Demographic Change in South-Eastern Europe: trends, determinants, and challenges

Tomáš Sobotka

Vienna Institute of Demography (Austrian Academy of Sciences), Wittgenstein Centre for Demography and Global Human Capital

Population Dynamics, Human Capital and Sustainable Development in South-East Europe; Regional Conference, Sarajevo 21 October 2019
Background: the sweeping societal changes in the region after 1989

The collapse of state-socialism in Central & Eastern Europe after 1989

- The collapse of the “old” economic and social security systems
- Ex-USSR and ex-Yugoslavia: regional territorial conflicts
- Long-lasting economic uncertainty, poverty, inequality
- Informal economy, shrinking tax base and government control
- Large-scale outmigration from some countries; brain drain
- Huge differences between countries and regions, also in the reforms and responses to economic changes
- Gradual stabilisation and economic recovery after 2000
Background: the sweeping societal changes in the region after 1989

The collapse of state-socialism & the Soviet Union in 1989-91

• The collapse of the “old” economic and social security systems
• Regional conflicts in some countries, including Russia, Azerbaijan, Georgia, Armenia, and Ukraine
• Long-lasting economic uncertainty, poverty, inequality
• Informal economy, shrinking tax base and government control
• Huge differences between countries and regions, also in the reforms and responses to economic changes
• Gradual stabilisation and economic recovery after 2000

→ Impacted the lives of all people
→ These shifts precipitated massive population changes
→ A combination of population trends driven by crisis responses and “modernization” (longer education, changing values, changing gender roles)
South-eastern Europe countries diversity

Human Development Index (2017)

Selected countries in South-Eastern Europe (green), Central & Eastern Europe (brown) and in other European regions (blue)

South-eastern Europe countries diversity

GDP per capita (2016) in constant 2010 $ (thousand)

Selected countries in South-Eastern Europe (green), Central & Eastern Europe (brown) and in other European regions (blue)

Spectacular population declines

Rapidly falling population in many countries in the region

Population size (million) in selected countries, 1989 and 2019

Note: Earlier data for Serbia refer to 1995

Source: Eurostat database (2019)
Fastest population declines globally

CEE & South-eastern Europe with world-fastest pop. declines

Countries with fastest population decline globally (%), 1989-2019

Note: Only countries with population > 1 million in 2019 ranked

Europe: East-West division in relative population change, 1990-2017, in %

Source: European Demographic Data Sheet 2018; map created with mapchart.net
Agenda

- Uncertain and problematic data
- Population dynamics: Falling fertility, changing family
- Population dynamics: Migration
- Future outlook and challenges: continuing outmigration and depopulation?

Regional focus: countries of former Yugoslavia (Bosnia and Herzegovina, Croatia, North Macedonia, Montenegro, Serbia and Slovenia) plus Albania, Bulgaria, Romania, Moldova

Thank you to Krystof Zeman (Vienna Institute of Demography) for providing selected fertility data for the region
Uncertain and problematic data
Why population data problematic in the region

Uncertainty about population data and indicators due to

- Under-reported outmigration (all countries in the region)
- Discontinuities in data collection (conflicts, breakdown on data collection systems; especially in the 1990s)
- Incomplete or deficient data collection; disputed census data
- Lacking reliable census and survey data (e.g., Bosnia and Herzegovina, Moldova)

Data most problematic in Moldova and Bosnia and Herzegovina (possibly also Albania)

Indicators of population size likely to be over-estimated, basic indicators of demographic change (fertility, mortality, migration (underestimated))

→ Imprecise data and indicators, also affects rankings and estimated time trends
Data inconsistencies: Two tales of outmigration from Hungary

Source: Figure 11 in Iren Gödri, “International migration,” Chapter 11 in Monostori, Judit - Őri, Péter - Spéder, Zsolt (eds.): Demographic Portrait of Hungary 2015
Data inconsistencies: The shrinking population of Moldova

[Graph showing population estimates for Moldova: official de jure (1980-2015) and alternative de facto (1980-2014), all ages, both sexes]

Population dynamics in the region: Falling fertility, changing family
Heterogeneity in long-term fertility declines: late decline in family size in some regions

Completed cohort fertility rate (children per woman), women born 1920-1972

**Sources:** Population census data (1980-2013); CFE database (2019), courtesy of Krystof Zeman and Ivan Cipin
Fertility rates falling to very low levels across the region

Period Total Fertility Rate (TFR, children per woman), 1980-2018

Sources: Eurostat (2018), Council of Europe (2006), European Demographic Data Sheet (2018), national statistical offices
Fertility rates falling to very low levels across the region

Period Total Fertility Rate (TFR, children per woman), 1980-2018

Sources: Eurostat (2018), Council of Europe (2006), European Demographic Data Sheet (2018), national statistical offices
Fertility rates below European average

Period Total Fertility Rate (TFR, children per woman), 1980-2018

[Graph showing fertility rates for various European countries and regions, with markers indicating specific years and countries.]
Uncertainty about period fertility levels: Extreme low fertility in South-Eastern Europe?

