Demographic Headwinds in Central and Eastern Europe

OCTOBER 21, 2019

Cristina Batog, Ernesto Crivelli, Anna Ilyina, Zoltan Jakab, Jaewoo Lee, Anvar Musayev, Iva Petrova, Alasdair Scott, Anna Shabunina, Andreas Tudyka, Xin Cindy Xu, and Ruifeng Zhang
Key messages

CESEE populations are expected to decline and age significantly

Fewer workers, higher public spending, lower productivity

Growth, living standard convergence, fiscal sustainability

Labor market reforms, can mitigate—but not fully offset—the growth effects

Need the full range of complementary policies to boost labor intensity, capital stock, and productivity
Agenda

1. Demographic prospects for CESEE countries
2. Labor supply
3. Public spending on pensions and health care
4. Potential effects on productivity
5. Effects on growth and income convergence
6. Policy priorities
The total population of the CESEE region is projected to decline significantly,...

**Total Population Growth**
(Percent, over whole period)

- World
- Africa
- Asia
- LatAm
- NorAm
- WestEur
- CESEE
- Baltic
- EE
- CE
- SEE EU
- SEE non-EU
- TUR


**Contributions to Total Population Growth**
(Year-over-year percent change)

Sources: United Nations, and IMF staff calculations.
...which is largely the consequence of relatively high mortality rates...

Sources: United Nations, and IMF staff calculations.
...and significant net outward migration

Growth in Population from Migration
(Percentage points of total population growth)

Contributions to Total Population Growth, 2017-2030
(Percent, yearly)

Sources: United Nations, and IMF staff calculations.
Half of CESEE countries are projected to experience population losses of 15 percent between now and 2050.

Population Changes
(Percent)

Sources: United Nations, and IMF staff calculations.
In addition, CESEE countries are projected to age more quickly than the Western European average.
These demographic shifts can have economic implications

- A shrinking labor force could slow potential growth
- An aging labor force could decrease productivity
- Increasing old-age dependence puts pressure on the cost of public services
Agenda

1. Demographic prospects for CESEE countries
2. Labor supply
3. Public spending on pensions and health care
4. Potential effects on productivity
5. Effects on growth and income convergence
6. Policy priorities
Under current labor market policies, the labor force is projected to decline drastically by 2050.
Two reform scenarios to illustrate the potential impact of policies

• **Moderate reform scenario**: assumes moderately paced annual increases in female and older worker labor force participation rates to the highest Western European rates and retirement age increases in line with life expectancy, but not higher than 67.

• **Ambitious reform scenario**: assumes rapid annual increases in female and older worker labor force participation rates to the highest Western European rates and retirement age increases in line with life expectancy, beyond 67.
In some countries ambitious reforms would be very powerful – in others less so

![Labor Force in 2050 and Ambitious Policy Measures](image_url)

- Higher FLFP
- Higher participation 55+
- Increase in retirement age
- Total gap
Agenda

1. Demographic prospects for CESEE countries
2. Labor supply
3. **Public spending on pensions and health care**
4. Potential effects on productivity
5. Effects on growth and income convergence
6. Policy priorities
Pension and healthcare costs are expected to increase by nearly 4 percentage points of GDP by 2050

- At current replacement rates which are about 33 percent on average
- Or 7 percentage points at 40 percent replacement rates as recommended by the ILO
Ambitious labor market reforms with 40% replacement rates would generate savings of nearly 5 pps of GDP
Agenda

1. Demographic prospects for CESEE countries
2. Labor supply
3. Public spending on pensions and health care
4. Potential effects on productivity
5. Effects on growth and income convergence
6. Policy priorities
A priori the impact of an aging workforce on productivity is unknown and externalities play a major role

Positive effects:
• Older workers have more work experience
• Incentives to innovate should increase as skilled labor becomes scarce, increasing the payoffs to automation

Negative effects:
• Age-related deterioration in physical and mental capabilities and depreciation of knowledge
• Older workers might find it more challenging to adapt to changing job requirements
• Innovation may become less profitable as population growth slows, e.g. by reducing market size
• Aging societies may lose some of their “dynamism” slowing the rate of technological progress
• The entry of new firms and entrepreneurship can slow with the aging of population and workforce
The projected composition of the workforce suggests that productivity growth in CESEE countries is likely to decline

- Empirical question

- A one-percentage-point increase in the share of workers ages 55+ is associated with a **decrease in TFP growth by about 0.6 percentage points** (similar to other findings in the literature)

- Caveats: Statistical uncertainty and past may not be indicative of the future

![Average Share of Workers in the Total Workforce, by Age](image-url)
The average annual decrease of TFP growth is 0.38 pps in CESEE and 0.34 pps in Western Europe in 2020–50.

Impact of Workforce Aging on TFP growth (Annual percentage point impact; average)

Sources: UN WPP; ILO; PWT 9.0; and IMF staff calculations.

Annual Impact of Workforce Aging on TFP Growth (Annual percentage point impact; average, 2020–50)

Sources: UN WPP; ILO; PWT 9.0; and IMF staff calculations.
Agenda

1. Demographic prospects for CESEE countries
2. Labor supply
3. Public spending on pensions and health care
4. Potential effects on productivity
5. Effects on growth and income convergence
6. Policy priorities
EEU MOD: CESEE average GDP growth lower by about 1.2 pps and GDP levels by 31 percent by 2050

Impact of Demographics on GDP Growth
(Average yearly impact from 2020-2050, percentage points)

Source: IMF staff estimates.

Impact of Demographics on Investment
(Average percent difference from the no-demographics scenario, 2020-50)

Source: IMF staff estimates.

Income Convergence in CESEE - Aging Baseline
(GDP per capita in CESEE as a share of that in Western EU)

Source: IMF staff estimates.

Impact of Demographics on the Deficit-to-GDP Ratio
(Percent of GDP, change between 2020-50)

Source: IMF staff estimates.
Moderate and ambitious labor market reforms would improve GDP growth by about 0.2 and 0.4 pps

Impact of Demographics on GDP Growth
(Average yearly impact from 2020-2050, percentage points)

Impact of Demographics on GDP Per Capita Growth
(Average yearly impact from 2020-2050, percentage points)

Impact of Demographics on Deficit-to-GDP Ratio
(Percent of GDP; change between 2020-50)

Source: IMF staff estimates.
Agenda

1. Demographic prospects for CESEE countries
2. Labor supply
3. Public spending on pensions and health care
4. Potential effects on productivity
5. Effects on growth and income convergence
6. Policy priorities
For many countries, the nature of the problem is largely labor-driven,...

- Overall impact in unmitigated scenario is -31 percent of GDP by 2050
- The driving channel is labor (but also capital and productivity)
...but for most CESEE economies, increasing participation rates alone will not fully offset shrinking workforces

<table>
<thead>
<tr>
<th>Impacts of Labor Market Reforms</th>
<th>Baseline</th>
<th>Moderate labor reforms</th>
<th>Ambitious labor reforms</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP growth</td>
<td>-1.16</td>
<td>-1.00</td>
<td>-0.88</td>
</tr>
<tr>
<td>GDP per capita growth</td>
<td>-0.60</td>
<td>-0.46</td>
<td>-0.43</td>
</tr>
<tr>
<td>GDP</td>
<td>-30.9</td>
<td>-27.0</td>
<td>-24.2</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>-16.9</td>
<td>-13.1</td>
<td>-12.2</td>
</tr>
</tbody>
</table>

(Rows 1 and 2: average yearly impact over 2020–50; rows 3 and 4: level deviation by 2050; percentage points)
This motivates looking at the full range of complementary policy option

- Increase L through boosting \textit{labor intensity}, retaining and attracting \textit{skilled workers}, incl. \textit{foreign workers}, boosting \textit{health} and \textit{life expectancy};

- Support K though \textit{financial} and \textit{governance} reforms, and preserving public \textit{infrastructure};

- Boost TFP though \textit{product market reforms}, improving \textit{education} and \textit{training};

- Ensure fiscal sustainability through raising \textit{retirement ages}, and more \textit{efficient public spending}
Considerable heterogeneity across CESEE countries means different policy priorities for each country

