Danube Region Monitor "People and Skills"

Report 2021

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Version: March 2, 2022

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Content

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The Danube Region: Population and Socio-Economic Performance

Population and Socio-Economic Performance

The Danube Region:

1. 'Old' EU Member States – countries which joined the EU before 2004 (Austria and Germany: Bavaria and Baden-Württemberg)
2. 'New' EU Member States – countries which joined the EU in 2004 or later (Bulgaria, Croatia, Czechia, Hungary, Romania, Slovakia and Slovenia)
3. EU (potential) candidate countries – Bosnia and Herzegovina, Montenegro and Serbia
4. European Neighbourhood countries within the Eastern Partnership initiative – the Republic of Moldova and Ukraine: Chernivtsi, Ivano-Frankivsk, Odesa, and Zakarpattya

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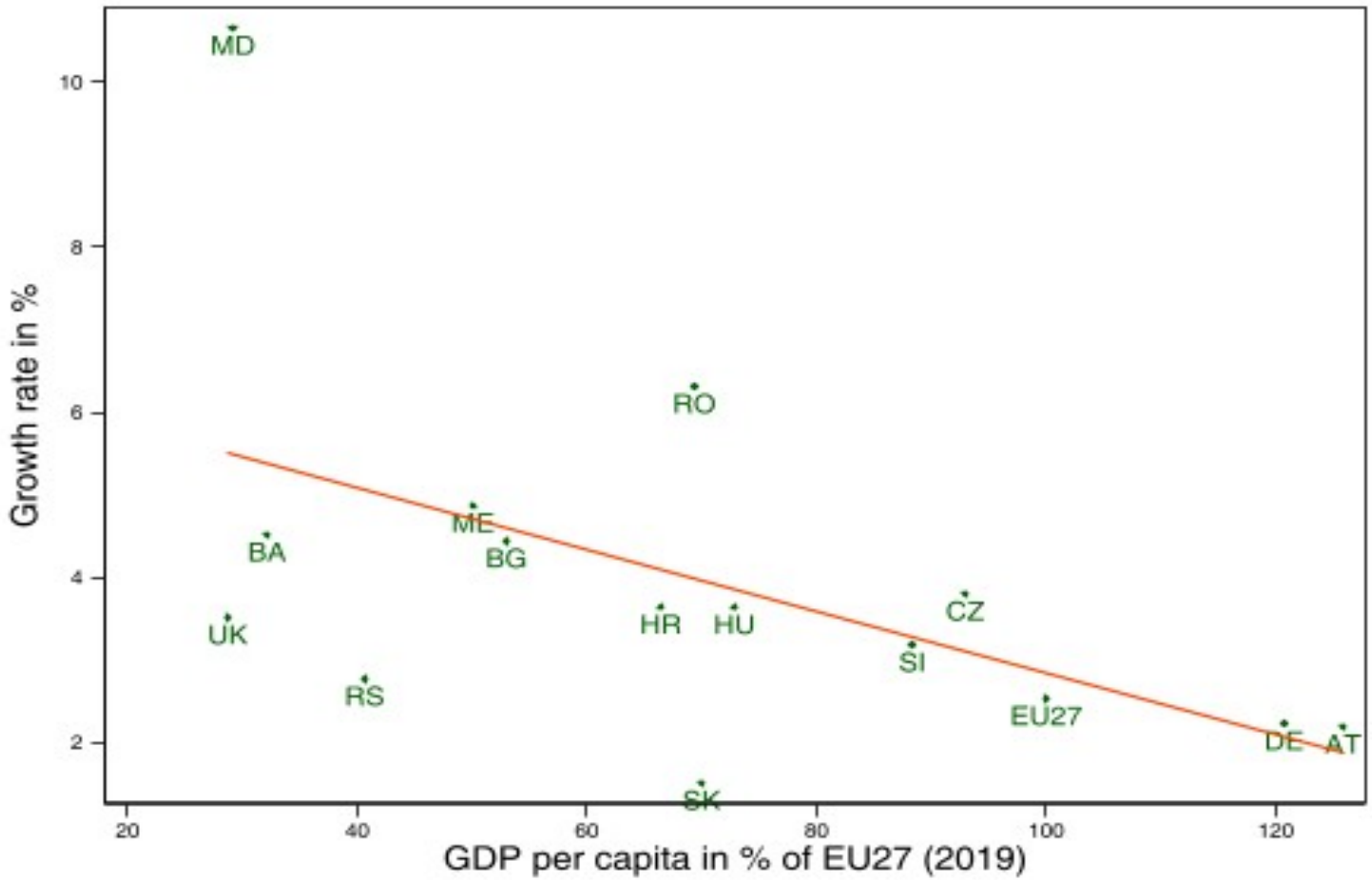
Population and Socio-Economic Performance

- Population
  1. About 111 mn persons in 2020 starting from about 112 mn persons in 2011
  2. Compared to EU27 with 442 mn in 2011 and 448 mn in 2020
- GDP growth
  1. Danube Region: 2011-2019: 2.3% 2020: -5.5%
  2. EU27: 2011-2019: 1.5% 2020: -5.9%
- Convergence in GDP per capita

Convergence

Higher growth rate in countries with larger gap



The data behind the Danube Region Monitor "People and Skills"

Data

- Main sources
  1. Eurostat: EU LFS, EU SILC, EU SES
  2. OECD: PISA, PIAAC
  3. Other: ITU, UNECE, Worldbank, IEA
  4. National Sources
- Challenges
  1. Regional data (Germany, Ukraine): not available for detailed and specific indicators
  2. For Potential candidate countries and EU neighbourhood countries data are patchy (e.g. took part in PISA and TIMMMS only in 2018; these surveys are conducted only every 4 years)
  3. For Potential candidate countries and EU neighbourhood countries some data no longer available in Eurostat (national sources if possible)
- 34 indicators, most of them broken down by age, gender, educational attainment, or other categories over period 2011-2020 for 14 countries and 6 regions plus Danube region aggregate (mean) and EU27 amounting to 140 indicators (plus some calculated shares, indices or ratios)

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Objective I:

Contribution to a Higher Employment Rate in the Danube Region, Especially Through Tackling Youth and Long-Term Unemployment

Aims of the Objective I

- Analyse the dynamics of six key labour market indicators over a period of 2011-2020 with a focus on convergence and divergence within the Danube Region, namely:
  1. Employment rate
  2. Unemployment rate
  3. Long-term unemployment share
  4. Activity rate
  5. Inactivity rate
  6. The Not in Education, Employment or Training (NEET) rate
- Evaluate current effects of COVID-19 pandemic on labour markets of Danube Region countries, particularly in the context of youth

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Main results - Overall dynamic

- **The overall labour market situation** generally improved substantially in most of the Danube Region countries over the period of 2011–2019.
- The 'new' EU Member States have been gradually converging to the level of the 'old' Member States (Austria and Germany) and the convergence →
  - Convergence was most pronounced for Bulgaria, Czechia and Hungary where **unemployment and NEET** declined substantially and **activity rate** improved.
  - Serbia experienced a massive reduction in **unemployment**, including **long-term unemployment**, and a surge in **employment and activity rates**, which bring the country much closer to the EU-27 levels.

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Main results - COVID-19 effects

- **The effect of COVID-19 on the labour market was very heterogeneous** across countries and seemed to be dependent to a large extent on the presence of various employment protection schemes
  - Some of the EU Member States launched short-term job retention and wage subsidy schemes (e.g. Austria, Czechia, and Hungary)
  - The EU (potential) candidate states and the EU neighbourhood countries offered very limited support to workers
- Montenegro, Republic of Moldova, and Ukraine appeared **most affected by the pandemic** in terms of employment decline and increases in inactivity rates and long-term unemployment.