Officially reported low and extreme low period Total Fertility Rates in some countries partly biased due to inflated population estimates

Period Total Fertility Rates, 2017
(officially reported values)
Period Total Fertility Rate in Albania (official and alternative estimates)

Prenatal sex selection: distorted sex ratios at birth

- Several countries recording mildly distorted SRBs
- Declining after 2010

UNDP estimates (WPP 2019); normal levels at 1.04-1.06:
- Albania 112 in 2000-2010 (1.09 now)
- Montenegro 110 in 1990-2010
- North Macedonia 108 in 2010-15
- B & H: 107 most years
  (China 116 around 2000)
Family size: Rapid rise in one-child families in parts of the region

Share with one child, women born 1955-1971; selected countries in South-eastern Europe and Russia

Source: Census 2011, data from the Cohort Fertility and Education (CFE) database (2019)
Very low fertility among highly educated women

Completed fertility by level of education, women born 1930-1970

Source: Census 2011, data from the Cohort Fertility and Education (CFE) database (2019); some data provided by Krystof Zeman and Ivan Cipin
Very low fertility among highly educated women

Completed fertility by level of education, women born 1930-1970 (selected European countries)

The continuing postponement of first births, 1990s-2010s

Source: Human Fertility Database (HFD), 2019
Early marriages replaced by living with parents

The share of young people aged 20-29 living with parents

Early marriages replaced by living with parents

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>61</td>
</tr>
<tr>
<td>Hungary</td>
<td>67</td>
</tr>
<tr>
<td>Cyprus</td>
<td>68</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>68</td>
</tr>
<tr>
<td>Ireland</td>
<td>69</td>
</tr>
<tr>
<td>Romania</td>
<td>69</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>69</td>
</tr>
<tr>
<td>Poland</td>
<td>71</td>
</tr>
<tr>
<td>Slovenia</td>
<td>74</td>
</tr>
<tr>
<td>Serbia</td>
<td>75</td>
</tr>
<tr>
<td>Spain</td>
<td>75</td>
</tr>
<tr>
<td>Portugal</td>
<td>75</td>
</tr>
<tr>
<td>Greece</td>
<td>76</td>
</tr>
<tr>
<td>Italy</td>
<td>78</td>
</tr>
<tr>
<td>Macedonia</td>
<td>78</td>
</tr>
<tr>
<td>Malta</td>
<td>82</td>
</tr>
<tr>
<td>Slovakia</td>
<td>82</td>
</tr>
<tr>
<td>Croatia</td>
<td>83</td>
</tr>
</tbody>
</table>


Very high share of young people aged 20-29 living with parents in South-eastern Europe.
Declining fertility, changing family: Main determinants and explanations

They are complementary – not mutually exclusive; different weight/mix in different countries

- The Economic disruption, conflict, uncertainty: esp. the 1990s → economic ups and downs have a stronger effect than in most other European regions
- Rapid expansion of higher education: delaying life course transitions, changing parenting ambitions and styles
- The “Second Demographic Transition”: changing values, lifestyles and aspirations of younger generations
- The “Pattern of Disadvantage”
- The “Contraceptive revolution”: a shift from abortion to contraception, falling unplanned pregnancies and births
- New family policies since the 2000s, economic upturns
The cultural divides across the region:
Importance of religion

### Eastern and Western Europeans Differ on Importance of Religion, Views of Minorities, and Key Social Issues

People in Central and Eastern Europe are less accepting of Muslims and Jews, same-sex marriage, and legal abortion.
The cultural & values divides across the region: attitudes to same-sex marriage (2015-17)

Young adults in Central and Eastern Europe largely oppose gay marriage

% of those ages 18 to 34 who say they oppose/strongly oppose allowing gays and lesbians to marry legally

