

# Employment and Social Developments in Europe

Upward social convergence in the EU  
and the role of social investment



2024

Annual review

# Employment and Social Developments in Europe 2024

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# Foreword



In 2019 the Commission set a new course towards a fair and inclusive Europe that protects its citizens and creates opportunities. During this mandate, the Commission has set targets for higher employment, more training, and much less poverty; backed by targeted initiatives to implement the 20 principles of the European Pillar of Social Rights. EU legislation promoting pay transparency will help achieve equal pay for equal work for both women and men. EU-funded projects are empowering young people to acquire the skills they need, build up confidence, and land their first job. EU funds have also helped governments and companies to invest in workers' training for today's labour market. The EU Directive on adequate minimum wages has strengthened EU workers' right to fair wages that provide for a decent standard of living. Workers in the platform economy will have more rights, social benefits and better working conditions thanks to a dedicated EU Directive. The recently adopted European Framework for quality apprenticeships will further support a highly-skilled and qualified workforce by helping young people enter the world of work. The action plan on tackling skills and labour shortages will help unlock the EU's growth potential, support its competitiveness, and provide better opportunities for all. The European Child Guarantee ensures that children in need get all possible opportunities to break the cycle of disadvantage and thrive in life. The European Care Strategy aims to make quality care more accessible and more affordable. The European Platform to Combat Homelessness brings partners from across the EU together to tackle this most extreme form of social exclusion.

In 2023, the EU reached a historical high for employment and a historical low for unemployment, respectively at 75.3% and 6.1%. For the first time in history, the employment rate for women in the EU surpassed 70% in 2023, despite subdued growth. In addition, fewer people are now at risk of poverty and social exclusion.

As it examines the role social investment can play in promoting upward social convergence in the EU, the annual edition of our review *Employment and Social Developments in Europe* (ESDE) provides analytical evidence that can support further the development of a social Europe that protects. The recently launched Social Convergence Framework will further strengthen our actions to promote upward social convergence, by firmly embedding the analysis of Member States' social indicators in the European Semester process.

ESDE's analysis shows that social investment, including reforms and investments in up- and re-skilling, lifelong learning, active labour market policies, early childhood education and care, and active labour market policies, can contribute to upward social convergence in the EU. Affordable housing and social protection complement our social investment policies, thus also helping European citizens converge towards better labour markets and social outcomes. Our analysis confirms that ESF+ funded investments in skills can lead to both long-term economic gains and a catching-up of regions with initially low levels of GDP per capita through increased labour productivity. This is very welcome news, not least in a context of poor results in the latest PISA round measuring the basic skills of Europe's 15-year-olds. It also provides analytical validation of our steadfast promotion of better skills and access to employment. According to ESDE, investing in active labour market policies such as measures to support access to employment, including for youth and women, as well as supporting labour market transitions, can help people find new jobs and keep them for longer. ESDE's analysis also shows that social housing and housing allowances reduce poverty risks and contribute to narrowing the divergence of these risks across countries.

ESDE's findings strengthen our commitment to fully implement the European Pillar of Social Rights and meet the 2030 EU headline targets on employment, skills, and poverty reduction. I encourage you to delve into the rich content of this report to learn how we have been strengthening a social Europe that includes and empowers everyone, enhances the competitiveness of our economy and resilience of our society, promotes the sustainability of our welfare systems and protects the vulnerable among us.

**Nicolas Schmit**

Commissioner, Jobs and Social Rights



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# Executive Summary

## UPWARD SOCIAL CONVERGENCE IN THE EU AND THE ROLE OF SOCIAL INVESTMENT

This edition of the *Employment and Social Developments in Europe* (ESDE) review examines patterns and developments of social convergence in the EU over the last decade, showing important catching-up trends among Member States. It discusses the role of social investment in supporting social and economic developments, providing evidence of the impact of selected policies on socioeconomic outcomes. It also examines how policies on housing, social protection, and green reforms and investment can support upward social convergence.

### CHAPTER 1: MAIN ECONOMIC, LABOUR MARKET AND SOCIAL DEVELOPMENTS

**In a context of broad economic stagnation in 2023, labour markets continued to be remarkably resilient and social outcomes showed some signs of improvement.** In the wake of the COVID-19 pandemic, Russia's ongoing war of aggression against Ukraine, and the ensuing energy crisis, EU economic output barely increased and the cost of living remained high, against a reduction in inflation. Social outcomes improved slightly, with declining at-risk-of-poverty (AROP) indicators and improving average real income. However, energy poverty increased. The outlook for 2024 points to a gradual expansion of gross domestic product (GDP) amid high geopolitical risks.

**In 2023, economic growth in the EU lagged behind other advanced economies.** The EU witnessed a 0.4% increase in real GDP, down from 3.4% growth in 2022 and 6% in 2021. Net exports were the primary driver of the modest increase in real GDP, with both private and public consumption giving only a slight impetus to GDP growth, and investment contributing negatively. The forecast for economic growth in 2024 is 1.0% for the EU and 0.8% for the euro area.

**While inflation has been growing since the second half of 2021 in both the EU and the euro area, it slowed significantly in 2023.** In December 2023, annual inflation in the EU reached 3.4% (2.9% in the euro area), a reduction of 7 percentage points (pp) compared to December 2022 (6.3 pp in the euro area). Inflation in the EU is predicted to decline from 6.4% in 2023 to 2.7% in 2024 (from 5.4% in 2023 to 2.5% in 2024 in the euro area).

**In 2023, the EU employment rate reached the record-high level of**

**75.3%**

**The labour market remained robust despite slower economic growth.** Alongside modest GDP growth, total employment increased by 1.2% in the EU and 1.4% in the euro area in 2023. Employment growth was driven by job creation in trade, transport, accommodation, and food services activities. Employment levels reached record highs, with 216.5 million people employed in the EU and 168.7 million people in the euro area (2.6 million and 4.1 million people more than in 2022, respectively).

**The employment rate also rose to record heights in 2023, at 75.3% in the EU (74.7% in the euro area), and 75.7% in Q1 2024, placing the EU on track to reach the EU employment headline target of at least 78% by 2030.** Five Member States have already reached their national targets and 13 have rates beyond the EU headline target. For the first time, the employment rate for women was over 70% and the gender employment gap narrowed to a record low of 10.2 pp in 2023 (-0.5 pp compared to 2022). Further improvements will be necessary to halve the gender employment gap of 2019 (which stood at 11.3 pp) by 2030, a commitment outlined in the European Pillar of Social Rights Action Plan. Women are still overrepresented among temporary and (especially) part-time workers, at 28.5%, compared to 8.4% for men.

**The unemployment rate decreased slightly in 2023, falling to historically low levels.** The EU unemployment rate in 2023 was 6.1% (-0.1 pp) (6.6% in the euro area, -0.2 pp), with a rate of 6.4% for women and 5.8% for men (6.9% and 6.2%, respectively, in the euro area). At the same time, the youth unemployment rate remained stable, at 14.5% in both the EU and the euro area (+0.1 pp), with young women's unemployment rates lower than those of young men. In 2023, the long-term unemployment rate declined to 2.1% in the EU and 2.4% in the euro area.

**Against the background of a robust labour market, companies experienced labour and skills shortages in 2023.** Job vacancies remained at record high levels (2.9% for 2023 and 2.6% for Q1 2024), with many companies struggling to recruit and possibly deciding to retain workers even if not fully utilised (so-called labour hoarding). Although declining shortages in the industry sector led to a slight fall in the overall labour shortages indicator in 2023, labour and skills shortages remain at historically high levels and may persist, given ongoing demographic changes. Having recovered in 2021 and 2022, labour productivity decreased in 2023 compared to 2022 (-0.8% per employed person and -0.6% per hour).

**The shares of people aged 15-29 neither in employment, nor in education or training (NEET) and early school leavers declined further.** In 2023, the NEET rate fell by 0.5 pp to 11.2%. The proportion of early school leavers experienced a marginal reduction, declining by 0.1 pp to 9.5%, with a rate of 7.7% for women and 11.3% for men. This evolution took place in the context of a further considerable decline in the basic skills of 15-year-old pupils in the EU.

**46.6%**

**of adults participated in education and training in 2022**

**Adult participation in education and training remains well below the EU target for 2030.** In 2022, 46.6% of people aged 25-64 in the EU participated in education and training activities, an increase of 2.9 pp compared to 2016. The participation rate for formal learning was 6.3%, with non-formal learning at 44%. Constraints on participation are predominantly attributed to the fact that potential participants do not see the need for specific training. Limited participation has also reflected insufficient supply or difficulties in accessing relevant quality training, scheduling conflicts, family responsibilities, and financial barriers. Lifelong learning and upskilling/reskilling efforts will be essential for the success of the green and digital transitions and for EU competitiveness.

**Real gross disposable household income (GDHI) continued to recover in 2023, after declining in 2021.** As inflationary pressures eased and nominal wage growth gained pace in 2023, real GDHI was 1.8% higher in Q4 2023 compared to Q4 2022. Increases in real household income were largely due to improvements in the real compensation of employees and self-employed people. Despite only modest increases in electricity prices and a decrease in gas prices, the recovery of households' purchasing power continued to be held back by the still high inflation rate of essential items, such as food, clothing and rent.

**In 2023, the AROPE rate decreased slightly to**

**21.4%**

**At-risk of poverty or social exclusion (AROPE) decreased slightly in 2023 (2022 income), while income inequality remained broadly stable, and severe material and social deprivation (SMSD), as well as energy poverty increased, in particular for low-income households.** The AROPE rate decreased by 0.3 pp from 2021, but remained high for children, young adults, people with disabilities, non-EU citizens, those with low levels of educational attainment, and unemployed people. Tax-benefit systems contributed substantially to mitigating poverty and inequality. However, the loss of purchasing power due to high inflation in 2022 is better reflected in the modest decrease of real incomes and a slight increase in the SMSD rate (from 6.3% in 2021 to 6.8% in 2023) and in energy poverty as measured by the inability to keep home adequately warm (from 6.9% in 2021 to 10.6% in 2023).

**With easing inflationary pressures, financial distress declined but remained still high for the lowest income quartile.** At the end of 2023, the share of households reporting financial distress was particularly high for the lowest income quartile, at 28.3% in December 2023 (+0.9 pp compared to December 2022), 10 pp or

more above the shares for other income quartiles. In the context of easing inflation, this level reached 27.6% in July 2024 (-0.7 pp compared to one year before).

**Having slowed in 2021, social protection benefit expenditure rose strongly in real terms in 2022 in response to the cost-of-living crisis.** In 2022, social protection benefit expenditure grew compared to 2021 (+2.7%), except for unemployment benefits. Tax-benefit systems played a large role in supplementing people's market income in 2023: the average share of benefits (excluding pensions) in individuals' full disposable income was higher than before the onset of the COVID-19 pandemic (8.3% in 2023, compared to 7.1% in 2019). In the context of high financial distress experienced by households in the lowest income deciles, this highlights the importance of social protection systems and government intervention in buffering the financial impact of crises on households.

## CHAPTER 2: SOCIAL CONVERGENCE IN THE EU: TAKING STOCK

**Upward economic and social convergence is essential for European integration.** It implies both an improvement in socioeconomic indicators at EU level and a reduction in disparities between countries or regions. Convergence also entails poorer performers catching up with other countries or regions. ESDE 2024 examines various dimensions of convergence, covering developments since 2007, particularly from 2014 to 2023. This period was chosen to follow previous research documenting the setbacks to long-term convergence posed by the 2008 financial crisis.

**Strong economic performance contributed to the catching-up of central and eastern Member States and to some convergence overall.** Since 2014, GDP per capita in the EU increased at a faster pace than in previous years. After years of stable convergence, changes in national and regional variation in GDP per capita were mixed, but there is clear evidence of catching-up by central and eastern Member States. Disparities in household incomes narrowed across countries and displayed some catching-up. In the euro area, household wealth grew by over 20% between 2017 and 2021, with top-earners benefiting the most from this growth.

**Between 2008 and 2023, employment in the Member States converged upwards**

**Labour market outcomes converged upwards over the last decade.**

Following the downturn during the financial crisis, the employment rate in the EU rose by almost 8 pp between 2014 and 2023, while the unemployment rate declined by 5 pp, with youth unemployment declining by almost 10 pp. NEET and youth unemployment rates also improved. The

variation in these labour market outcomes across Member States and regions declined sharply, pointing to upward convergence, supported by the catching-up of poorer performers. Nevertheless, differences across countries and regions remain sizeable.

**Labour market developments show upward convergence in gender equality in the EU, although progress is slowing.** The gender employment gap declined from 16 pp in 2007 to 10.2 pp in 2023 but most of that reduction was achieved prior to 2014. Persistent gender segregation in the EU labour market and differences in the career trajectories of mothers and fathers remain stumbling blocks to further progress. Women remain more involved than men in housework and childcare responsibilities. More women than men do housework (63 % compared to 36 %) and care for children (34% to 25%) on a daily basis. Both the gender care gap and its variation across countries have been stable over time. This is linked to limited participation of small children in early childhood education and care (ECEC) in the EU. Currently, around 37% of children aged 0-2 participate in ECEC, with the EU aiming to reach 45% participation by 2030, in line with the revised Barcelona Targets.

**Cross-country differences in labour market outcomes are linked to several factors, including differences in human capital development that affect the skill supply.** The share of the EU population attaining tertiary education has grown sharply, from 29% in 2007 to 43.9 % in 2023, with considerable variation between national rates, ranging from 22.8% to 66% in 2023. Over the same period, disparities expanded in adult learning participation and to a minor extent in the development of basic digital skills. Some low-performing countries caught up with others in adult learning participation, but there is no evidence of catching-up in tertiary education attainment.

**From 2015 to 2023, poorer performers caught up strongly on AROPE rate, GDP and GDHI**

**The at risk of poverty or social exclusion rate has converged for both adults and children.**

The AROPE rate at EU level decreased from 24% in 2015 to 21.4% in 2023 for the population as a whole. During the same period, the share of children at risk of poverty or social exclusion aged less than 18 years declined from 27.4% to 24.8%. Differences in AROPE rates (and its components) decreased across Member States and

regions, with a prominent catching-up of the poorest-performing countries. Improvements in AROPE rates (and

employment outcomes) despite the COVID-19 pandemic, energy and geopolitical shocks reflect the effectiveness of the exceptional support measures adopted by Member States and the EU. Nevertheless, differences across Member States in AROPE rates remain considerable. In 2023, national AROPE rates ranged from ca. 12% to 32% (10.7% to 39% for children), highlighting a clear risk that certain population groups could be left behind.

**Convergence between Member States does not necessarily mean convergence at regional level within Member States.** Tertiary education attainment, for example, diverged within 16 of the 18 Member States analysed. These developments stemmed from sharp increases in capital regions due to the concentration of universities, high demand for tertiary-educated workers, and associated wage premiums. By contrast, a lack of tertiary education opportunities and an outflow of highly qualified workforce posed challenges for some less urban or more rural regions, contributing to (risks of) talent development traps. Adult education participation also diverged between regions in the majority of Member States analysed, while developments in NEET rates were mixed.

**60% +**

**of EU population reject the stereotype that women are more interested in home and children than in paid work**

**Progress towards gender equality is supported by increasingly positive attitudes towards women's paid work, although significant differences persist across countries.** More than 60% of the EU population reject the stereotype that women prefer being at home over paid work, compared to less than 40% in 1990. The prevalence of work equality-based beliefs varies between countries, reaching over 80% in northern Member States and ranging between 30 and 60% in central and eastern Member States.

**The EU promotes upward socioeconomic convergence through investment and reform initiatives.** As enshrined in the Treaty, <sup>(1)</sup> a major goal of the EU is to ensure closer coordination of economic policies and sustained convergence of Member States' economic performance. Since its establishment in 1957, the European Social Fund (ESF) (European Social Fund Plus (ESF+) since 2021) has promoted convergence and cohesion across countries and regions, with the specific objective of stimulating growth and employment in the least-developed regions. Furthermore, the Recovery and Resilience Facility (RRF), which provides EUR 648 billion (at 2022 prices) to Member States for implementing reforms and investments making their economies and societies more sustainable, resilient and prepared for the green and digital transitions, is also contributing to promoting social cohesion and convergence in the aftermath of the Covid-19 pandemic<sup>(2)</sup>. Efforts to foster social convergence and well-being are also specifically considered in the European Pillar of Social Rights and its action plan, and are monitored in the context of the European Semester for economic and social policy coordination, the EU's multilateral surveillance framework. A number of policy initiatives have been adopted under the Pillar, including a Directive on adequate minimum wages, a Recommendation on adequate minimum income, the European Skills Agenda, the reinforced Youth Guarantee, and the Child Guarantee. Recently, efforts to monitor challenges to social convergence and to identify related policies have gained prominence within the European Semester, notably through an analysis based on the principles of a Social Convergence Framework, building on existing tools such as the Social Scoreboard.

**Social dialogue remains an effective way of improving living and working conditions, which can support upward social convergence.** It helps to raise productivity, ensures social fairness, improves the quality of the working environment, and fosters democracy at work. Social dialogue is promoted in the 2022 Directive on adequate minimum wages, which requires Member States with a collective bargaining coverage below 80% to establish enabling conditions and promote an institutional framework that fosters strong social dialogue in wage-setting and collective bargaining. The 2023 Council Recommendation on strengthening social dialogue in the European Union seeks to support Member States in promoting social dialogue and collective bargaining at national level. <sup>(3)</sup> In January 2024, the Val Duchesse Social Partners Summit gave new impetus to social dialogue, with the European Commission committing to launching a Pact for European Social Dialogue and establishing a dedicated European Social Dialogue Envoy.

<sup>(1)</sup> See the most recent consolidated version of the TFEU at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02016E%2FTXT-20200301>

<sup>(2)</sup> Please see Mid-term evaluation of the Recovery and Resilience Facility (RRF), [https://commission.europa.eu/about-european-commission/departments-and-executive-agencies-old/economic-and-financial-affairs/evaluation-reports-economic-and-financial-affairs-policies-and-spending-activities/mid-term-evaluation-recovery-and-resilience-facility-rrf\\_en](https://commission.europa.eu/about-european-commission/departments-and-executive-agencies-old/economic-and-financial-affairs/evaluation-reports-economic-and-financial-affairs-policies-and-spending-activities/mid-term-evaluation-recovery-and-resilience-facility-rrf_en). EU Member States can also obtain tailor-made technical expertise to design and implement reforms from the Technical Support Instrument (TSI), whose support does not require national co-financing. Its budget in the 2021-2027 financing period is ca. EUR 865 million. See Regulation (EU) 2021/240 of the European Parliament and of the Council of 10 February 2021 establishing a Technical Support Instrument at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2021:057:FULL&from=EN>

<sup>(3)</sup> Council Recommendation of 12 June 2023 on strengthening social dialogue in the European Union, [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C\\_202301389](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C_202301389)



## CHAPTER 3: THE ROLE OF SOCIAL INVESTMENT

**Social investment entails reforms and investments that contribute to higher productivity and prosperity, alongside better social outcomes, fostering upward social convergence.** While there is no commonly agreed definition of social investment yet, this report considers social investment as public spending related to investments and reforms that, on top of pursuing social objectives and thereby fostering upward social convergence, are expected to produce returns in terms of economic growth through their impact on human capital and productivity, including via stronger innovative capacity and absorption of new technologies, and/or labour supply. Key areas include upskilling and reskilling, lifelong learning, active labour market policies (ALMPs), and early childhood education and care policies, which can be complemented by higher investment in affordable housing and social protection, among others. Returns on social investment are typically more substantial when they target early stages of life, such as ECEC, education and training. They also strongly depend on the efficiency of spending.

**ECEC participation in the EU is improving, but several Member States still fall behind the Barcelona participation target of 45% for children aged 0-2.** Low levels of participation in ECEC for some Member States call for higher investment. Analysis suggests that the additional yearly spending on ECEC needed to reach the EU Barcelona Targets by 2030 would amount to 0.085% of GDP at the EU level, more than EUR 11 billion. Children who can benefit most from attending ECEC, such as those from disadvantaged backgrounds, tend to participate least, with children facing different types of disadvantages having ECEC participation rates at least 10pp lower than those from non-disadvantaged backgrounds.

**Deterioration in pupils' skills is associated with decreasing efficiency of spending on education**

**The efficiency of spending on education has decreased over time, accompanied by a worsening of pupils' basic skills.** The 2022 Programme for International Student Assessment (PISA) study revealed a substantial deterioration in the basic skills of 15-year-olds in the EU since 2018. This can have an adverse impact on labour productivity and EU competitiveness, hindering wage developments over time. The efficiency of spending on school education per student also dropped sharply in 2022

and varied significantly across countries, underlining the relevance of factors such as quality of education in determining the effectiveness of investment in school education.

**ESF+ investments in skills are projected to contribute to upward economic convergence**

**Effective investments in skills can yield positive long-term impacts on labour market outcomes and economic growth, contributing to upward socioeconomic convergence.** Investments in skills through the ESF+ are projected to increase employment and GDP beyond the 2021-2027 programming period. A 0.1 pp increase in investment in the skills

profiles of young unemployed people is expected to increase employment across all age groups by 0.25% and raise GDP by more than the original investment, by around 0.18% in the long run. These interventions are projected to lead to an initial catching-up among regions lagging behind in labour market outcomes and GDP, reducing disparities across regions and facilitating long-term economic convergence.

**Investing in ALMPs can have positive effects on a broad range of labour market, social and economic outcomes, contributing to upward convergence in the EU.** Simulations suggest that ESF+ investments in ALMPs in the 2021-2027 programming period could raise EU employment and GDP in the long term, promoting regional economic and social convergence, reducing disparities, and prompting catching-up effects. Impact evaluations of Member States' specific ALMPs found that training programmes, job creation schemes and wage subsidies are effective at increasing employment, earnings, and social outcomes, particularly among long-term unemployed people.

**Other social policies complementing social investment can enhance convergence and reduce poverty.** For example, housing allowances intended to compensate for housing costs and social housing were found to reduce the AROP rate, respectively, by 1.4 pp (in 2022) and 0.4 pp (in 2019). At the same time, investment in workforce upskilling and reskilling to support the green transition can improve convergence in labour market outcomes. Investments in affordable and sustainable mobility, food, energy and housing are crucial for equitable climate neutrality. By stabilising incomes, social protection systems can mitigate poverty particularly during times of economic downturn. Simulations show that the tax-benefit systems in the EU in 2022-2023 would have absorbed almost half of a hypothetical 5% reduction in market income through reductions in taxes and social insurance contributions and increases in means-tested social benefits.

**The EU's commitment to high-quality investment and reform in employment and social areas is reinforced through a number of initiatives.** Many were launched in the context of the European Pillar of Social Rights and its Action Plan. They are underpinned by EU funds, such as the European Social Fund+, the

European Regional Development Fund, the RRF as well as the Technical Support Instrument. The reformed economic governance framework agreed by co-legislators on 24 February 2024 underlines the importance of sustainable and inclusive growth as a goal for macroeconomic policies, including upward convergence. More recently, the La Hulpe Declaration signed on 16 April 2024 amplified the relevance of the European Pillar of Social Rights as a compass guiding (social) investment and promoting upward convergence in working and living conditions. It also highlighted the need for timely and harmonised EU data and efforts to improve evidence-based policy-making.

# Main employment and social developments

## 1. INTRODUCTION <sup>(4)</sup>

**In a context of still high, albeit diminishing, inflation in the EU, economic growth in 2023 was sluggish.** The expansion of real Gross Domestic Product (GDP) slowed significantly due to the erosion of real wages per employee, falling external demand, strong monetary tightening, and partial withdrawal of fiscal support <sup>(5)</sup> Real GDP increased by 0.4% in 2023, after expanding by 3.4% in 2022. According to the European Commission's Spring 2024 Economic Forecast, GDP is projected to expand by 1.0% in 2024 and by 1.6% in 2025. Annual inflation in the EU peaked at 11.5% in October 2022, before decelerating to 3.4% by the end of 2023, largely reflecting developments in energy prices. The resulting easing of inflation in food and non-energy goods and services, together with direct support measures, reduced the burden on households.

**Despite these economic challenges, the labour market stayed robust in 2023, with a 1.2% increase in employment.** The EU employment rate (individuals aged 20-64) reached its highest-ever level, at 75.3%. In parallel, unemployment levels remained at record lows of 6.1%. The labour market situation of notably young people, long-term unemployed people, and people in vulnerable situations all showed signs of improvement, but with significant differences to the general population. Despite these positive developments, employment growth is expected to be limited in 2024 and 2025, in a context of moderate economic growth. Improved participation in the labour market for women and underrepresented groups, such as low-skilled people, older workers, young people, people with a migrant or minority racial or ethnic background, and persons with disabilities, remains a challenge.

**Labour market tightness persisted in 2023.** The job vacancy rate, an indicator of unmet labour demand, remained elevated following a significant increase since 2021, but there was a slight decline in 2023 within the EU, particularly in industry and construction. The highest rates were evident in 'administrative and support service activities' (which include temporary employment agencies), 'accommodation and food service activities', 'construction', 'professional, scientific and technical activities', and information and communication. Labour market slack continued to recede. <sup>(6)</sup> The recently adopted Action Plan on Labour and Skills Shortages <sup>(7)</sup>

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<sup>(4)</sup> This chapter was written by Lorise Moreau, Nora Wukovits, Erik Paessler and Argyrios Pisiotis. The cut-off date for this chapter is 19 August 2024.

