 age-groups against the projected size across the two intercensal periods standardised to the ten-year periods of 2001–2011 and 2011–2021. Slovenia was the only country with a positive change in both age-groups in both periods. While the actual size of the 20–29 age-group transitioned to 30–39 age-group in the first ten-year period (2001–2011) exceeded the

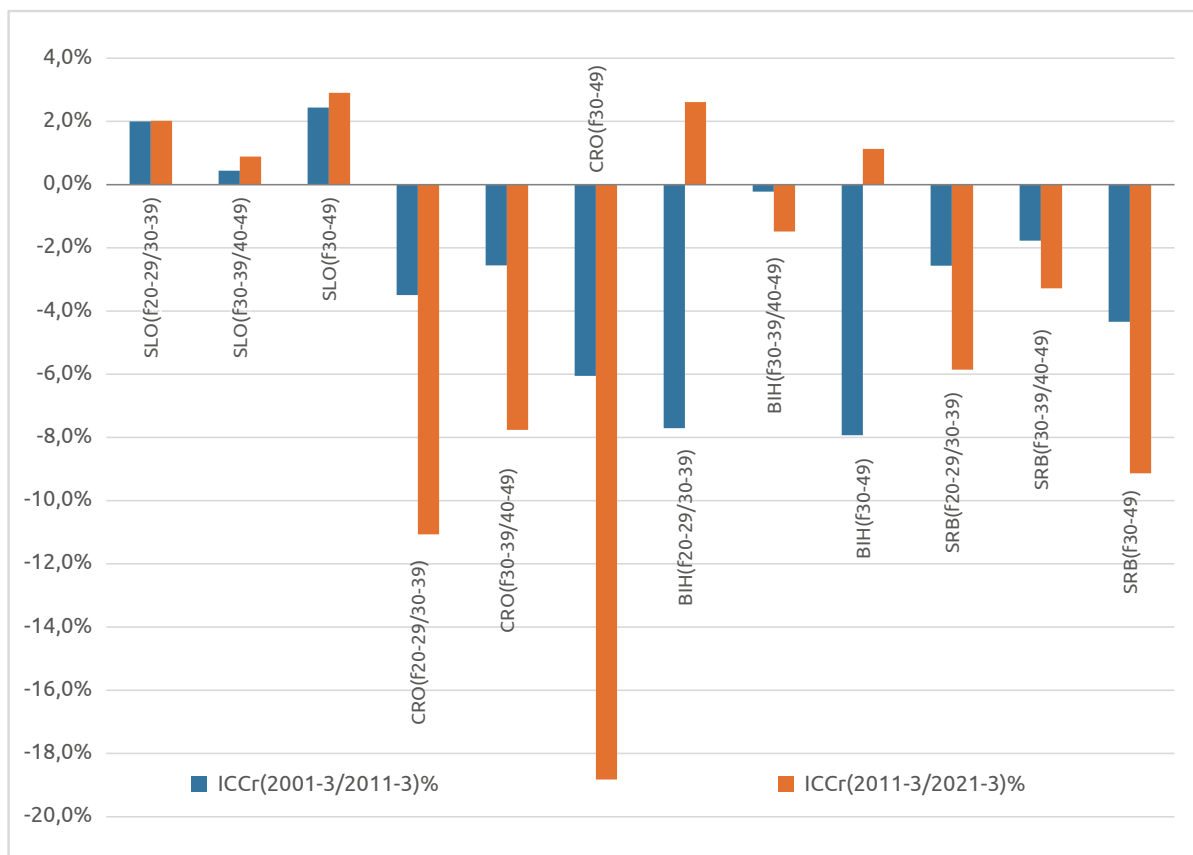


Figure 9 Relative intercensal change (ICCr) in Slovenia, Croatia, Bosnia-Herzegovina, and Serbia, 2001–2022

Source: national statistical offices of Slovenia, Croatia, Bosnia-Herzegovina, Serbia; author's calculations.