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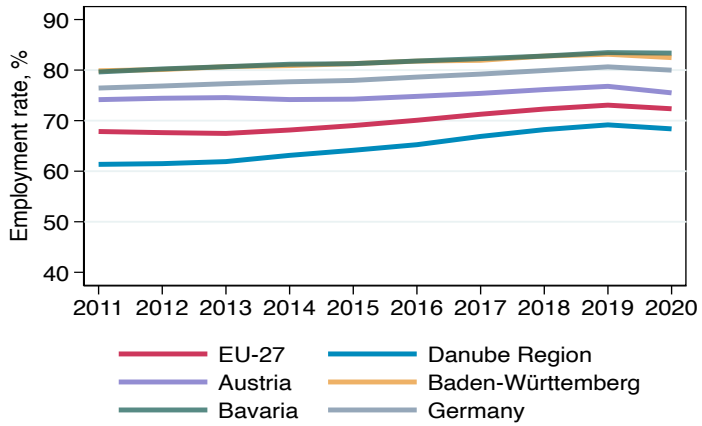
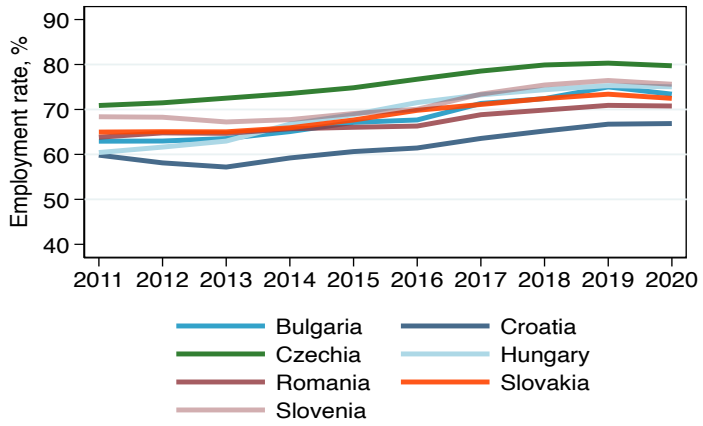
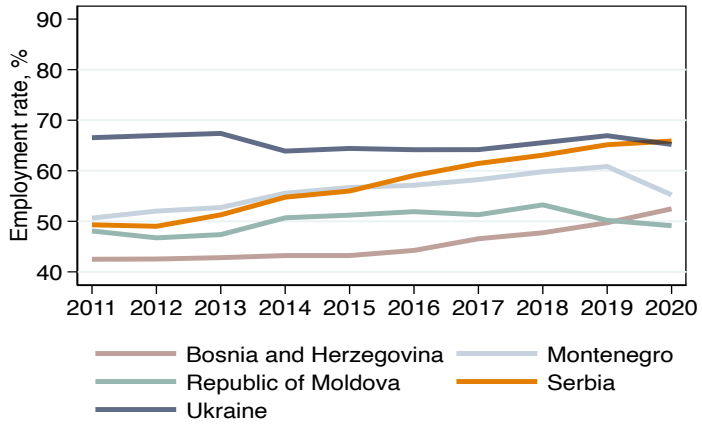
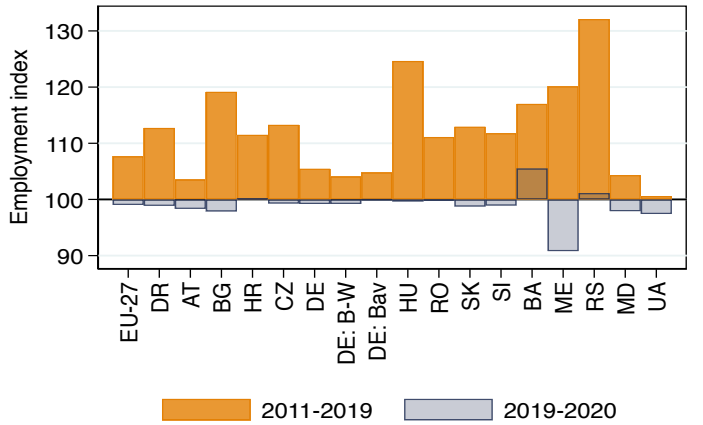
Employment

Employment rates and employment indices across countries for the population aged 20 to 64



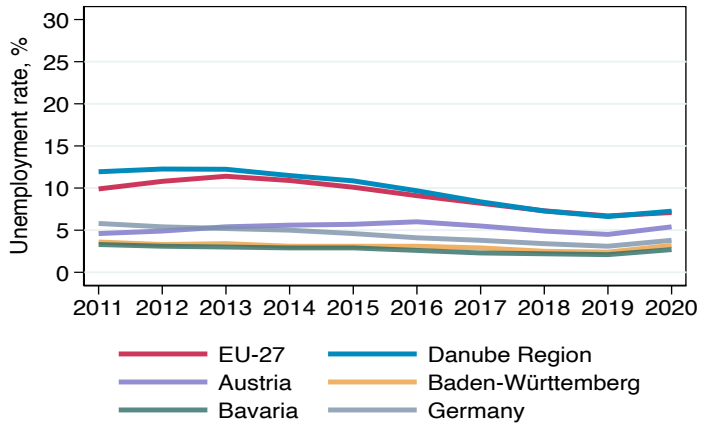


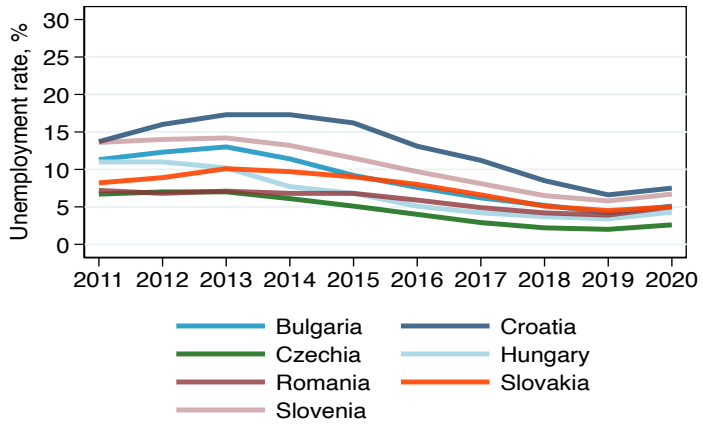


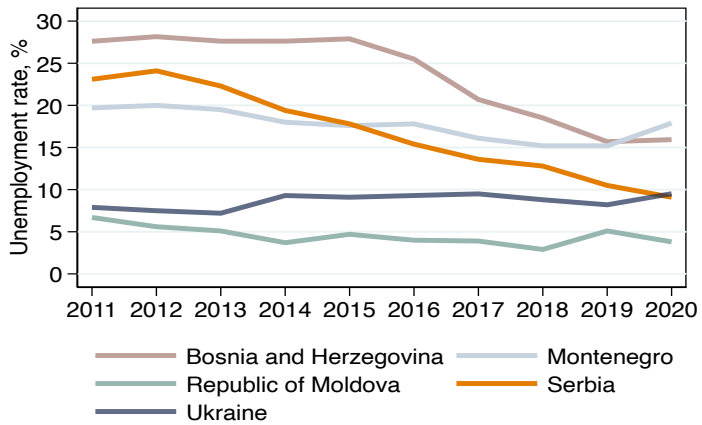


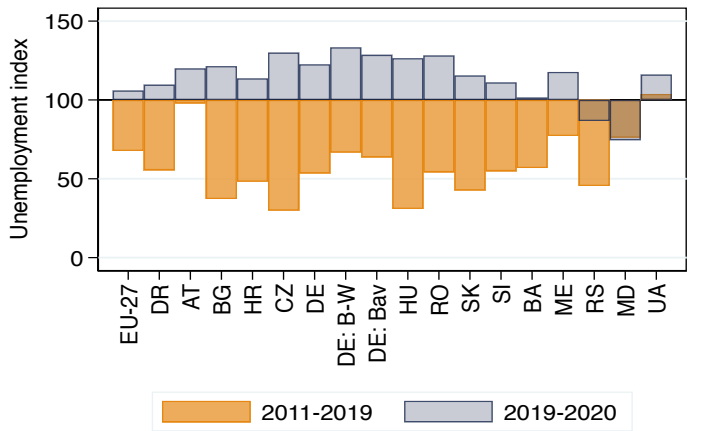
Unemployment

Unemployment rates and unemployment indices across countries for the population aged 15 to 74