<table>
<thead>
<tr>
<th></th>
<th>Labor Supply (1)</th>
<th>Participation Female 25-45 (2)</th>
<th>Participation Female 55+ (3)</th>
<th>Participation Male 55+ (4)</th>
<th>Retirement Age (5)</th>
<th>Workforce aging (6)</th>
<th>Old-age Dependancy (7)</th>
<th>Age-related Spending (8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>Yellow</td>
<td></td>
<td>Yellow</td>
<td>Yellow</td>
<td>Red</td>
<td>Yellow</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>Yellow</td>
<td></td>
<td>Yellow</td>
<td>Yellow</td>
<td>Red</td>
<td>Yellow</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>Yellow</td>
<td></td>
<td>Yellow</td>
<td>Yellow</td>
<td>Red</td>
<td>Yellow</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>Croatia</td>
<td>Yellow</td>
<td></td>
<td>Yellow</td>
<td>Yellow</td>
<td>Red</td>
<td>Yellow</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>North Macedonia</td>
<td>Yellow</td>
<td></td>
<td>Yellow</td>
<td>Yellow</td>
<td>Red</td>
<td>Yellow</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>Montenegro</td>
<td>Yellow</td>
<td></td>
<td>Yellow</td>
<td>Yellow</td>
<td>Red</td>
<td>Yellow</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>Romania</td>
<td>Yellow</td>
<td></td>
<td>Yellow</td>
<td>Yellow</td>
<td>Red</td>
<td>Yellow</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>Serbia</td>
<td>Yellow</td>
<td></td>
<td>Yellow</td>
<td>Yellow</td>
<td>Red</td>
<td>Yellow</td>
<td>Red</td>
<td>Red</td>
</tr>
</tbody>
</table>

Policy focus: Low | Medium-low | Medium-high | High | Data not available

Note:
(1) Change in labor supply (in percent): Green above 0; Yellow between -20 and 0; Orange between -30 and -20; Red below -30;
(2) Female LFP ages 25-45 (in percent): Green above 90, Yellow between 77.5 and 90; Orange between 60.5 and 77.5; Red below 60.5;
(3) Female LFP ages 55-64 (in percent): Green above 61, Yellow between 63 and 52.1; Orange between 35.2 and 52.1; Red below 35.2;
(4) Male LFP 55-64 (in percent): Green above 77, Yellow between 64.7 and 77; Orange between 54.2 and 64.7; Red below 54.2;
(5) Retirement age: Green above 67, Yellow between 67 and 65; Orange between 65 and 60; Red below 60;
(6) Change in share of workforce above 55 years (in percentage points): Green below 3; Yellow between 3 and 6; Orange between 6 and 10; Red above 10;
(7) Ratio of population above 65 years to population aged 20-64 (in percent): Green below 40; Yellow between 40 and 50; Orange between 50 and 60; Red above 60;
(8) Increase in age-related spending (in percent of GDP): Green below 0; Yellow between 0 and 4; Orange between 4 and 8; Red above 8
Thank you!
Additional Slides
Main themes in a nutshell

- The populations of Central, Eastern, and Southeastern European (CESEE) countries (ex Turkey) are expected to decrease and age significantly over the next 30 years.
  - Increasing demands on health care and pension resources
  - Shrinking labor force
  - An aging workforce potentially decreases productivity growth

- Implications for growth, convergence to higher living standards, and fiscal sustainability. Will CESEE grow old before becoming rich?

- Labor market reforms, which will have to be tailored for each country, can mitigate—but not fully offset—the growth effects of shrinking and aging populations, although they could help ease fiscal pressures
Regional Definitions

Central, Eastern, and Southeastern Europe (CESEE): Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Republic of North Macedonia, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Turkey, Ukraine.¹

Baltic states: Estonia, Latvia, Lithuania.

Central European New Member States (CE): Czech Republic, Hungary, Poland, Slovakia, Slovenia.

Eastern Europe (EE): Belarus, Moldova, Russian Federation, Ukraine.

Southeastern European EU Member States (SEE EU): Bulgaria, Croatia, Romania.

Southeastern European Non-EU Member States (SEE non-EU or Western Balkans): Albania, Bosnia and Herzegovina, Republic of North Macedonia, Montenegro, Serbia.¹

Western Europe (WE): Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, San Marino, Spain, Sweden, Switzerland, United Kingdom.
A declining labor force could be remedied through higher fertility, inward migration or labor force participation

- **Fertility**: There is little evidence that direct financial incentives to boost fertility are effective
- **Inward migration**: Most CESEE countries do not have long-term strategies for inward migration
- **Labor force participation**: There is particular room to improve the participation of older workers and women
In most countries, even ambitious reforms would ultimately be overwhelmed by population changes.

**Labor Force Projections, 2050**

(Percent change, 2015=100)

- Under ambitious policies scenario
- Under moderate policies scenario
- Baseline 2050

Sources: UN population projections, and IMF staff calculations.
# Shares of Older Workers (Percent of total workforce)

<table>
<thead>
<tr>
<th>Country</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2040</th>
<th>2045</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDA</td>
<td>18.2</td>
<td>19.3</td>
<td>17.9</td>
<td>18.2</td>
<td>20.2</td>
<td>23.9</td>
<td>30.0</td>
<td>31.5</td>
</tr>
<tr>
<td>SVK</td>
<td>15.4</td>
<td>15.9</td>
<td>16.1</td>
<td>16.6</td>
<td>22.2</td>
<td>25.1</td>
<td>27.1</td>
<td>27.9</td>
</tr>
<tr>
<td>EST</td>
<td>21.5</td>
<td>22.7</td>
<td>22.9</td>
<td>23.9</td>
<td>24.5</td>
<td>25.9</td>
<td>28.2</td>
<td>27.1</td>
</tr>
<tr>
<td>LVA</td>
<td>19.9</td>
<td>21.8</td>
<td>22.3</td>
<td>22.8</td>
<td>22.5</td>
<td>23.7</td>
<td>25.7</td>
<td>25.2</td>
</tr>
<tr>
<td>ROU</td>
<td>17.2</td>
<td>18.3</td>
<td>18.9</td>
<td>22.6</td>
<td>26.1</td>
<td>28.8</td>
<td>32.6</td>
<td>28.9</td>
</tr>
<tr>
<td>LTU</td>
<td>19.4</td>
<td>21.6</td>
<td>21.9</td>
<td>22.0</td>
<td>21.0</td>
<td>21.9</td>
<td>23.8</td>
<td>23.8</td>
</tr>
<tr>
<td>BGR</td>
<td>19.2</td>
<td>19.1</td>
<td>19.6</td>
<td>21.6</td>
<td>23.6</td>
<td>23.8</td>
<td>24.8</td>
<td>23.4</td>
</tr>
<tr>
<td>ALB</td>
<td>16.6</td>
<td>18.5</td>
<td>18.2</td>
<td>18.2</td>
<td>18.4</td>
<td>19.8</td>
<td>20.9</td>
<td>23.0</td>
</tr>
<tr>
<td>CZE</td>
<td>17.1</td>
<td>17.0</td>
<td>17.8</td>
<td>21.1</td>
<td>18.4</td>
<td>23.9</td>
<td>23.3</td>
<td>22.3</td>
</tr>
<tr>
<td>HRV</td>
<td>15.2</td>
<td>15.7</td>
<td>15.4</td>
<td>16.8</td>
<td>18.4</td>
<td>19.6</td>
<td>20.0</td>
<td>21.7</td>
</tr>
<tr>
<td>SRB</td>
<td>16.0</td>
<td>16.1</td>
<td>16.9</td>
<td>18.6</td>
<td>19.7</td>
<td>20.2</td>
<td>21.2</td>
<td>21.6</td>
</tr>
<tr>
<td>UKR</td>
<td>11.8</td>
<td>17.2</td>
<td>16.7</td>
<td>17.4</td>
<td>19.0</td>
<td>21.3</td>
<td>23.1</td>
<td>21.4</td>
</tr>
<tr>
<td>POL</td>
<td>15.6</td>
<td>14.7</td>
<td>14.1</td>
<td>15.3</td>
<td>17.8</td>
<td>20.6</td>
<td>21.5</td>
<td>21.2</td>
</tr>
<tr>
<td>MKD</td>
<td>14.5</td>
<td>15.0</td>
<td>15.7</td>
<td>16.3</td>
<td>17.5</td>
<td>19.3</td>
<td>20.5</td>
<td>20.9</td>
</tr>
<tr>
<td>HUN</td>
<td>15.6</td>
<td>14.5</td>
<td>15.9</td>
<td>18.5</td>
<td>21.1</td>
<td>20.2</td>
<td>19.6</td>
<td>20.5</td>
</tr>
<tr>
<td>RUS</td>
<td>15.6</td>
<td>16.6</td>
<td>15.4</td>
<td>16.1</td>
<td>17.1</td>
<td>18.8</td>
<td>20.7</td>
<td>19.0</td>
</tr>
<tr>
<td>BIH</td>
<td>13.1</td>
<td>14.1</td>
<td>13.9</td>
<td>14.4</td>
<td>15.1</td>
<td>15.9</td>
<td>16.8</td>
<td>17.5</td>
</tr>
<tr>
<td>TUR</td>
<td>9.4</td>
<td>10.4</td>
<td>11.5</td>
<td>12.6</td>
<td>14.1</td>
<td>15.4</td>
<td>16.3</td>
<td>17.0</td>
</tr>
<tr>
<td>SVN</td>
<td>12.8</td>
<td>14.3</td>
<td>15.8</td>
<td>16.6</td>
<td>18.0</td>
<td>18.5</td>
<td>18.0</td>
<td>16.3</td>
</tr>
<tr>
<td>BLR</td>
<td>12.6</td>
<td>13.4</td>
<td>12.6</td>
<td>12.5</td>
<td>13.1</td>
<td>14.7</td>
<td>16.2</td>
<td>14.9</td>
</tr>
<tr>
<td>Avg CESEE</td>
<td>15.8</td>
<td>16.7</td>
<td>17.0</td>
<td>18.2</td>
<td>19.8</td>
<td>20.8</td>
<td>22.0</td>
<td>22.0</td>
</tr>
<tr>
<td>Avg WE</td>
<td>16.9</td>
<td>19.1</td>
<td>20.8</td>
<td>21.3</td>
<td>21.7</td>
<td>22.1</td>
<td>22.3</td>
<td>22.5</td>
</tr>
</tbody>
</table>