Source: Surveys conducted 2015-2017 in 34 countries. See Methodology for details.
*Eastern and Western Europeans Differ on Importance of Religion, Views of Minorities, and Key Social Issues*
Population dynamics in the region: Migration
The East – West European migration divide in Europe

The main migration stream in the last 30 years from the East to the West (including southern Europe) of Europe

- Serious consequences in the East: low fertility & higher mortality & outmigration imply accelerated long-term demographic decline
- *Uncertain data on migration*: data gaps, incomplete data & estimates

→ *European migration split*: the shrinking Central & Eastern & south-Eastern Europe (except for Russia) vs. the expanding West, South & North
East-West division in estimated net migration, 1990-2017

Source: European Demographic Data Sheet 2018; http://www.populationeurope.org
Population change due to migration and natural population decline, 1989-2017 (selected European countries, in %)

Source: European Demographic Data Sheet 2018; www.populationeurope.org
CEE migration closely correlated with economic development

GDP per capita in 2005 (in PPP) and cumulated population change due to migration, 1990-2016

Sources: GDP data: World Bank database (2018); migration: European Demographic Data Sheet 2018; http://www.populationeurope.org
European migration closely correlated with economic development

GDP per capita in 2005 (in PPP) and cumulated population change due to migration, 1990-2016

Sources: GDP data: World Bank database (2018); migration: European Demographic Data Sheet 2018; http://www.populationeurope.org
The diversity of East-West European migration

Migration streams from Romania and Albania

Born in Romania & living in

- Italy: 1036
- Germany: 707
- Spain: 612
- UK: 316
- Hungary: 206

Born in Albania & living in

- Italy: 458
- Germany: 50

Source: own computations based on Eurostat database (2018) and data from German statistical office (based on citizenship)
Where has everyone gone?
Young Romanians abroad

Romanian “losses” due to migration

- Age 30-34: peak reproductive and productive ages, high cumulative migration
- In 2014, ca 1.78 mill. Romanians surviving, out of 1.86 mill. born in 1979-83

Living in Romania: 77.2%
Living abroad: 22.8%
(405,000)
Where has everyone gone? Young Romanians abroad

Romanian “losses” due to migration

- Age 30-34: peak reproductive and productive ages, high cumulative migration
- In 2014, ca 1.78 mill. Romanians surviving, out of 1.86 mill. born in 1979-83

Living abroad: 22.8% (405,000)
Living in Romania: 77.2%

Source: own estimations based on Eurostat database
Where has everyone gone?
Young Moldovans abroad

Share economically active population estimated working abroad:
2000: 8.4%; 2013: 27.0% (UNFPA, CCD/INCE 2014, Tab. 9.1)

Split families, abandoned kids:
• 1.4% of kids left without parental care & placed in institutions in 2005
• >20% of school-aged kids had parents living abroad in 2005-10
(UNFPA, CCD/INCE report 2014, Tab. 6.4)
Managing population decline & ageing

Mass Depopulation Threatens Bosnia’s Future

Bosnia faces bleak future as more and more citizens emigrate, leading to ethnic tensions and economic and social decline.

Romanian hospitals in crisis as emigration takes its toll

Thousands of doctors and nurses have left Romania in past decade, leading to dire staff shortages.

Depopulation turns Serbian villages into ghost towns

REPUSNICA, Serbia (Reuters) - Repusnica was once a bustling village on the slopes of Mount Stars Planina in Serbia. Now its bars lie empty, its houses stand shuttered and nobody walks its streets.
Future outlook and challenges: continuing outmigration and depopulation?
Strong desire to emigrate in many countries

Potential net migration index, 2015-17 (Gallup)

Based on phone surveys covering the following Q:  
*Ideally, if you had the opportunity, would you like to move permanently to another country, or would you prefer to continue living in this country?*

Youth = age 15-29

Source: Potential Net Migration Index; Gallup; http://news.gallup.com/migration/interactive.aspx; accessed 21 October 2019
Observed and projected population change, with and without migration, 1989-2050 (CEPAM scenarios)

Limits to potential fertility upturns: emigration and population momentum driving sharp falls in numbers of births

Limits to potential fertility upturns: emigration and population momentum driving sharp falls in numbers of births
Challenges of ultra-fast population aging (Bosnia and Herzegovina)