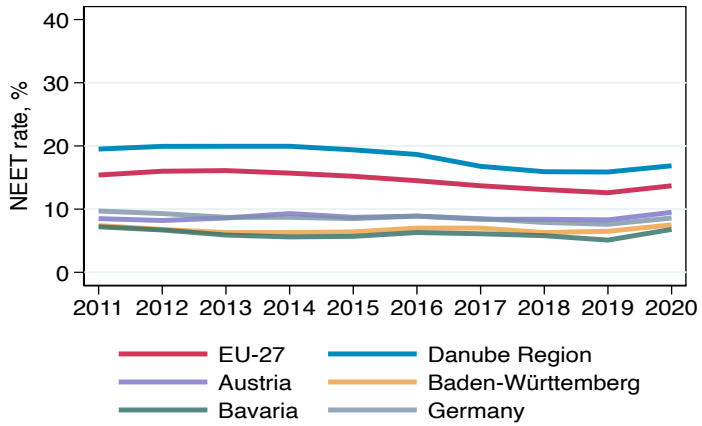


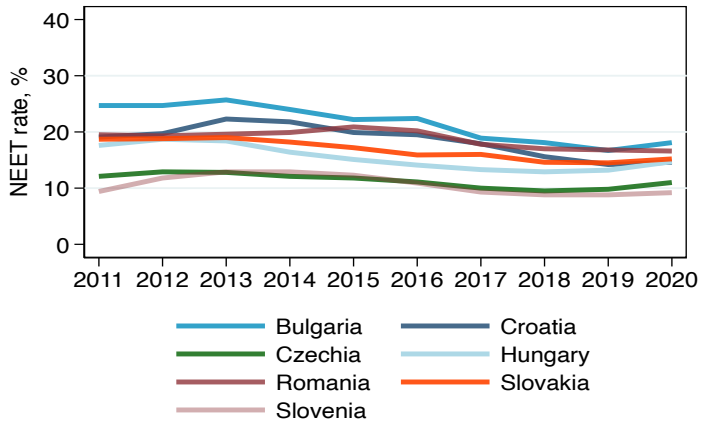


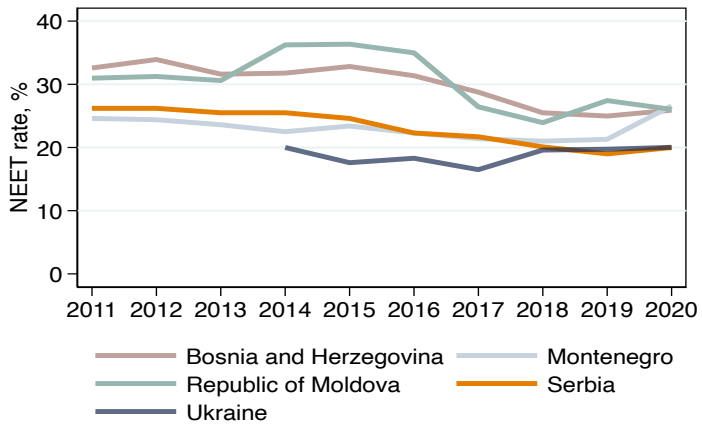


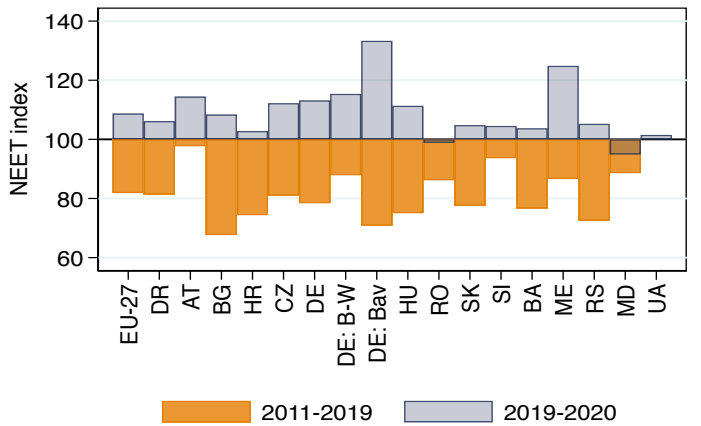


NEET rates and NEET indices across countries for the population aged 15 to 29









Recommendations

- COVID-19 pandemic has **widened inequalities in a number of key labour market indicators** across across EU Member States and other countries of the Region → policies should aim to facilitate post-pandemic stabilisation, particularly in the countries hit the most by the pandemic (Bosnia and Herzegovina, Montenegro, the Republic of Moldova and Ukraine).
- **Sectors and occupations were unevenly hit by the pandemic** → various actions tackling employment recovery through additional training are needed. Such actions will help to:
  - Re-allocate the labour from the most affected branches, which faced major job reductions and very slow employment recovery (e.g. tourism and entertainment activities), to the sectors that were mildly affected by the pandemic (e.g. manufacturing, construction and public administration)
  - Foster quick employment recovery of the people who lost their jobs and prevent long-term unemployment increase.

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Objective II:

Contribution to Improved Educational Outcomes and Relevant Skills and Competences in the Danube Region, Focusing on Learning Outcomes for Employability, Entrepreneurship, Innovation, Active Citizenship and Well-Being

Aims of the Objective II

- To analyse a number of key indicators related to improved educational outcomes and relevant skills of people in the Danube Region, namely:
  1. Participation in pre-school education
  2. Employment rates by educational attainment level
  3. ICT skills
  4. Proportion of population with at least upper secondary education
  5. Proportion of population with tertiary education
- Draw cross-region comparison with an emphasis on cross-country differences in education systems and pubic support of education.

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Main results

- Strongly heterogeneous educational outcomes despite overall improvements in 2011–2019
  - EU Member States have much better educational attainments compared to other countries of the Region, particularly in the context of **pre-school enrolment, ICT skills and the propensity to hold tertiary education**
- The **employment rate of people aged 20 to 24 holding at least upper secondary education** revealed a steady pattern:
  - The highest in 'old' Member States, followed by the 'new' Member States and then by EU (potential) candidate states and EU neighbourhood countries
- **Pre-school enrolment** was strikingly low in Montenegro, the Republic of Moldova and Serbia despite a major improvement in the former two countries.
- Croatia, Bosnia and Herzegovina, Bulgaria and Romania revealed systematically low **ICT skills**.
- The levels of **tertiary education** are lowest in Bosnia and Herzegovina, Montenegro, the Republic of Moldova, Romania and Serbia, yet the dynamics remained positive.