<sup>(5)</sup> (European Commission, 2024a).

<sup>(6)</sup> Labour market slack refers to all unmet needs for employment. This includes unemployment according to the International Labour Organization (ILO) definition, as well as underemployed part-time workers, people seeking a job but not immediately available to work, and people available to work but not seeking. Total labour market slack is expressed as a percentage of this extended labour force.

<sup>(7)</sup> On 20 March 2024, the Commission presented an Action Plan setting out key measures that the EU, Member States and social partners should take to address labour and skills shortages. The Action Plan provides a robust response to labour market challenges ensuing from demographic trends at EU, national and subnational levels and it is backed by investments of ca. EUR 65 billion supported by EU funds.

identifies five policy domains for actions to tackle labour and skills shortages. These include the activation of underrepresented groups, boosting workers' skills acquisition to improve skills matching, ensuring better working conditions and employment quality, strengthening fair intra-EU mobility, and attracting more talent from outside the EU.

**Participation of adults in formal or non-formal learning has witnessed only a modest increase in recent years.** In 2022, 46.6% of people aged 25-64 in the EU engaged in education or training activities, including guided-on-the-job (GOTJ) training, <sup>(8)</sup> during the 12 months preceding the survey, an increase of 2.9 percentage points (pp) compared to 2016 (43.7%). The main reason indicated by respondents for not participating was not seeing the need for training. Those willing to participate reported barriers such as training schedule, family reasons, and costs. <sup>(9)</sup> Promoting skills development and providing support for training and education remains a priority to provide more opportunities for upskilling and reskilling.

**Social expenditure as a share of GDP increased in response to the COVID-19 pandemic's economic and social challenges, then subsequently declined somewhat.** In 2020, public expenditure shifted towards social, health and economic priorities. This considerable expansion played a crucial role in mitigating job losses by implementing income support schemes and reinforcing existing social protection systems at the onset of the pandemic. Public expenditure on labour market policies reached a record high during the COVID-19 pandemic, at nearly 3% of GDP, but decreased in subsequent years. While most expenditure components started to decrease post-pandemic, social protection expenditure <sup>(10)</sup> increased in 2022 due to an expansion of pension expenditure.

**Easing inflationary pressures, together with the effects of tax-benefit systems, improved real disposable income in 2023.** Primarily driven by the impact of elevated inflation on real wages, real gross disposable household income (GDHI) declined in the latter half of 2022, but showed signs of recovery in 2023. This positive development was predominantly attributed to the reduced negative effects of taxes on income and wealth, as well as to an increase in real compensation of employees. Inflation in essential items such as food and clothing can disproportionately affect lower and middle-income groups, and tax-benefit systems significantly contributed to augmenting individuals' income in 2023. This underscores the significance of social protection systems and government intervention in mitigating the financial repercussions of crises, poverty and inequality for EU households.

**At-risk of poverty or social exclusion (AROPE) rates decreased slightly in 2023 (2022 incomes) and income inequality remained stable.** However, these two indicators do not fully capture the declines in real household incomes and loss of purchasing power resulting from persistently high inflationary pressures in 2022. This is reflected in the severe material and social deprivation (SMSD) rate, which increased slightly during 2021-2023, particularly for those with the lowest incomes. Finally, energy poverty <sup>(11)</sup> increased over the last two years overall, and more strongly for households at risk of poverty.

**Going forward, labour market and social outcomes will be affected by subdued growth, persistent labour shortages and demographic challenges.** Rising geopolitical tensions are expected to strain global and European economic growth in 2024, with disruptions to international trade. Labour shortages are anticipated to remain at record highs, posing an increasing constraint to growth. Demographic changes shaped by increased longevity and persistent low fertility are expected to have a substantial impact on the EU population. Between now and 2050, the EU is expected to lose one million people of working age each year, on average, falling to 258 million by 2030 and 236 million by 2050. This will result in a persistent pressure from labour and skills shortages, with particularly high demand for healthcare and long-term care workers. The EU social model risks becoming more imbalanced, with the sustainability of the EU pension and health systems called into question and reduced intergenerational fairness for future generations. At the same time, the health status of workers is one of the key determinants of labour force productivity.

**This chapter explores the latest employment and social developments in the EU.** The next section discusses the macroeconomic context, the following one presents labour market developments and trends in participation in adult learning, and the final section explores income and living conditions. This year's chapter places a special focus on public expenditure.

<sup>(8)</sup> The definition used in the headline target of at least 60% of adults participating in education or training each year by 2030 does not include guided-on-the-job training. See footnote <sup>(34)</sup>.

<sup>(9)</sup> Adult education survey definition in the Eurostat glossary here.

<sup>(10)</sup> For an analysis on the role of social protection expenditure as automatic stabiliser during crises see Chapter 3.

<sup>(11)</sup> Measured by the inability to keep the home adequately warm.

## 2. MACROECONOMIC DEVELOPMENTS AND FORECAST

**Global economic activity expanded throughout all quarters in 2023, primarily driven by robust growth in China, the United States, and India.** At the same time, economic activity slowed in other advanced economies, such as the United Kingdom and Canada. The decrease in international goods trade reflected the weakness of global manufacturing. Conversely, services continued to recover, particularly travel and tourism. The fall in demand for manufactured goods post-COVID-19 pandemic, the frail state of the manufacturing sector, high inventory levels in advanced economies, and trade restrictions all negatively impacted trade. <sup>(12)</sup>

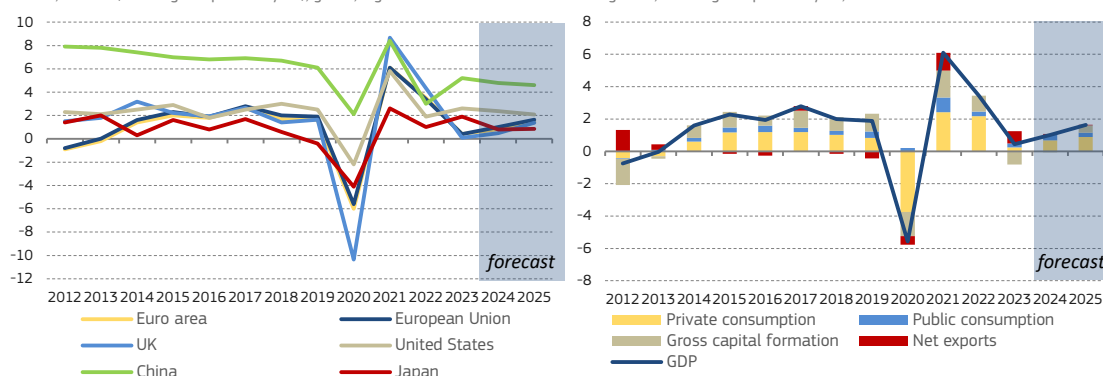
**In the EU, real GDP growth decelerated in 2023 and stands below the levels of other major economies.** Real GDP rose by just 0.4% in 2023, after growing by 3.4% in 2022 and 6.1% in 2021. Developments in the euro area were similar, with a growth rate of 0.4% in 2023. Economic activity in the EU was somewhat stronger in the first half of 2023 (+1.1% in Q1 and +0.5% in Q2), slowing in the second half of the year (+0.2% in Q3 and +0.4% in Q4). <sup>(13)</sup> Annual GDP growth in the US, Japan and China was higher than in the EU (+2.6%, +1.9%, and +5.2%, respectively) and lower in the UK (+0.1%) (Chart 1.1).

**The expansion of EU real GDP in 2023 was primarily driven by an increase in net trade.** In the context of weak foreign demand hindering exports and a sluggish domestic demand and manufacturing activity hindering imports, the decrease in import volumes was higher than the decline in exports, contributing +0.7 pp of real GDP growth. Net trade impact on growth was more favourable than anticipated in the Autumn 2023 Economic Forecast. <sup>(14)</sup> Private and public consumption contributed only modestly to GDP growth (+0.3 pp and +0.2 pp respectively) and the contribution of gross fixed capital formation (+0.3 pp) was outweighed by the negative impact of the change in inventories (-1.1 pp) (Chart 1.1).

Chart 1.1

**Real GDP growth was lower in the EU than in other major economies in 2023, with net exports as main contributor**

Left chart: GDP, volume (% change on previous year), global; Right chart: Contribution to real GDP growth, % change on previous year, EU



**Note:** Shaded area refers to European Commission (Directorate-General for Economic and Financial Affairs (DG ECFIN)) Forecast. Gross capital formation is the sum of the gross fixed capital formation, changes in inventories and acquisitions less disposals of valuables. Left chart: 2023 figures for Japan and US are estimates.

**Source:** Eurostat [nama\_10\_gdp, naida\_10\_gdp], DG ECFIN forecast, Organisation of Economic Co-operation and Development (OECD) (for UK).

[Click here to download chart.](#)

**In 2023, real GDP expanded in 16 Member States.** The increase was 2.0% or more in eight countries, with particularly high growth in Malta, at 5.7%. <sup>(15)</sup> By contrast, real GDP declined in 11 countries, notably in Estonia (-3.0%) and Ireland (-5.5%) (Chart 1.2). Among the five biggest EU economies, real GDP declined in Germany (-0.2%) and expanded in the Netherlands (+0.1%), France (+0.9%), Italy (+0.9%) and Spain (+2.5%).

**Inflation in both the EU and the euro area slowed significantly in 2023.** By December, annual inflation in the EU had dropped to 3.4% (2.9% in the euro area), marking a significant reduction from December 2022 levels (10.4% in the EU and 9.2% in the euro area), and from the peak in October 2022 (11.5% in the EU and 10.6% in the euro area) (Chart 1.3). In February 2024, inflation had further decelerated, to 2.8% in the EU (2.6% in the euro area), remaining stable until July 2024. The main drivers were the decline in energy prices and an easing of inflationary pressures from food, industrial goods, and services. Gas and electricity inflation rates experienced a decline in the latter half of 2022 and early 2023, followed by a drop in prices due to improved supplies and infrastructure, higher inventory levels, and subdued demand. While food price inflation started to slow in April

<sup>(12)</sup> (European Commission, 2024a)

<sup>(13)</sup> Seasonally and calendar adjusted data. Growth compared to the same quarter of the previous year.

<sup>(14)</sup> (European Commission, 2024a)

<sup>(15)</sup> Mostly due to net exports and private consumption. Investment contributed negatively to growth after a strong contribution in 2022 due to aircraft acquisition.

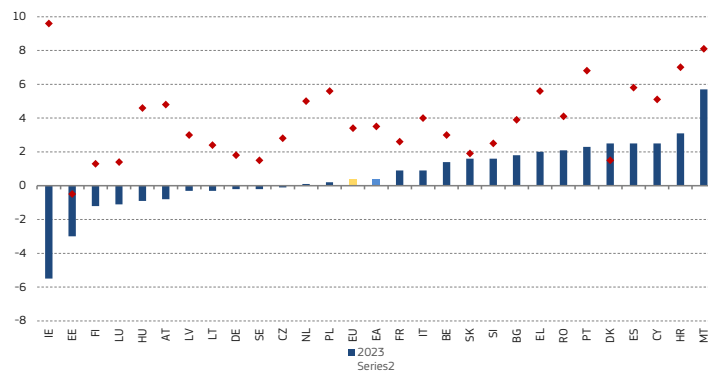


2023, inflation in services only started to subside during the 2023 summer. Elevated – albeit declining – inflation and tightening monetary policy affected economic performance in 2023, with important consequences for households (see Section 4.1.).

Chart 1.2

### Real GDP grew in most Member States in 2023

Real GDP growth, EU, 2022 (dots) and 2023 (bars) (% change on previous year)



Note: Ireland: modified domestic demand.

2022: data provisional for Belgium, Cyprus, Germany, Greece, Spain, France, Croatia, Portugal and Romania.

2023: data provisional for Belgium, Bulgaria, Cyprus, Germany, Greece, Spain, France, Croatia, Hungary, Luxembourg, the Netherlands, Portugal and Romania.

Source: Eurostat [nama\_10\_gdp].

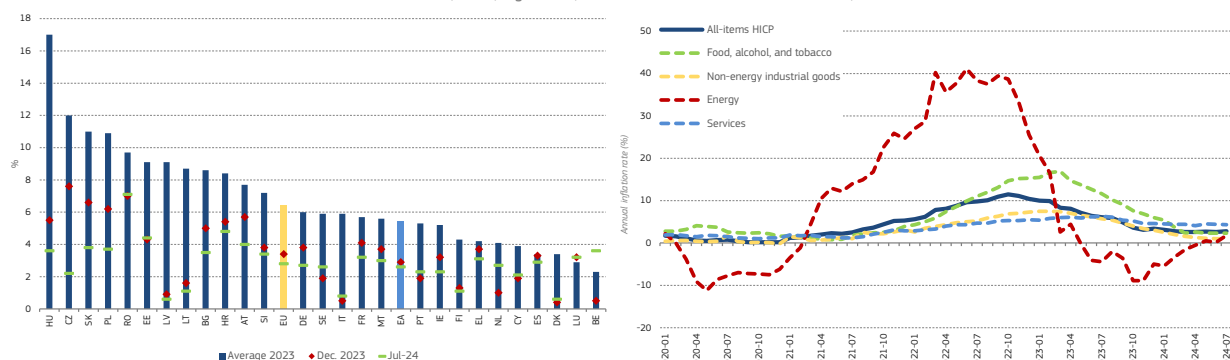
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**Inflation is projected to remain stable for the rest of 2024 and to decline further in 2025.** Annual inflation in the EU is forecasted to average at 2.7% in 2024 and then to decline to 2.2% in 2025. Food and non-energy industrial goods are the primary drivers behind this slowdown.<sup>(16)</sup> Yet, the expiration of policy measures introduced to address the energy crisis may continue to put pressure on the prices of consumer energy. Wage pressures remain elevated, with service prices having contributed little to disinflation.

Chart 1.3

### Inflation decelerated in most Member States in 2023, but remained high despite decreasing prices of energy

Left chart: All-items Harmonised Index of Consumer Prices (HICP), 2023; Right chart, Annual inflation rates for selected items, EU



Source: Eurostat [prc\_hicp\_aind; prc\_hicp\_manr].

[Click here to download chart.](#)

**Almost all Member States' economies are projected to grow in 2024, with an average growth at the EU-level of 1.0%** (0.8% in the euro area). After recovering somewhat at the beginning of 2024 (+0.6% in Q1 and +0.8% in Q2, compared to same quarter of the previous year), GDP growth is expected to reach 1.6% in 2025 (1.4% in the euro area). The EU entered 2024 with a weaker economic outlook than initially expected. Nevertheless, the conditions remain in place for a gradual improvement in economic activity. Continued wage and employment growth are expected to sustain growth in households' disposable income in 2024 and to continue in 2025 (albeit slightly slower), which would also boost consumption. The contribution of investment to real GDP growth is expected to increase more gradually and the contribution of EU's net external demand is predicted to become neutral.<sup>(17)</sup> Overall, domestic risks related to growth and inflation are broadly balanced in the EU.

**Heightened geopolitical tensions and global policy uncertainty expose the EU economic outlook to several risks.** Russia's ongoing war of aggression against Ukraine and the Middle East conflict could add to upward pressure on prices and stress on supply chains, jeopardising production and trade. Energy commodities

<sup>(16)</sup> (European Commission, 2024a)

<sup>(17)</sup> (European Commission, 2024a)

are also vulnerable to these downward risks. Persistence of inflation in the US may delay its interest rate cuts, resulting in tighter global financial conditions. In addition, uncertainties linked to China and US economic activity developments could weigh on the EU economy. Finally, climate change risks continue to be of primary concern, with severe potential costs for natural capital, infrastructure and economic activity.<sup>(18)</sup> Financing the digital infrastructure may also prove a challenge.

### 3. LABOUR MARKET DEVELOPMENTS

#### 3.1. Employment trends

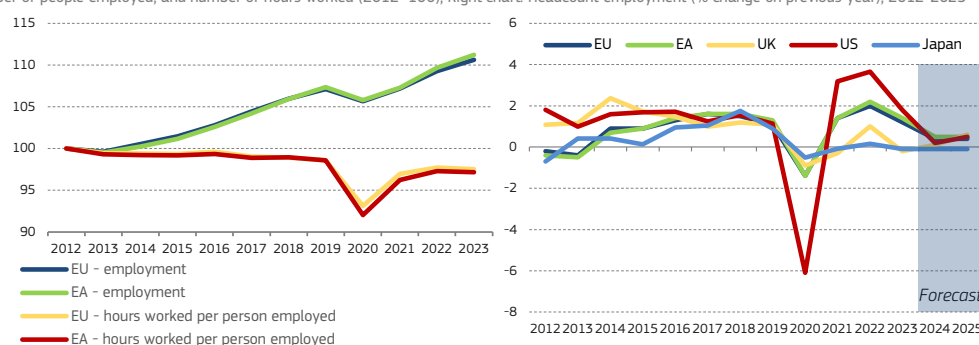
**Despite ongoing economic challenges, labour markets in the EU remain robust.** Alongside modest GDP growth of 0.4% in 2023, employment increased by 1.2% in the EU and 1.4% in the euro area, with 216.5 million people employed in the EU and 168.7 million in the euro area. With the exception of Romania (-0.9% compared to 2022), all countries experienced an increase in employment. The countries with the highest percentage increase were Malta (+6.7 %), Ireland (+3.5%), Estonia (+3.2%), Spain (+3.2%) and Luxembourg (+2.2%). All other Member States recorded a percentage growth below 2.0%. Notwithstanding a rise of 1.0% in total hours worked in the EU (+1.3% in the euro area) in 2023 compared to 2022, there was a slight decrease in the number of hours worked per employed person (-0.2% in the EU and -0.1% in the euro area), still below the pre-COVID-19 pandemic levels in 2019. This downward trend, which has been protracted for the last two decades, may reflect the introduction of more efficient and productive technologies, including the acceleration of digitalisation, as well as changes in work attitudes. After recovering in 2021 and 2022, labour productivity decreased again in 2023 compared to the previous year (-0.8% per employed person and -0.6% per hour), reflecting a combination of higher labour supply and fewer hours worked per employed person,<sup>(19)</sup> as well as low total factor productivity growth.

**In 2023, the sectors that contributed most to employment growth were trade, transport, accommodation and public administration, defence, education, human health and social work activities.** The numbers of people employed in these two sectors increased by 0.8 million and 0.7 million, respectively. In relative terms, employment grew most in information and communication (+4.2%), indicating the elevated need for specialised skills. It rose by 0.9% in construction and 0.2% in industry, and declined by 1.1% in agriculture, forestry and fishing. The number of self-employed people increased by 1.0% and employee numbers grew by 1.3%.

Chart 1.4

#### Number of hours worked per person employed stagnated in 2023 despite a resilient labour market

Left chart: Number of people employed, and number of hours worked (2012=100); Right chart: Headcount employment (% change on previous year), 2012-2025



Note: EA = euro area. European Commission (DG ECFIN) 2023 Spring Forecast in the shaded area.

Source: Eurostat [nama\_10\_a10\_e, nama\_10\_pe, naida\_10\_pe], DG ECFIN Forecast.

[Click here to download chart.](#)

**According to the European Commission Spring 2024 Economic Forecast, employment should expand by 0.6% in the EU in 2024 and by 0.4% in 2025, driven by a positive carry-over effect of gains during 2023.** Such expansion could be limited by the fact that employers are retaining their workers in a context of labour shortages (so-called labour hoarding).<sup>(20)</sup> In July 2024, the new indicator of labour hoarding developed

<sup>(18)</sup> (European Commission, 2024a)

<sup>(19)</sup> (European Commission, 2024a)

<sup>(20)</sup> 'Labour hoarding can be defined as "that part of labour input which is not fully utilised by a company during its production process at any given point in time" (ECB, 2003). Typically, labour hoarding, implying under-utilisation of the workforce, occurs in periods of slack or downturn in economic activity. The rationale for companies not to lay off (redundant) employees in such periods is that (i) dismissing workers usually involves costs, e.g. severance payments, and (ii) recruiting workers once economic activity recovers also entails costs (screening the labour market for candidates, training them, etc.). When economic activity picks up again, companies may not hire new workers immediately, but rather rely on the underutilised labour already in the company. The European Commission developed an

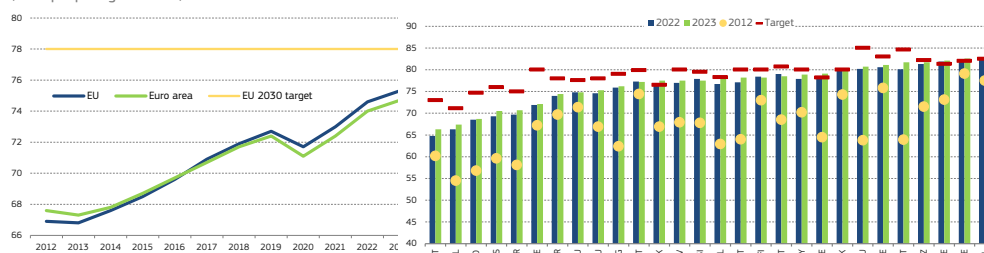
by the Commission increased slightly compared to the previous month (+0.4 pp to 10.8%, three-month moving average), slightly above its long-term average (9.7%) and pre-COVID-19 pandemic levels (7.5%, three month moving average in February 2020) (Chart 1.4). The level was higher in retail (15.5%) and construction (15.3%) and, than in industry (9.7%) and services (8.2%). <sup>(21)</sup>

**In 2023, the employment rate for individuals aged 20-64 reached the highest recorded levels in the EU.** At 75.3%, it corresponded to an increase of 0.7 pp in both the EU and euro area (74.7%) compared to 2022 (Chart 1.5). The 2023 EU employment rate is getting closer to the EU Porto target, which aims to achieve at least 78% of people aged 20-64 in employment in the EU by 2030, with national targets specific to each Member State. The largest increases were recorded in Malta (+1.6 pp), Italy (+1.5 pp), Poland and Spain (both +1.2 pp), while the employment rate declined in Lithuania (-0.5 pp), Slovenia (-0.4 pp), Denmark (-0.3 pp), Finland (-0.2 pp) and Austria (-0.1 pp). Five Member States (Estonia, Ireland, the Netherlands, Slovakia, Sweden) are already above their national target (Chart 1.5).

Chart 1.5

#### Employment rates reached historic levels in 2023, but growth is slowing

Employment rate (% of people aged 20-64)



Source: Eurostat [lfsi\_emp\_a].

[Click here to download chart.](#)

**The gender employment gap <sup>(22)</sup> continued to decrease in 2023, albeit slowly, while the employment rate for women surpassed 70% for the first time.** Within the EU, the difference in employment between women and men stood at 10.2 pp, a decline of 0.5 pp from 2022 and 1.1 pp from 2019. The employment rate for women rose to 70.2%, while the rate for men rose to 80.4%. Further improvements are necessary to meet the ambition set out in the action plan to implement the European Pillar of Social Rights of at least halving the gender employment gap by 2030 compared to 2019 (11.3 pp).

**The employment rate rose for all age groups in 2023, but at a slower pace than in previous years.** On a yearly basis, the rate grew by 0.4 pp (to 35.2%) for young workers (aged 15-24), by 0.5 pp (to 82.2%) for prime age workers (aged 25-54) and by 1.7 pp (to 63.9%) for older workers (aged 55-64) (Chart 1.6). Despite the COVID-19 pandemic, over the period 2019-2023, the employment rate for younger workers increased by 1.7 pp. Potentially as a result of several national pension reforms and the entry of more active cohorts in these age groups, the employment rate during that same period rose by 5.3 pp for older workers and by 2.0 pp for prime-age workers during the same period. The gender employment gap was wider for older workers (12.0 pp) than for prime-age workers (10.1 pp) and young workers (4.3 pp).

**In 2023, the employment rate rose for people aged 25-54 with lower and medium levels of education.** The increase was most notable among those with lower education (+0.8 pp, to 64.1%) while it stagnated for those with tertiary education. Despite the implied reduction in the gap, rates remained highest for those with medium-level vocational education (+0.4 pp, to 84.9%) and those with tertiary education (89.7%), who are typically more likely to have the skills required in the labour market.

**High employment disparities exist between the general population and people in vulnerable situations, including non-EU citizens or people with disabilities.** The disability employment gap stood at 21.5 pp in 2023. In 2023, the employment rate was 76.2% for national workers aged 20-64 (+0.8 pp compared to 2022), 77.6% for EU mobile workers (+0.6 pp), and 63.0% for non-EU workers (+1.2 pp).

indicator of labour hoarding, which measures the percentage of managers expecting their firm's output to decrease, but employment to remain stable or increase, based on the Joint Harmonised EU Programme of Business and Consumer Surveys (BCS) (European Commission, 2023c).