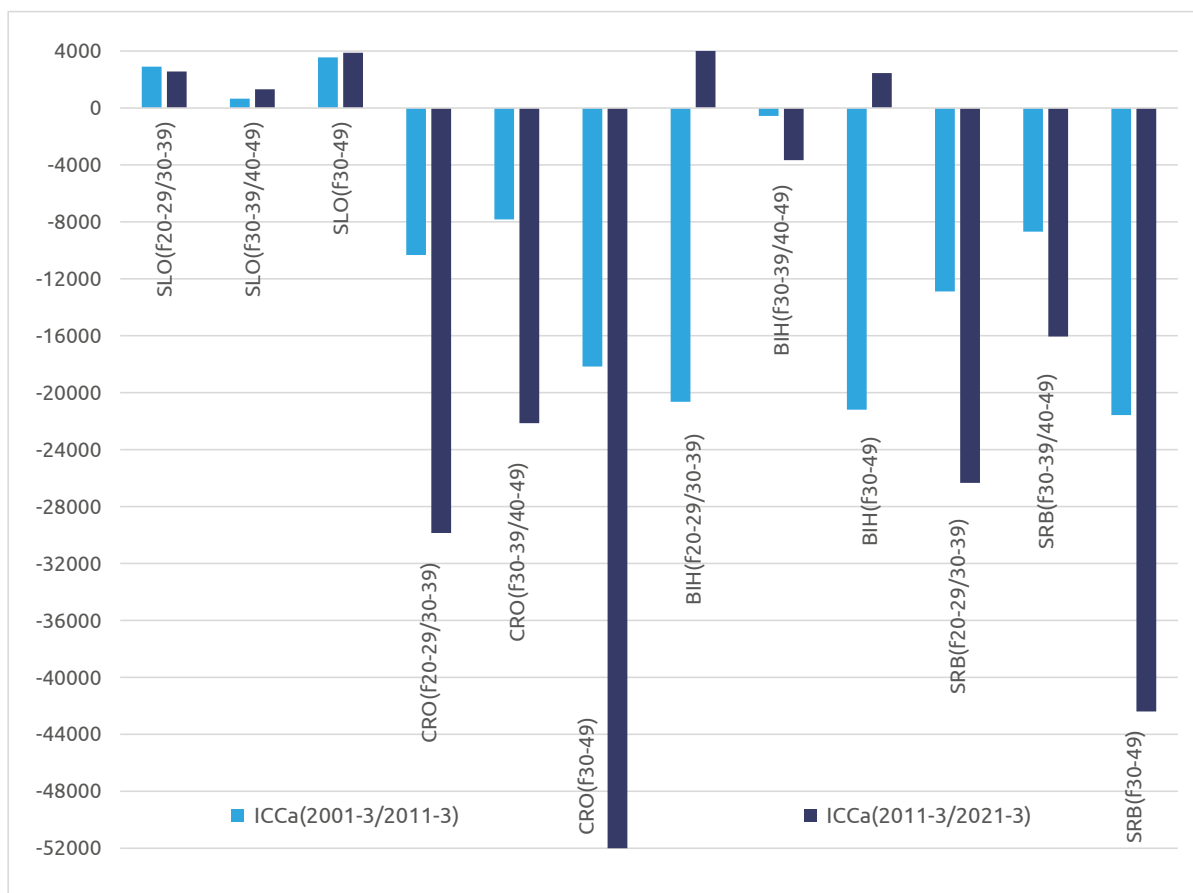


Figure 10 Absolute intercensal change (ICCa) in Slovenia, Croatia, Bosnia-Herzegovina, and Serbia, 2001–2022

Source: national statistical offices of Slovenia, Croatia, Bosnia-Herzegovina, Serbia; author’s calculations.

projected size by 2 per cent, the same contingent augmented for another 2 per cent in the second ten-year period (2011–2021). The population gain at the older 30–39 age-group transitioning to 40–49 age-groups was smaller (about 0.5 per cent in 2001–2011 and 1.0 per cent in 2011–2021). The absolute change in both periods amounted to +8,000 (Figures 9 and 10). Croatia is the country which lost the most in both periods in terms of relative (–6 and –19 per cent respectively) and absolute (–18,000 and –52,000 respectively) change. Second to Croatia is Serbia with a very similar temporal losses of the fertile age-groups (–4.3 and –9 per cent respectively), but to a lesser absolute extent (–22,000 and

42,000 respectively). Bosnia-Herzegovina is a different case, also due to its unreliable statistics. Having the data from the 2013 census, the results are more reliable for the first period (–8 per cent or –21,000 in 2001–2011). With the estimated values for 2021, it appears that Bosnia-Herzegovina ceased to figure as an overwhelming source of population. The estimated actual value for the second period (2011–2021) shows a surplus of +2.6 per cent over the projected value for the younger age-group, while the age-group now in its forties exerted a deficit of –1.6 per cent or –4,000. Thus, the overall surplus in 30–49 age-group amounts to 2,500 (Figures 9 and 10). Bosnian case is perhaps heralding a new

era of slow decrease in emigration with many possible repercussions in geographical and socio-economic sense.

Summing it up, the stage of deep ageing is the most pronounced in Croatia and Serbia, especially at the younger fertile group, while the overall loss of fertile population is profound and will certainly affect the further future decrease of population. Drawing from the presented findings and the overall loss of population and fertility below replacement level, it is possible to infer the same for Macedonia, Kosovo-Metohija, and Montenegro. In the area of former Yugoslavia, only Slovenia appears to be demographically better off, yet the danger of sliding into the stage of deep ageing has not been overcome.