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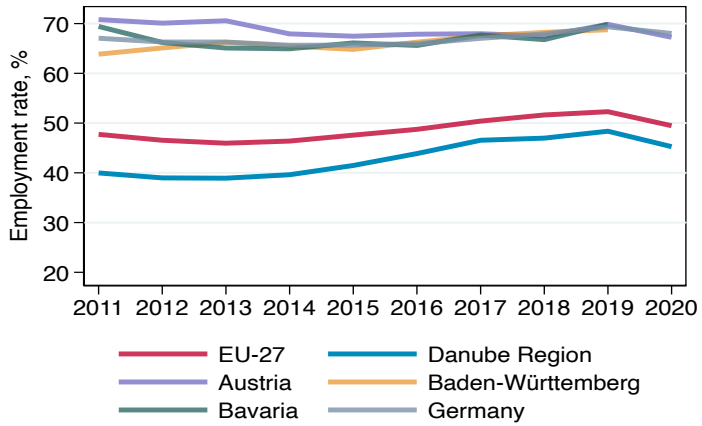
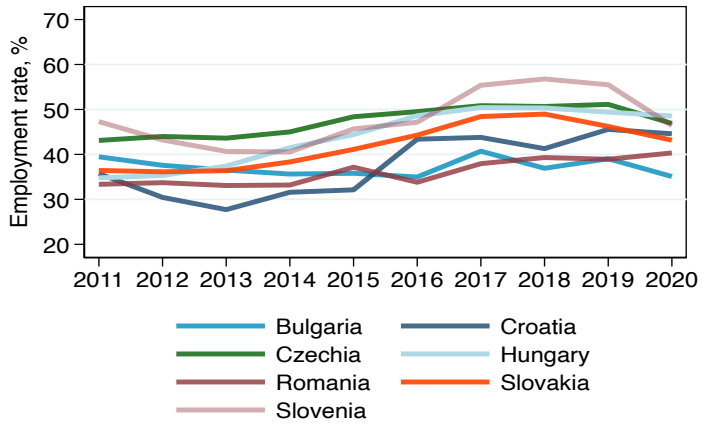
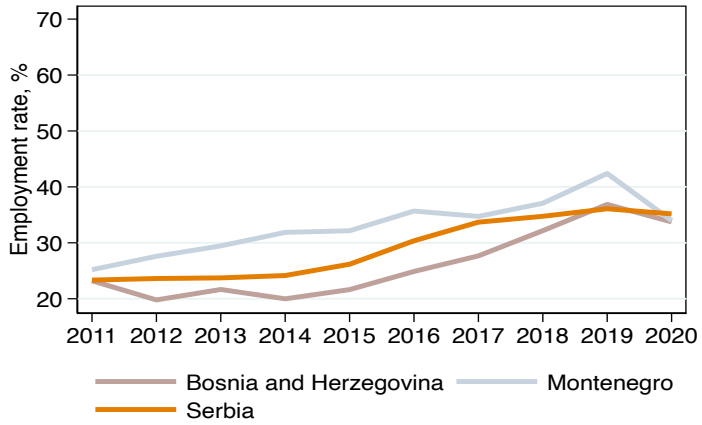
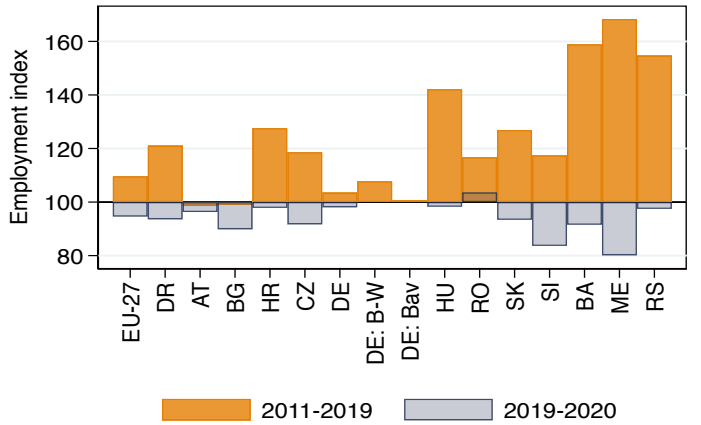
Employment of youth

Employment rate of people aged 20 to 24 who have completed at least upper secondary education across countries



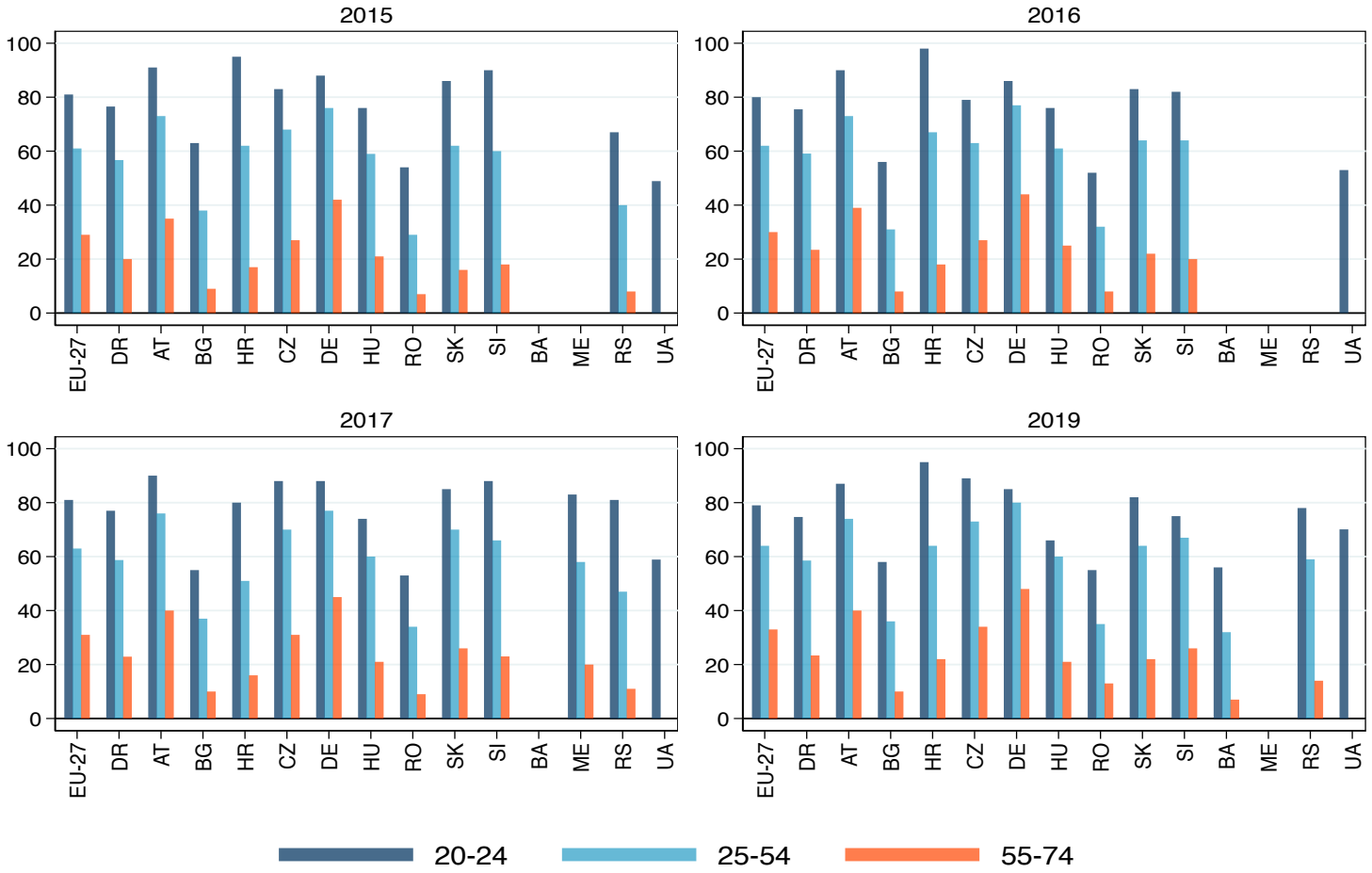






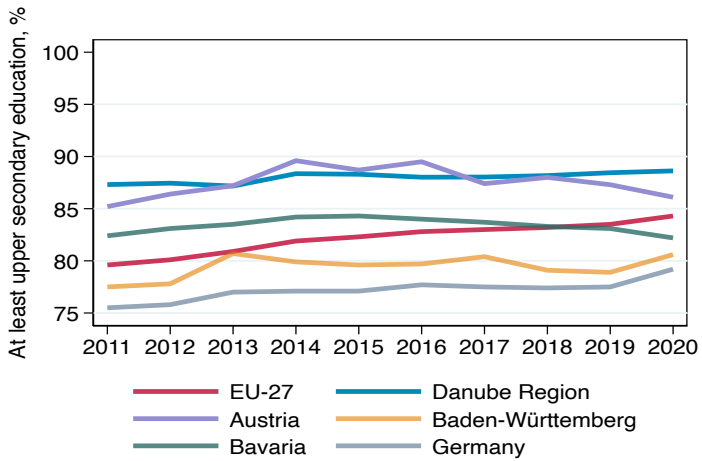
ICT skills

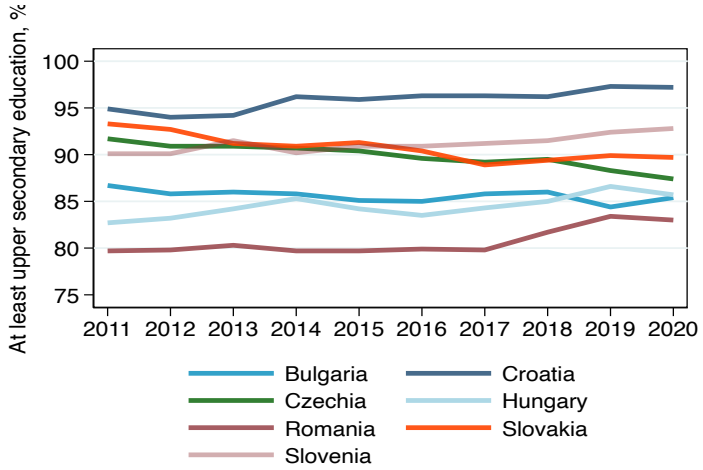
Share of population with basic or above basic overall digital skills by age groups across countries