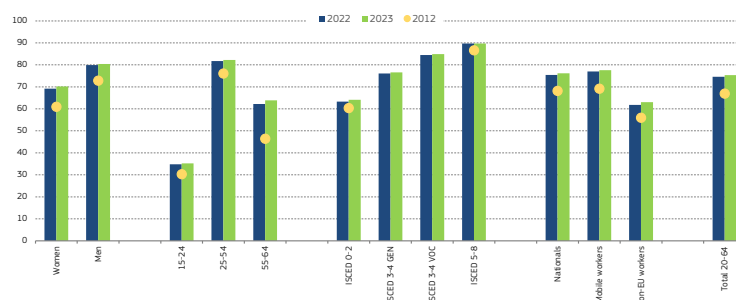
<sup>(21)</sup> See Business and Consumer Survey here.

<sup>(22)</sup> Difference between the employment rate of women and men aged 20-64.

Chart 1.6

**Employment rates rose in all population groups**

Employment rate by sex, age group, educational attainment level and citizenship (% of population of respective group), EU, 2023



Note: % of population aged 20-64 for all groups, except by educational attainment (% of population aged 25-54). No data for International Standard Classification of Education (ISCED) 3-4 GEN and VOC before 2021. ISCED (0-2) less than primary, primary and lower secondary education; ISCED (3-4 GEN) general upper secondary and post-secondary non-tertiary education; ISCED (3-4 VOC) upper secondary and post-secondary non-tertiary education; ISCED (5-8) tertiary education.

Source: Eurostat [lfsi\_emp\_a, lfsa\_ergaedn].

[Click here to download chart.](#)

**The employment rate in rural regions continued to increase, surpassing 75% for the first time.** It is close to the employment rate of the total population at the EU level (75.3%), with differences across Member States.

**Increases in the numbers of permanent and full-time workers were the primary reason for the rise in employment.** The proportion of temporary employment among individuals aged 15-64 in the EU dropped significantly during the COVID-19 pandemic in 2020 and has not returned to the same levels (23.1 million or 11.6% in 2023, 1.6 pp below the 2019 rate and 0.5 pp lower than in 2022). Comparison of the growth rates of employment (+1.2%) and temporary employment (-3.8%) shows that more people have permanent contracts. The share of part-time workers aged 15-64 in the EU increased by 0.2 pp in 2023 (to 17.8%, or 35.4 million people), still below the 2019 rate (19.4%). The share of workers in temporary (12.8%) and part-time (28.5%) employment remained significantly higher among women than men (10.5% and 8.4%, respectively). The gender gap remained stable in both temporary employment (at 2.3 pp) and in part-time employment (at 20.1 pp). Care duties remain the main reason for part-time employment (21.2%), followed by no full-time job found (19.4%) and education and training (14.2%). The proportion of involuntary part-time employment as a share of total part-time employment further decreased to 19.4% in 2023 (-1.5 pp) following a consistent trend since 2014.

**Working conditions have improved over the last decade.** The number of workers working long hours decreased by nearly one-quarter compared to 2014, reaching 6.9% in 2023. Similarly, the share of workers with atypical working time was 33.9% in 2023, having decreased by nearly 5 pp over a 10-year period, with only a slight increase in 2021 due to the COVID-19 pandemic. The proportion of people working more than one job remained remarkably stable between 2020 and 2023 (3.9%), only a slight decrease since 2013 (-0.3 pp).

### 3.2. Unemployment rates

**In 2023, unemployment levels remained at record lows.** The unemployment rate among people aged 15-74 declined modestly in both the EU (by 0.1 pp, to 6.1%) and euro area (by 0.2 pp, to 6.6%), reaching the lowest rates ever recorded by Eurostat. Compared to 2022, the reduction was 0.1 pp for both men (to 5.8%) and women (to 6.4%) (Chart 1.7). Among the signs of ongoing labour hoarding (as companies retain their employees despite an expected decrease in output in the short term) the unemployment rate is expected to remain broadly stable in 2024, at 6.1%, before falling slightly in 2025, to 6.0%. <sup>(23)</sup> In 2023, the unemployment rate remained far higher for people with education levels up to lower secondary (11.9%, -0.4 pp from 2022) than for those with upper secondary and post-secondary (non-tertiary) education (5.6%, -0.1 pp from 2022) or with tertiary education (3.8%, stable from 2022).

**In 13 Member States, the unemployment rate declined compared to 2022.** In most cases, the decrease was less than 1.0 pp, with the exception of Greece (-1.4 pp, to 11.1%). It remained stable in Romania (5.6%) and France (7.3%), and increased by between 0.1 pp and 0.9 pp in the remaining 11 Member States. <sup>(24)</sup>

<sup>(23)</sup> (European Commission, 2024a)

<sup>(24)</sup> Changes in unemployment in 2023 compared to 2022:

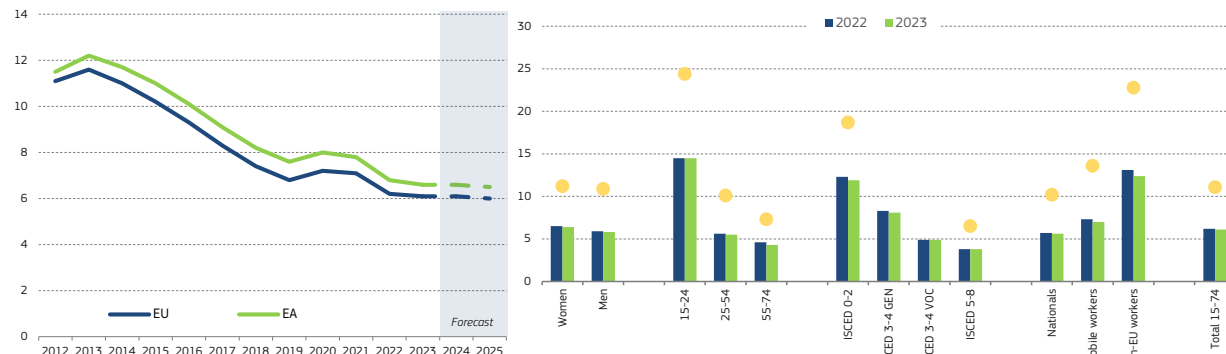
- Decrease: Belgium (-0.1 pp), Germany (-0.1 pp), Poland (-0.1 pp), Ireland (-0.2 pp), Slovakia (-0.3 pp), Slovenia (-0.3 pp), Italy (-0.4 pp), Latvia (-0.4 pp), Malta (-0.4 pp), Cyprus (-0.7 pp), Croatia (-0.9 pp), Spain (-0.8 pp), Greece (-1.4 pp).
- Stable: France, Romania.

**The long-term unemployment rate fell in 2023.** After a brief increase during the onset of the COVID-19 pandemic, the long-term unemployment rate continued to decline steadily, reaching 2.1% in 2023 (-0.3 pp compared to 2022), with long-term unemployment representing 35.0% of all unemployment (3.5 pp lower than in 2022). Very long-term unemployment dropped to 1.2% (0.2 pp lower than 2022), representing just over one-fifth (20.6%) of total unemployment.

Chart 1.7

### Unemployment rates reached record lows in 2023 and declined in all population groups

Left chart: Unemployment rate (% of population aged 15-74), 2023; Right chart: Unemployment rate, by specific groups of population (% of active population aged 15-74), 2012, 2022, 2023, EU



Note: European Commission (DG ECFIN) forecast in shaded area. No data for ISCED 3-4 GEN and VOC before 2021.

Source: Eurostat [une\_rt\_a, une\_rt\_a, ifsa\_urgaed, ifsa\_urgan], DG ECFIN 2024 Spring Forecast.

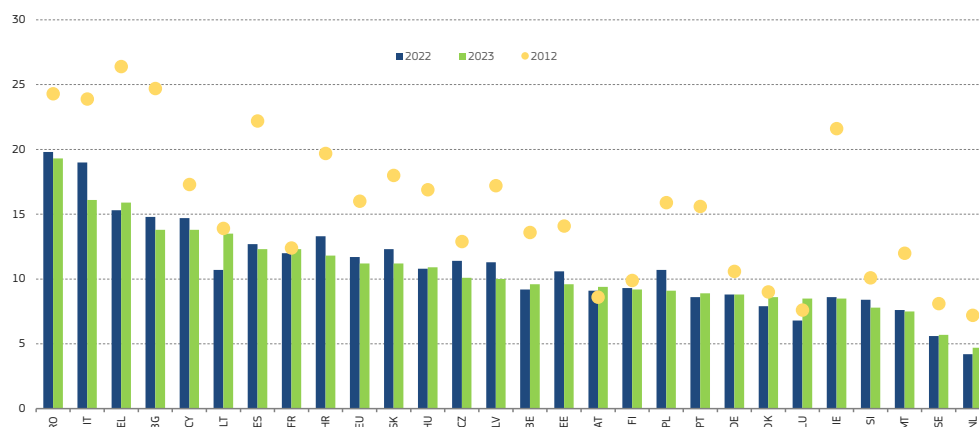
[Click here to download chart.](#)

**The youth unemployment rate remained stable in the EU and decreased slightly in the euro area in 2023.** It averaged 14.5% in the EU and 14.5% in the euro area (-0.1 pp). The most substantial annual declines were recorded in Greece (-4.7 pp, to 26.7%) and Latvia (-3.0 pp, to 12.3%), with the sharpest rises recorded in Hungary (+2.2 pp, to 12.8%) and Finland (+2.0 pp, to 16.2%). The unemployment rate was 2.8 times higher among young workers (aged 15-24) than the rest of population (aged 25-74). The unemployment rate of young people is more sensitive to the economic cycle than other age groups, leading to quicker falls in levels during economic recovery, but higher increases when the economy slows down. These young people have a higher probability of obtaining temporary contracts or being dismissed during recession due to shorter tenures, limited work experience, and lower firing costs. <sup>(25)</sup>

Chart 1.8

### NEET rates in the EU fell in 2023

15-29-year-olds (% of respective population)



Source: Eurostat [lfsi\_neet\_a].

[Click here to download chart.](#)

**The share of people aged 15-29 who were not in employment, education or training (NEET) in the EU fell again in 2023.** The overall NEET rate decreased by 0.5 pp (to 11.2%), compared to a decline of 1.4 pp in 2022. The NEET rate remained somewhat higher for women (12.5%) than men (10.1%), increasing most in Lithuania (+2.8 pp) and Luxembourg (+1.7 pp), and falling most markedly in Italy (-2.9 pp), Poland (-1.6 pp) and

\* Increase: Bulgaria (+0.1 pp), the Netherlands (+0.1 pp), Sweden (+0.2 pp), Austria (+0.3 pp), Portugal (+0.3 pp), Czechia (+0.4 pp), Finland (+0.4 pp), Hungary (+0.5 pp), Denmark (+0.6 pp), Luxembourg (+0.6 pp), Estonia (+0.8 pp), Lithuania (+0.9 pp).

<sup>(25)</sup> (European Commission, 2022d); (European Commission, 2023i). (European Commission, 2023b)



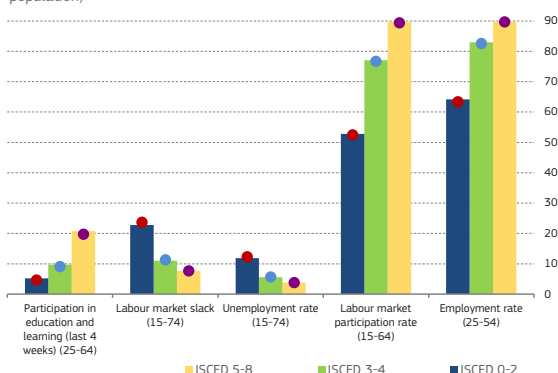
Croatia (-1.5 pp) (Chart 1.8). Romania is now the Member State with the highest NEET rate (19.3%), while the Netherlands has the lowest rate (4.7%). Despite the recent decline, the NEET rate remains elevated, negatively affecting young people. Complementing the EU employment target for 2030, the action plan for the implementation of the European Pillar of Social Rights sets the goal to decrease the NEET rate to 9% by 2030, meaning that this progress must be maintained in the coming years. The rate of early leavers from education and training continued its long-term downward trend in 2023, dropping by 0.2 pp, to 9.5% (7.7% for women and 11.3% for men).

### 3.3. Labour market participation

Chart 1.9

#### Labour market slack continued to decline, while labour market participation rates grew slightly

Various labour market indicators, by educational attainment (% of respective population)



Note: ISCED 0-2: Less than primary, primary and lower secondary education; ISCED 3-4: Upper secondary and post-secondary non-tertiary education; ISCED 5-8: Tertiary education. 2023 data in bars, 2022 data in dots.

Source: Eurostat ([lfsi\_educ\_a], [lfsa\_argaed], [lfsa\_urgaed], [lfsa\_sup\_edu], [trng\_lfse\_03]).

[Click here to download chart.](#)

remained stable, at 0.9%. Labour market slack was higher for people with lower education (22.8%) than for those with medium (11.0%) or higher (7.7%) education.

### 3.4. Labour demand

**As an indicator of unmet labour demand, the job vacancy rate in the EU experienced a slight decrease in 2023, but remained at a high level following a surge in 2021-2022.** This gauge of labour shortage showed consistent increases post-financial crisis, rising from 1.0% in 2014 to 2.3% in 2019 (Chart 1.10). It briefly receded during the COVID-19 pandemic, to 1.8% in 2020, only to rise sharply in 2021, to 2.4%, and to 3.0% in 2022 (the highest recorded figure to date) before falling to 2.8% in 2023. At sectoral level, the highest job vacancy rates were in 'administrative and support service activities' (that include temporary employment agencies) (4.3%), 'accommodation and food service activities' (3.8%), 'construction' (3.8%), 'professional, scientific and technical activities' (3.7%), and 'information and communication' (3.4%). The lowest rates were in 'mining and quarrying' (1.2%), 'water supply; sewerage, waste management and remediation activities' (1.8%), and 'electricity, gas, steam and air conditioning supply' (1.8%). Certain sectors, such as 'construction' and 'information and communications technology' (ICT), play a pivotal role in facilitating the green and digital transitions. Addressing the high number of job vacancies in these sectors will help to eliminate bottlenecks and smooth the transition process.

**The labour market continued to be constrained despite a slight decrease in the labour shortage indicator in industry and construction. (27)** The Beveridge curves show labour shortages declining slightly in almost all sectors of the economy, together with a decline in unemployment to historically low levels. The combination of a still high (albeit slightly declining) level of vacancies and continued decline in unemployment suggests that the labour market continues to match jobseekers to job openings with a degree of efficiency that is broadly unchanged since 2013. The labour shortage indicator in 2023 was 32.3% in the services sector (+0.9 pp compared to 2022), 29.4% in the construction sector (-3.3 pp) and 25.5% in industry (-3.1 pp) (Chart 1.11).

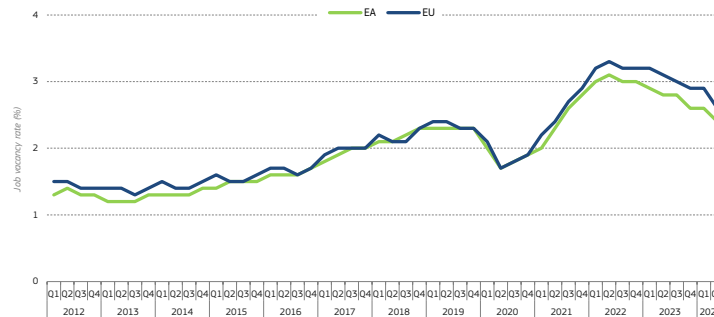
(26) See footnote (6) for definition.

(27) A sentiment indicator that reflects the share of managers identifying shortage of labour force as a factor limiting production (see Business and Consumer Survey here).

Chart 1.10

**Job vacancies declined in 2023 but remain high**

Job vacancy rates (% of vacancies and occupied posts)



Note: Job vacancy rate = vacancies / (vacancies + occupied posts); NACE rev2 B-S Industry, construction, and services (except activities of households as employers and extra-territorial organisations and bodies).

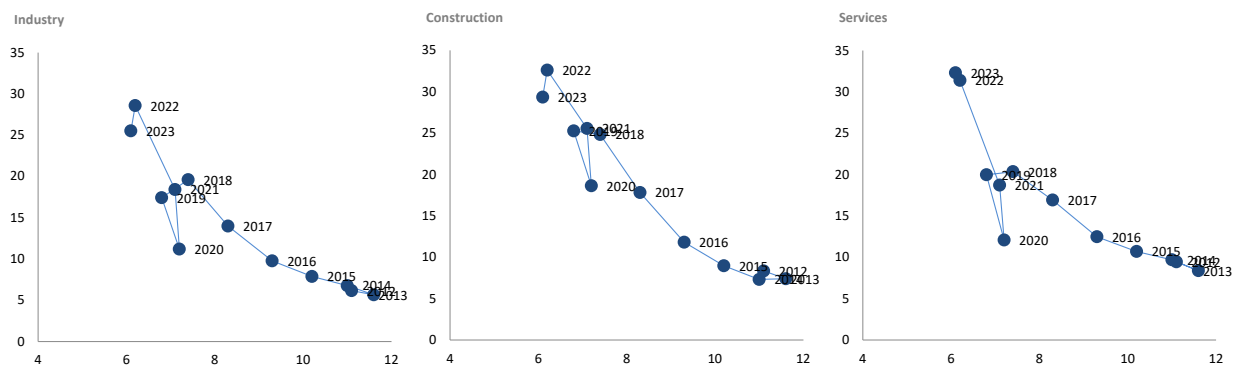
Source: Eurostat, Job Vacancy Statistics [jvs\_q\_nace2]. Seasonally adjusted data.

[Click here to download chart.](#)

Chart 1.11

**Labour shortages declined slightly in industry and construction in 2023, but remained at high levels**

Beveridge curves (labour shortage indicators on Y-axis and unemployment rates on X-axis)



Note: Annual figures for labour shortage indicators (Y axis) are calculated as annual averages of quarterly data (industry and services) or monthly data (construction). This is a sentiment indicator that reflects the share of managers identifying shortage of labour force as a factor limiting production.

Source: Eurostat [ei\_bsin\_q\_r2 ; ei\_bsbu\_m\_r2 ; ei\_bsse\_q\_r2 ; une\_rt\_a]. Data seasonally adjusted.

[Click here to download chart.](#)

### 3.5. Adult learning

#### Participation of adults in formal or non-formal learning <sup>(28)</sup> increased only slightly in recent years.

According to the Adult Education Survey (AES), <sup>(29)</sup> in 2022, 46.6% of people aged 25-64 in the EU had attended education or training activities, including guided-on-the-job (GOTJ) training, <sup>(30)</sup> during the previous 12 months, an increase of 2.9 pp compared to 2016 (43.7%) and 6.4 pp compared to 2011 (40.2%). 6.3% of adults had participated in formal learning and 44.0% in non-formal learning. <sup>(31)</sup> Formal learning was mainly in the fields of health and welfare (18.3%), business, administration, and law (18.3%), engineering, manufacturing and construction (11.8%), and arts and humanities (11.7%). Some of these areas cover sectors with labour shortages. Participation in learning reached its highest levels among people with tertiary education (65.7% of adults aged 25-64) and its lowest levels among respondents with lower secondary education or less (25.1%). For 38.1% of respondents, the non-formal learning activities were job-related. The level of job-related non-formal learning was higher for employed people (47.2%), than for unemployed people (17.2%) or people outside the labour force

<sup>(28)</sup> Learning activities are categorised as follows (see Adult Education Survey methodology here):

- Formal: formal education programmes are recognised as such by public authorities. They primarily consist of initial education.
- Non-formal: a form of education that is institutionalised, intentional and planned by an education provider and comes as an addition, alternative and/or complement to formal education within the lifelong learning of individuals. The AES differentiates between four types of typical non-formal learning activities: courses, workshops, or seminars, guided on-the-job training (planned periods of education, instruction or training directly at the workplace, organised by the employer with the aid of an instructor), and private lessons.
- Informal: an intentional or deliberate form of learning that is not institutionalised. It can occur in the family, workplace, local community and daily life, on a self-directed, family-directed or socially-directed basis.

<sup>(29)</sup> AES statistics explained here; Adult learning database here.

<sup>(30)</sup> The definition that includes guided-on-the-job training differs to that used to monitor the headline target of at least 60% of adults participating in education or training each year by 2030. See footnote <sup>(34)</sup>.

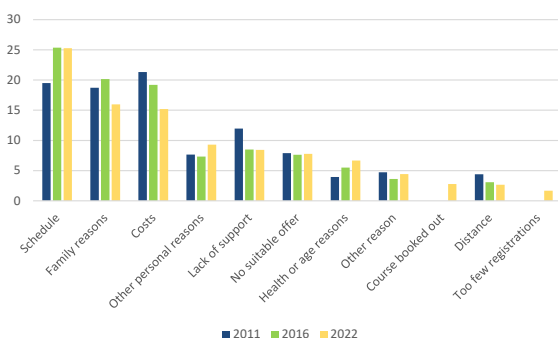
<sup>(31)</sup> Categories not mutually exclusive, i.e. respondents could answer yes to both.

(9.7%).<sup>(32)</sup> In addition, 64.2% of the population aged 25-64 declared that they had improved their knowledge, skills, or competences in informal ways, such as through exchanges with a family member, friend, or colleague (31.1%), alone (on electronic devices (53.2%), using printed material (37.8%)), visiting learning centres (8.4%), or attending guided tours (15.4%).

Chart 1.12

### Schedule, family reasons and costs are the most common barriers to participation in education or training

Main reason for not participating (or not participating more) for willing respondents, 2022, EU



Note: 'Course booked out' and 'Too few registrations' were not proposed in 2011 and 2016. Percentages calculated based on respondents who answered the question (non-response rate was 11.3% in 2011, 5.7% in 2016, 9.8% in 2022).

Source: Eurostat [TRNG\_AES\_179], Directorate-General for Employment, Social Affairs and Inclusion (DG EMPL) calculations.

[Click here to download chart.](#)

**Most people did not see the need to undertake training, while those who did cited schedules, family reasons and costs as their main reasons for not participating in education or training.** In 2022, 42.4% of respondents aged 25-64 did not want to participate in education or training because they did not see the need (75.9%). Of those who wanted to participate and could not (10.2%) or those who participated but wanted to participate more (15.7%), 25.3% listed training schedules as the main barrier to their participation, while 16.0% cited family reasons, and 15.2% highlighted costs (Chart 1.12).<sup>(33)</sup>

**Progress towards the EU target of at least 60% of adults participating in learning every year by 2030 is limited.** The level of participation of people aged 25-64 in formal or non-formal learning (excluding guided-on-the-job training for the monitoring of the target) was at 34.4% in 2011, 37.4% in 2016 and 39.5% in 2022.<sup>(34)</sup> In a context where labour and skills shortages constitute a challenge for EU competitiveness,

investment in skills continues to be of the utmost importance, especially towards a fair green and digital transition. The Commission promotes investment in skills, notably through the new European Skills Agenda, and the action plan for the implementation of the European Pillar of Social Rights.

## 3.6. Public expenditure on labour market policies and social protection

**In the years following the COVID-19 pandemic, total public expenditure remained sustained and then slowly returned to pre-pandemic levels.** Overall, in both nominal terms and as a share of GDP, government expenditure increased in 2020 and remained at high, albeit declining, levels in 2021 in response to the economic and social challenges of the pandemic (Chart 1.13, left chart). In 2022, total public expenditure as a share of GDP returned to similar levels to 2012. The areas of public expenditure that experienced the strongest growth during the first year of COVID-19 pandemic were spending on social protection (+2.6pp between 2019 and 2020, to 21.9% of GDP) and economic affairs<sup>(35)</sup> (including many COVID-19 pandemic-related measures; +1.7 pp, to 6.1% of GDP), and health (+1.0 pp, to 8.0%).%, which reflects the measures put in place to mitigate the socio-economic effects of the crisis as well as the additional demand for healthcare, medical appliances and medicines. In 2022, public expenditure higher than in 2019 included economic affairs (+1.4pp, to 5.8% of GDP), health (+0.6pp, to 7.6%) and housing (+0.4pp, to 1%), while social protection spending as a share of GDP almost fully reverted to its pre-pandemic level (+0.1pp, to 19.4%), mainly reflecting positive developments in the labour market.<sup>(36)</sup>

<sup>(32)</sup> Taking into consideration all objectives, not just those related to jobs, 53.9% of employed people, 29.2% of unemployed people and 24.4% of people outside the labour force participated in formal or non-formal education and training.

<sup>(33)</sup> Other personal reasons (9.3%), lack of support from employer or public services (8.4%), no suitable offer of education or training (7.8%), health or age reasons (6.7%), other reason (4.4%), course booked out (2.8%), distance (2.7%), and too few registrations (1.7%).

<sup>(34)</sup> Definition of the indicator monitoring the target differs from published data on the Eurobase and excludes guided-on-the-job (GOTJ) learning activities. The specially calculated data excluding GOTJ training for EU and all Member States, including disaggregation by sex, age groups and educational attainment, are available from Eurostat here.