Sources: ILOSTAT, UN WPP; and IMF staff calculations.

Note: Older workers are defined as workers aged 55 years or older. Data labels use International Organization for Standardization (ISO) codes. CESEE = Central, Eastern, and Southeastern Europe; WE = Western Europe.
# Old-Age Dependency Ratio

(65+/(20 – 64))

<table>
<thead>
<tr>
<th>Country</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2040</th>
<th>2045</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>SVN</td>
<td>28.8</td>
<td>35.0</td>
<td>41.1</td>
<td>46.7</td>
<td>51.8</td>
<td>55.9</td>
<td>61.8</td>
<td>66.6</td>
</tr>
<tr>
<td>POL</td>
<td>24.3</td>
<td>30.0</td>
<td>36.4</td>
<td>39.3</td>
<td>41.2</td>
<td>44.8</td>
<td>51.4</td>
<td>60.8</td>
</tr>
<tr>
<td>CZE</td>
<td>28.8</td>
<td>34.0</td>
<td>37.1</td>
<td>39.1</td>
<td>41.1</td>
<td>46.7</td>
<td>54.5</td>
<td>58.9</td>
</tr>
<tr>
<td>HRV</td>
<td>31.2</td>
<td>35.3</td>
<td>39.8</td>
<td>43.7</td>
<td>45.8</td>
<td>49.2</td>
<td>53.0</td>
<td>57.4</td>
</tr>
<tr>
<td>EST</td>
<td>31.0</td>
<td>35.0</td>
<td>39.2</td>
<td>42.3</td>
<td>44.5</td>
<td>48.1</td>
<td>51.5</td>
<td>56.3</td>
</tr>
<tr>
<td>BGR</td>
<td>32.6</td>
<td>36.2</td>
<td>39.2</td>
<td>41.0</td>
<td>42.8</td>
<td>46.5</td>
<td>51.4</td>
<td>54.9</td>
</tr>
<tr>
<td>SVK</td>
<td>21.5</td>
<td>26.5</td>
<td>31.4</td>
<td>35.2</td>
<td>37.5</td>
<td>41.4</td>
<td>47.7</td>
<td>53.9</td>
</tr>
<tr>
<td>BIH</td>
<td>24.9</td>
<td>28.5</td>
<td>33.3</td>
<td>39.1</td>
<td>42.6</td>
<td>46.3</td>
<td>49.6</td>
<td>53.2</td>
</tr>
<tr>
<td>ROU</td>
<td>27.4</td>
<td>31.7</td>
<td>35.3</td>
<td>35.2</td>
<td>40.3</td>
<td>45.1</td>
<td>50.7</td>
<td>52.7</td>
</tr>
<tr>
<td>HUN</td>
<td>27.9</td>
<td>33.3</td>
<td>36.6</td>
<td>37.0</td>
<td>39.0</td>
<td>43.7</td>
<td>50.0</td>
<td>52.4</td>
</tr>
<tr>
<td>LVA</td>
<td>31.5</td>
<td>34.7</td>
<td>39.0</td>
<td>42.4</td>
<td>44.3</td>
<td>47.0</td>
<td>48.9</td>
<td>52.3</td>
</tr>
<tr>
<td>ALB</td>
<td>20.6</td>
<td>23.4</td>
<td>29.0</td>
<td>35.6</td>
<td>40.1</td>
<td>43.6</td>
<td>46.6</td>
<td>51.0</td>
</tr>
<tr>
<td>LTU</td>
<td>30.7</td>
<td>32.4</td>
<td>36.7</td>
<td>42.2</td>
<td>45.3</td>
<td>47.6</td>
<td>47.7</td>
<td>47.9</td>
</tr>
<tr>
<td>UKR</td>
<td>24.7</td>
<td>27.9</td>
<td>31.6</td>
<td>34.6</td>
<td>35.5</td>
<td>37.6</td>
<td>41.1</td>
<td>46.8</td>
</tr>
<tr>
<td>MNE</td>
<td>22.8</td>
<td>27.0</td>
<td>31.0</td>
<td>34.9</td>
<td>36.8</td>
<td>39.3</td>
<td>42.3</td>
<td>46.6</td>
</tr>
<tr>
<td>MKD</td>
<td>19.5</td>
<td>22.9</td>
<td>26.5</td>
<td>30.2</td>
<td>33.8</td>
<td>36.8</td>
<td>40.6</td>
<td>45.8</td>
</tr>
<tr>
<td>SRB</td>
<td>26.8</td>
<td>31.8</td>
<td>34.3</td>
<td>35.9</td>
<td>37.3</td>
<td>39.6</td>
<td>42.6</td>
<td>45.3</td>
</tr>
<tr>
<td>BLR</td>
<td>22.2</td>
<td>25.1</td>
<td>30.2</td>
<td>34.5</td>
<td>36.1</td>
<td>37.6</td>
<td>39.6</td>
<td>43.8</td>
</tr>
<tr>
<td>RUS</td>
<td>20.7</td>
<td>25.1</td>
<td>30.1</td>
<td>34.1</td>
<td>33.4</td>
<td>34.2</td>
<td>36.0</td>
<td>40.0</td>
</tr>
<tr>
<td>MDA</td>
<td>14.5</td>
<td>16.9</td>
<td>23.0</td>
<td>27.2</td>
<td>27.9</td>
<td>29.4</td>
<td>32.9</td>
<td>39.9</td>
</tr>
<tr>
<td>TUR</td>
<td>13.4</td>
<td>14.9</td>
<td>17.3</td>
<td>20.2</td>
<td>23.3</td>
<td>27.2</td>
<td>31.6</td>
<td>36.2</td>
</tr>
<tr>
<td>Avg CESEE</td>
<td>25.0</td>
<td>29.0</td>
<td>33.2</td>
<td>36.7</td>
<td>39.1</td>
<td>42.3</td>
<td>46.3</td>
<td>50.6</td>
</tr>
<tr>
<td>Avg WE</td>
<td>30.6</td>
<td>33.6</td>
<td>37.5</td>
<td>42.1</td>
<td>46.7</td>
<td>50.3</td>
<td>53.0</td>
<td>55.2</td>
</tr>
</tbody>
</table>

Sources: ILOSTAT, UN WPP; and IMF staff calculations.
Note: Older workers are defined as workers aged 55 years or older. Data labels use International Organization for Standardization (ISO) codes. CESEE = Central, Eastern, and Southeastern Europe; WE = Western Europe.
Baseline Pension and Health Care Projections

\[
\frac{PE}{GDP} = \frac{\text{pensioners}}{\text{workers}} \times \frac{\text{pensioners}}{\text{pop65 + workers}} \times \frac{\text{pop15} - 64}{\text{pop15} - 64}
\]

1. Replacement rate
2. Coverage Ratio
3. Inverse LFP
4. Old-age dependency ratio

\[
\frac{HE}{GDP} = \frac{HE_{0-64}}{\text{pop0-64 workers}} \times \frac{\text{pop0-64}}{\text{GDP workers}} \times (1 + \alpha \times \frac{\text{pop 65+}}{\text{pop 0-64}}) ; \text{ where } \alpha = \frac{HE_{65+}}{\text{Popul 65+}} \times \frac{\text{Popul 0-64}}{HE_{0-64}}
\]