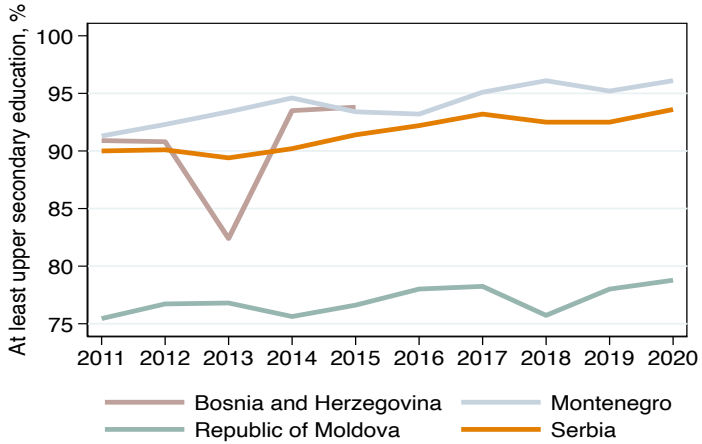


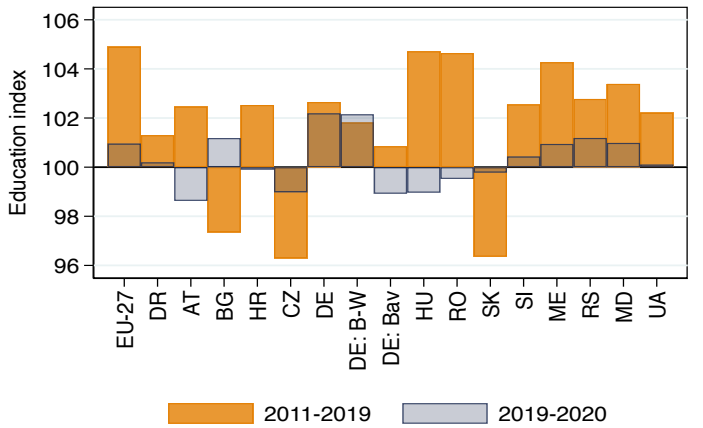
Upper secondary education

Proportion of population aged 20 to 24 having completed at least upper secondary education across countries









Recommendations

- Policy action towards **improvement of educational outcomes** needs to take the interrelation of all study levels into account → only those students who attained upper secondary education have a potential to obtain tertiary degree →
  - Actions at all levels of educational systems are required
  - Policy should aim at more inclusive and more accessible education
  - Emphasis on the development of hard and soft skills from an early age is needed
- Technological advancements → **a growing need for ICT specialists as well as an average increase in ICT skill demands** in other professions
  - ICT skills will be an essential part of the job profile for many jobs in the future
  - Improvements of ICT skills should be in the spotlight of educational policy on all education levels
  - Older workers need to acquire sufficient ICT skills via on-the-job and off-the-job training, which might be supported by governments

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Objective III:

Contribution to Increased Quality and Efficiency of Education, Training and Labour Market Systems

Aims of the Objective III

- To analyse key four indicators of quality of education and training over 2011-2020, namely:
  1. Public expenditure on education
  2. Private expenditure on education
  3. Distribution of teachers and stuff
  4. Public expenditures in labour market policies (LMP)
- Evaluate the cross-region disparities bearing in mind cross-country discrepancies in economic performance.

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Main results

- Both **governmental and private expenditures on education** increased substantially in Croatia, whereas in most of the other countries of the region, they declined in 2011–2019. Most stark increases:
  - Austria and Slovenia - private expenditure on pre-primary education
  - Bulgaria, Czechia and Slovakia - private expense on tertiary education
- **The share of pupils/students per teacher** in the Danube Region increased on all education levels, except post-secondary (both non-tertiary and tertiary) → growing pressure on the educational systems.
- Drastic cross-country differences in the absolute levels of **LMP funding** within the region:
  - Austrian government spent about 2% of GDP on LMP support in 2019
  - Romania and Serbia spent practically nothing in 2019
  - LMP funding declined in all countries, except for Austria and Bulgaria

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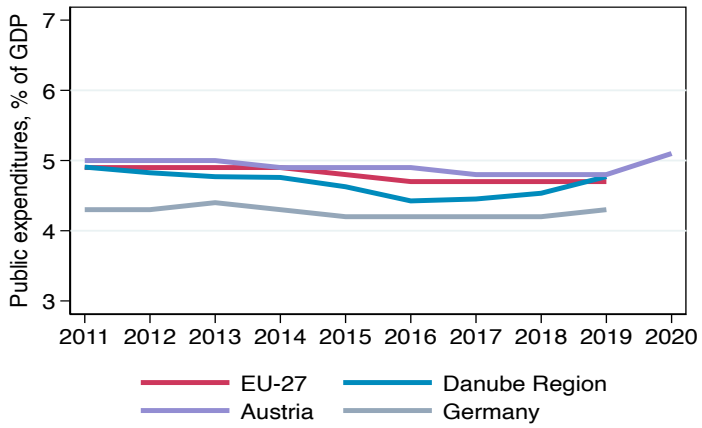
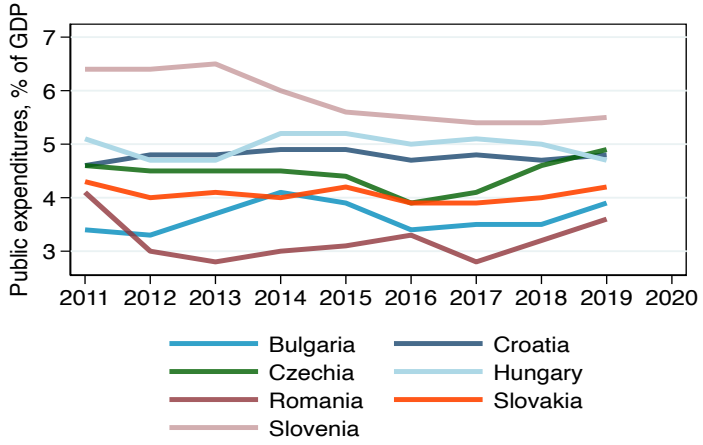
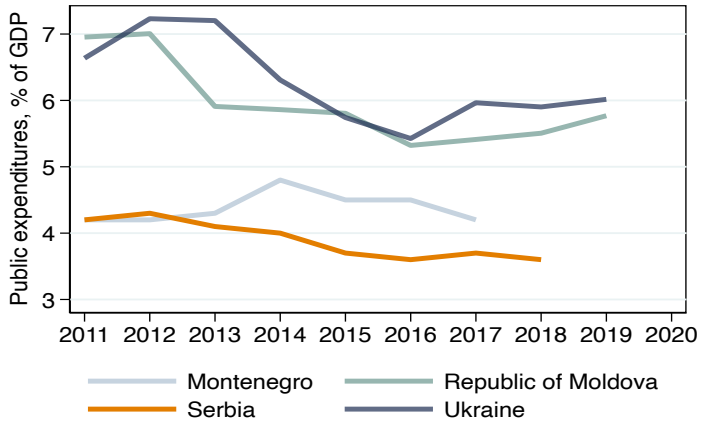
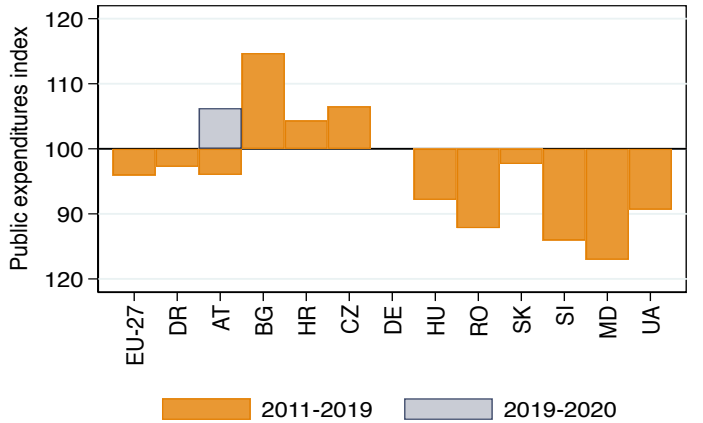
Public expenditure on education