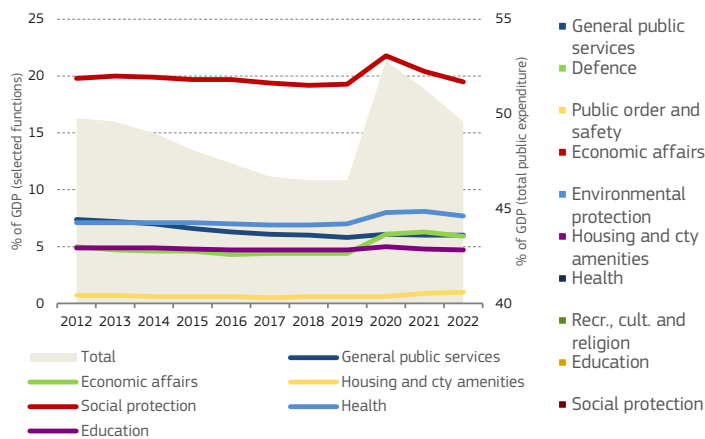
<sup>(35)</sup> It includes, among others, administration of general economic, commercial and labour affairs, formulation and implementation of policies, regulation or supervision of activities, support to programmes or schemes, promotion of policies and programmes, administration of sectoral affairs and services, grants, loans or subsidies supporting sectors, administration and operation of government agencies engaged in applied research, grants, loans or subsidies to support applied research by non-government bodies. More details in the Manual on sources and methods for the compilation of COFOG statistics here.

<sup>(36)</sup> Based on latest available administrative data, which extends to 2022.

Chart 1.13

### During the COVID-19 pandemic, public expenditure peaked, in particular in social protection, health and economic affairs

Left chart: government expenditure on selected functions (% of GDP: total on right-hand side, individual items on left-hand side), 2012-2022, EU; Right chart: government expenditure (% of GDP), 2022



Source: Eurostat [gov\_10a\_exp].

[Click here to download chart.](#)

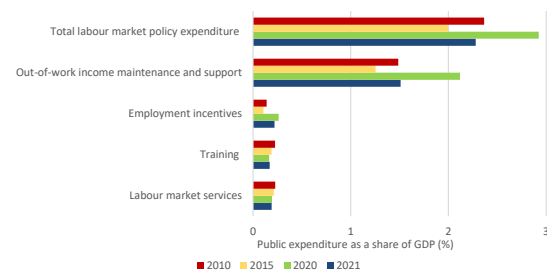
### Public expenditure on labour market policies peaked recently, with the rollout of government programmes to support employment during the COVID-19 pandemic.

Expenditure on labour market policies in the EU substantially increased in 2020 compared to earlier years, both in value (EUR millions) and as a share of GDP, reaching a record high of nearly 3% of GDP before decreasing to 2.3% in 2021 (Chart 1.14). Spending on employment incentives also increased, albeit from a much lower level. Participation in activation support peaked in 2020, reaching 46.3 out of 100 people wanting to work (compared to 33.5 out of 100 persons in 2019). Besides income maintenance and support, and spending on labour market services, expenditure on ALMPs focuses mostly on employment incentives and trainings for jobseekers. On a longer period, at the EU level, spending on employment incentives largely increased from 0.1% of GDP in 2010 to 0.2% of GDP in 2021. In contrast, training programmes have experienced a steady decrease in expenditure over the same period, but still make up a relatively sizeable proportion of the EU countries' spending on ALMPs. For most of the 22 countries with available information, the level of total spending on ALMPs in 2022 returned to similar levels than before the COVID-19 pandemic. Chapter 3 presents more detailed analysis of expenditure on active labour market policies. <sup>(37)</sup>

Chart 1.14

### Recent peak in public expenditure on labour market policies, notably for out-of-work maintenance and support

Public expenditure on labour market policies, total and by selected type of action, 2010-2021, EU



Note: Total labour market policy expenditure encompasses categories 1-9 in the database. 2021, DG EMPL calculations (Romania and Italy, pre COVID-19 pandemic expenditure (2019) when 2021 data are missing). Categories: 1 – Labour Market Services, 2 – Training, 3 – Job rotation and job sharing (not used anymore, included in category 4), 4 – Employment incentives, 5 – Supported employment and rehabilitation, 6 – Direct job creation, 7 – Start-up incentives, 8 – Out-of-work income maintenance and support, 9 – Early retirement. Cat 8 'Out-of-work income maintenance and support' encompasses, among others, both unemployment benefits and short-term work schemes, including relevant COVID-19-related schemes.

Source: European Commission Labour Market Policy Database.

[Click here to download chart.](#)

### In 2022, expenditure on social protection benefits increased in real terms but decreased as a share of GDP, reflecting positive developments in the labour market.

In 2020, social protection benefit expenditure increased by 7.7% and played a major role in cushioning initial COVID-19 pandemic-related employment losses (Chart 1.15). That year, benefits related to unemployment accounted for the largest share of the increase (+3.5 pp). The growth in social expenditure slowed in 2021 (+0.4%) before increasing by 2.6% in 2022, largely due to a rise in benefits related to old-age pensions and survivors' pensions (contribution of +2.2 pp), while unemployment benefits continued to decline (contribution of -1.5 pp) in a context of recovery and employment growth. Supported by a resilient labour market, the negative contribution of unemployment benefits in 2021 and 2022 stemmed from the tightness of the labour market, the phasing-out of job retention schemes after the pandemic, and unemployed people no longer being eligible. A series of measures between January 2022 and January 2023 sought to support the income of pensioners against inflation (indexation, ad hoc increases, one-off benefits). <sup>(38)</sup> As a share of GDP, social protection benefit expenditure decreased to 27.2% in

<sup>(37)</sup> Based on latest available administrative data, which extends up to 2022.

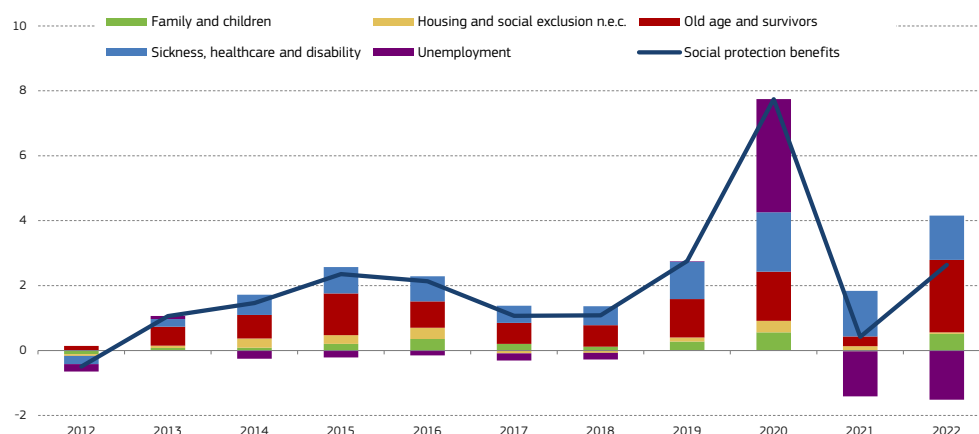
<sup>(38)</sup> (European Commission, 2024c).

2022, 3 pp lower than in 2020 and 1.5 pp lower than in 2021. Old age and survivors' benefits represented the highest proportion of social benefit expenditure (46.3%), followed by sickness and healthcare (30.0%), family and children (8.6%), disability (7.0%), unemployment (4.3%), social exclusion (2.6%) and housing (1.3%). At national level, estimated total expenditure on social protection benefits ranged between 11.3% of GDP in Ireland and 32.2% of GDP in France in 2022. <sup>(39)</sup> The significance of social protection benefits is also affected by the large shares of people entitled to such benefits but not claiming them. For instance, national case studies estimated that in Spain, 58% of households entitled to minimum income benefits in 2022 did not request them in Italy, the non-take-up rate of minimum income by eligible households in 2021 was 38.5%, and almost half (46.6%) of potentially eligible households in Belgium remained uncovered in recent years. <sup>(40)</sup>

Chart 1.15

### Old age and health-related benefits were key contributors to the growth of social protection benefit expenditure in 2022

Growth in social protection expenditure (% change on previous year, in real terms) and contribution, by function, to the yearly increase (purchasing power standards, PPS), both on the left axis, EU



Note: Nominal expenditure converted into real expenditure by deflating with HICP.

Source: Eurostat, ESSPROS [spr\_exp\_sum] and ESSPROS early estimates (2022), and prices statistics [prc\_hicp\_aind]; DG EMPL calculations.

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## 4. LIVING CONDITIONS, POVERTY, AND INCOME DEVELOPMENTS

**This section presents recent trends in income and living conditions of EU households since the start of the cost-of-living crisis.** It documents income trends for the overall population and for different income groups, the role of social transfers in mitigating income inequality, and the multifaceted nature of poverty and social exclusion.<sup>(41)</sup> As the official indicators on inequality and risk of poverty are computed with survey data on income (latest available are 2023 data based on 2022 incomes), these figures are complemented with Eurostat flash estimates on income inequality and poverty (2023 incomes).

### 4.1. Income and consumptions trends

**Following declines in the last three quarters of 2022, real gross disposable household income (GDHI) began to rise again in 2023, especially in the last quarter.** The impact of high inflation on real wages prompted real GDHI to decline by 0.3% in the fourth quarter of 2022 compared to the previous year. However, as inflationary pressures eased and nominal wage growth gained pace in 2023, real GDHI saw improvements and was 1.8% higher in the fourth quarter of 2023 compared to the same quarter of 2022 (0.7% in the first, 1.2% in the second, 0.6% in the third quarter in year-on-year comparisons). The positive growth of real GDHI in the first two quarters of 2023 was primarily due to the lower negative impact of taxes on income and wealth. In the context of easing inflation, real compensation of employees contributed positively to GDHI in the second half of 2023 (Chart 1.16). The phase-out of the extraordinary measures after the COVID-19 pandemic and the accompanying energy crisis can explain the negative contribution of net social benefits on the growth of real GDHI observed in most quarters of 2021 and 2022. In the first two quarters of 2023, these net social benefits started to positively contribute to growth again, but stagnated in the second two quarters (see Section 3.6.).

<sup>(39)</sup> 2022 figures are preliminary results based on Eurostat early estimates for expenditure on social protection.

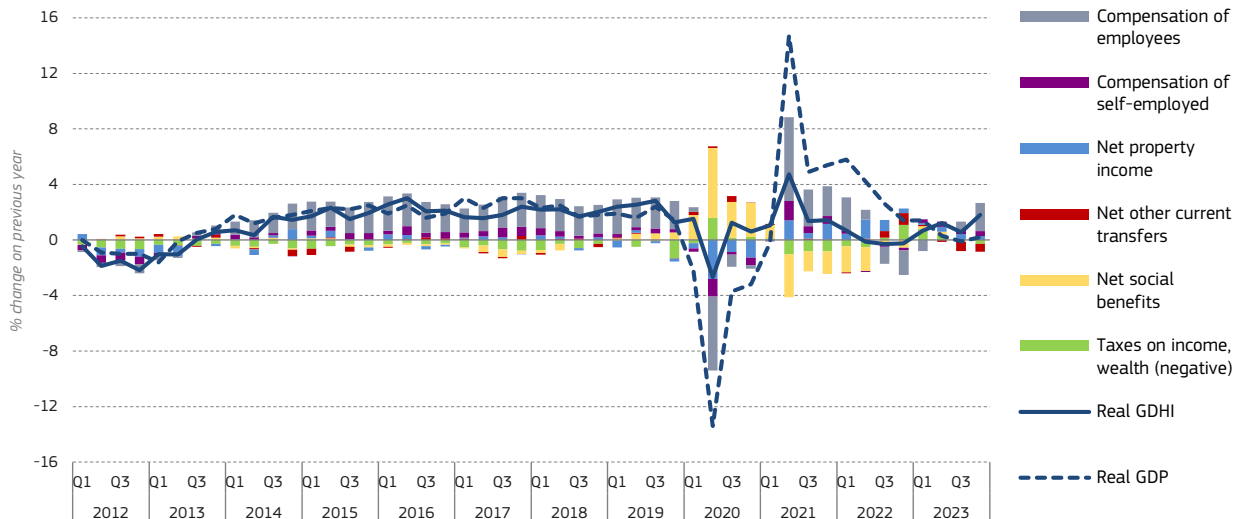
<sup>(40)</sup> Based on latest available administrative data, which extends up to 2022. Spain: (Autoridad Independiente Responsabilidad Fiscal, 2023); Belgium and Italy: (Almeida, De Poli and Hernández, 2022); for EU-level developments: (Heylen, 2024), (European Commission, 2022f).

<sup>(41)</sup> Note that the social transfers analysed here do not include in-kind transfers such as healthcare coverage. Those are nevertheless known to have strong impact on reducing poverty (see the State of Health Synthesis Report 2023 p.17, and ESTAT on theSTIK - Impact of health social transfers in kind on income distribution and inequality - Statistics Explained (europa.eu)).

Chart 1.16

**Real GDP growth, real GDHI growth and its main components**

Real GDHI and real GDP (% change on previous year), and contribution of GDHI components (pp), 2012–2023, EU



Note: Nominal GDHI converted into real GDHI by deflating it with the price index of household final consumption expenditure [prc\_hicp\_aind].

Source: DG EMPL calculations based on Eurostat data, national accounts [nasq\_10\_nf\_tr] and [namq\_10\_gdp], data non-seasonally adjusted.

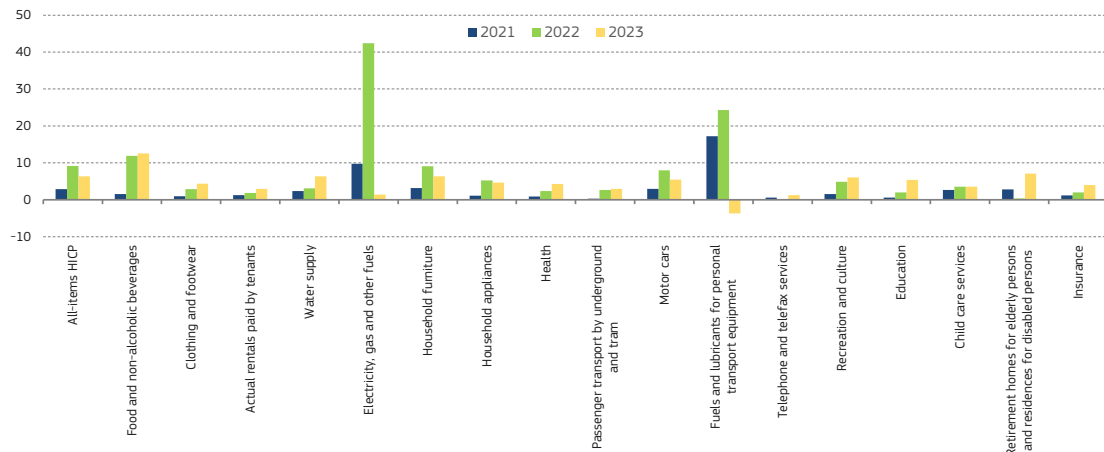
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**The price of some necessities continued to increase in 2023, affecting the purchasing power of lower-income households, while energy prices remained high.** Despite easing inflationary pressure, some essential items for households, such as food and beverages (12.6%), clothing and footwear (4.4%) and rents (3.0%), continued to increase in 2023. This negatively impacted households, especially those with lower incomes, which spend a large share of their income on essential consumption items. However, prices grew less substantially for electricity, gas and other fuels (1.4%), which likely eased the financial pressure stemming from energy consumption for lower-income and some middle-income households. In this context, the increase in energy poverty in 2023 was less pronounced compared to 2022 (Chart 1.17).

Chart 1.17

**Prices of items continued to increase in 2023 compared to 2022 and 2021**

Price index of household final consumption expenditure (year-on-year change), by COICOP, HICP annual data, EU



Note: Consumption items selected from the classification of individual consumption by purpose (COICOP); HICP gives comparable measures of inflation for the countries and country groups for which it is produced.

Source: Eurostat data [prc\_hicp\_aind].

[Click here to download chart.](#)

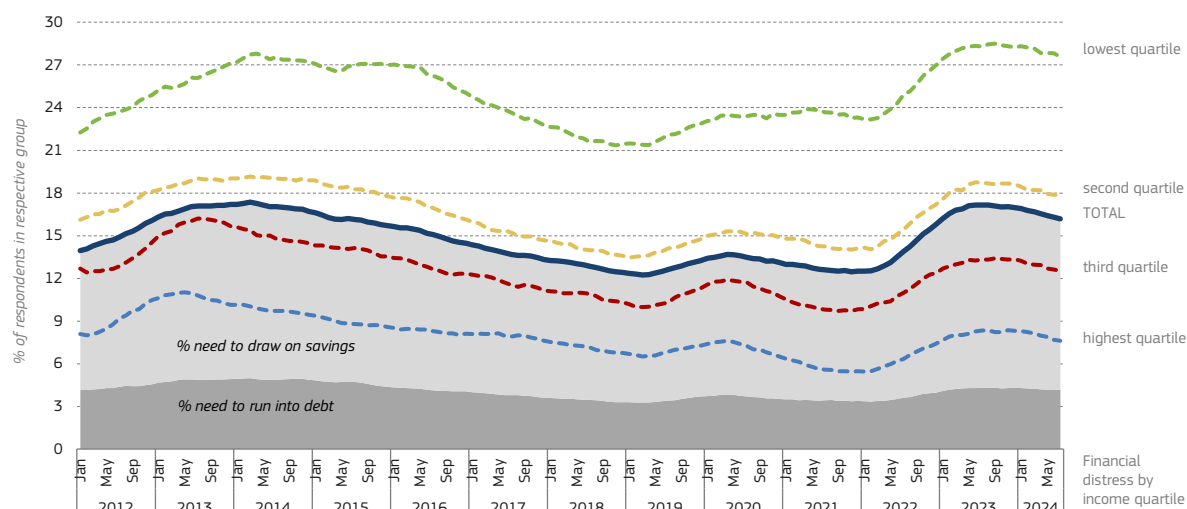
**In the context of easing inflation, the proportion of people reporting financial distress experienced a decline.** After stagnating at high levels, around 17.1%, from May to December 2023, financial distress slightly declined in the first two quarters of 2024, reaching 16.2% in July (-1.0 pp compared to one year before). In the same month, the share of the population declaring that they needed to draw on savings reached 12.0% (-0.8 pp compared to the same month in 2023), while 4.2% stated that they were running into debt (-0.2 pp) (Chart 1.18).



Chart 1.18

**Persistent financial distress over the last year, especially for lower-income households**

Reported financial distress by income quartile, 2012-2024, EU



Note: Lines show the long-term averages for financial distress for the population as a whole and for households in the four income quartiles. Overall share of adults reporting having to draw on savings and/or run into debt are in light grey and dark grey, respectively, which together represent total financial distress.

Source: DG EMPL calculations based on Business and Consumer Surveys, unadjusted data, 12-month moving average.

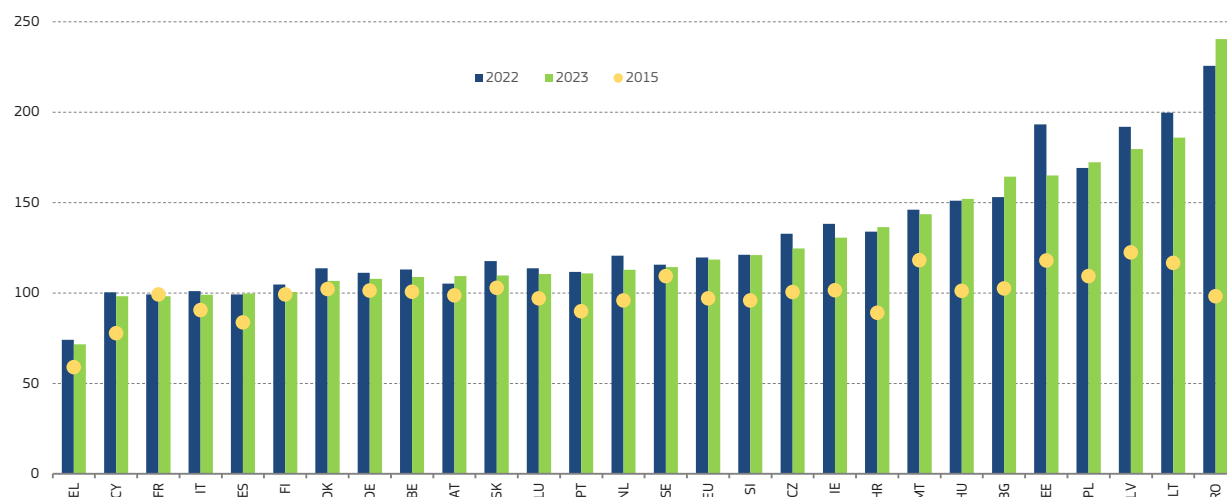
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**Lower-income households still experienced particularly elevated levels of financial distress.** In July 2024 this indicator reached 27.6% for the lowest income quartile (-0.7 pp on a yearly basis), remaining at almost 10 pp or more above the shares for other income quartiles. It amounted to 17.9% for the second quartile (-0.8 pp), 12.5% for the third quartile (-0.8 pp), and 7.6% for the wealthiest quartile (-0.7 pp) (Chart 1.18). Persistent financial distress, especially for lower-income households, could be partly due to average price increases for certain consumer items in 2023, notably food, and ongoing elevated energy prices.

Chart 1.19

**Real median disposable income did not increase in all countries since 2010**

Median equivalised disposable income in real terms (Index SILC 2010 = 100)



Source: Eurostat [ILC\_DI18].

[Click here to download chart.](#)

**Over the last decade, real median disposable income increased for the EU average but remained at 2015 (2014 incomes) levels in 2023 (2022 incomes) in a number of Member States.** This includes some major EU economies (Chart 1.19). The real median disposable income at EU level increased from 97% of the 2010 real median income in 2015 (2014 incomes) to 118.5% in 2023 (2022 incomes). It remained quite stable since 2020. The trend varied considerably across the Member States. In France, Italy, Finland, Denmark, Germany, Belgium, Austria, Slovakia and Sweden, the 2023 real median disposable income remained at 2015 levels, while it increased most in Romania, Latvia, Lithuania, Poland, Bulgaria and Hungary. In Greece, the real median disposable income remains well below the pre-financial crisis level. In nominal terms, the flash estimates (2023 income) nowcast an overall increase of 6.0% for 2023 incomes, with positive changes estimated for all countries. In real terms, however, a slight, non-statistically significant increase (0.2%) is expected at EU level, while at national level, the nowcasted real income is estimated to increase in 16 countries, to remain stable in six

countries, and to decrease in five countries, <sup>(42)</sup> reflecting the heterogeneity of the impact of inflation across countries.

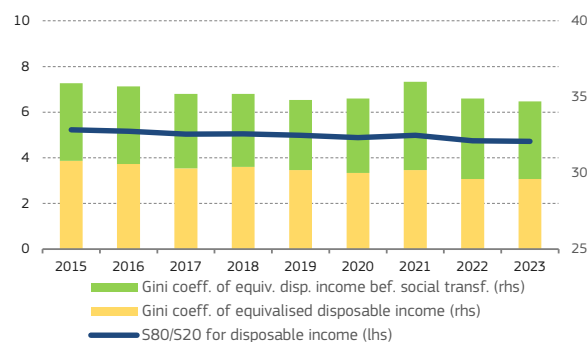
## 4.2. Income inequality

**Following a slight decrease in 2021 and 2022, income inequality in the EU remained broadly static in 2023 compared to 2022, despite the challenging context.** As a measure of inequality of income distribution, the ratio of the total income received by 20% of the population with the lowest income (bottom quintile) remained broadly stable, at 4.72 in 2023 (2022 incomes), compared to 4.74 in 2022 (2021 incomes). <sup>(43)</sup> This development was confirmed by Eurostat's flash estimates of income quintile share ratio for the top and bottom quintiles (S80/S20) nowcasting 2023 income. The broad stability of income inequality during subsequent crises reflects the large-scale support measures put in place by Member States, with EU support, which significantly mitigated negative effects. More generally, income inequality would be much higher without the redistributive effects of transfers (Chart 1.20). <sup>(44)</sup>

Chart 1.20

### Social transfers reduced inequalities

Disposable income quintile share (S80/S20) (left-hand side) and Gini coefficient before and after social transfers (excluding pensions) (right-hand side), 2015–2023, EU



Note: Year refers to EU Survey on income and Living Conditions (EU-SILC) survey year; income from previous year. Break in time series in 2020 due to major methodological changes (especially in Germany).

Source: Eurostat, EU SILC [ILC\_DI11] [ILC\_DI12] [ILC\_DI12C].

[Click here to download chart.](#)

## 4.3. Risk of poverty and social exclusion

**The AROPE rate decreased slightly in 2023 but remains high for certain groups, including children (0–17).** The AROPE rate in the EU was 21.4% in 2023, a slight decrease compared to the previous two years (21.6% in 2022 and 21.7% in 2021) (Chart 1.21). The AROPE rate for children remained rather stable compared to 2022, but increased from 24.0% in 2020 to 24.8% in 2023. In line with the trend in previous years, the share of people at risk of poverty or social exclusion in 2023 was higher for women (22.4%) than for men (20.3%). Young adults aged 18–24 (26.1%), people with a low level of educational attainment (34.5%), people with disabilities (28.8%), non-EU citizens (45.5%), and unemployed people (66.3%) experienced particularly high risks of poverty or social exclusion.