1. Generosity of health care package for the young
2. Inverse of LFP
3. Ratio of the per capita health spending for the older population to the per capita health spending for the young (\(\alpha\)) and the old-age dependency ratio
A one-percentage-point increase in the share of workers ages 55+ is associated with a decrease in TFP growth by about 0.6 percentage points

\[ \Delta \log YL_{it} = \alpha_i + \gamma_t + \sum_s \beta_s w_{sit} + \delta yad_{it} + \varphi oad_{it} + \varepsilon_{it} \]

<table>
<thead>
<tr>
<th>Variables</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor Productivity</td>
<td>0.205</td>
<td>0.238**</td>
<td>-0.0216</td>
<td>-0.113**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFP Human Capital</td>
<td>(1.565)</td>
<td>(2.003)</td>
<td>(-1.051)</td>
<td>(-2.254)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital-Output Ratio</td>
<td>-0.731***</td>
<td>-0.608***</td>
<td>-0.0142</td>
<td>0.291***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(–4.006)</td>
<td>(–3.563)</td>
<td>(–0.461)</td>
<td>(3.931)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of Workers in 45–54 Age Cohort</td>
<td>-0.209</td>
<td>0.309</td>
<td>0.239</td>
<td>-0.0260</td>
<td>-0.258**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(–2.454)</td>
<td>(–4.151)</td>
<td>(–0.170)</td>
<td>(4.457)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Old-age Dependency Ratio</td>
<td>0.224</td>
<td>0.149</td>
<td>-0.0162</td>
<td>-0.0162</td>
<td>-0.209</td>
<td>0.309</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.670)</td>
<td>(0.441)</td>
<td>(–0.390)</td>
<td>(–1.605)</td>
<td>(0.923)</td>
<td>(0.740)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.0260</td>
<td>-0.258**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young-age Dependency Ratio</td>
<td>0.0337</td>
<td>-0.00976</td>
<td>-0.00437</td>
<td>-0.0364***</td>
<td>0.0680*</td>
<td>0.0334</td>
<td>-0.00791</td>
<td>-0.0551***</td>
</tr>
<tr>
<td></td>
<td>(0.924)</td>
<td>(–0.227)</td>
<td>(–0.425)</td>
<td>(–2.847)</td>
<td>(1.709)</td>
<td>(0.756)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.00791</td>
<td>-0.0551***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>4,150</td>
<td>2,883</td>
<td>3,585</td>
<td>4,152</td>
<td>4,150</td>
<td>2,883</td>
<td>3,585</td>
<td>4,152</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>167</td>
<td>116</td>
<td>144</td>
<td>167</td>
<td>167</td>
<td>116</td>
<td>144</td>
<td>167</td>
</tr>
<tr>
<td>Country Fixed Effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Time Dummies2</td>
<td>Yes*</td>
<td>Yes*</td>
<td>Yes*</td>
<td>Yes*</td>
<td>Yes*</td>
<td>Yes*</td>
<td>Yes*</td>
<td>Yes*</td>
</tr>
<tr>
<td>Anderson Correlations LR Test p-value</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Staff calculations.
Note: Robust z-statistics in parentheses. *** p < 0.01; ** p < 0.05; * p < 0.1. TFP = total factor productivity.

1 Adjusted by \(\alpha/(1 - \alpha)\).

The Europe-oriented version (EEUMOD) of the IMF’s Flexible System of Global Models

- Nine individual Central, Eastern, and Southeastern European countries and six Central, Eastern, and Southeastern European country blocks.

- Countries modeled individually are Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, Russia, Serbia, and Ukraine.

- The country blocks are the remainder of Eastern Europe (Belarus and Moldova); Central European Euro Area (Estonia, Latvia, Lithuania, Slovakia, Slovenia); Southeastern Europe (Albania, Bosnia and Herzegovina, Republic of North Macedonia, Montenegro); two euro area blocks (Austria, Belgium, Germany, Finland, France, Ireland, Netherlands, Portugal, Luxembourg, Malta; Greece, Italy, Spain, and Cyprus); and an Other European Union block (Denmark, Sweden, the United Kingdom).

- The rest of the world is split into the United States, China, Japan, Turkey, and aggregated blocks for Emerging Asia, Latin America, Other Advanced Countries, Oil Exporters, and Remaining Countries.
Although the distributions of older worker shares overlap, the historical distribution might not adequately capture the dynamics relevant for future workforce aging and TFP growth.

Sources: UN WPP; ILO; PWT 9.0; and IMF staff calculations.
Production function: CESEE average GDP growth lower by about 1.4 pps and GDP levels by 35 percent by 2050
Production function: CESEE GDP per capita would still increase from 52 to 60 percent of WE average by 2050.

CESEE Relative Income Levels in Aging Scenarios
(In percent, GDP per capita in CESEE as a share of that in Western EU)

Western Europe =100

Sources: UN WPP; WEO; and IMF staff calculations.

1/ The exercise explores three sets of “no-aging” growth rates: i) the WEO projected 2023 potential growth; ii) the historical average growth of individual countries during 2000-2018; iii) the historical average growth of the respective Western European country group (devided into two income groups) at a similar income level.
Effect of demographic shocks on the average of CESEE countries

Real GDP and Real GDP per Capita
(Percent difference)

Real Consumption and Real Investment
(Percent difference)

Impact Channels of Demographics on GDP in CESEE ex TUR
(Percentage points; 2050)

Sources: UN WPP; WEO, PWT; IMF staff calculations.
The net impact of alternative fiscal reactions is small for GDP growth but significant for debt

(Average yearly impact over 2020–50, percentage points)

<table>
<thead>
<tr>
<th></th>
<th>Accommodating deficits</th>
<th>Higher taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP</td>
<td>-1.2</td>
<td>-1.0</td>
</tr>
<tr>
<td>Real GDP per capita</td>
<td>-0.6</td>
<td>-0.5</td>
</tr>
<tr>
<td>Debt/GDP in 2050</td>
<td>76.0</td>
<td>11.9</td>
</tr>
</tbody>
</table>
Policies to Increase Effective Labor Inputs

• **Boosting working-age population** to bring in foreign workers

• **Boosting labor intensity:**
  • Considerable room to increase labor participation and employment rates of women and older workers
  • Increased spending on lower labor tax wedges, lower unemployment replacement rates, and active labor market policies tend to boost participation and employment

• The quality of institutions matters in **retaining and attracting skilled workers**

• Achievement of a 5.9-year **gain in life expectancy** at birth solely by reducing mortality from heart diseases to that of populations with the highest life expectancies (United Nations 2012)
Policies to Support Capital Deepening

• **Subsidizing** private capital investment not advisable – can lead to inefficient capital allocation

• **Financial sector reforms** encourage efficient allocation

• **Governance reforms** are a useful complement when capital accounts open and domestic banking systems open to foreign competition

• Pressure to squeeze out **public investment** should be resisted, good public infrastructure also being a condition for private investment
Policies to Boost Productivity

Allocation of labor and capital can explain a large part of the differences in TFP:

- **Product market reforms** are associated with a higher capital stock and help boost TFP
- Strengthening state-owned enterprise governance or privatizing state-owned enterprises, reductions in red tape, and reducing the size of informal sector

Human capital drives growth differences across countries over long periods of time:

- **Educational** attainment can be improved through e.g. regular assessments, not necessarily higher public spending
- **Lifelong learning** to encourage greater participation of older workers
- **Preserve spending on education and training** despite fewer young people
Policies to Ensure Sustainability of the Public Finances

• Moderate labor reform scenario helps offset about half, ambitious reforms fully, the projected increase in aging-related government spending and debt in 2020—2050

• Raising retirement ages with improvements in life expectancy would reduce the number of pensioners and complement efforts to boost the labor force participation of older workers

• Fiscal space also needs to be preserved for measures to increase labor participation and raise skills. This motivates a broader examination of tax systems and more efficient public expenditure
Considerable heterogeneity across CESEE countries means different policy priorities for each country

- **Labor supply** is particularly pressing for Bulgaria, Latvia, Poland, and Ukraine

- **Participation of younger women** is noticeably low in Moldova and Turkey; **participation of older women** is low in Bosnia and Herzegovina, Croatia, Republic of North Macedonia, Romania, Turkey, and Ukraine, whereas that of **older men** is particularly low in Bosnia and Herzegovina, Romania, Slovenia, Turkey, and Ukraine

- **Reform of retirement ages** especially beneficial in Belarus, Moldova, Russia, Turkey, and Ukraine, both from the point of view of labor supply and fiscal sustainability

- **Workforce aging** is rapid in Moldova and Slovakia

- **Old-age dependency** is more pressing in the Central European countries, notably Poland and Slovenia

- **Fiscal pressures** from age-related spending especially acute in Albania, Bosnia and Herzegovina, Croatia, Lithuania, Moldova, Poland, Russia, Slovenia, and Ukraine
DEPOPULATION HOT SPOTS

Projected population change in Central and Southeast Europe (1989-2050)

-15% POLAND

+16% AUSTRIA

+3% SLOVENIA

-22% CROATIA

-29% BOSNIA AND HERZEGOVINA

-5% MONTENEGRO

-18% ALBANIA

-3% NORTH MACEDONIA

-20% HUNGARY

-3% CZECH REPUBLIC

-6% SLOVAKIA

-24% SERBIA

-39% BULGARIA

-11% KOSOVO

-3% GREECE

Source: United Nations, World Bank, Kosovo Agency of Statistics
Ageing in the Balkans – Does Migration matters?