Public expenditure on education in % of GDP for selected countries



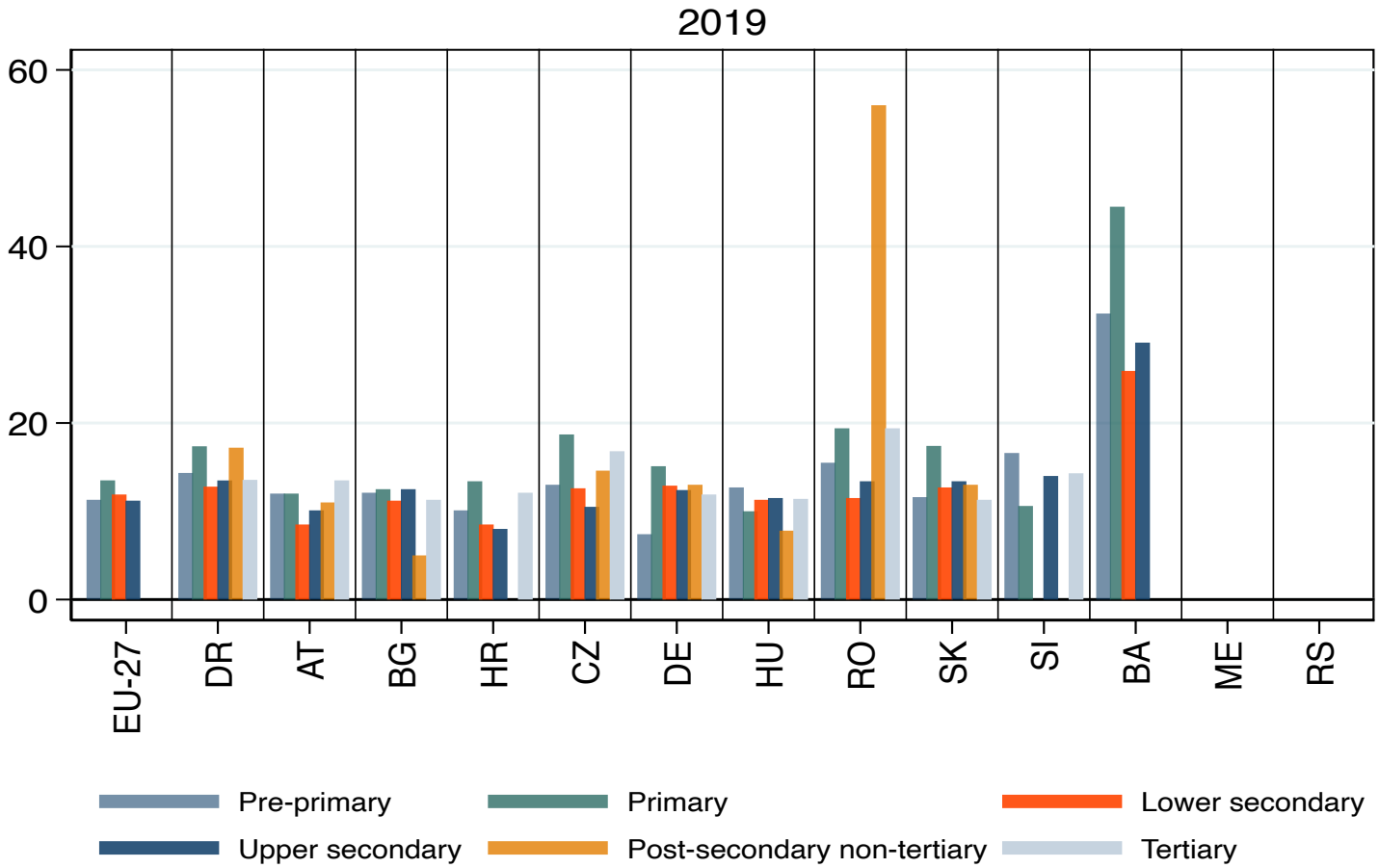






Ratio of students to teachers

Ratio of pupils and students to teachers and academic staff in 2019 for selected countries



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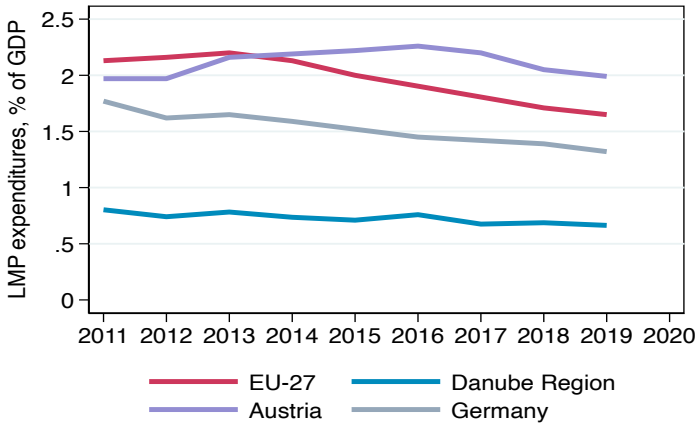
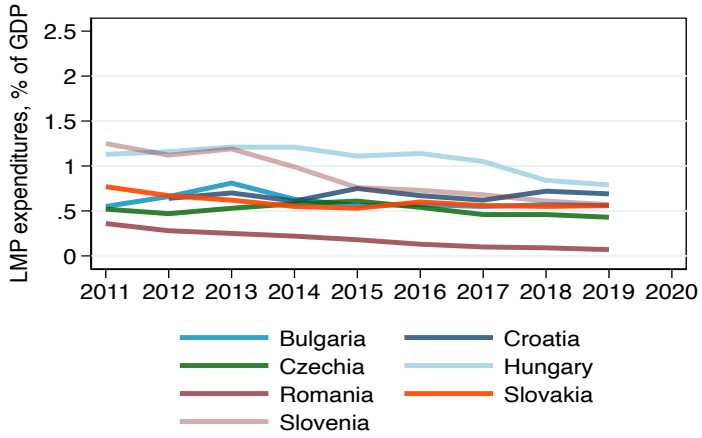
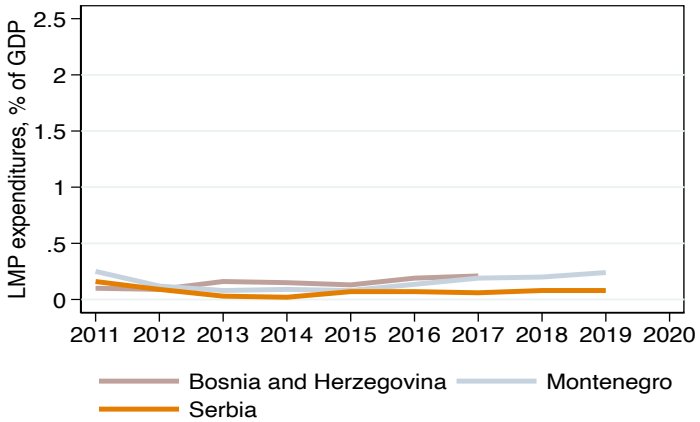
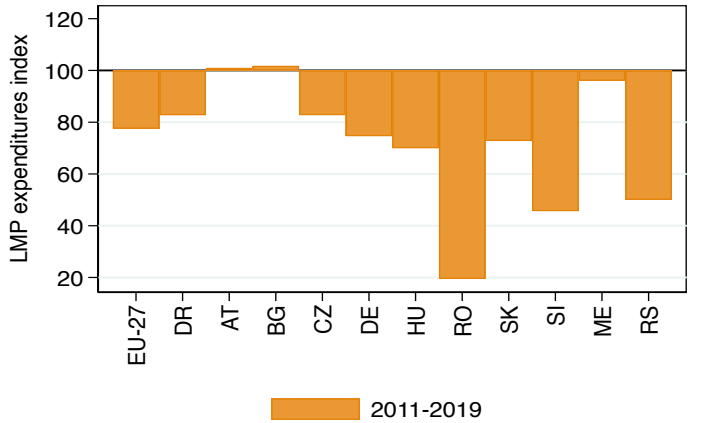
Public expenditures on LMP