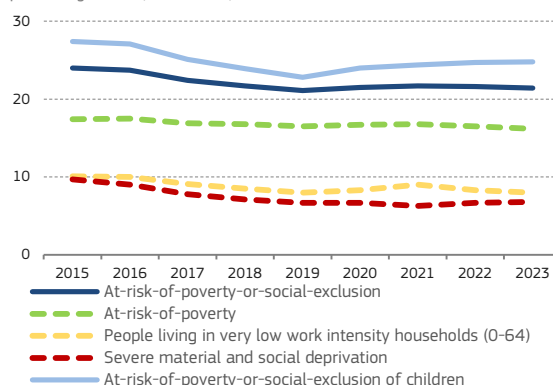
### Progress towards the EU 2030 poverty reduction target is advancing but remains limited for children.

The EU 2030 target foresees lifting at least 15 million people out of poverty or social exclusion compared to 2019, including at least five million children. An estimated 93.9 million people in the EU experienced poverty or social exclusion in 2023, 19.7 million of whom were children under 18 years old. As socioeconomic conditions recover from the COVID-19 pandemic and energy crises, the AROPE rate experienced some improvements in 2023, showing a decrease of 0.6 million people from 2022 and a decrease of 1.6 million people from 2019. However, trends in the AROPE rate for children point to very slow improvements in 2023, pointing to the higher vulnerability of this group to the recent cost-of-living crisis. The number of children at risk of poverty or social exclusion decreased by 0.1 million compared to 2022 but increased by 0.6 million compared to

Chart 1.21

### At risk of poverty or social exclusion rate decreased slightly from 2020–2023, but increased for children

AROPE rate, AROP rate, severe material and social deprivation (SMSD) rate (% of population), share of people living in very low work intensity (VLWI) households (% of population aged 0–64), 2015–2023, EU



Note: Year refers to: EU-SILC survey year; income from previous year; AROPE, AROP: income from previous year; SMSD: current year; VLWI: status in the past year. Values for AROP between 2015–2018 are estimated. AROPE and AROP break in time series in 2020.

Source: Eurostat, EU SILC [ILC\_PEP501N] [ILC\_LI02] [ILC\_MDS011] [ILC\_LVHL11N].

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<sup>(42)</sup> Stable: Denmark, Croatia, Cyprus, Latvia, Malta, Austria and Sweden. Decrease: Czechia, Germany, France, Italy, and Hungary. Increase: Belgium, Bulgaria, Estonia, Ireland, Greece, Spain, Lithuania, Luxembourg, the Netherlands, Poland, Portugal, Romania, Slovenia, Slovakia, Finland.

<sup>(43)</sup> EU-SILC indicators provide insights on the economic wellbeing and other living conditions based on data collected during a specific year, denoted as N. This data encompasses both the characteristics of households for that year (N) and the income from the preceding year, N-1. The income for year N-1 is an estimate for income of year N within EU-SILC. To take into account differences in household size and composition and thus enable comparisons of income levels, the concept of equivalised disposable income is used. It is based on the total net (also referred to as disposable) household income divided by the number of 'equivalent adults', using a standard (equivalence) scale.

<sup>(44)</sup> These effects are represented by the difference between the GINI coefficient before and after social transfers.

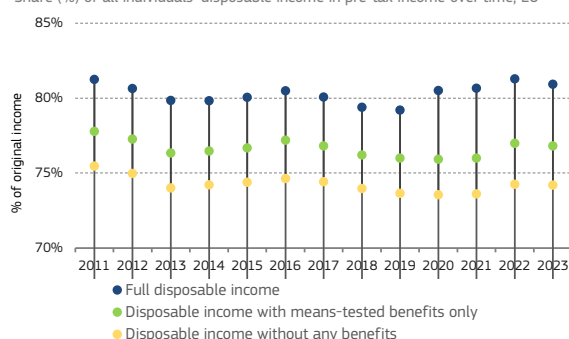
2019.<sup>(45)</sup> Overall, social protection and inclusion play a crucial role in ensuring socioeconomic resilience to shocks, but specific groups need additional support.

**The at-risk of poverty (AROP) rate recorded a further slight decrease in 2023.** It decreased from 16.5% in 2022 (2021 incomes) to 16.2% in 2023 (2022 incomes). Before social transfers (excluding pensions), this rate was 24.8%, 8.6 pp higher, confirming the high impact of social transfers on decreasing the risk of monetary poverty. The AROP rate was high and increased for unemployed people (47.5% in 2023, compared to 46.2%), while remaining broadly stable for children (+0.1 pp, to 19.4%) (Chart 1.21). In-work poverty decreased only slightly, to 8.3% in 2023 (by 0.2 pp) continuing the longer-term trend from 2015. Despite the protective effect of work, many workers still remain at risk of poverty (Chart 1.23). This income indicator does not directly capture changes in household purchasing power. Eurostat flash estimates<sup>(46)</sup> indicate that the AROP rate is expected to reduce by a further 0.2 pp (16.0%) in the EU for 2023 incomes, a non-statistically significant decline. The nowcasted results also show non-statistically significant changes for children, older people, and workers. At national level, the AROP rate is expected to remain stable in 17 countries, to decrease in six, (Germany, Estonia, Spain, the Netherlands, Portugal and Finland), and increase in four (Greece, France, Luxembourg, and Austria).

Chart 1.22

### Tax-benefit systems played a greater role in people's disposable income during and after the COVID-19 pandemic

Share (%) of all individuals' disposable income in pre-tax income over time, EU



**Note:** Original income: pre-tax employment and self-employment income; capital, property and investment income; private pensions and transfers.  
 Full disposable income: original income minus taxes and social insurance contributions paid by the individual, plus means-tested benefits, non-means-tested benefits and pensions.  
 Disposable income with means-tested benefits only: original income minus taxes and social insurance contributions paid by the individual, plus means-tested benefits and pensions.  
 Disposable income without any benefits: original income minus taxes and social insurance contributions paid by the individual, plus pensions.  
 The figure shows the ratios of three different types of disposable income to original income, e.g. a blue dot (full disposable income) at 100% indicates that, on average, benefits received by households are equal to the amount paid for taxes and SIC paid by the individuals. If the blue dot is below 100%, people pay, on average, more taxes and SIC than they receive in benefits.

**Source:** JRC calculations based on Euromod I6. 0+. EU average is weighted by the population of the countries.

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### Tax-benefit systems played a significant role in complementing people's disposable income in 2023.

In the EU in 2023 (as in 2020-2022), the average share of benefits in individuals' disposable incomes was higher than before the onset of the COVID-19 pandemic (Chart 1.22).<sup>(47)</sup> This illustrates the importance of social protection systems and government intervention in buffering the financial impact of crises on households in the EU. Overall, the positive impact of tax-benefit systems was primarily driven by non-means-tested benefits. The share of non-means-tested benefits increased by 1 pp in 2020 and although it receded slightly until 2023, it remained at a higher level than before the pandemic. One possible explanation for that increase is their faster implementation compared to means-tested benefits, thus their broader use by governments to swiftly respond to the COVID-19 pandemic first and the inflationary crisis later.

### The proportion of the population living in severe material and social deprivation remained rather stable.

The SMSD rate in 2023 was 6.8%. Contrary to the long-term improvements since 2015, over the last three years the SMSD rate increased slightly, by 0.5 pp (from 6.3% in 2021), in line with the relatively stable real disposable median income (Chart 1.19). The increase was more pronounced for those in the first income quintile,

who experienced high SMSD rates (19.0% in 2023, compared to 18.4% in 2021, +0.6 pp), reflecting declines in the purchasing power of the lowest income households over this period (Chart 1.23, right). In line with favourable labour market developments, the proportion of people living in very low work intensity households in 2023 further decreased to 8.0%, compared to 8.3% in 2022.

<sup>(45)</sup> Figures based on the break-free series [ilc\_pecs01] and EMPL calculations to adjust the figures to the break in series in France.

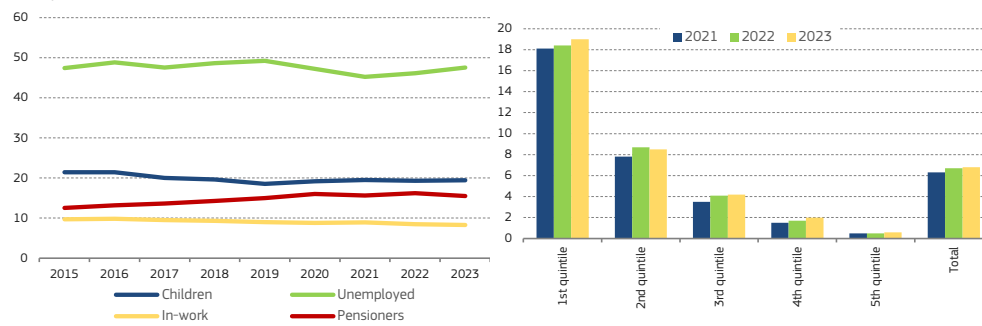
<sup>(46)</sup> Eurostat flash estimates complement structural and detailed indicators from EU-SILC to capture the latest income changes, particularly relevant in times of crisis. Flash estimates are based on modelling and microsimulation techniques that consider the complex interaction between labour market developments, economic and monetary policies, and the implementation of social reforms. For the latter, Eurostat uses the latest information on labour from the 2023 EU-LFS together with the EUROMOD microsimulation model, which provides the effects of direct taxes, social security contributions and benefits on households' income.

<sup>(47)</sup> Calculated as the difference between full disposable income and disposable income without any benefits as a share of full disposable income. For limitations of the modelling exercise and assumptions used in Euromod see (European Commission, 2022d).

Chart 1.23

### Work protects against poverty, but still imperfectly; Severe material and social deprivation at high levels and slightly increasing for the lowest income group

Left chart: share of population at-risk-of-poverty (AROP rate) for selected characteristics, 2015-2023, EU; Right chart: share of population in severe material and social deprivation (SMSD rate) by income quintile, 2021-2023, EU



Note: Year refers to EU-SILC survey year; income from previous year. AROP rate: income from previous year, SMSD rate: current year. AROP rate between 2015 and 2018 is estimated. AROP rate break in time series in 2020.

Source: Eurostat, EU SILC [ILC\_LI02] [ILC\_LI04] [ILC\_IW01] [ILC\_PN56] [ILC\_MDD13].

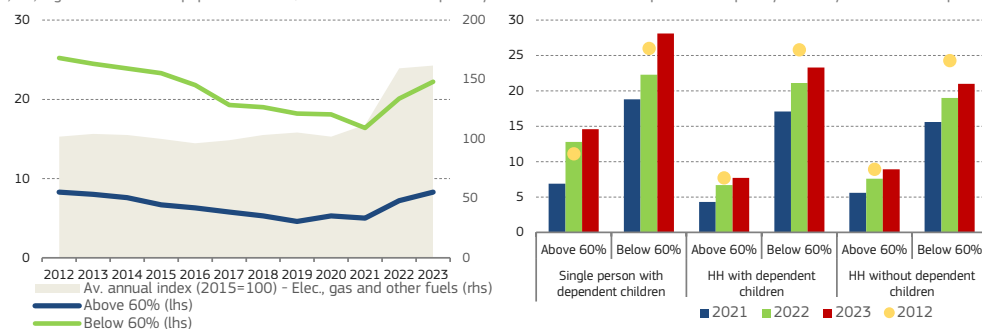
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**Despite relatively favourable social outcomes, the proportion of the population experiencing energy poverty further increased in 2023.** Energy poverty here operationalised and measured by the ‘inability to keep home adequately warm’, increased by 1.3 pp in 2023, reaching 10.6% (compared to 9.3% in 2022 and 6.9% in 2021). There are large variations across Member States, with energy poverty particularly high in Spain (20.8%), Portugal (20.8%), Bulgaria (20.7%), Lithuania (20.0%) and Greece (19.2%). In the context of high energy prices, energy poverty increased more sharply for the population at risk of poverty (by 2.1 pp), to 22.2% in 2023, reaching more than double the EU average (Chart 1.24, left). The proportion of single people with dependent children experiencing energy poverty has surpassed 2012 levels (Chart 1.24, right). The share of households with arrears on utility bills remained stable compared to 2022, while the proportion of households living in a dwelling with a leaking roof, damp walls, floors or foundation, or rot in window frames or floor increased by 0.7 pp to 15.5% in 2023. Household expenditure on housing, water, electricity gas and other fuels have risen steadily since 2010. <sup>(48)</sup>

Chart 1.24

### Peak of population unable to keep their home adequately warm in 2023

Left chart: share of population below/above the at-risk-of-poverty threshold unable to keep home adequately warm and average annual index (2015=100) for electricity, gas and other fuels, 2012-2023, EU; Right chart: share of population below/above the at-risk-of-poverty threshold unable to keep home adequately warm by household composition, 2021-2023, EU.



Source: Eurostat, EU-SILC [ILC\_MDES01] [PRC\_HICP\_AIND].

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## 5. CONCLUSIONS

**In 2023, EU growth was weak in the context of decreasing, but elevated, inflation levels.** Inflation declined throughout the year, initially driven primarily by the decrease in energy prices. Real GDP increased by 0.4% in 2023 and is expected to expand by 1.0% in 2024 and by 1.6% in 2025. However, uncertainties and significant risks persist, especially as geopolitical tensions continue.

**In recent years, the labour market remained resilient, with employment at record highs and unemployment at record lows.** The employment rate reached its highest-ever level in 2023, at 75.3%, while unemployment remained at 6.1%. The labour market situations of population groups in vulnerable situations showed improvement, albeit with significant differences to the general population. Employment growth is expected to be limited in 2024 and 2025.

<sup>(48)</sup> Eurostat [hbs\_exp\_t121]

**In the context of economic and demographic challenges, significant labour shortages persist.** Labour shortages continue to be high, albeit declining slowly, with a decreasing labour demand. Limited employment growth is anticipated in the coming years, partially due to moderate economic growth. The situation has improved for young people, those classified as NEET, and people in vulnerable situations (e.g. non-EU citizens, people with disabilities), but still lags considerably compared to the total population. Labour shortages can be addressed comprehensively through activating underrepresented people in the labour market, supporting skills development, improving working conditions in certain sectors, improving fair intra-EU mobility for workers and learners, and attracting talent from outside the EU. <sup>(49)</sup> Social dialogue and the social partners are crucial in promoting such actions.

**Participation in education and training activities saw only a modest increase, indicating a positive, but insufficient, trend towards enhancing skills and competencies.** Barriers such as perceived lack of necessity, schedule conflicts, and financial constraints hindered broader participation in training. These must be addressed, as investing in skills remains critical for addressing labour shortages, maintaining competitiveness in the EU, and supporting the green and digital transitions. The European Commission promotes skills development and provides support for skills, training and education through initiatives like the new European Skills Agenda, the Pact for Skills, and the action plan for the implementation of the European Pillar of Social Rights, as well as supporting social partners in their capacity-building and social dialogue activities.

**The surge in public expenditure on social, health, and economic priorities during the COVID-19 pandemic underlines the role of government intervention in mitigating the adverse impacts of crises.** Social protection measures, including income support schemes and unemployment benefits, played a vital and countercyclical role in cushioning the economic fallout of the pandemic. In recent years, tax-benefit systems demonstrated their role in reducing inequality and augmenting the market income of vulnerable households. Sustained efforts are needed to ensure the effectiveness and efficiency of public spending and policies in supporting people in the most vulnerable situations.

**The risk of poverty or social exclusion decreased slightly and income inequality remained stable, while severe material and social deprivation and energy poverty increased, particularly for low-income households.** The at-risk of poverty (AROP) rate decreased somewhat, while income inequality remained stable (2022 incomes), with Eurostat's flash estimate predicting overall stability of income inequality and a further slight decrease in the AROP rate (2023 incomes). Tax-benefit systems played a crucial role in mitigating poverty and inequality.

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<sup>(49)</sup> See also the Action Plan on Labour and Skills Shortages, [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_24\\_1507](https://ec.europa.eu/commission/presscorner/detail/en/ip_24_1507)

# Social convergence in the EU: taking stock

## 1. INTRODUCTION <sup>(50)</sup>

**Fostering economic and social convergence is a key objective of European integration.** This reflects the expectation that, as a result of European integration, economic prosperity and social progress should be shared across all Member States, regions and citizens. Reducing differences between the best- and worst-performing regions <sup>(51)</sup> was outlined as a priority as early as the founding Treaty of Rome in 1957. <sup>(52)</sup> Since the 1950s, enhancing convergence has been a major objective of the EU Funds policies. It was also explicitly set out in the 1992 Maastricht Treaty on European Union (TEU), which called on the Member States 'to achieve the strengthening and the convergence of their economies'. Article 3 of the TEU states that the EU 'shall promote economic, social and territorial cohesion, and solidarity among Member States'.

**Decreasing economic disparity can lead to social convergence, but not always.** The theory of economic convergence states that the gap in income per capita between poorer and wealthier economies is expected to diminish over time, as the former typically experience more rapid growth rates. <sup>(53)</sup> Within this, upward economic convergence implies both an improvement in performance on average and a reduction of disparities across entities (countries or regions). Historically, it has been assumed that social progress was the logical outcome of economic growth. <sup>(54)</sup> Such an assumption implied that the achievement of upward economic convergence would also lead to upward social convergence, defined as a decline in disparities in social indicators (for instance employment, skills and people at risk of poverty and social exclusion) accompanied by improvements on average. More recently, the empirical literature has found mixed evidence on the relationship between economic and social convergence, pointing to the fact that there is no strong link between the two. <sup>(55)</sup>

**Since 2017, the EU has reinforced its efforts to strengthen upward social convergence and well-being.** The European Pillar of Social Rights is the EU's compass to foster upward convergence, setting out 20

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<sup>(50)</sup> This chapter was written by Jakub Caisl, Anna Lalova, Erik Paessler and Markus Sommersguter, with contributions from Argyrios Pisiotis, and Vanda Almeida, Carlotta Balestra, Luiz Hermida and Sebastian Königs from the OECD.

<sup>(51)</sup> This categorisation of regions is based on the beta convergence estimations at regional level. That is different from the regional categorisation in cohesion policy, where less developed regions are those where GDP/per capita in PPS is less than 75% of the EU27 average (between 75% and 100% for transition regions and above 100% for more developed regions).

<sup>(52)</sup> At least since the Single European Act (1986), convergence has been considered the fundamental economic mechanism and precondition for achieving socio-economic cohesion in the Union ( (Alcidi et al., 2018); (LSE Enterprise, 2011)).

<sup>(53)</sup> The theory of convergence was pioneered by economists R. Solow and Trevor Swan ( (Swan, 1956); (Solow, 1956)).

<sup>(54)</sup> The assumption of the neoclassical growth model that higher GDP per capita denotes better living standards persisted even after the American economist Easterlin observed that after a certain level of income has been attained, people's average perception of their living conditions no longer appears to grow with higher income ( (Easterlin, 1974); (Hacké and Axisa, 2019); (Talmon-Gros, 2014); (Barro et al., 1991)).

<sup>(55)</sup> (Eurofound, 2018)



principles in the areas of equal opportunities and access to the labour market, fair working conditions and social protection and inclusion. The action plan for the implementation of the European Pillar of Social Rights Action Plan was adopted in 2021 and contained more than 75 actions, 74 of which have already been adopted. Notably, the action plan includes three EU 2030 headline targets for employment, skills, and poverty reduction <sup>(56)</sup> that aim to foster upward convergence in the EU. Monitoring social convergence has recently become a more prominent element of the EU's multilateral surveillance framework, the European Semester for economic and social policy coordination, following the development of a Social Convergence Framework that allows for country-specific analyses of Member States' social and labour market policies (see section 5. of this chapter).

**Upward convergence and catching-up trends have been significant in the EU.** Evidence across Member States and regions points to long-term converging trends in living standards. Greece and Spain caught up, with the 12 founding members of the euro area by 2007. Similarly, central and eastern European countries have converged with the EU-15 <sup>(57)</sup> on citizens' welfare since the 2004, 2007 and 2013 enlargements. Research has also provided support for post-accession convergence, showing that the new EU Member States exhibited higher growth rates compared to the EU-15. In most cases, institutional reforms and integration into the EU market have been identified as the major drivers behind the 'catching-up'. However, the same studies noted that convergence is not uniform, with certain regions in central and eastern European Member States benefiting more than others, leading to disparities within, as well as between, countries. <sup>(58)</sup>

**This chapter provides a longer-term analysis of socio-economic convergence between and within Member States.** It describes methodological approaches (see part A2.1. of the Technical annex) used in relevant literature to identify convergence trends. It then examines national and regional (NUTS 2 level) convergence in socioeconomic outcomes at EU level and assesses whether disparities across Member States and regions have increased or decreased over the last decade. It focuses on within-country variations in socioeconomic convergence, before taking a closer look at convergence in labour market outcomes from a gender-equality perspective as various EU level initiatives have been targeting gender disparities in the labour market over the past years. Finally, it presents a brief overview of EU initiatives supporting convergence including the European Pillar of Social Rights and the new Social Convergence Framework. Compared to previous analytical outputs, notably ESDE reports dedicated to this topic, the 9<sup>th</sup> Cohesion report, and Eurofound's work on convergence, <sup>(59)</sup> the chapter considers more recent developments (to 2023) and looks at additional labour market and social outcome indicators previously not considered. <sup>(60)</sup>

## 2. ANALYSIS OF SOCIOECONOMIC CONVERGENCE AT EU LEVEL

**This section provides a brief assessment of convergence in key socioeconomic outcomes, examining selected headline indicators of the EU Social Scoreboard.** <sup>(61)</sup> It analyses convergence in economic performance and living standards, labour market outcomes, skills supply, and social outcomes. To assess convergence across countries and regions (at NUTS 2 level) over time, it relies on methodological approaches centred on reduction in national and regional disparities, defined as sigma convergence, and catching-up of worse performers, defined as beta convergence (see part A2.1. and A2.2. of the Technical annex). <sup>(62)</sup> For each indicator, the analysis looks at convergence across all Member States and, where data allow <sup>(63)</sup>, across all sub-national regions. <sup>(64)</sup> Unless regional results differ significantly from national results at EU level, tables and charts with regional results are presented in part A2.2. of the Technical annex. The analysis covers developments since

<sup>(56)</sup> By 2030: an employment rate of at least 78% of the population aged 20-54; at least 60% of all adults to participate in learning every year; at least 15 million fewer people at risk of poverty or social exclusion.

<sup>(57)</sup> Belgium, Denmark, Germany, Ireland, Greece, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland, Sweden, United Kingdom (UK).

<sup>(58)</sup> (European Commission, 2017); (Eurofound, 2021b); (Eurofound, 2021a); (Eurofound, 2023a); (Eurofound and EEA, 2023); (Alcidi et al., 2018); (Rapacki and Prochniak, 2009); (Campos, Coricelli and Franceschi, 2021). This outcome is substantiated by the observed decrease in the coefficient of variation in real GDP per capita for the group of seven Member States that joined the euro area in 2007 or later, from 0.38 in 2000 to 0.13 in 2015 (European Commission, 2017).

<sup>(59)</sup> (European Commission, 2018); (European Commission, 2024b); (Eurofound, 2018); (Eurofound, 2023a).

<sup>(60)</sup> Adult participation in learning rate, Tertiary education attainment rate, At risk of poverty or social exclusion (AROPE) for children, Housing cost overburden rate, Healthy life years at 65.

<sup>(61)</sup> Latest version of the Social Scoreboard can be found [here](#).

<sup>(62)</sup> The methodology, as developed by the Eurofound and used in this report, focuses on analysis at the level of territorial unit (country, region) with no weighting for the territorial unit. The reason for that is to avoid compromising the evolution in variation of outcomes for those units.

<sup>(63)</sup> Regional level data cover employment and unemployment rates, people not in employment, education or training (NEETs), GDP per capita, adult participation in learning, and tertiary education attainment. Regional data are not readily available for other indicators covered at national level.

<sup>(64)</sup> Nomenclature of territorial units for statistics (NUTS) 2.

2007, <sup>(65)</sup> primarily 2014–2023 because 2014 marked the end of the period most directly affected by the 2008 financial crisis and the associated, well-documented setbacks to convergence in the EU. <sup>(66)</sup>

## 2.1. Convergence of economic outcomes and living standards

**Over the last decade, GDP per capita increased at a faster pace than in previous years.** GDP per capita in Purchasing Power Standard (PPS) grew from EUR 26 632 to EUR 35 616 between 2014 and 2022 (Chart 2.1)<sup>(67)</sup>, with the impacts of the COVID-19 pandemic proving temporary and limited. In 2022, the top three countries in the EU had GDP levels above EUR 46 000 per capita, while the bottom three had GDP per capita levels below EUR 24 000. In terms of regional disparities, GDP has tended to be lower in eastern and southern regions (less than 80% and around 85% of EU average GDP per capita, respectively) compared to northern and western regions (around 120%).