Arjan Gjonca
Department of International Development
London School of Economics
mailto: a.gjonca@lse.ac.uk

Population Dynamics, Human Capital and Sustainable Development in South-East Europe;
UNFPA, Regional Conference
Sarajevo 21-22 October 2019
What is the demographic “picture” in the South Western Balkans?

Total Fertility Rate in SW Balkans, 1950-2019

Source: UN Population Prospects, 2019
What is the demographic “picture” in the South Western Balkans?

Low levels of fertility – lowest low levels

• TFR is between 1.3 and 1.8 children per woman in most SW Balkans

• How were these levels achieved?
  • Continuous declining trend (since before collapse of communism) - Serbia, Croatia, Montenegro, BiH)
  • Rapid declining trend (Albania and Kosovo)
What is the demographic “picture” in the South Western Balkans?

**High levels of life expectancy at birth (Long Lives)**

- E(o) (M) between 71 – 76 years; e(o) (F) between 75 – 81 years
- IMR in all countries less than 10 per 1000 live births;
- Neonatal Mortality rate continuous to be relatively high.
- So, in terms of survival not much difference from either west of east Europe.
- Some of the Balkans are different from Eastern Europe as they did not go through the so-called “adult mortality crises of Eastern Europe” (e.g. Albania and most former Yugoslav republics). Linked to Mediterranean diet and life style.
What is the demographic “picture” in the South Western Balkans?

Infant and Neonatal Mortality Rates, 2018

Source: Eurostat 2019
What is the demographic “picture” in the South Western Balkans?

Life expectancy at birth 2017

- Romania
- Bulgaria
- Croatia
- Montenegro
- North Macedonia
- Serbia
- BiH
- Kosovo
- Albania

Source: Eurostat 2019
What is the demographic “picture” in the South Western Balkans?

DEMOGRAPHIC REGIME:
LONG LIVES AND VERY LOW FERTILITY
What is the demographic “picture” in the South Western Balkans?

What is happening to migration?

• It has to be said that there are various trends/patterns across the Balkans – and it is difficult to generalise

• Data is a major issue. We only have estimates from between census populations and some of these countries either have no census or only one.

• But the overall trend is negative net migration during the transition period (1990 to present)
What is the demographic “picture” in the South Western Balkans?

What is happening to migration?

• e.g. Albania and BiH with net migration rates in different periods of up to -25. That is large by any standard.

• In some countries it is by far the dominant demographic process (e.g. in Albania where 1/3 of the population has emigrated, in BiH and in Kosovo similar trends but data unreliable)

• Migration has a double effect on population structure: a. reducing the tax paying population and b. reducing the level of childbearing.
What is the demographic “picture” in the South Western Balkans?

Net Migration Rate in SW Balkans, 1950-2019

- Albania
- Bosnia and Herzegovina
- Montenegro
- North Macedonia
- Serbia
- Croatia
Emigration effect in Albanian population structure?
What is the demographic “picture” in the South Western Balkans?

DEMOGRAPHIC REGIME:

LONG LIVES
VERY LOW FERTILITY
VERY HIGH EMIGRATION
What is the demographic “picture” in the South Western Balkans?

What is the consequence of this “new demographic regime”? – Population Ageing

• By 2019 the population over 60+ has reached 20% (Albania 22%, Croatia about 27%, Serbia and BiH about 25%)

• The process has been very fast. The fast pace of increase starts in the mid-1980s, but it really accelerates in the 1990s.

• Time it took these countries for the population over 60+ to go from 10 to 20% is about 30 years in high migration populations BiH, Albania and North Macedonia). It took some western European countries double that time.

• In 20 years-time by 2040 most projections predict that most of these countries 60+ population will reach 30%, and in some cases about 35% (e.g. Croatia and Serbia).

• But under different economic scenario – Middle Income Countries
What is the demographic “picture” in the South Western Balkans?

Percentage of population over 60+

Source: UN Population Prospects 2019
What is the demographic “picture” in the South Western Balkans?

Source: UN Population Prospects 2019
What is the demographic “picture” in the South Western Balkans?

Is migration responsible or partially responsible for this ageing?

Case of Albania (because data permit us) and emigration the highest in the region:

What we did is that we take as base year population for projection 1989 (census year), and projection population of 2019, today’s population, under different scenarios:

1. Migration effect real, fertility and mortality constant with the rate of base year;
2. Fertility effect real, the others constant
3. Mortality effect real, the others constant
4. The actual population of Albania in 2019
Is Migration responsible or partially responsible for Population Ageing?

Annual Growth Rate 1989-2019

- Actual
- Mig. Effect
- Fert. Effect
- Mort. Effect
Is Migration responsible or partially responsible for Population Ageing?

*Dependancy Ratio in % 1989-2019*
Is Migration responsible or partially responsible for Population Ageing?

*Old Age Dependancy Ratio in % 1989-2019*
Is Migration responsible or partially responsible for Population Ageing?

- Albanian population has aged faster than expected in a short period of 30 years
- Mortality effect minimal
- Migration and fertility most important
- Migration has affected the speed of ageing
What should be the Future Policy focus - UNFPA?

Should we worry?

a. Not necessarily – Ageing is a natural consequence of demographic transition, although it has come faster in the region compared to the rest of Europe.

b. If the Right Policies, societies can benefit from it
   • We live longer but we also live healthier
   • The time of entering employment has increased with more children staying in education, thus late retirement will not change much the long life time in employment for the new generations.
   • In retirement, elderly continue to be productive and do contribute to society in formal and informal sectors.
What should be the Future Policy focus - UNFPA?

Should we worry?

But, only if the Right Policies are in place for:

i. Health care

ii. Social care:
   • traditional family support is breaking down due to low levels of fertility).
   • Thus who is going to support elderly populations when institutionalisation is not “socially acceptable in this part of Europe?
What should be the Future Policy focus - UNFPA?

*NOT JUST FOCUS ON YOUNG PEOPLE BUT ALSO THE ELDERLY*
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

Figure 11: Emigration from Hungary and immigration of Hungarian citizens to other European countries (flow), 1995–2013(2014)

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

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
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)

**Source:** Figure 1 in Lerch, M. 2013. Fertility decline during Albania’s societal crisis. *European Journal of Population* 29: 195-220.
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

Source:

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”

PEW RESEARCH CENTER
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

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

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

REPUBLIKA, Serbia (Reuters) - Republika 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)

**Source:** Projected population based on *SSP2 CEPAM Medium* and *SSP2 CEPAM Zero Migration* 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.*
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>
</tbody>
</table>

| **Proportion age 65+**                  |      |      |      |      |      |      |      |
| SSP1 - Rapid Development                | 15.7%| 18.7%| 26.7%| 43.8%| 52.4%| 62.6%| 76.9%|
| SSP2 - CEPAM Zero Migration             | 15.7%| 17.9%| 22.8%| 29.5%| 33.5%| 36.8%| 40.3%|
| SSP2 - CEPAM Medium                     | 15.7%| 18.6%| 25.8%| 39.5%| 45.1%| 49.0%| 52.0%|
| SSP2 - CEPAM Double Migration           | 15.7%| 19.3%| 29.4%| 54.1%| 63.6%| 66.1%| 44.5%|
| SSP3 - Stalled Development              | 15.7%| 18.2%| 22.8%| 26.0%| 26.5%| 25.5%| 24.0%|