Public expenditure on labour market policies in % of GDP for selected countries









Recommendations

- **The rising share of pupils/students per teacher on the lower and medium education levels** in the region needs a policy response →
  - Increased workload per teacher
  - Less time for the teacher to spend on individual work with each student
  - Overall lower quality of education
- **Decline in LMP** is another worrying trend:
  - LMP is an important tool to support the unemployed and other disadvantaged groups in their transition from unemployment or inactivity to employment
  - Well-organised and sufficiently funded LMP helps combat long-term unemployment and increase socio-economic well-being in the medium run
  - LMP appears crucial in the post-pandemic recovery - people who lost their jobs may need to acquire new skills to re-integrate into the labour market and find a job in a different sector and/or occupation → **LMP is a crucial tool to prevent mounting long-term unemployment**, as those who lost their jobs during the pandemic may fail to find new ones and stay unemployed

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Objective IV:

Contribution to Ensuring Inclusive Education and Training and Promoting Inclusive Labour Markets, Equal Opportunities and Non-Discrimination as well as Promoting Civic Competences and Life-Long Learning Opportunities for All

Aims of the Objective IV

- The objective aims to analyse education system and labour market from the perspective of inclusiveness, equal opportunities and non-discrimination, relying on eight key indicators:
  1. Gender pay gap
  2. Share of people at risk of poverty
  3. Inequality of income distribution – quantile share ratio and GINI index
  4. Performance of pupils in basic competencies (PISA test)
  5. Life-long learning (LLL)
  6. Share of early leavers from education and training
  7. Education equality – PISA index of economic, social and cultural status (ESCS) and TIMSS test performance
  8. Access to the internet

Main results I

- **Poverty and drastic income inequality** persist
  - EU (potential) candidate countries and neighbourhood countries have much higher poverty and income inequality than the 'old' EU Member States
  - Among the 'new' EU Member States Bulgaria and Romania had strikingly high risk of poverty
- Shares of **low-achieving students** have increased substantially in most of the countries, with the most striking jump in science → educational outcomes have declined
- Gender, immigration and socio-economic status **disparities in basic competencies** persist
  - Girls tended to have much stronger reading skills and lower mathematics abilities in all countries
  - Immigrant pupils have lower reading, mathematics and science skills (except for Hungary and Montenegro)
  - Pupils with higher socio-economics status performed much better in all domains in all countries without exceptions.

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Main results II

- The propensity to **leave school early** varied across the region
  - Bulgaria, Hungary, the Republic of Moldova and Romania appeared to have a remarkably high share of early school leavers, ranging far above the EU-27
- The Danube Region appeared extremely heterogeneous in terms of **LLL propensity**
  - 'Old' Member States having the highest shares of LLL along with Czechia and Slovakia
  - In all other countries in the region, the LLL was strikingly low
  - The COVID-19 pandemic reduced the LLL even further ← related to the overall drop in educational activities due to the social distancing measures and suspension of various training opportunities.
- **Internet access** has become more widespread in all countries of the Danube Region, with no exceptions, yet the 'old' EU Member States have the highest access rate in the region.

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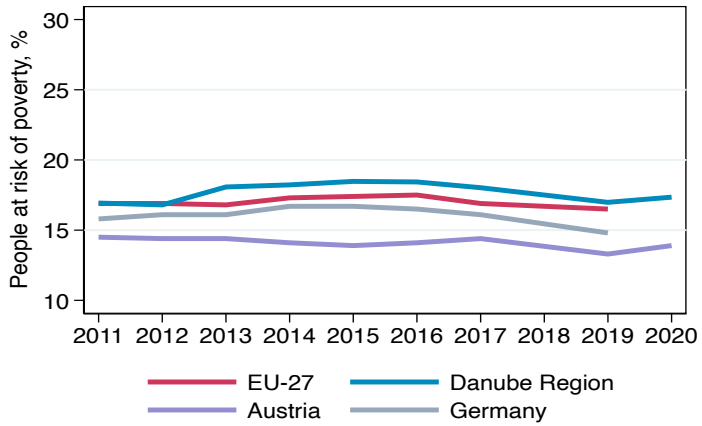
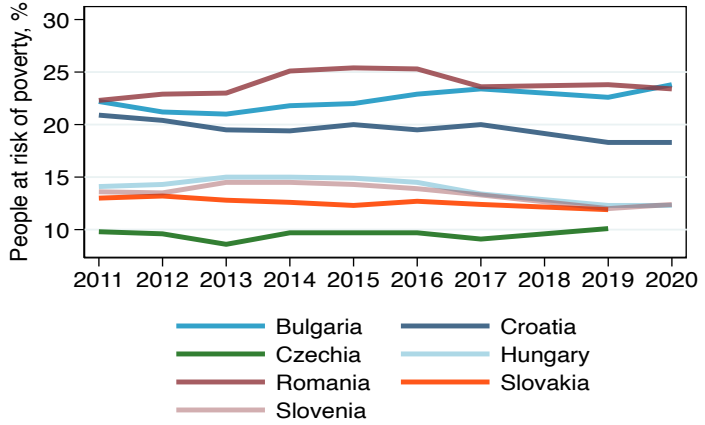
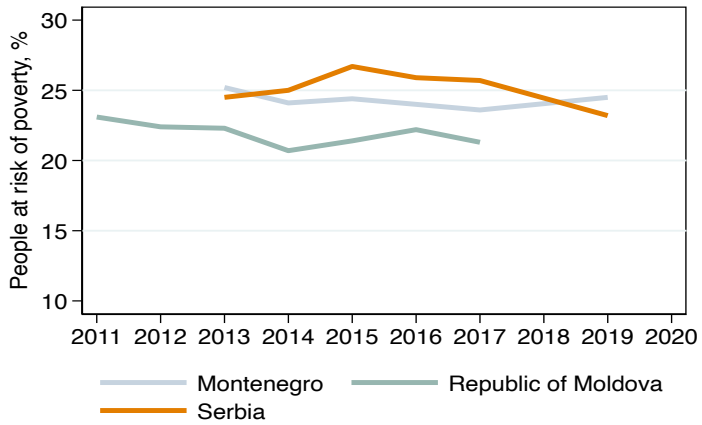
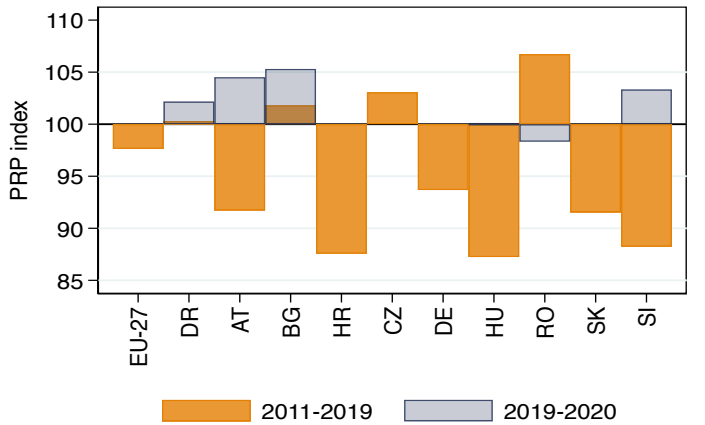
Risk of poverty

Share of people at risk of poverty from 2011 to 2020 and the index change in the proportion of people at risk of poverty across countries