**Growth in real household incomes reflected improved standards of living.** Real gross domestic household income (GDHI) rose by 11.8%, from EUR 15 450 per capita in 2014 to EUR 17 283 per capita in 2022 (Chart 2.1). This was accompanied by growth in net wealth over the period (Box 2.1). The impact of the COVID-19 pandemic on income growth was limited, largely due to automatic stabilisers and the income support measures adopted in the Member States. Still, cross-country variation of GDHI per capita remained substantial in 2022, ranging from EUR 9 300 to EUR 35 300.

**These improvements in GDP per capita have resulted in some convergence of economic gains across Member States and regions.** Over the long-term, cross-country variation in GDHI has decreased, pointing to convergence across Member States, while both national and regional variation of GDP per capita remained rather stable (Chart 2.1).<sup>(68)</sup> However, after 2014, GDP per capita variation decreased in relative terms (i.e. adjusted for average EU GDP growth), but not strongly enough to create convergence in absolute differences across Member States (i.e. not adjusted for changes in EU GDP average; Chart 2.1 and Chart A2.1 in Technical annex). As such, the results of the two measurements lead to rather ambiguous convergence results. Differences increased after 2020, suggesting uneven impacts of the COVID-19 pandemic and subsequent inflationary pressures on economic growth. Convergence trends in GDP per capita measured in EUR and in purchasing power standard (PPS) are the same, with slightly different magnitude.

**Strong GDP per capita and household income growth in central and eastern European countries tend to support upward convergence at EU level.** Some Eastern countries and regions that started at lower GDP per capita and household income levels experienced strong increases since 2014, supporting a mild catching-up effect in both GDP and household income (Table 2.1). For example, Bulgaria, Croatia, Poland, and Romania caught up in terms of GDP while Croatia, Hungary, Latvia and Lithuania caught up in terms of household income. Conversely, stagnation or decline in some southern regions and countries posed a challenge to upward convergence, especially for household income. These contrasting trends reflect underlying differences in productivity growth and investment dynamics, with eastern regions often registering high increases in productivity and investment, unlike many southern regions. They also reflect disproportionate impacts of economic shocks and other persisting structural challenges, notably quality of institutions and smooth functioning of the labour market. <sup>(69)</sup>

<sup>(65)</sup> When data start to become available on a more systematic basis across indicators.

<sup>(66)</sup> (Eurofound, 2018).

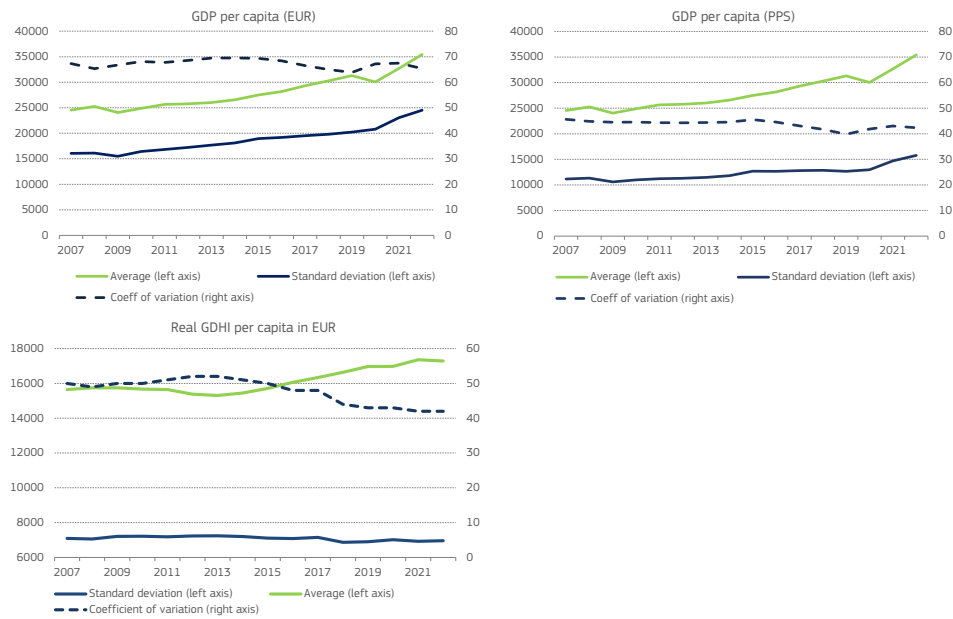
<sup>(67)</sup> GDP per capita grew from EUR 26 630 to EUR 35 620 between 2014 and 2022. Convergence estimations of GDP as measured in per capita EUR, PPS and chain linked volumes follow similar patterns.

<sup>(68)</sup> (European Commission, 2024b) shows rather stable trend of convergence, considering longer time period since 1995.

<sup>(69)</sup> Quality of institutions, the European Quality of Government Index captures citizens' perceptions and experiences of various public services (education, healthcare, law enforcement). A high-quality government is defined as one that combines high impartiality, good public service delivery and low corruption; Smooth functioning of the labour market; (European Commission, 2024b).

Chart 2.1  
**Convergence patterns of economic gains vary across the Member States**

GDP per capita (EUR and PPS) and real GDHI per capita (EUR), and cross-country variation (measured by standard deviation and coefficient of variation, hence adjusted by average EU GDP), 2007-2022, EU-27



*Note:* GDHI data missing for Malta and Romania. Standard deviation is a measure of cross-country variation, the higher the standard deviation, the higher the cross-country variation. EU average levels are weighted values.

*Source:* DG EMPL calculations based on Eurostat datasets nama\_10\_pc, GDHI DG EMPL calculations

[Click here to download chart.](#)

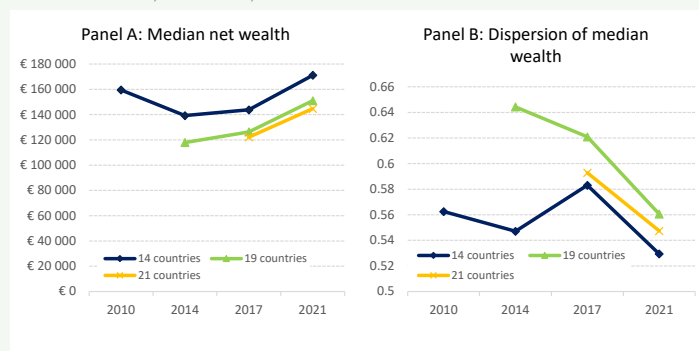
## Box 2.1: Convergence in national wealth levels and distribution

**Median net wealth was stable for most of the 2010s with disparities between countries declining** (Chart 1). Between 2010 and 2017, there were only mild changes in median wealth across the 14 eurozone countries that participated in the Household Finance and Consumption Survey (HFCS),<sup>(1)</sup> accompanied by oscillating variation in wealth levels across countries. Higher saving rates and higher prices of certain assets (notably real estate) triggered throughout the COVID-19 pandemic resulted in an increase in net wealth in every country in the euro area, except for Finland.<sup>(2)</sup> That increase coincided with a drop in wealth disparity between countries. No post-COVID-19 household-level data on wealth are available to assess the durability of the changes during the pandemic.

Chart 1

**Median wealth has increased on average in the euro area, with countries converging upwards**

Average and standard deviation of median net wealth, 2010 – 2021, euro area



Notes: Median household net wealth in 2021 EUR purchasing power standard (PPS). Dispersion measured as standard deviation of log-transformed median wealth by country. Dark blue line includes the 14 countries participating in both wave 1 and wave 4 of the HFCS: Belgium, Germany, crGreece, Spain, France, Italy, Cyprus, Luxembourg, Malta, the Netherlands, Austria, Portugal, Slovakia, Finland. Light green line also includes Estonia, Ireland, Latvia, Hungary, Slovenia. Yellow line, includes Croatia and Lithuania, in addition to the 19 countries already listed above. Standard deviation is a measure of cross-country variation, the higher the standard deviation, the higher the cross-country variation.

Source: OECD calculations based on the Eurosystem Household Finance and Consumption Survey (HFCS), [https://www.ecb.europa.eu/stats/ecb\\_surveys/hfcs/html/index.en.html](https://www.ecb.europa.eu/stats/ecb_surveys/hfcs/html/index.en.html).

**Since 2014, net wealth grew for all income quintiles, benefitting mostly top earners.** Increases in household net wealth were relatively modest between 2014 and 2017, with median wealth among the top fifth of earners (top quintile) recording the largest growth (15%). Between 2017 and 2021, median household net wealth grew over 20% for all income quintiles. In absolute terms, the top income quintile still benefitted most from this growth, increasing their net wealth by EUR 50,000 (PPS) between 2017 and 2021 (Chart 2).

**Wealth concentration increased after the financial crisis but decreased during COVID-19.** The distribution of wealth became more unequal between 2010 and 2017 (Chart 3), with an increase in the share of wealth held by the top 10% at the expense of the bottom 50%. Eleven of the 14 countries with data available since 2010 saw the wealth share held by the top 10% increase between 2014 and 2017 (from 48% to 50%).<sup>(3)</sup> At the same time, variation in wealth concentration across countries decreased until 2017 (Chart 3), as wealth in less unequal countries became more concentrated. Breaking the previous trend, during the COVID-19 pandemic there was a decrease in the wealth share of the top 10%, accompanied by a rising share of wealth held by the bottom 50%.<sup>(4)</sup>

<sup>(1)</sup> HFCS data have some limitations in capturing the concentration of wealth at the very top of the wealth distribution due to difficulties in covering the wealthiest individuals in a survey and due to underreporting of wealth at the top.

<sup>(2)</sup> For the purposes of this analysis, “euro area” here refers to the group of countries represented in the HFCS, i.e. including Hungary in wave 2 and Croatia in wave 3 (joined the eurozone in 2023). Figure 1 note contains a full list of countries included in each time series.

<sup>(3)</sup> The increase in concentration of wealth between 2014 and 2017 is also apparent for the broader group of 19 countries for which data are available since 2014, although the patterns are weaker.

<sup>(4)</sup> In general, this was due to lower debt levels and higher housing prices, both of which favour the bottom and middle of the distribution. Financial asset prices were also lower in 2020 than in 2017 for most countries but grew in 2021.

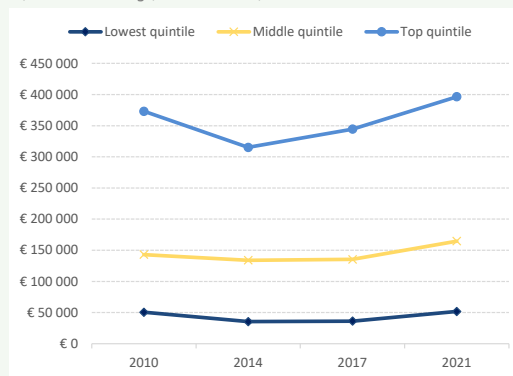
(Continued on the next page)

Box (continued)

Chart 2

**Median net wealth grew across the income distribution between 2010 and 2021**

Median household net wealth by income quintile, euro area average, 2021 USD PPP, 14 EU countries



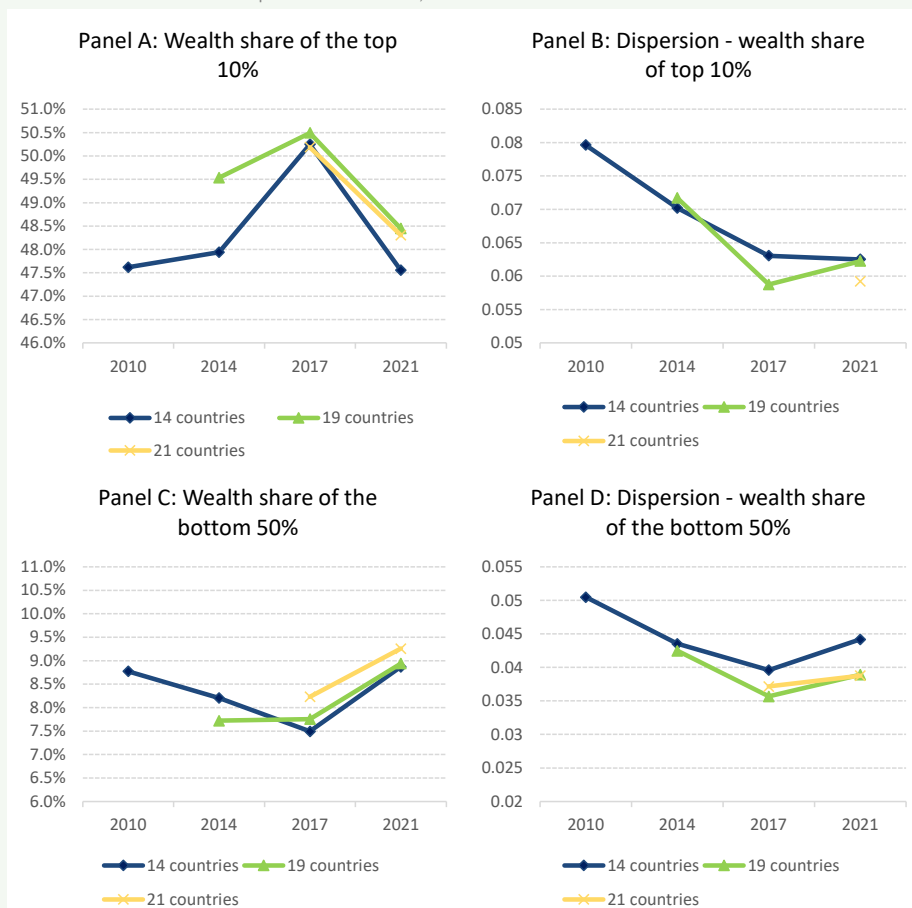
**Note:** Median household net wealth in 2021 EUR PPS. Median household net wealth calculated for: people in the bottom fifth of income earners (lowest quintile); people in the middle fifth of income earners (middle quintile); people in the top fifth of income earners (top quintile).

**Source:** OECD calculations based on the HFCS, [https://www.ecb.europa.eu/stats/ecb\\_surveys/hfcs/html/index.en.html](https://www.ecb.europa.eu/stats/ecb_surveys/hfcs/html/index.en.html)

Chart 3

**Wealth concentration increased after the financial crisis but decreased during COVID-19**

Average and standard deviation of wealth share of top 10% and bottom 50%, 2010-2021



**Note:** Dispersion measured as standard deviation of wealth share by country. See Figure 1 note for more information. Standard deviation is a measure of cross-country variation, the higher the standard deviation, the higher the cross-country variation.

**Source:** OECD calculations based on the HFCS.

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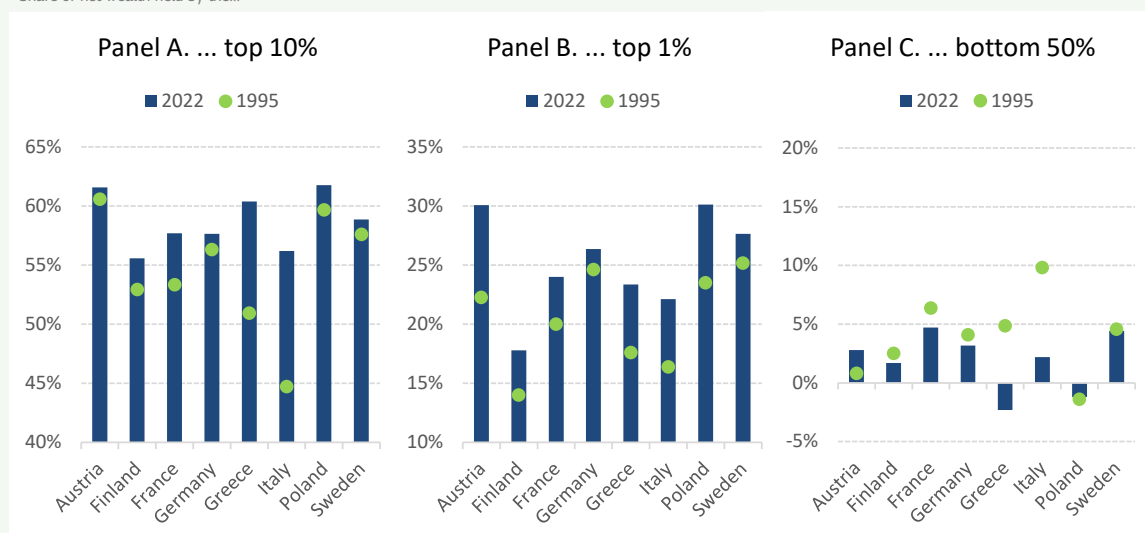
Box (continued)

**The increasing concentration of wealth during the 2010s continued the longer-term increases in wealth inequalities in the EU. <sup>(5)</sup>** In all the countries, the concentration of wealth has increased significantly since 1995, although following different patterns (Chart 4). In most of the selected countries, the wealth share held by the top 1% has increased significantly, resulting in a higher concentration of wealth at the very top. This typically came at the expense of the bottom 50% of the distribution, except in Poland and Austria, where it was at the expense of the middle class instead.

Chart 4

#### Wealth concentration increased over the long-term in many EU countries in 1995 and 2022

Share of net wealth held by the...



Note: Net household wealth is the sum of financial assets (e.g. equity or bonds) and non-financial assets (e.g. housing or land) owned by individuals, net of their debts. Wealth inequality is measured using the distribution of net household wealth among adults (equal-split series). Population comprises individuals over age 20.

Source: World Inequality Database, data on 1 March 2024.

<sup>(5)</sup> Longer-term data series were taken from the World Inequality Database. They are not entirely comparable to data collected by the European Central Bank presented elsewhere in this box, but allow for the study of the evolution of wealth concentration over a longer time period. Only those countries for which the World Inequality Database long-term data are known to be of good quality were selected for analysis.

## 2.2. Convergence of labour market outcomes and skills supply

**Since 2014, the labour market has performed strongly but sizeable differences persist across countries and regions (Figure 2.1).** Following a downturn between 2008 and 2013 due to the economic and financial crisis, <sup>(70)</sup> the EU employment rate increased from 67.6 % in 2014 to 75.3 % in 2023 (Chart 2.2). Unemployment started to decline in 2014 (11 %) and fell to 6.1% in 2023 <sup>(71)</sup>. Outcomes for young people, aged 15-24, followed a similar pattern, with the youth unemployment rate steadily decreasing from 24.1 % in 2014 to 14.5 % in 2023, and the NEET rate declining from 16% in 2014 to 11.2% in 2023. The employment rate of older workers (aged 55-64) improved from 49.7% to 63.9% during the same period. As regards cross-country variation, in 2023, five Member States had already reached or exceeded their national employment rate targets. <sup>(72)</sup> Employment rates varied from 66% in some southern Member States to around 80% in most northern and western Member States. Unemployment of people aged 15-74 ranged from 2.6 % to 12%, while unemployment rates for young people aged 15-24 ranged from 6% to almost 29%. NEET rates ranged from almost 5% to 19%.

**Over the last decade, labour market outcomes have displayed broad upward convergence.** Since 2014, improvements in employment, unemployment (including among young people) and NEET rates were accompanied

<sup>(70)</sup> Eurostat dataset used to monitor the EU 2030 employment target (lfsi\_emp\_a) is limited to 2009-2022. A historical dataset for employment rates is used to show earlier data points (lfsa\_ergan). The historical data shows that the employment rate in 2008 was 69.5%, decreasing to 75.3% in 2023.

<sup>(71)</sup> For the overview of general unemployment rate trends in the text the Eurostat data code une\_rt\_a is used.

<sup>(72)</sup> The national targets are available here.

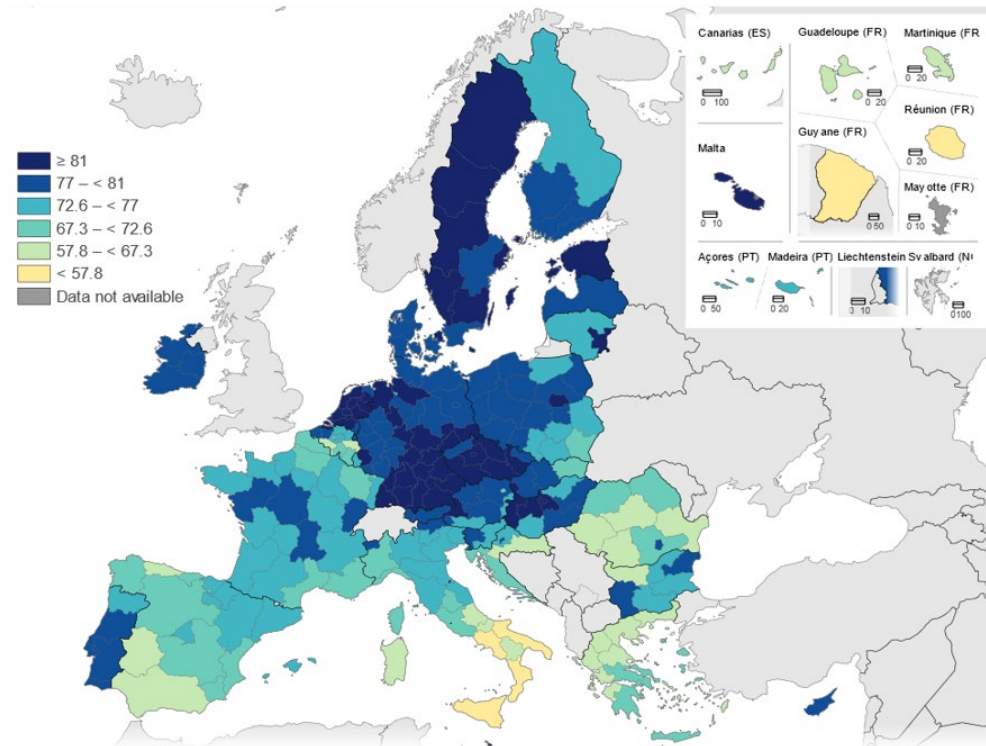


by decreasing national and regional variation (Chart 2.2), leading to upward convergence in labour market outcomes. Employment rates of older people converged upwards as well (Chart A2.2 in Technical annex). Convergence in real wages differs according to the type of measurement: absolute differences in wages have largely remained stable since 2007 (Chart 2.3), but relative differences across countries have decreased, showing upward convergence. <sup>(73)</sup>

Figure 2.1

### Differences in employment rates across EU regions remain sizable

Employment rate (% of people aged 20-64) by NUTS2 regions, 2023



Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat  
Cartography: Eurostat – IMAGE, 06/2024

Source: Eurostat, [lfst\_r\_lfe2emprtn], IMAGE Interactive map generator  
[Click here to download figure.](#)

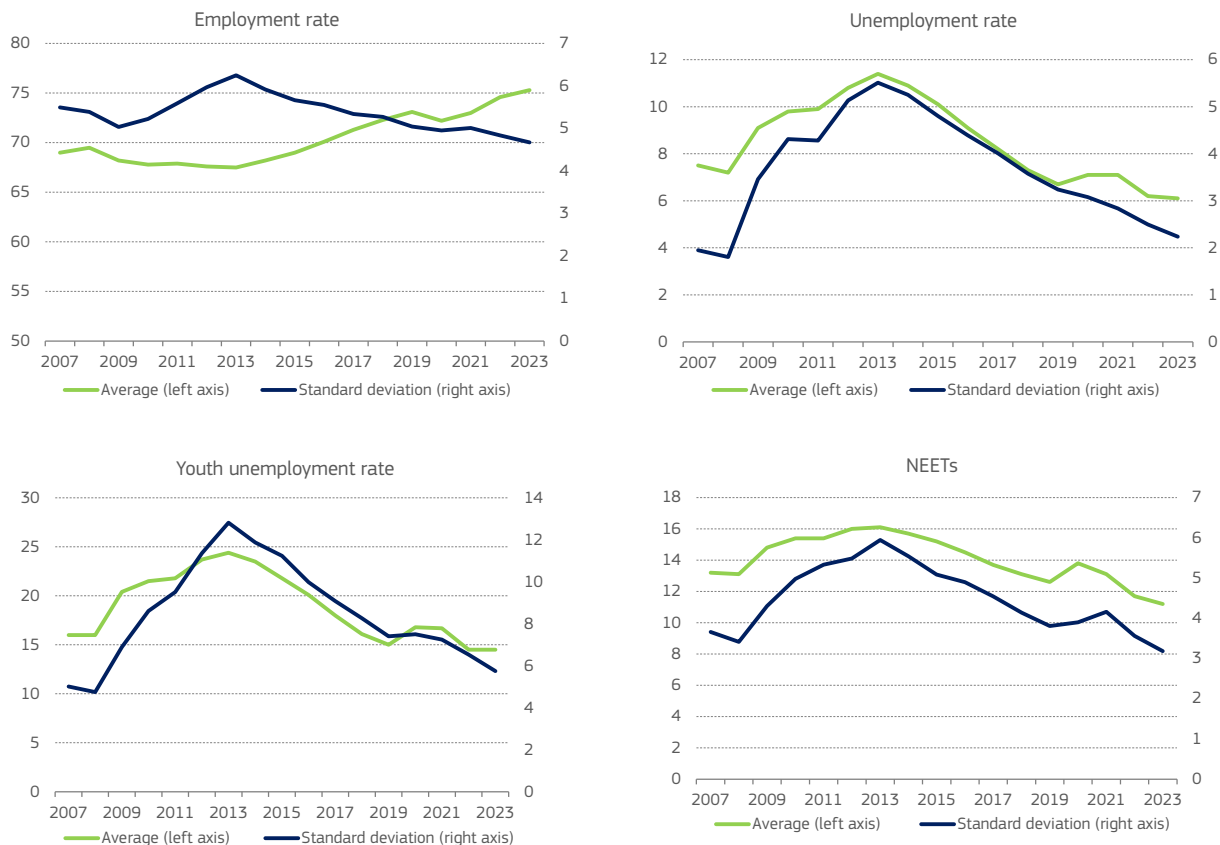
**Convergence of labour market outcomes was only temporarily interrupted by the COVID-19 pandemic.** In 2021, the labour market had already bounced back due to short-time work schemes and other exceptional support measures. This was a much quicker recovery than after the 2008 financial crisis, which led to a divergence of labour market outcomes until 2014. Since then, the average performance of countries and regions has improved with national and regional differences beginning to narrow (Chart 2.2). While improvements in employment were quickly evident, reductions in (youth) unemployment and NEET rates took longer to materialise, reaching pre-2008 values only in 2018. Overall, the impact of the 2008 financial crisis on disparities in regional overall employment rates was more severe and protracted than at national level, with regional differences remaining above 2007 levels in 2022 (Chart A2.2 in Technical annex).