**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
Realizing the potential of living longer

Vitalija Gaucaite Wittich
Population Dynamics, Human Capital and Sustainable Development in South-East Europe, 21-22 October 2019, Sarajevo
56 member States, 17 % of world population, >30 % of world’s 65+
<table>
<thead>
<tr>
<th>Year</th>
<th>80+</th>
<th>65-79</th>
<th>15-64</th>
<th>0-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>4.0</td>
<td>11.4</td>
<td>66.5</td>
<td>18.1</td>
</tr>
<tr>
<td>2030</td>
<td>5.4</td>
<td>15.0</td>
<td>62.7</td>
<td>16.9</td>
</tr>
<tr>
<td>2050</td>
<td>8.7</td>
<td>15.8</td>
<td>59.5</td>
<td>16.0</td>
</tr>
</tbody>
</table>

Source: UNDESA World Population Prospects, rev. 2019
Policy response
2017 Lisbon Declaration

3 goals for the fourth cycle

Goal 1 – Recognizing the potential of older persons

Goal 2 – Encouraging longer working life and ability to work

Goal 3 – Ageing with dignity
Suggested Approaches

- Age-integrated approach to facilitate transitions between education, working, caring and leisure

- Possibility to flexibly combine these stages over the life course while mitigating personal risks and social inequalities
Suggested Approaches

Collaborative efforts of individuals, civil society, businesses and the state aiming at realizing the potential of:

- Healthy life years
- Extended working lives
- Silver economy
- Volunteering & caring
Active Ageing Index

Capturing various facets of active ageing & indicating how much of the potential of older persons is realized
## Active Ageing Index (AAI)

The Active Ageing Index (AAI) is a tool to measure the untapped potential of older people for active and healthy ageing across countries. It measures the level to which older people live independent lives, participate in paid employment and social activities as well as their capacity for active ageing.

### Indicators

**Employment**
- Employment rate 55-59
- Employment rate 60-64
- Employment rate 65-69
- Employment rate 70-74

**Participation in Society**
- Voluntary activities
- Care to children and grandchildren
- Care to infirm and disabled
- Political participation

**Independent, Healthy and Secure Living**
- Physical exercise
- Access to health services
- Independent living
- Financial security (three indicators)
- Physical safety
- Lifelong learning

**Capacity and Enabling Environment for Active Ageing**
- Remaining life expectancy at age 55
- Share of healthy life expectancy at age 55
- Mental well-being
- Use of ICT
- Social connectedness
- Educational attainment

### Domains

- Employment
- Participation in Society
- Independent, Healthy and Secure Living
- Capacity and Enabling Environment for Active Ageing

**Overall Index**

- AAI

**22 indicators**

**4 domains**
### Active Ageing Index, 2018

<table>
<thead>
<tr>
<th>Populations</th>
<th>North Macedonia</th>
<th>Serbia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Overall</td>
<td>34.3</td>
<td>27.2</td>
</tr>
<tr>
<td>Employment</td>
<td>30.8</td>
<td>14.5</td>
</tr>
<tr>
<td>Participation in society</td>
<td>15.8</td>
<td>13.7</td>
</tr>
<tr>
<td>Independent living</td>
<td>60.4</td>
<td>59.0</td>
</tr>
<tr>
<td>Capacity for active ageing</td>
<td>59.7</td>
<td>57.3</td>
</tr>
</tbody>
</table>

Source: UNECE [https://statswiki.unece.org/display/AAI](https://statswiki.unece.org/display/AAI)
## Active Ageing Index, 2018

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Men</th>
<th>Women</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 RLE at age 55 (as % of next 50 years)</td>
<td>43.8</td>
<td>50.0</td>
<td>43.2</td>
<td>51.0</td>
</tr>
<tr>
<td>4.2 Share of HLE in RLE</td>
<td>71.7</td>
<td>62.1</td>
<td>70.5</td>
<td>66.0</td>
</tr>
<tr>
<td>4.3 Mental well-being</td>
<td>81.9</td>
<td>81.1</td>
<td>50.6</td>
<td>45.7</td>
</tr>
<tr>
<td>4.4 Use of ICT</td>
<td>38.0</td>
<td>32.0</td>
<td>39.0</td>
<td>29.0</td>
</tr>
<tr>
<td>4.5 Social connectedness</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>4.6 Educational attainment</td>
<td>63.2</td>
<td>43.1</td>
<td>72.2</td>
<td>55.4</td>
</tr>
</tbody>
</table>

Source: UNECE [https://statswiki.unece.org/display/AAI](https://statswiki.unece.org/display/AAI)
Thank you

https://www.unicef.org/population/ageing.html
FATHERS ON THE LEAVE
SHARE OF FATHER’S PART IN THE TOTAL LEAVE
WHO ACTUALLY TAKES THE LEAVE IN JAPAN?
REASONS FOR LOW TAKE-UP OF PATERNITY LEAVE IN JAPAN (2017)

- Staff shortage
- My company did not offer it
- Unfavourable atmosphere (against taking leave)
- I was doing work nobody else could do
- I did not want to have a lower income
- Other people (a spouse or grandparents) took care of my child
- It could have an adverse effect on my career, e.g. pay rise or promotion
- I felt that I can participate in childcare without taking the leave
- I did not understand the procedures
- We used the nursery
- My family members did not support this

Notes: N=1,648 (men on regular contracts who have a child under three and who did not take the leave). Percentages do not sum to 100 per cent because respondents could choose more than one reason.
Japan to raise subsidies for firms where dads take paternity leave, sources say

KYODO

To boost the number of employees taking paternity leave and promote female participation in the workforce, the labor ministry has decided to increase government subsidies for companies whose employees do so, sources close to the matter said Thursday.

The rate of men who take leave for child care is only around 6 percent despite six consecutive years of increase, far from the government’s goal of 13 percent by 2020.

Under the current system, companies receive subsidies if they undertake steps to facilitate paternity leave, such as by holding management seminars or getting bosses to encourage subordinates to take leave.

So far, small and midsize companies receive between ¥570,000 and ¥720,000 for the first period of paternity leave taken by an employee. The sum ranges from ¥285,000 to ¥360,000 in the case of large companies. More subsidies are given if more take paternity leave, based on the number of days taken.

The labor ministry aims to add around ¥100,000 to those subsidies for every male employee at small and midsize companies who takes leave if companies take more initiative, the sources said. The details are still being studied, but large companies will receive half of the sum to be given to small and midsize companies, they said.

Japan ranked first among 41 countries in a UNICEF report in June on paternity leave based on legal entitlements.
THANK YOU
Panel:
social and family policies

Anne H. Gauthier
NIDI-KNAW, RUG, and GGP
1. The design and focus of policies

Policies -> Decision to have a (another) child
1. The design and focus of policies

- Policies
- Decision to have a (another) child
- Support for gender equality
- Youth opportunity
- Health and well-being
2. Having all the pieces
2. Having all the pieces

Parental leave (well paid, not too long, guaranteed return to work)

Package of other policies supporting gender equality

Support from the employer/ workplace, no discrimination

Social acceptance of fathers taking leave

Family Policies

Labour Market

Gender Equality

Norms
3. It can take time!

• Often no immediate impact on fertility
• No immediate impact does not mean it does not work
• But signal that perhaps not all the pieces or pre-conditions are in place
Surveys can help!
A Farm in Canada

opportunities for your children
life in the open country
da home and success

Learn how the Canadian National Railways' Colonization Service advises and places new settlers. An interesting booklet describing the "Canadian National Railways Colonization Service" explains how. Ask for it.

Colonization Department
Canadian National Railways

Anders & Hayes, South Street, DORCHESTER.
BH Futures Foundation

Human Capital Investment: the bottom up approach

Damir Mitric, Board Member

Population Dynamics, Human Capital and Sustainable Development in South-East Europe

October 2019, Sarajevo, Bosnia & Herzegovina
Empowering the youth of Bosnia and Herzegovina through education, technology and global leadership
How prosperous and complex is your economy?

- Blue dots – Non resource dependent
- Red dots – Resource dependent

- Complexity, Prosperity
- Complexity is a driver of prosperity
- More complex economy means that less countries can produce what you can produce
- Export data only

Source:
Prosperity of a country - What is the magic formula?

What causes the large gap between rich and poor countries?

- Correlation between a nation’s economic prosperity and factors such as how the country is governed, the average amount of formal education each individual receives, and the country's overall competiveness.
- Researchers from Harvard and MIT have discovered that a new measure based on a country's collective knowledge can account for the enormous income differences between the nations of the world better than any other factor.