5 CONCLUSION

Twenty-five years after the break-up of Yugoslavia, the demographic analysis shows that except for the three smaller post-Yugoslav nations (Slovenia, Macedonia, Montenegro), other bigger former republics have dramatically underperformed. The direct demographic loss accumulated by Bosnia-Herzegovina, Serbia and Croatia amounted to 2.5 mill., compared to 1990 (Josipović 2016). While the demographic losses mainly accumulated due to the devastating results of the wars and consequent ethnic cleansing predominantly in Bosnia-Herzegovina and Croatia, the forced and pseudo-voluntary resettlement of population, including the failure of return migration and thorough reconciliation, resulted in structurally unstable populations left to precarious socio-economic conditions (*ibid.*). In addition, the second swing of the financial and debt crisis in 2012/2013 crushed many of small businesses which used

to render some decentralized employments and had prevented excessive centralization (Josipović 2018). Henceforth, the pronounced demographic centralization of all post-Yugoslav states has only accelerated. By the next crisis (COVID-19 pandemic), the shaken and disturbed population age-structure further suffered under a myriad of factors caused by lockdowns and other restrictions (Josipović 2021). Such a development saw its inevitable demographic consequences in the national censuses carried out during or after the main wave of the pandemic.

With the overall changes in value-system, growing demands for working population, tense political situation and less general enthusiasm, within the second demographic transition women have still managed to hold their fertility goals close to two children. With the completed fertility rate (CFR) and the corrected total fertility rate (cTFR) indicators around 1.8 children per women in the childbearing period, an important delay in tempo of fertility is obvious. This delay causes major problems, since the intergenerational solidarity is based on the size of generations and not the size of families. In addition, many couples and individuals decide to limit their offspring to zero, thus there is growing share of childlessness.

The analysis confirmed the deep-ageing hypothesis, where the post-Yugoslav countries could neither recuperate from the demographic losses of the war and the resettlement of population, nor could they prevent the constant shrinking of the fertile contingent of the populations. The only regional exception is Slovenia, where in spite of low transversal fertility (1.6 children per woman in child-bearing age), growing childlessness (up to 25 per cent) and

pronounced emigration of its citizens, the immigration from abroad (predominantly foreign citizens from post-Yugoslav countries) compensated for the net losses and revitalized the total population. No such case is apparent elsewhere across the post-Yugoslav space. Such a recuperation of the Slovenian national

population will not be possible for very much longer, due to the state of deep aging in the rest of the post-Yugoslav space, especially in Croatia and Serbia. There, the capacity for emigration-oriented population (20–39 years) is rapidly diminishing, while other destination countries also taking their share.

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Depopulacija i duboko starenje: prostor bivše Jugoslavije i Zapadnog Balkana između druge demografske tranzicije i emigracije

SAŽETAK

U članku se razrađuje koncept dubokog starenja gde su ukupni efekti starenja druge demografske tranzicije, usled niskog fertiliteta ispod proste reprodukcije stanovništva, pojačani povećanom emigracijom fertilnog kontingenta, što znači dodatni gubitak aktivnog stanovništva. Proces dubokog starenja stoga ubrzava opadanje ukupne populacije. S druge strane gubitak fertilnog kontingenta može postići prividan porast ukupne stope fertiliteta pri čemu tempo efekta fertiliteta igra odlučujuću ulogu. Članak se najpre bavi pitanjem demografskih promena u evropskim makroregionima nakon pada Gvozdene zavese (1990–2020). Najznačajnija je preorientacija tradicionalne neto emigracije od južno- i istočno- evropskog ka jugoistočno-evropskom bazenu. Zatim se analiziraju demografske promene na teritoriji bivše Jugoslavije kako bi se procenile razmere ovih promena u poslednjem međupopisnom periodu (2011–2022). Nadovezujući se na nalaze ranijih istraživanja gde se ističe gubitak stanovništva i negativan razvoj migracija, ovde se pristupa dubljoj strukturi problema populacionih gubitaka u većini zemalja nastalih posle raspada Jugoslavije. S druge strane, treba napomenuti da postoje značajne fluktuacije i varijacije u inače niskom fertilitetu u regionu Zapadnog Balkana. Istovremeno, nizak nivo ukupne stope fertiliteta ne mora da znači i smanjenje ukupnog rodnog ponašanja, što postaje vidljivo kroz primenu aproksimativne stope završnog fertiliteta. Migraciona komponenta promene stanovništva zbog delimično nepostojećih, nesigurnih ili oskudnih podataka procenjena je indirektno kroz međupopisno poređenje. Primenjene su međupopisne projekcije fertilnog kontingenta da bi se procenio stepen starenja i odredio položaj u procesu dubokog starenja stanovništva. Rezultati pokazuju da su Hrvatska i Srbija najizraženije u procesu dubokog starenja, posebno u mlađim skupinama fertilnog kontingenta, dok je većina ostalih zemalja, osim Slovenije, pogođena gubitkom celokupnog fertilnog kontingenta koji će bez sumnje uticati na dalji demografski gubitak ovih prostora u budućnosti.

KLJUČNE REČI

starenje stanovništva, emigracija, nizak fertilitet, depopulacija, druga demografska tranzicija