<sup>(73)</sup> The difference in the two measures is that changes in the coefficient of variation might be led by changes in the average level of the indicator, suggesting upward convergence across countries, rather than changes in the standard variation which would point to a convergence of wage distribution.

Chart 2.2

**Labour market outcomes have improved since 2014, accompanied by convergence**

Employment rate (% of population aged 20-64), unemployment rate (% of population in the labour force aged 15-74), youth unemployment rate (% of labour force aged 15-24), young people neither in employment nor in education and training (NEET) (% of population aged 15-29), and their cross-country variation (measured by standard deviation), 2007-2023, EU-27



**Note:** Estimations based on employment rate of age group 20-64, unemployment rate of age group 15-74, and youth unemployment rate of age group 15-24. EU average levels are weighted values. Indicators differ from the Social Scoreboard main indicators in terms of EU average levels. Indicators were selected to allow visualisation of a wider time period before 2009. Standard deviation is a measure of cross-country variation, the higher the standard deviation, the higher the cross-country variation.

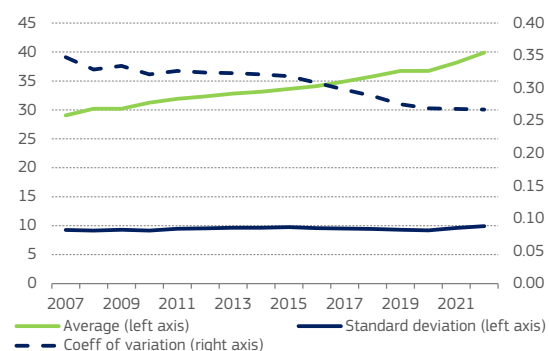
**Source:** DG EMPL calculations based on EU Labour Force Survey (EU-LFS) datasets ifsa\_ergan, ifsa\_urgan, edat\_lfse\_20

[Click here to download chart.](#)

Chart 2.3

**Cross-country differences in real wages decreased in the longer term**

Real compensation per employee (PPS) and cross-country variation (measured by standard deviation and coefficient of variation), 2021-2022, EU-27



**Note:** Standard deviation is a measure of cross-country variation, the higher the standard deviation, the higher the cross-country variation.

**Source:** Annual macroeconomic database of the European Commission Directorate-General for Economic and Financial Affairs (AMECO).

[Click here to download chart.](#)

**Cross-country and regional variations in labour market performance are linked to a number of factors, including differences in human capital development.** Participation in learning is one of the factors linked to employability, adoption of advanced technologies,<sup>(74)</sup> and production of high-value goods. Widening gaps in skill development suggest increasing variation in the supply of skilled workers. In the last decade, labour and skills shortages increased in the EU, driven by demographic changes, substantial job growth due to the green and digital transitions, as well as changing skill requirements, and poor working conditions.<sup>(75)</sup> This may exert pressure on the labour market, creating more potential for employment in lagging regions, and consequently catching up in labour market outcomes.

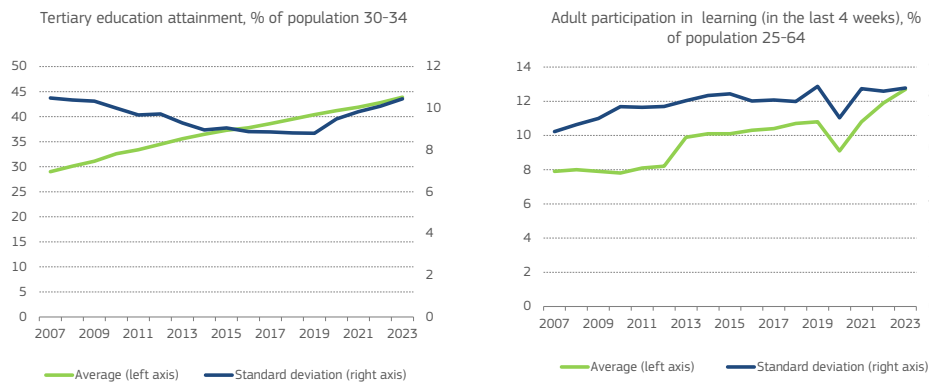
<sup>(74)</sup> (World Bank, 2018).

<sup>(75)</sup> (European Commission, 2024b).

Chart 2.4

**Increasing disparities in skills supply create further risks for the labour market**

Tertiary education attainment and adult participation in learning (last 4 weeks) (% of population aged 30-34), and cross-country variation (measured by standard deviation), 2007-2023, EU-27



Note: Standard deviation is a measure of cross-country variation, the higher the standard deviation, the higher the cross-country variation. EU average levels are weighted values.

Source: DG EMPL calculations based on Eurostat datasets trng\_ifse\_01, edat\_ifse\_03.

[Click here to download chart.](#)

**Tertiary education attainment has grown considerably, although disparities between countries are stable in the long term.**

The share of population aged 30-34 attaining tertiary education in the EU grew considerably, from 29% in 2007, to 36.5 % in 2014, and 43.9 % in 2023 (Chart 2.4) <sup>(76)</sup>. After declining until 2013 and stabilising between 2014 and 2019, disparities started to increase again in 2020. Member States in central and eastern Europe perform below the EU average, while those in north and western Europe rank highest, with overall EU rates varying from 22.8% to 66% in 2023. The convergence after the 2008 financial crisis may be partly linked to the resilience of employment in some high-skilled occupational groups. <sup>(77)</sup> Growing job insecurity during that period led to an increasing demand for higher education as an alternative to employment. <sup>(78)</sup>

**Regional variation in tertiary education attainment increased, contrasting with stability in national disparities.** Regional disparities did not change much between 2007 and 2015 but have since started to grow steadily (Chart 2.5). In 2023, tertiary education attainment exceeded 50% in approximately 50 regions covering more than half of the Member States (while it ranged from 28% to 48% in the majority of EU NUTS2 regions, Figure 2.2). These were often the capital regions of these countries, whose exceptionally high shares of tertiary graduates contributed to high variation across regions. Having tertiary education was also considerably more common in regions with a higher rather than lower GDP per capita (12 pp difference). <sup>(79)</sup> By contrast, about four in five regions in Bulgaria, Czechia, Portugal and Romania had tertiary education attainment below 30%. The persistence of regional differences in tertiary education attainment raises concerns about potential talent development traps in regions lacking a qualified workforce capable of enhancing productivity. This is an important challenge to balance regional development, as highlighted in the European Commission's recent Communication on Harnessing Talent in Europe's Regions. <sup>(80)</sup>

<sup>(76)</sup> In order to ensure consistency across the analysis, the figures refer to the Social scoreboard indicator tertiary education attainment as % of population aged 30-34, and not the EU target indicator, which considers the age bracket 25-34. Trends in standard deviations of the indicator follow similar pattern for both of the age brackets.

<sup>(77)</sup> (European Centre for the Development of Vocational Training (Cedefop), 2011).

<sup>(78)</sup> (Kärkkäinen, 2010), (Douglas, 2010).

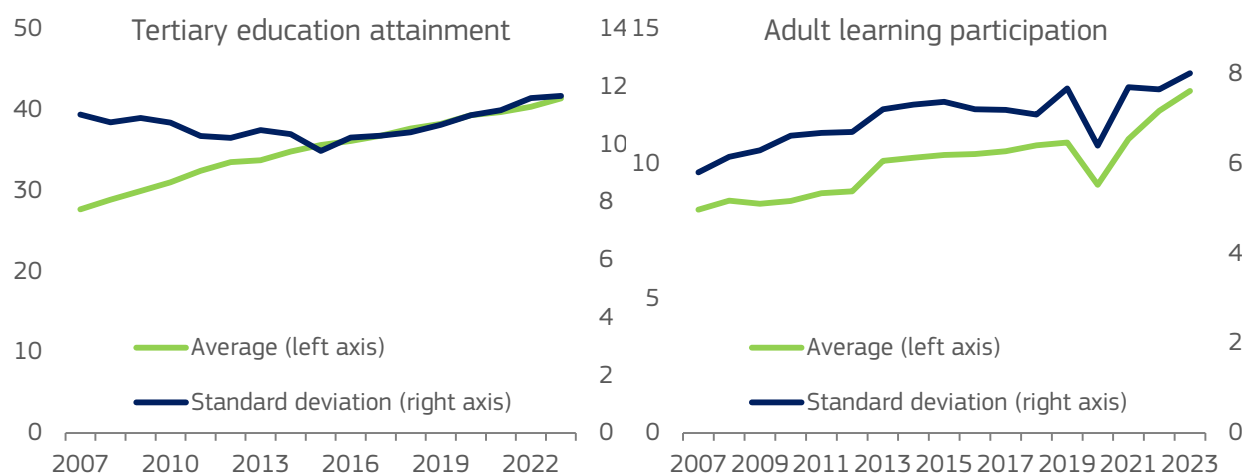
<sup>(79)</sup> (European Commission, 2024b).

<sup>(80)</sup> Read Communication press release [here](#).

Chart 2.5

**Growing disparities in skill supply pose challenges to regional development**

Tertiary education attainment and adult participation in learning (last 4 weeks) (% of population aged 30-34), and cross-regional variation (measured by standard deviation), 2007-2023, EU-NUTS2



Note: Standard deviation is a measure of cross-regional variation, the higher the standard deviation, the higher the cross-regional variation.

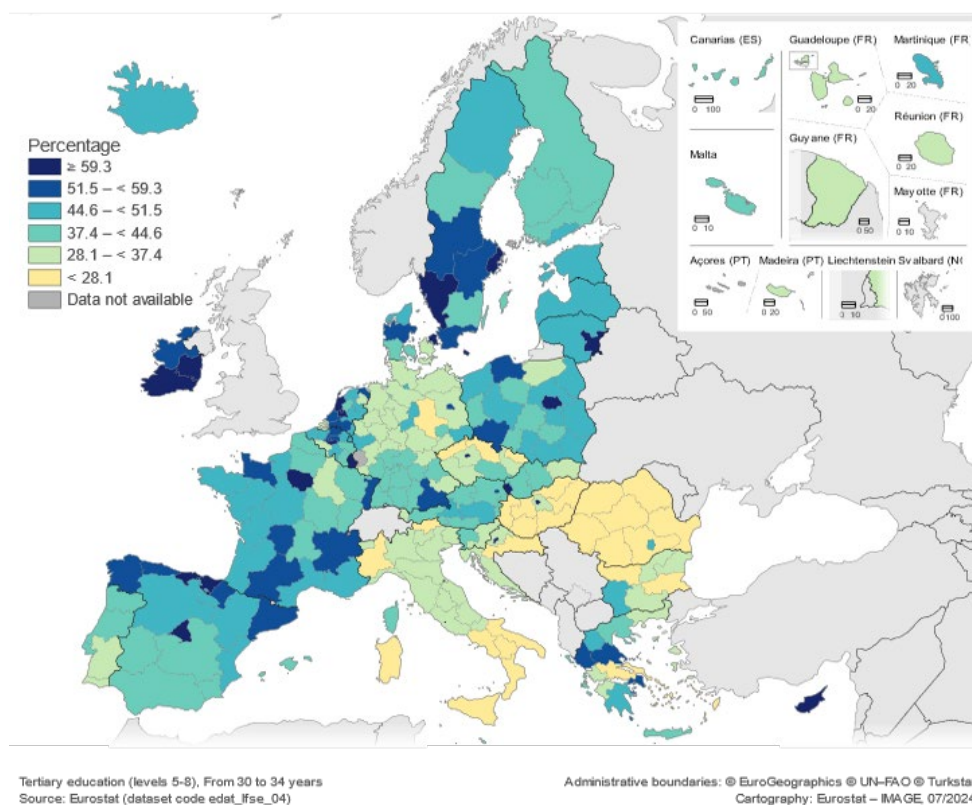
Source: DG EMPL calculations based on Eurostat datasets edat\_lfse\_04, trng\_lfse\_04.

[Click here to download chart.](#)

Figure 2.2

**Regional variation in tertiary education attainment ranged from 28-48% in most NUTS2 regions**

Tertiary educational attainment, 2023 (% of people aged 30-34), NUTS 2 regions



Note: Tertiary educational attainment (% of people aged 30-34) by NUTS2 regions, 2023.

Source: Eurostat, edat\_lfse\_04 IMAGE Interactive map generator.

[Click here to download figure.](#)

**While participation in adult learning improved somewhat at the EU level, disparities increased including in relation to the development of basic digital skills.** The indicator for adult learning participation (over the last four weeks) stood at 7.9% in 2007, increasing to 10.1% in 2014, and 12.8% in 2023.<sup>(81)</sup> However, differences in national (and regional) participation rates widened, ranging from 1.4% to

<sup>(81)</sup> Analysis refers to the European Pillar of Social Rights Social Scoreboard indicator of adult participation in learning in the past 4 weeks (LFS) and not to the adult participation in learning in the last 12 months (Adult Education Survey (AES)) indicator that monitors the EU

38.8% in 2023 (Chart 2.4). Adult participation rates tended to be higher in northern and western EU regions and in regions with higher GDP per capita (around 14% for both) compared to eastern EU and regions with lower GDP per capita (around 8% for both). Evidence points to slightly increasing cross-country disparities between Member States in the development of basic digital skills.<sup>(82)</sup> This is particularly important in the context of growing digitalisation and digital intensity of jobs and the existing gender gaps.<sup>(83)</sup> There was some increase in the share of people with basic or above-basic digital skills (from 53.9% in 2021 to 55.6 in 2023). However, differences across countries are sizeable, ranging from 28% to 83%.

**On average, countries and regions with poorly performing labour markets and lower participation in adult learning have somewhat caught up with those with better outcomes (Table 2.1).** In 2014-2023, Greece, Spain and Croatia experienced more rapid improvements in employment than other Member States, and several countries also experienced quick reductions in unemployment, including among young people (Greece, Spain, Croatia, Italy, Cyprus, Portugal) and NEET rates (Bulgaria, Greece, Spain, Croatia, Italy). For youth unemployment rate, the catching-up during the 2014-2023 period was not strong enough to compensate for the lack of convergence between 2007 and 2014, and thus there was no catching-up effect over the whole 2007-2023 period. Catching-up in adult learning participation and tertiary attainment was more rapid during the financial crisis than in other periods. While this catching-up continued during 2014-2023 for adult learning (notably due to improvements in Hungary, Poland, Romania, and Slovakia), there is no significant evidence of catching-up in tertiary attainment levels. The regional catch-up effects between 2007 and 2023 are broadly comparable with those observed at national level (Table A2.1 in Technical annex), albeit of weaker magnitude in some cases (employment and unemployment rates).

---

2030 adult learning target. Unlike the EU 2030 adult learning target, the LFS indicator referring to the past 4 weeks provides more data points, enabling analysis of cross-country variations over time.

<sup>(82)</sup> The digital skills indicator in the Social Scoreboard has been revised: the new indicator includes two reference points, 2021 and 2023.

<sup>(83)</sup> In 2023, more women, aged 16-44, had at least basic digital skills than men in the same age groups. Among the older people aged 45 or over, the trend is reverse (based on Eurostat indicator `isoc_sk_dssk_i21` and Eurostat Statistics Explained article).

Table 2.1

**Prominent catching-up of worst performing countries, especially between 2014-2023**

Beta-convergence patterns and regression coefficients at national level, by indicator, 2007-2023

Indicator	Time period	
	2007-2014	2014-2023
GDP per capita	Catching up (-0.02)	Catching up (-0.02)
GDHI	Catching up (-0.01)	Catching up (-0.02)
Employment rate, % of population aged 20-64	No robust evidence of catching up	Catching up (-0.05)
Unemployment rate, % of labour force aged 15-74	No robust evidence of catching up	Catching up (-0.04)
Youth unemployment rate, % of labour force aged 15-24	No robust evidence of catching up	Catching up (-0.04)
NEET rate, % of population aged 15-29	No robust evidence of catching up	Catching up (-0.04)
AROPE rate, % of population	Catching up (-0.04)	Catching up (-0.04)
AROPE rate of children, % of population aged 0-17	Catching up (-0.03)	Catching up (-0.03)
Housing cost overburden, % of population	Catching up (-0.04)	Catching up (-0.05)
Healthy life years at age 65: women, years	No robust evidence of catching up	Catching up (-0.03)
Healthy life years at age 65: men, years	No robust evidence of convergence	No robust evidence of convergence
Adult participation in learning (in the last 4 weeks), % of population 25-64	Catching up (-0.06)	Catching up (-0.03)
Tertiary education attainment, % of population aged 30-34	Catching up (-0.06)	No robust evidence of catching up

Note: Statistically significant logarithmic regressions coefficients in green, with coefficient in brackets. \*AROPE rate estimations correspond to 2007-2014 and 2015-2023 time periods, in order to capture definition and recalculations of the old (pre-2014) and new (since 2015) indicator. Healthy life years indicator is available until 2022. 2014-2022 estimates shown for GDP per capita, GDHI, and healthy life years (men and women).

Source: DG EMPL calculations based on Eurostat data. The full list of indicators is available in chart notes across section 2.

[Click here to download table.](#)

## 2.3. Developments in convergence of social outcomes

**Since 2015, the AROPE rate has declined for both adults and children, accompanied by convergence across countries.** The AROPE rate decreased from 24% in 2015 to 21.4% in 2023 (with decreases halting since 2019) for the population as a whole, and from 27.4% to 24.8% for children (aged 0-17) (Chart 2.6).<sup>(84)</sup> This development occurred despite the shocks and impacts of the COVID-19 pandemic, the energy crisis and geopolitical shocks demonstrating the effectiveness of the exceptional support measures Member States and EU put in place to mitigate the impact of these crises. Since 2015, declines have been apparent across all components of the AROPE rate: severe material and social deprivation (SMSD) rate, monetary poverty and low work intensity. The highest declines were recorded in the SMSD rate (-2.9 pp). The improvement in aggregate EU

<sup>(84)</sup> The definition of the AROPE indicator was revised in 2021. The new definition includes reference points since 2015 and not before that. Using the old AROPE definition, between 2007-2014 AROPE remained around 24.5% for the general population and decreased from 26.5% to 24.7% for children. In accordance with official Eurostat definitions (see here), in order to calculate the share of people who are at risk of poverty or social exclusion three separate measures are combined covering those persons who are in at least one of the following three situations:

- (1) persons who are at risk of poverty, in other words, with an equivalised disposable income that is below the at-risk-of-poverty threshold.
- (2) persons who suffer from severe material and social deprivation, in other words, those who cannot afford at least seven out of thirteen deprivation items (six related to the individual and seven related to the household) that are considered by most people to be desirable or even necessary to lead an adequate quality of life.
- (3) persons (aged less than 65 years) living in a household with very low work intensity.

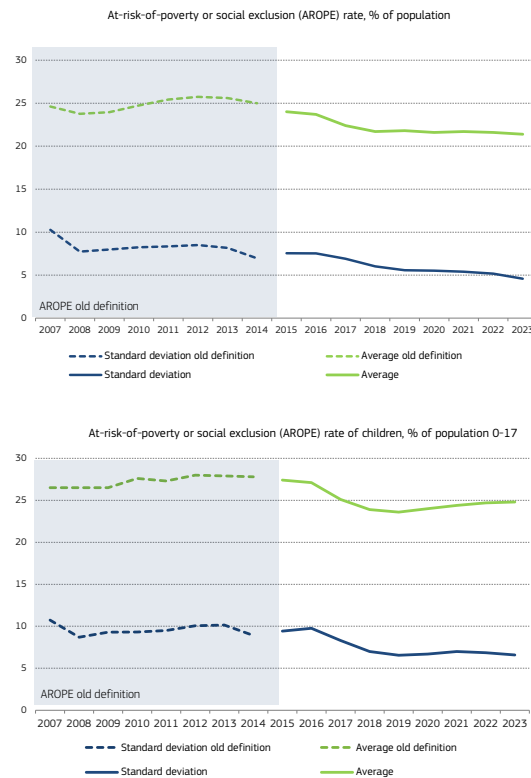


performance since 2015 was accompanied by convergence in the AROPE rate and its components across Member States, for both adults and children. The magnitude of the cross-country gaps in the AROPE rate for adults and children remained sizeable. In 2023, national AROPE rates ranged from approximately 12% to 32% (10.7% to 39% for children). Regional trends and convergence in adult AROPE rates broadly followed national developments, with mild declines in poverty and social exclusion accompanied by slow convergence since 2015.

Chart 2.6

### Differences in social outcomes have declined across countries

AROPE rate (% of population and % of population aged 0-17), housing cost overburden rate (% of population), and cross-country variation (measured by standard deviation), 2007-2023, EU-27



**Note:** AROPE indicator modified in 2021 for new EU 2030 target (see here). Revised indicator is coupled with previous definition for longer timeframe. EU average levels are weighted values. Housing cost overburden rate: estimates provided for 2007-2009, due to lack of weighted estimations in Eurostat database. Income data from EU-SILC refer to year prior to data collection year.

Croatia and Germany are omitted in the calculations of the housing cost overburden variations, due to missing values in 2007, 2008 and 2009.

**Source:** DG EMPL calculations based on EU-SILC datasets `ilc_peps01`, `ilc_pecs01`, `ilc_lvho07a`.

[Click here to download chart.](#)

**Countries and regions with high AROPE rates saw bigger average reductions than those with low AROPE rates (Table 2.1).** Some central, eastern and southern European countries that recorded the highest AROPE rates in 2015 (Bulgaria, Hungary, Romania, Greece, Latvia, Lithuania, Spain), including for children (Bulgaria, Hungary, Romania, Greece, Lithuania, Italy), showed a pattern of catching up with the better performing Member States by 2023. Pronounced catching-up of some eastern, northern and central European countries (Bulgaria, Hungary, Italy, Latvia, Lithuania,) was also evident in the SMSD rate. This catching-up effect could also be identified at regional level, albeit somewhat weaker than at national level.

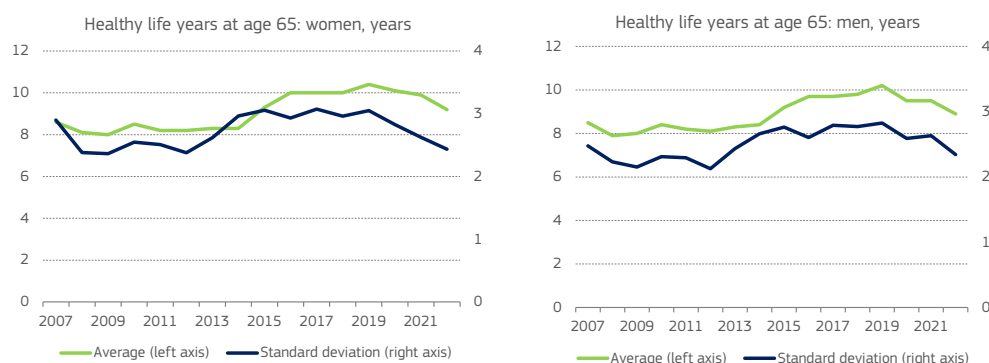
**In the last couple of years, poverty and social exclusion risks did not increase and differences between Member State indicators have remained stable.** Amid unprecedented support during the COVID-19 pandemic, AROPE rates at EU level remained stable since 2020, as did their variation by country. This is in contrast to the 2008 financial crisis, which led to increases in poverty and social exclusion at EU level with increasing differences between countries from 2008 until 2013.

**Health outcomes of the EU population remained stable at EU level, with no robust pattern of convergence or divergence across Member States since 2014.** On average, between 2014 and 2022, both women and men in the EU could expect around nine additional healthy life years at the age of 65, with a slightly higher value for women than men (Chart 2.7). The COVID-19 pandemic led to an overall decrease of life expectancy. In 2022, the average number of healthy life years that a man aged 65 is expected to live ranged from 4 to 13.5 across the Member States. For women aged 65, that range was 3.8 to 14.3. While cross-country variations remained stable, there was a catching-up process between 2007 and 2022 (Table 2.1).