“A country's wealth correlates with its collective knowledge”
How do we develop & empower students

**Professional Development** (mentoring, HR counselling, workshops with industry & other partners, international & local jobs & internships, application support for PhD, masters, EU grants & other opportunities) – **Education & Leadership** (Academy, Expert Webinars, Podcasts) – **Events participation** (Mobility, events, conferences, annual congress) – **Funding** (projects, early seed for POC (startup) – **Volunteering** – Mentoring high school students, outreach etc – **Startup support**

**Scholarships**

**Mentoring**

**Academy**

**Community**

**Mobility**

**Internships & Projects**
Examples of mentoring

Stojanka Danilovic
Student ETF, East Sarajevo

Adnan Behmen
Global IT Project Manager
Proctor & Gamble, Poland

Selma Alicic
Student ETF, Tuzla

Khaled Mokhtar
Emerging Technologies & Innovation Manager at Etisalat, UAE
Some of our mentors

Bojan Trabonjevic
Melbourne, Australia
Chief Executive Officer
Profilstep

Mirsad Barusic
Papendrecht, Netherlands
Business Unit Manager JVS JVS Vibration & Noise Engineers

Edin Golubovic
Istanbul, Turkey
Partner & Vice President of Research & Development Innovlink

Vedran Azman
Brisbane, Australia
Senior Telecommunications Engineer

Ebrahim Hassen,
Freiburg, Germany
Institute of Virology, Med. Centre Uni of Freiburg

Jasmin Hafic
Sarajevo, BiH
Software Engineer

Almir Agic
Brussels, Belgium
Validation Coordinator

Ervin Sadic
Pittsburgh, USA
Professor Biomedical Eng

University of Pittsburgh

Maler Al Osta
Sarajevo, BiH
Senior Digital Marketing Sales Consultant

Arin Sabalic
Deventer, Netherlands
Chief Operating Officer TM7

Emma Cosin
London, UK
Senior Product Manager Pearson

Adnan Behrwin
Warsaw, Poland
Global IT Leader Proctor & Gamble

Mirel Selic
Singapore/Melbourne
Cyber Security Leader Honeywell

Miralam Salihovic
Cupertino, USA
Manager, Global Operations, Apple

Mirjela Haliovic
Geelong, Australia
EHS Delivery Leader, Dow

Ana-Marina Pajonja
Croatia
Project Manager, Horus Business Consulting d.o.o.

Hana Casic
Charlottesville, USA
BB&T, Vice President

Mirza Kuzucanin
Melbourne, Australia
Senior Vice President Business Development Seizing Machines

Eddie Deli
Michigan, USA
Digital Specialist Masco, Advanced Technology & Integration

Simay Akar
Suzhou, China
Marketing Manager Teknos Solar Technologies

Emina Pasic
Stockholm, Sweden
Power and Energy

Sabina Guder
Linz, Austria
Process Engineer, Primetals Technologies (Siemens)

YOU?
# Mentors by Country

<table>
<thead>
<tr>
<th>Country</th>
<th>Mentors</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>2.2%</td>
</tr>
<tr>
<td>Denmark</td>
<td>2.2%</td>
</tr>
<tr>
<td>Sweden</td>
<td>4.3%</td>
</tr>
<tr>
<td>UAE</td>
<td>2.2%</td>
</tr>
<tr>
<td>Croatia</td>
<td>2.2%</td>
</tr>
<tr>
<td>China</td>
<td>2.2%</td>
</tr>
<tr>
<td>Austria</td>
<td>4.3%</td>
</tr>
<tr>
<td>Poland</td>
<td>2.2%</td>
</tr>
<tr>
<td>England</td>
<td>2.2%</td>
</tr>
<tr>
<td>Turkey</td>
<td>2.2%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>6.5%</td>
</tr>
<tr>
<td>Belgium</td>
<td>2.2%</td>
</tr>
<tr>
<td>B&amp;H</td>
<td>28.3%</td>
</tr>
<tr>
<td>USA</td>
<td>10.9%</td>
</tr>
<tr>
<td>Germany</td>
<td>4.3%</td>
</tr>
<tr>
<td>Australia</td>
<td>21.7%</td>
</tr>
</tbody>
</table>
Connecting diaspora, talent & business
Accelerated Training and Learning in Australia

- We are incubating BH students and young professionals (already working in industry)

Haris Selmanović, Tuzla

Momčilo Amović, Sokolac (Banja Luka)

Ali Mokayes, Tuzla

Rijad Sarić, Sarajevo
What else do we do? Srebrenica

What’s NEXT?
20 Maker Spaces in BH by end of 2022

Currently planned Banja Luka, Široki Brijeg, Donji Vakuf and Sanski Most
Human Capital in the Western Balkans:
A Missing Link to Growth and Inclusion

October 22, 2019

Jamele Rigolini, World Bank
Western Balkan countries remain among the poorest in Europe

GDP per Capita as Percentage Share of Germany’s Median of 7 small transition economies in Europe

Latvia

North Macedonia

Median of the Western Balkans

1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017
Lagging economic growth has led to a persistent jobs challenge

Western Balkans

AVERAGE YEARS OF PRODUCTIVE EMPLOYMENT LOST, 2016

- AUT
- EST
- CZE
- LTU
- LVA
- HUN
- SVN
- POL
- SVK
- BGR
- ROU
- ALB
- HRV
- SRB
- MNE
- MKD
- BIH
- KOS

- 15-24
- 25-54
- 55-64

Females
An aging population urgently requires boosting productivity

Total Dependency Ratio
(<15 & 65+)/[(15-64)]

- Albania
- Bosnia and Herzegovina
- Montenegro
- North Macedonia
Realizing opportunities from the demographic dividends will depend on good policies

- First dividend: More people in working age, More workers, More production, More disposable income to save
- Second dividend: Accumulation of human and physical capital, Permanent increase in output per capita

Total dependency ratio

Western Balkans

Time
The demographic transition amplifies the impacts of good but also bad policies.

**Virtuous cycle**
- Educated children
- Productive adults
- Economically independent elderly

**Vicious cycle**
- Poorly educated children
- Unproductive and dependent adults
- Dependent elderly

**Policies**
- Social policies
- Macro policies
- Regulation

**Outcomes**
- Growth
- Equity
- Labor markets
- Fiscal sustainability

#INVESTinPeople
The demographic transition amplifies the impacts of good but also bad policies

Virtuous cycle
- Educated children
- Productive adults
- Economically independent elderly

Vicious cycle
- Poorly educated children
- Unproductive and dependent adults
- Dependent elderly

Policies
- Social policies
- Macro policies
- Regulation

Outcomes
- Growth
- Equity
- Labor markets
- Fiscal sustainability

This study
Human capital is essential for growth, good jobs and poverty reduction

• A healthy, skillful population helps handling increasingly complex and competitive production processes

• Quality human capital also helps the poor escape poverty through better jobs:
  
  ➢ One additional year of schooling increases earnings by 9 percent

  ➢ Inclusive and cost-effective health systems support productive lives and avoid impoverishment from health shocks

  ➢ Effective social protection systems protect people and promote employment
Human Development begins in the womb: The importance of ECD

CHILD WITH STUNTED BRAIN DEVELOPMENT

HEALTHY, CARED FOR CHILD
Education systems that fail students in the labor market

High functional illiteracy rates

OECD Average = 20.1 percent
Health systems that impoverish people and fail to address new diseases

High Out-of-Pocket health expenditures

GDP per Capita PPP (2017)

- GDP-Adjusted Average
- EU Average
- WHO Recommended Threshold

Out of Pocket Health Expenditures (% Health Expenditures)
Health systems that impoverish people and fail to address new diseases

Rising prevalence of NCDs

GDP per Capita PPP (2017)

- GDP-Adjusted Average
- EU Average
Out of focus social assistance

High social assistance spending does not necessarily reach the poor
A persistent inclusion challenge (1/2)

Disparities in learning outcomes persist along gender, location, and income groups

- **Girls**: 418 (1.5 years of schooling)
- **Boys**: 374 (1.5 years of schooling)
- **Rural**: 373 (1 year of schooling)
- **Urban**: 403 (1 year of schooling)
- **Poorest**: 359 (over 2 years of schooling)
- **Richest**: 432 (over 2 years of schooling)

The inclusion agenda is also a growth agenda

In Serbia, by 2030 close to 30% of new workers will include individuals from vulnerable and minority backgrounds.
A persistent inclusion challenge (2/2)

Education outcomes for vulnerable Roma are dismally low

![Graph showing Upper Secondary Completion Rates (%)]
An Urgent Need for More and Better Investments in Human Capital (1/3)