### Alternative Scenarios to 2100

<table>
<thead>
<tr>
<th>Projection Results by Scenario (SSP1-3)</th>
<th>2015</th>
<th>2020</th>
<th>2030</th>
<th>2050</th>
<th>2060</th>
<th>2075</th>
<th>2100</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population (in millions)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSP1 - Rapid Development</td>
<td>3.54</td>
<td>3.36</td>
<td>2.98</td>
<td>2.15</td>
<td>1.75</td>
<td>1.22</td>
<td>0.59</td>
</tr>
<tr>
<td>SSP2 - CEPAM Zero Migration</td>
<td>3.54</td>
<td>3.50</td>
<td>3.40</td>
<td>3.06</td>
<td>2.87</td>
<td>2.58</td>
<td>2.15</td>
</tr>
<tr>
<td>SSP2 - CEPAM Medium</td>
<td>3.54</td>
<td>3.36</td>
<td>2.97</td>
<td>2.11</td>
<td>1.71</td>
<td>1.19</td>
<td>0.66</td>
</tr>
<tr>
<td>SSP2 - CEPAM Double Migration</td>
<td>3.54</td>
<td>3.21</td>
<td>2.57</td>
<td>1.41</td>
<td>0.95</td>
<td>0.48</td>
<td>0.21</td>
</tr>
<tr>
<td>SSP3 - Stalled Development</td>
<td>3.54</td>
<td>3.41</td>
<td>3.27</td>
<td>2.95</td>
<td>2.83</td>
<td>2.69</td>
<td>2.69</td>
</tr>
<tr>
<td><strong>Proportion age 65+</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSP1 - Rapid Development</td>
<td>15.7%</td>
<td>18.7%</td>
<td>26.7%</td>
<td>43.8%</td>
<td>52.4%</td>
<td>62.6%</td>
<td>76.9%</td>
</tr>
<tr>
<td>SSP2 - CEPAM Zero Migration</td>
<td>15.7%</td>
<td>17.9%</td>
<td>22.8%</td>
<td>29.5%</td>
<td>33.5%</td>
<td>36.8%</td>
<td>40.3%</td>
</tr>
<tr>
<td>SSP2 - CEPAM Medium</td>
<td>15.7%</td>
<td>18.6%</td>
<td>25.8%</td>
<td>39.5%</td>
<td>45.1%</td>
<td>49.0%</td>
<td>52.0%</td>
</tr>
<tr>
<td>SSP2 - CEPAM Double Migration</td>
<td>15.7%</td>
<td>19.3%</td>
<td>29.4%</td>
<td>54.1%</td>
<td>63.6%</td>
<td>66.1%</td>
<td>44.5%</td>
</tr>
<tr>
<td>SSP3 - Stalled Development</td>
<td>15.7%</td>
<td>18.2%</td>
<td>22.8%</td>
<td>26.0%</td>
<td>26.5%</td>
<td>25.5%</td>
<td>24.0%</td>
</tr>
</tbody>
</table>

**Source:** Projected population scenarios in: Centre of Expertise on Population and Migration (CEPAM) Project (collaboration between JRC and IIASA) // Lutz W. et al.: *Demographic and Human Capital Scenarios for the 21st Century: 2018 assessment for 201 countries.* (Table on p. 282)
Population decline should not be addressed through birth rates only

• Key role of outmigration

• Population decline will not slow down unless migration trends reversed: slowing-down out-migration & attracting immigrants

• Paramount role of economic conditions, migration policies

• Also infrastructure building, governance, investment in families

• Migration will have a stronger impact on long-term trends in the number of births than fertility rates: will most of the Bosnian/Serbian/Albanian/Croatian kids in the future be born in the region or in Western & Southern Europe?

• Family policies: Shift away from quantitative targets to softer qualitative criteria: well-being, happiness, health, human capital

• Rapid adaptation policies needed: aging, depopulating regions
Population decline as a policy opportunity?  
Investment in kids, families and young adults

Smaller population and fewer kids may be helpful for the qualitative shift in family policy, improving human capital, and for achieving some of the SDGs

- Easier to expand childcare provision, improve quality of education and healthcare for kids & pregnant women
- Potentially easier to address youth unemployment & the high share of NEETs
- Easier to expand child benefits and eradicate poverty in larger families
- Opportunity to make housing in cities & towns more accessible for young people
- Opportunity to increase the quality of schools & teaching
European Demographic Data Sheet 2018

Contribution of migration and natural population change to long-term population growth in Europe, 1990–2017

Data, graphs and featured boxes available at www.populationeurope.org