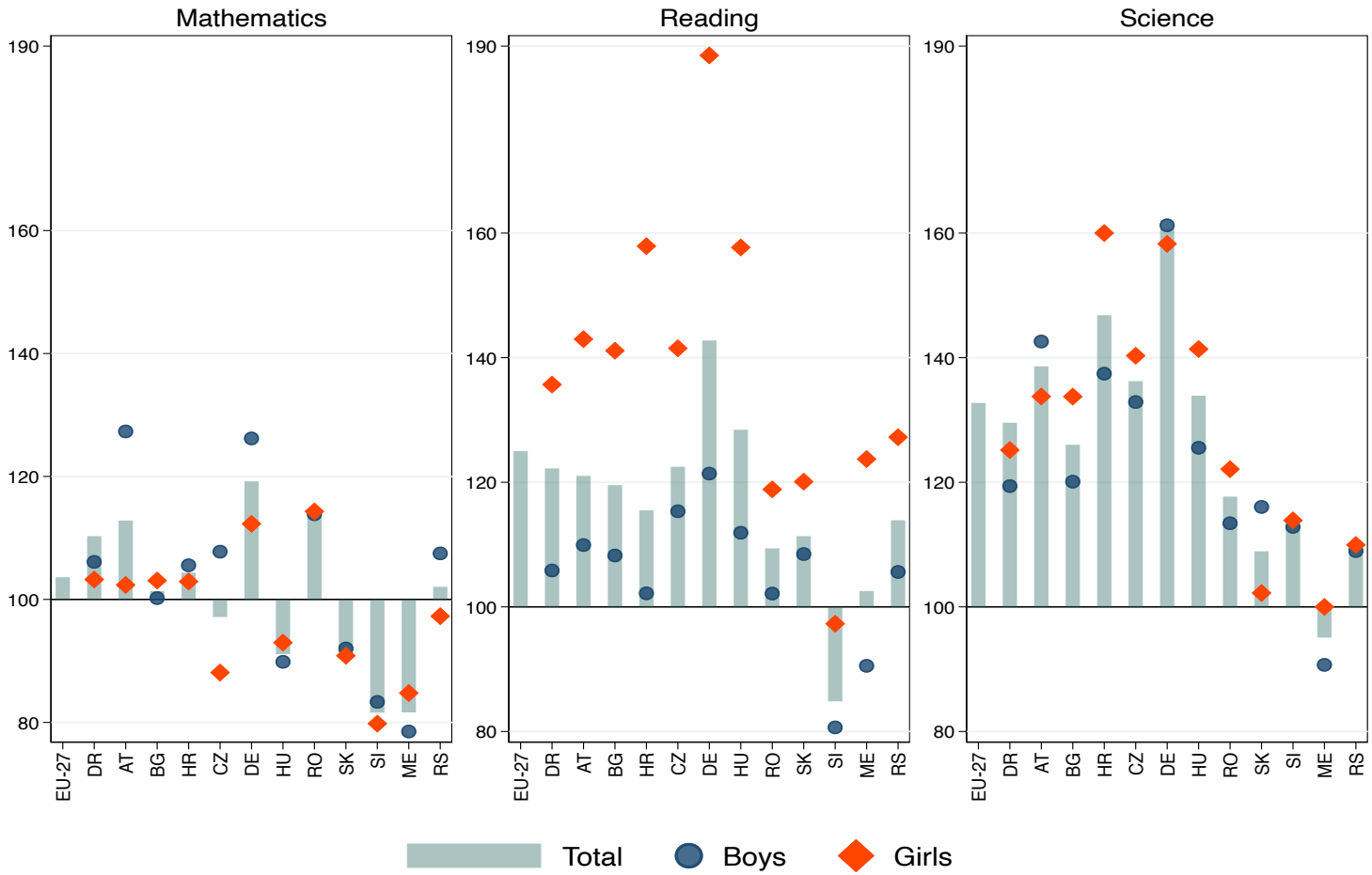






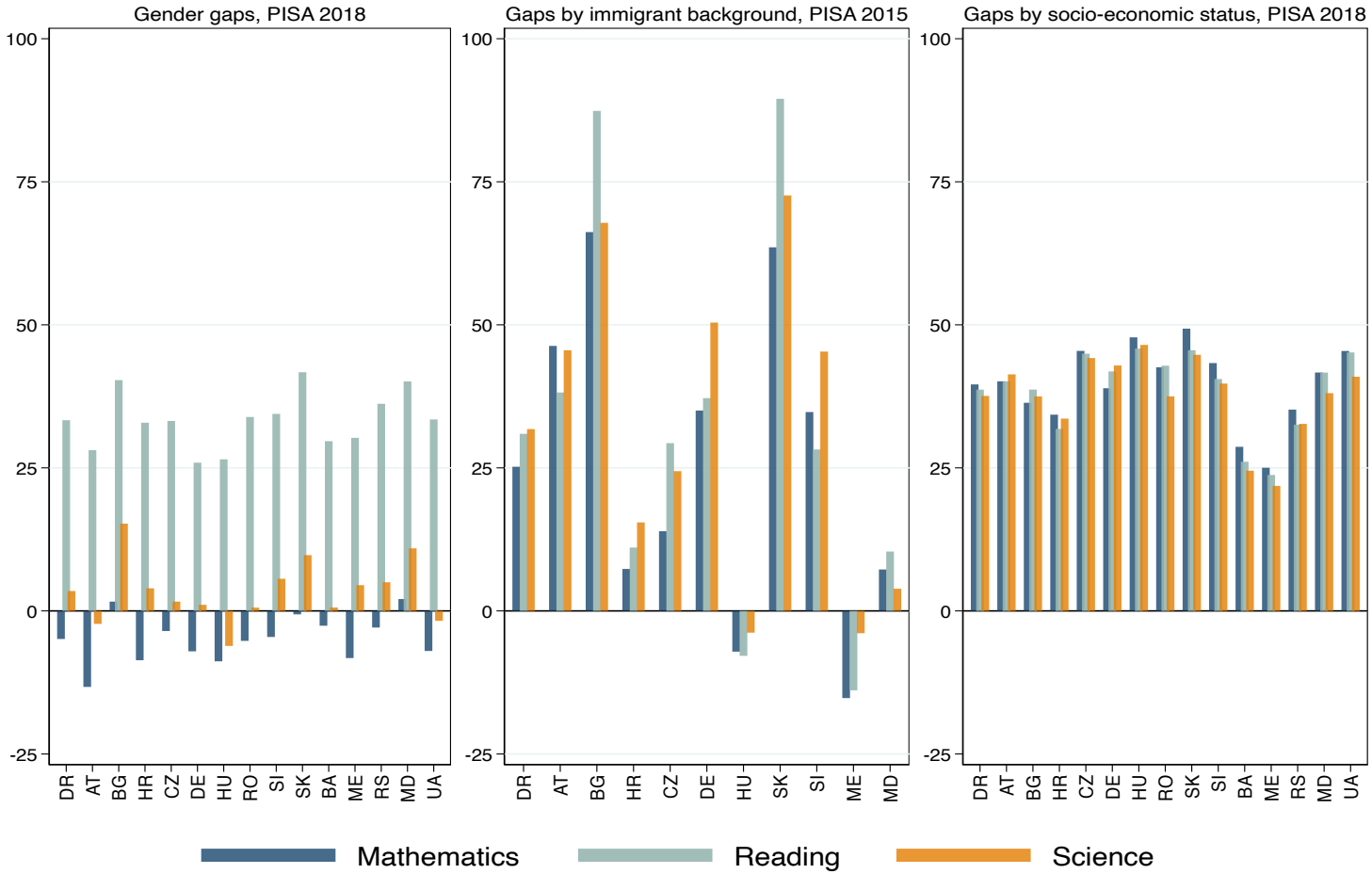
Share of underachievers

Change in the share of low-achieving students in mathematics, reading and science by gender across countries for 2018 to 2012



Gaps in test performance

Gaps in test performance by gender, migration status and socio-economic status across countries



Recommendations I

- The substantial **gender gaps in mathematics** call for special educational policy attention towards support and encouragement of girls in this discipline
  - To effectively narrow the gender gaps in given disciplines, steps need to be taken as early as possible, as the gaps emerge already at a very young age
  - Additional training, encouragement and psychological support may be valid policy measures
  - It appears more efficient to try to prevent the gaps than to narrow them later on
- Policy actions towards **strengthening students' commitment** to complete at least upper secondary education and providing additional **study support to low-achieving students and students from lower socio-economic backgrounds** are needed
  $\rightarrow$ early school leaving results in worse labour market outcomes and eventually increases poverty and inequality.

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Recommendations II

- An increase of **internet access** in the Danube Region countries with lower income levels need policy action
  - Investments in infrastructure improvements
  - The reduction of costs related to internet usage
  - The improvement of the computer skills of the population in all age groups, particularly in rural areas

  → The COVID- 19 pandemic showcased **the immense role of the internet in safeguarding employment, fostering education participation and staying connected with society** in the face of social distancing measures and lockdowns. → Internet access will remain equally important even in post-pandemic times
    - Some jobs may keep a (partial) remote mode
    - Online education sources gained immense popularity and proved very useful, especially for those who cannot participate in formal education programmes for various reasons.