• In **education**, there is a need to improve quality, relevance, and inclusion:

  ➢ In the **early ages**, access to quality childcare needs to be expanded – with priority to children from poor and vulnerable backgrounds

  ➢ In **basic education**, teacher and curriculum reforms and better school management would help students acquire solid foundational skills

  ➢ In **TVET and higher education**, ensuring quality certification and accreditation and closer links with the private sector could boost the labor market relevance of the training

  ➢ There is also a need to more carefully **monitor student performance and outcomes at all levels**, and better support poor and vulnerable students
An Urgent Need for More and Better Investments in Human Capital (2/3)

- In **health**, reforms should address the lifelong consequences of poor ECD, the rise of NCDs, and excessive out-of-pocket health expenditures:
  - **Reproductive health and antenatal/children care services** are in need of a quality boost
  - Health care needs to adapt to **aging populations** and the **rise of NCDs**
  - **Primary care** should be enhanced and expanded into the places where people live and work
  - **Health insurance systems** need to be broadened and optimized to reduce out-of-pocket spending, in particular among poorer households
An Urgent Need for More and Better Investments in Human Capital (3/3)

• **Social assistance** should focus on alleviating poverty, improving the employability of the poor and provide effective support throughout the lifecycle:

  ➢ Social assistance must be *refocused to address actual needs*, rather than covering broad categories of beneficiaries independent from needs
  ➢ Social assistance should not only support the poor but also *promote the acquisition of human capital* and the employability of the poor
  ➢ Programs and case management can also be *better integrated*: only two Western Balkan countries have a well-established social registry
Where do we stand?

<table>
<thead>
<tr>
<th>Systems</th>
<th>Diagnosis of Challenges</th>
<th>Policy Assessments</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor markets and migration</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Thank you

Western Balkans
Regular Economic Report # 15

www.worldbank.org/eca/wbrer/
Financial crisis: Fewer babies... (WEO, 2018)


Greece/Spain: 1.5 (2007) to 1.3 (2016)
What is driving this trend?

• Employment and Income -

• Social changes (preferred family size, higher female labor force participation) -

• Tax wedge on couples +

• Labor market conditions (family allowances, job protection during maternity) +
Job in the FORMAL economy

Demand side:

• Structural reforms to improve the business climate and attract FDIs and improve export competitiveness

• Labor market reforms (adequate flexible, adequate minimum wage, well-balanced parental leave policy)

• Product and service market reforms

• Financial sector reform (access to credit, sound financial intermediation)

Supply side:

• Education reforms (update curricula, focus on labor market needs, teacher evaluation, etc.)
Fiscal policy:

- Revenue side: taxation of second family income
- Expenditure side:
  - Investment in high-quality infrastructure, education, and healthcare
  - Affordable childcare
  - Social Safety Net
New Strategy for IMF Engagement on Social Spending (June 2019)

- Raising INEQUALITY in the aftermath of the crisis
- Not just sustainable growth, but also INCLUSIVE growth
- Intensified interest in social spending (education, health and social assistance) is a key policy lever to achieve this
- Focus is on (i) fiscally sustainable; (ii) effectiveness; (iii) efficiency
Parentsmtart employers
- SUSTAINABLE RETURN ON INCLUSION

Tiina Bruno, Sweden

Economist, ”norm breaker”, mother of 3, management consultant and international lecturer.

Founder of the Parentsmtart concept for employers, managers and employees, author of the book (2010) and CEO of the Föräldrasmart Co with team of experts in Sweden.
Parents taking payed parental leave days 2018 in Sweden:

- 900,000
- They were away 60 million days from work with payed leave.

- 60 M
- Mothers took 270 days and fathers 70 days of the total 480 payed days offered.

- 270 - 70
- They were away 7 million payed days from work caring for sick children.

- 7 M
- 10% of the Swedish state budget was assigned to economic support to families.

Source: Försäkringskassan Sweden
WHY support working parents?
Examples from history in Sweden

- Work shortage in the labour market after the war
- Individualization
  - One breadwinner – two breadwinners
  - Individual taxation 1971
- Gender equality debate
  - Why should women work two jobs?
- Demands for social reforms
  - Who takes care of the children when women work?
- Child care expansion – day care and economy
  - Redistribute money
NOW - family policies & legislation in Sweden

**Parental Leave Law**
- 480 days
- For BOTH parents (1974)

**Discrimination Law**
- 80% of salary (to max level)
- Keep job during leave
- Equality plan (25 pers)

**Salary Survey**
- Employer help combo work-fam

**Child care**

**Child allowance**

**NOW - family policies & legislation in Sweden**

- Promote involvement of men in family life – women to work
- Facilitate combination work-family
- Avoid discrimination of parents at work

**SUSTAINABLE RETURN ON INCLUSION**
Parental leave in Sweden – towards equal share

1995: 1 father month
2002: 2 father months
2016: 3 father months

66 years to equal share?
WHAT'S in it for us?

Why Social Impact Companies → Society

Sustainable & gender equal societies

Sustainable & gender equal companies

Sustainable & gender equal families

Civil Society (families, individuals):
Culture
Tradition
Values/Norms

Company:
Culture
Routines
Values/Norms

The human right to live "a whole life"
(both family & a job, without having to choose)

Use ALL competence in the society, increase birth rates etc.

What's in it for us?

Society:
History
Politics
Legislation

The human right to live "a whole life"
(both family & a job, without having to choose)
WHY - what’s in it for a Company?

**ROI**
Return On Investment & Return On Inclusion

**Societies**
CSR with leverage on gender equality, inclusion, social sustainability...

**Employers**
Employer Branding, Talent Mgmt, PR, Marketing/Branding, Innovation...

**Employees**
Self esteem, loyalty, health, pride...

**Managers**
Inclusive and sustainable leadership

SUSTAINABLE RETURN ON INCLUSION
HOW - 2 areas of employer initiatives

FORMAL SUPPORT
- TIME
- MONEY
- ROUTINES
- IT

&

INFORMAL SUPPORT
- ATTITUDES
- BEHAVIORS
- LEADERSHIP
- ROLE MODELS

Involve all managers early and promote ambassadors

SUSTAINABLE RETURN ON INCLUSION
MODERN LEADERSHIP

PARENTAL SKILLS

- Delegation
- Empathy
- Management by objectives
- Motivation techniques
- Curiosity
- Planning
- Problem Solving
- Handling stress & chaos
- Creativity
- Efficiency
- Continuity
- Team building
- Organization
- Prioritization
- Tolerance
- "Presence"
- Communication
- "Active Listening"
- Conflict Mngt
- Negotiation
- Coaching/Developing others
- Set borders/limits
- Courage!
- Consequence & Fairness
- Profitability
- Business Goals
- Company Vision
- Employed Parents
- ROI
- PARENTHOOD

One of the best Management courses you can get!

Awareness of what parents give back to the Co
Why is it important – even though you can’t yet measure/prove the economic effects?

/Klas Forsström, CEO at Munters AB

We want to be an innovative company, and know that diversity and a broad view on competence stimulates innovation.

It is important for us to attract future talent and develop and keep the employees we have.

From a profitability perspective parents develop lots of skills “free of charge” for the company. To be a Parentsmart company makes employees develop and grow. When we help them combine work with family and see parenthood as an asset their performance increases, we get lower employee turnover and positive effects on our profitability.

To be a Parentsmart Company is to BE the future, encouraging time and close dialogue with children - our future customers and employees.
Adapt to local circumstances, norms, culture, possibilities. The power of local role models.

What is possible to initiate and implement only locally in a number of countries? What is possible everywhere?

"Swedish examples can inspire…"

1: Help local companies find their own most interesting WHY.
2: Identify one Co with one example of support to working parents.
2: Identify a strong internal manager role model in that Co.
3: Spread the role model (manager & Co) story about WHY and HOW.

“Swedish examples can inspire…”
PROJECT START NOV 2019:
New standard (with ISO potential) about employer support to working parents - gather and share best practise for all to develop faster

More info: tiina.bruno@parentsmartemployers.com
A growing concept

Community for best practice

Parents@work

Parents@work Employers

Parents@work Managers

Parents@work Employees

Audit Strategy Implementation Integration Communication

Dialogue ws/sem Train-the-trainer Coaching

Parental Leave Program Dialogue ws/sem Coaching

Digital

IRL

SHOWN
Internal & external communication

WHAT
Maturity level, formal & informal support today

HOW
Integration with existing strategies

WHY
Connection to vision, values & goals

SUSTAINABLE RETURN ON INCLUSION

https://www.parentsmaempremployers.com/