Chart 2.7

**Variations in health outcome measures have remained stable**

Healthy life years at age 65 for women and men, and cross-country variation (measured by standard deviation), 2007-2022, EU-27



Note: Latest data point is 2022. Standard deviation is a measure of cross-country variation, the higher the standard deviation, the higher the cross-country variation. EU average levels are weighted values.

Source: DG EMPL calculations based on EU-SILC dataset hlth\_hlye.

[Click here to download chart.](#)

### 3. CONVERGENCE IN SOCIOECONOMIC OUTCOMES WITHIN MEMBER STATES

**Understanding patterns of regional convergence within countries can better clarify trends in socioeconomic outcomes.** Convergence at EU level (across countries or regions as analysed in section 2) does not necessarily imply regional convergence within countries, for example when capital and metropolitan regions strongly outperform rural and peripheral regions within a country. It is important to look beyond convergence at EU level to capture potential challenges to territorial and social cohesion within specific Member States. This section provides regional convergence analysis within each of the 19 Member States with more than four NUTS2 regions.<sup>(85)</sup> It focuses on the indicators analysed in section 2 for which regional data are available (GDP per capita, (un)employment and NEET rates, tertiary and adult education rates, and AROPE rates), covering 2007 to 2022. It also provides an in-depth look at within-country convergence in median incomes across very small territorial units (NUTS3 regions) based on unique administrative data collected in eight Member States (Box 2.2(European Commission, )).

**Upward divergence in economic performance at EU level was observed within most EU Member States.** Sixteen of the 19 Member States analysed saw their national GDP per capita increase since 2007 amid growing regional disparities (Table 2.2). The growth in regional disparities was particularly strong (more than 50%) in Denmark and several central and eastern European countries (Bulgaria, Czechia, Poland, Romania). In central and eastern Member States, divergence partly resulted from capital regions outperforming other regions.<sup>(86)</sup> This was not always the case in other countries, e.g.: increases in regional variation in France were linked to particularly sluggish growth in regions with low levels of GDP per capita. Only Portugal experienced upward convergence in GDP per capita, but this was largely due to low growth in some developed, previously dynamic, regions.<sup>(87)</sup>

**Convergence patterns in labour market outcomes varied from country to country.** Employment rates grew in most Member States since 2007, sometimes accompanied by regional convergence and sometimes by divergence (notably in Romania). Similarly, regional NEET rates converged in some countries and diverged in others, while average national rates largely declined. Concerningly, Denmark, France, and Romania all saw strong regional divergence in NEET rates. Within-country developments in unemployment rates are more reassuring, with 10 of the 18 countries experiencing upward convergence, notably Bulgaria, Czechia, Germany, and Portugal. Overall, within-country variation in labour market outcomes was highly sensitive to specific national and regional factors, but a detailed analysis is beyond the scope of this report.

**Most countries experienced growth in tertiary education attainment accompanied by regional divergence.** This was the case for 16 of the 18 countries analysed. In several eastern and central European Member States (Czechia, Hungary, Poland, Romania) and Portugal, regional differences grew particularly strongly. These developments stemmed from sharp increases in tertiary education attainment in capital regions, reflecting a combination of factors including the concentration of universities, high demand for tertiary-educated workers and associated wage premiums. By contrast, a lack of tertiary education opportunities and an outflow of highly

<sup>(85)</sup> Four regions was considered the lowest number reasonable to perform robust convergence analysis.

<sup>(86)</sup> (Eurofound, 2021b); (Alcidi et al., 2018)

<sup>(87)</sup> (European Commission, 2024b)

qualified workforce posed challenges for some less urban regions, contributing to (risks of) talent development traps as outlined in the European Commission's Communication on harnessing talent in Europe's regions. Only Finland saw regional differences in tertiary education attainment fall, though this was accompanied by a mild decline in attainment at national level.

Table 2.2

### Convergence patterns in socio-economic outcomes vary by Member State

Within-country convergence/divergence across NUTS 2 regions, 2007-2022

	Economic performance	Labour market			Education		Poverty
	GDP per capita (EUR)*	Employment rate	Unemployment rate	NEET rate	Tertiary education	Adult education	AROPE**
AT							
BE							
BG							
CZ							
DE							
DK							
EL							
ES							
FI							
FR							
HR							
HU							
IT							
NL							
PL							
PT							
RO							
SE							
SK							

Table covers following developments between 2007 and 2022

- Standard deviation increase by 50+ %
- 10 to 50%
- 10 to 10%
- 50 to -10%
- Standard deviation decrease by 50+ %
- Deterioration in national average
- No substantial change to national average
- Improvement in national average

Blank cells imply data are not available

Note: Only Member States with more than four NUTS2 regions are covered. Substantial change in national outcome average over time is defined either as 5% (GDP per capita) or 0.5pp (other indicators). \* Developments for 2007-2021, due to data availability \*\* Developments for 2015-2022, due to data availability

Source: Analysis covers the same indicators (for the same age groups) as section 2.

[Click here to download table.](#)

**More than half of the Member States experienced upward divergence in adult education participation, reflecting similar developments at EU level.** The growth in regional differences was particularly strong in Austria, Czechia, Greece, France, Italy, Poland, Portugal, Romania, and Sweden. However, considerable increases in regional variation often reflected the initial situation in 2007 when adult learning participation was very low in many countries, irrespective of the region. Although some countries saw regional variation more than double, it remained relatively modest in most countries in 2022. Three countries (Finland, the Netherlands, and Spain) saw upward convergence in adult education participation.

**National declines in social exclusion and poverty risks were typically accompanied by stable or declining regional differences.** The evidence of within-country variation in AROPE rates is more tentative due to severe data limitations and changes in the AROPE definition over time, allowing analysis in just 10 Member States between 2015 and 2022. In most of these countries, national AROPE rates declined since 2015 and regional differences either declined (Czechia, Denmark, Finland) or remained stable (Hungary, Italy, Romania, Spain, and Sweden). Regional variation grew in Slovakia and Bulgaria alone during this period.

## Box 2.2: Convergence in median incomes across small regions (NUTS 3) within selected Member States

**This box provides an in-depth look at developments in incomes in small regions within nine EU Member States<sup>(1)</sup>** with sufficiently detailed income data from administrative sources over longer periods of time (typically 2007-2022).<sup>(2)</sup> Compared to the rest of the analysis presented in this chapter, this provides a more granular analysis of geographical disparities in incomes for a large number of NUTS3 regional units. The limitation of these administrative data is that they are not fully harmonised, preventing inter-country comparison of specific results. Following other analyses of this data,<sup>(3)</sup> regions are compared in terms of median incomes that approximate the earnings of a typical person living in a given region.

**Regional median incomes, averaged across small regions, have risen in real terms in almost all of the countries analysed** (Chart 1). Annual increases range from 0.7% in Sweden between 2011 and 2021 to 2.8% in Latvia between 2007 and 2022. Regional median incomes declined only in Finland, by 1.1% per year on average. Most of this decline occurred in the aftermath of the 2007-2008 financial crisis and in 2022, following Russia's war of aggression against Ukraine and the associated sharp increase in prices.<sup>(4)</sup>

Chart 1

### Regional median incomes increased, while regional disparities declined in some countries and rose in others

Average (left axis) and standard deviation (right axis) of regional median real disposable incomes, 2007-2022



**Note:** Different start and end periods across countries reflect differences in data availability. Averages of regional median incomes in a country are not population-weighted. Nominal regional median incomes deflated by national CPI. Standard deviation is a measure of cross-region (within-country) variation, the higher the standard deviation, the higher the cross-region variation.

**Source:** For nominal median incomes: administrative data provided by national authorities; for CPI: OECD (2024)

**Absolute differences in regional median incomes declined in some countries but grew in others** (Chart 1). Five countries experienced a decrease in absolute income disparities, i.e. convergence (Austria, Finland, France, Portugal, Spain), while the other four showed a rise in income disparities, i.e. divergence (Czechia, Denmark, Latvia, Sweden). In Czechia and Finland, the magnitudes of the changes were particularly large, with standard deviation increasing by 20% between 2007 and 2022 in Czechia and decreasing by 36% between 2007 and 2022 in Finland.

<sup>(1)</sup> This section presents preliminary findings from OECD analysis of variation in incomes across small regions over time.

<sup>(2)</sup> The administrative data on incomes collected by the OECD provides uniquely granular data across small (NUTS 3) regions. While the data are more granular and timelier than survey data on incomes, they are less harmonised across countries. The analysis thus focuses on within-country regional convergence patterns without attempting to provide cross-country comparisons. Administrative data on incomes within small regions cover nine Member States: Austria, Czechia, Denmark, Finland, France, Latvia, Portugal, Spain, Sweden. The same analysis was done with GDP per capita, as a robustness check, and results were broadly the same.

<sup>(3)</sup> (European Commission, 2021a), (Königs, S. et al., (Forthcoming)).

<sup>(4)</sup> Nominal incomes increased in Finland over the period, decreasing only in 2022. The decrease in real incomes is therefore purely the result of an increase in the Consumer Price Index (CPI).

(Continued on the next page)

*Box (continued)*

**A stronger picture of convergence emerges when focusing on relative differences in median incomes across regions.**<sup>(5)</sup> Regional median incomes converged in seven of the nine countries analysed, with Denmark and Sweden the exceptions. For Czechia and Latvia, the convergence patterns differ depending on whether absolute or relative measures are used: absolute income dispersion increased, but to a lesser extent than the cross-regional average of median incomes, implying a decline in relative income dispersion.

**Regional income convergence closely relates to differences in income growth between metropolitan (generally higher-income) and non-metropolitan (generally lower-income) regions.** In countries where regional incomes converged over time, metropolitan regions experienced slower median income growth (on average) than non-metropolitan regions. In Austria, median income growth was comparatively slow in the major metropolitan regions of Graz, Innsbruck, Linz-Wels, Salzburg und Umgebung, and Vienna. Similarly, Portugal experienced slow growth in the Área Metropolitana de Lisboa, and Spain saw slow median income growth in Madrid.<sup>(6)</sup> In countries where regional incomes diverged, the opposite pattern often emerged. In Denmark, median regional income growth was highest in the City of Copenhagen and lowest in the non-metropolitan regions of Bornholm and Fyn. In Sweden, Stockholm was among the regions with the highest median income growth, while income growth was lowest in the non-metropolitan regions of Södermanland and Kronoberg.

**Since 2014, median incomes in low-income regions have tended to catch up with high income regions in some countries but not others** (Table 1). The strongest catch-up effects were recorded in Spain and Portugal, followed by Austria, Finland and France. Other countries showed no significant evidence of catching up. In a few countries, notably Latvia and Denmark, the number of observations is very small, reflecting the small number of regions, which may account for the lack of significant results. Despite these limitations, the analysis provides broad evidence in favour of a catching-up process of the lowest-income regions during the recovery from the 2007-2008 crisis, the COVID-19 pandemic, and the subsequent period.

Table 1

#### Low-income regions are catching up with high income regions in some countries, but not others

Beta convergence patterns and regression coefficients for regional median incomes, by country

Country (time period)	Convergence pattern (beta convergence coefficient)
Austria (2014-2021)	Catching up (-0.02)
Czechia (2014-2022)	No robust evidence of catching-up
Denmark (2014-2022)	No robust evidence of catching up
France (2014-2021)	Catching up (-0.01)
Finland (2014-2022)	Catching up (-0.01)
Latvia (2014-2022)	No robust evidence of catching up
Portugal (2015-2022)	Catching up (-0.03)
Spain (2015-2021)	Catching up (-0.04)
Sweden (2014-2021)	no robust evidence of catching up

*Note:* Statistically significant logarithmic regressions coefficient in green, with coefficient in brackets. Initial period is 2014 for all countries except Portugal and Spain (lack of data for 2014). Final period is the latest year for which data are available, i.e. between 2020 and 2022. Nominal regional median incomes are deflated by national CPI. Observations are unweighted.

*Source:* For nominal median incomes: administrative data provided by national authorities; for CPI: OECD statistics available at <https://stats.oecd.org/>.

<sup>(5)</sup> Measured by coefficient of variation.

<sup>(6)</sup> In Finland, where median incomes declined in real terms over the period, the decline was comparatively strong for all three metropolitan regions (Helsinki-Uusimaa, Pirkanmaa and Southwest Finland).

## 4. CONVERGENCE IN LABOUR MARKET OUTCOMES AND RELATED ATTITUDES THROUGH A GENDER LENS

**Inclusive labour markets are an important aspect of upward social convergence in the EU.** Nevertheless, some individual characteristics are associated with considerable differences in labour market

outcomes that can challenge convergence within and between Member States. Past analysis shows gaps in labour market outcomes for women, people with lower education, a migrant background, or disabilities, and younger and older people. <sup>(88)</sup> This section compares the evolution of outcomes for women and men, reflecting the fact that while women account for almost half of the EU workforce, considerable gender gaps persist in the labour market and vary substantially between Member States.

**The EU is committed to achieving equal rights for women and men.** That commitment is outlined in the European Pillar of Social Rights, its Action Plan (with the ambition to halve the gender employment gap by 2030), and the EU Gender Equality Strategy 2020-2025. The Strategy outlines several key objectives to achieve more equal labour market outcomes, including closing gender gaps in the labour market, achieving equal participation across different sectors of the economy, <sup>(89)</sup> addressing the gender pay and pension gaps, closing the gender care gap, and challenging gender stereotypes. These objectives are important not only to ensure the fundamental rights of EU citizens, but to support long-term economic growth, address the ongoing decline in the working age population, and mitigate challenges linked to rising labour shortages, as highlighted in the recently adopted EU action plan on labour and skill shortages. <sup>(90)</sup> For example, EU-level estimates from 2017 show that, by 2050, improvements in gender equality could generate an increase in GDP per capita of between 6.1% and 9.6%, and an increase in employment of 10.5 million. This is of a similar magnitude to more recent estimates of potential improvements in women's labour force participation rates, which could increase the number of people in the labour force in the EU by up to 17 million, helping to address labour shortages. <sup>(91)</sup>

#### 4.1. Eliminating gender gaps in paid and unpaid work

**The EU labour market has seen a steady reduction in gender inequalities since the 1990s, but the pace of change slowed down over the last decade.** Focusing on key gender equality indicators from the Social Scoreboard, the gender employment gap for people aged 20-64 narrowed to 10.2 pp in 2023, at the same time as the employment rate of women topped 70% for the first time ever. However, the progress slowed down since 2012 (Chart 2.8). This was accompanied by a gradual reduction in gender inequalities in pay, with the gender gap in hourly pay declining from 15.8% in 2010 to 12.7% in 2022. Overall, European Institute for Gender Equality (EIGE)'s Gender Equality Index shows some progress within the domain of work over the last decade, albeit with considerable room for improvement. <sup>(92)</sup>

**Despite recent improvements in gender equality in the labour market, convergence across Member States has improved only slightly since 2012, with sizeable disparities remaining.** In 2023, the gender employment gap ranged from nearly 0 pp to almost 20 pp across the Member States. Similar variation was observed in the gender pay gap. Variation in the gender employment gap between countries decreased considerably between 2002 and 2012 but has since remained relatively stable (Chart 2.8). Cross-country differences in pay gaps declined slightly since 2010. Countries with large gender employment or pay gaps do not show robust patterns of catching-up with better performers over time. Evidence for broader convergence towards gender equality in the world of work is also limited, although EU countries converge towards more gender-equal states when certain additional outcomes are considered (notably representation of women and men in decision-making positions). <sup>(93)</sup>

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<sup>(88)</sup> (European Commission, 2023a)

<sup>(89)</sup> For example, the Council Recommendation on a European framework to attract and retain research, innovation and entrepreneurial talents in Europe aims at addressing persisting inequalities in research careers, notably those based on gender, sexual orientation, age, ethnic, national or social origin, and disability. It also introduces a new European Charter for Researchers that emphasises gender equality as a key principle, explicitly adopting an intersectional approach.

<sup>(90)</sup> (Cuberes and Teignier, 2016); (EIGE, 2017); (Eurofound, b). See action plan on labour and skill shortages here.

<sup>(91)</sup> (EIGE, 2017)

<sup>(92)</sup> (EIGE, 2023)

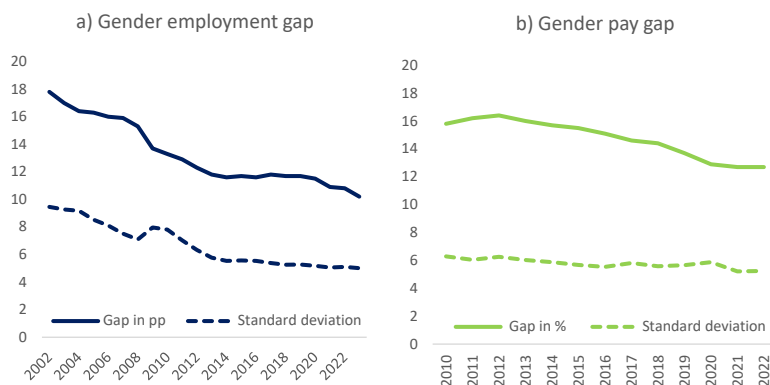
<sup>(93)</sup> (EIGE, 2023), (Eurofound and EIGE, 2021).



Chart 2.8

**Recent declines in gender employment and pay gaps were accompanied by some convergence**

Gender employment and pay gaps and cross-country variation (standard deviation), 2002-2022, EU-27



**Note:** Gender employment gap calculated for population aged 20-64. Significant breaks in the EU-LFS employment time series due to revisions of the survey over time, notably in 2005 and 2021. For cross-country variation in gender pay gap over the period 2010-2021: Greece and Croatia omitted due to missing data for several years. Information on gender pay gap for Ireland in 2021 missing. Standard deviation is a measure of cross-country variation, the higher the standard deviation, the higher the cross-country variation.

**Source:** DG EMPL calculations based on EU-LFS datasets lfsa\_ergan & sdg\_05\_20.

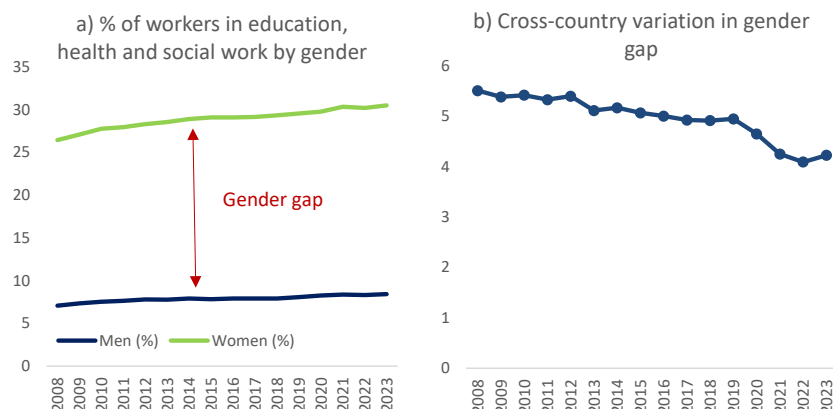
[Click here to download chart.](#)

**Further progress towards equality will depend in part on addressing two long-standing challenges: gender segregation and gender differences in the career trajectories of parents. <sup>(94)</sup>** Evidence suggests that much of the observed gender gaps in employment and earnings emerge with parenthood and are closely linked to unequal division of unpaid work, limited access to formal childcare services for very young children (see Chapter 3), father's low take-up of family leaves and, in some Member States, high taxation of second earners. <sup>(95)</sup> Gender segregation of certain sectors of economic activity and occupations are among the key factors contributing to the gender pay gap (women tend to be overrepresented in jobs with lower salaries) <sup>(96)</sup> and exacerbating labour shortages. <sup>(97)</sup>

Chart 2.9

**Slow but steady rise in gender segregation in education, health and social work sectors**

Proportion of employment in education, human health and social work activities by gender, and cross-country variation in gender gap (standard deviation), 2008-2023, EU-27



**Note:** Break in the EU-LFS employment time series due to survey revisions in 2021. Standard deviation is a measure of cross-country variation, the higher the standard deviation, the higher the cross-country variation.

**Source:** DG EMPL calculations based on EU-LFS dataset lfsa\_egan2

[Click here to download chart.](#)

**Gender segregation of work by occupation and sector of economic activity has changed very little over time. <sup>(98)</sup>** Recent research showed limited change in existing aggregate measures of gender segregation over the last two decades in the EU. <sup>(99)</sup> This can be illustrated by an analysis of the proportion of women and men employed in education, human health and social work activities, an indicator which the EIGE's Gender Equality Index uses as a proxy for gender segregation of the EU labour market. Around 30% of all employed women in the EU worked in education, human health and social work activities in 2022, compared to only 8% of

<sup>(94)</sup> (Bertrand, 2020)

<sup>(95)</sup> (Bettio, 2017); (Kleven, Landais and Soegard, 2019b); (Kleven et al., 2019a); (Goldin, 2021); (Eurofound, a)

<sup>(96)</sup> (European Commission, 2022c); (European Commission, 2022e); (Goldin, 2014); (EIGE, 2018)

<sup>(97)</sup> (European Commission, 2023a)

<sup>(98)</sup> (EIGE, 2023); (EIGE, 2018); (European Commission, 2023b)

<sup>(99)</sup> (European Commission, 2023b); (Eurofound and European Commission Joint Research Centre, 2021)

all men, resulting in a gender gap of about 22 pp (Chart 2.9). This gap increased since 2008, when it stood at about 19 pp. Over the same period, the variation in gender segregation in education and health activities across countries decreased (Chart 2.9). In other words, the EU Member States converged, but towards a somewhat more unequal outcome.

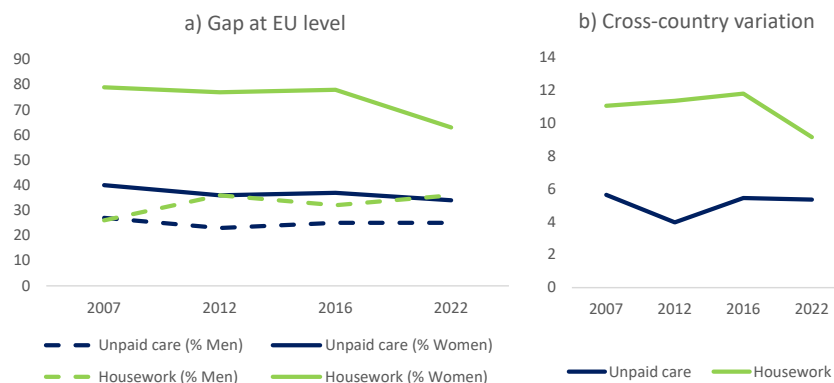
**Involvement of women in unpaid care has dropped somewhat since 2007, but women remain considerably more engaged in unpaid care than men.** In 2022, one in four men in the EU were involved daily in unpaid care, and around one in three in housework (Chart 2.10). For women, the corresponding shares were 34% and 63%, respectively. The proportion of men involved in unpaid care remained relatively stable since 2007. Female involvement in unpaid care dropped slightly (by about 6 pp), reflecting the increased availability of formal childcare (see Chapter 3 (Cedefop, )). The share of women doing housework on a daily basis dropped by 16 pp over the same period (notably since 2016), while the involvement of men increased by 10 pp.

**The evidence of convergence in gender gaps in unpaid work is mixed over time and varies considerably between Member States.** In several countries, the share of women involved daily in unpaid care is at least 15 pp higher than men, while in others there is little difference. Although the magnitude of cross-country differences has remained similar since 2007 (Chart 2.10), some evidence points towards countries with larger gaps catching-up with those with smaller gaps. The gender gap in housework varies between 12 pp and 44 pp across countries. The gap has converged since 2016, but there is no evidence of catching-up by countries with the largest gaps.

Chart 2.10

#### Limited upward convergence in gender gaps in unpaid work

Daily involvement in unpaid care and housework by gender, and cross-country variation in gender gaps (standard deviation), 2007-2022, EU-27



**Note:** Involvement in unpaid care defined as 'People caring for and educating their children or grandchildren, elderly or people with disabilities, every day (% 18-74 population)'. Involvement in housework defined as 'People doing cooking and/or housework, every day (% 18-74 population)'. Standard deviation is a measure of cross-country variation, the higher the standard deviation, the higher the cross-country variation.

**Source:** DG EMPL calculations based on EIGE's Gender Statistics Database

[Click here to download chart.](#)

**Gender segregation in the labour market and unequal division of unpaid work are firmly rooted in persistent stereotypes about gender-specific skills and household roles.<sup>(100)</sup>** Challenging such stereotypes is crucial to promote gender equality in the labour market. This is a key objective of the gender equality policy outlined in the EU Gender Equality Strategy 2020-2025.<sup>(101)</sup> The remainder of this section explores trends and convergence in attitudes towards the involvement of women and men in paid and unpaid work based on data collected in the European Values Survey between 1990 and 2017 for the 20 Member States, for which data are consistently available over such a long-time span.<sup>(102)</sup>

## 4.2. Attitudes to women's work and sharing unpaid work

**Increasingly positive attitudes to women's involvement in paid work are consistent with long-term reductions in the gender employment gap.** The share of people who do not believe that children suffer when mothers are in paid work increased from less than 40% in 1990 to more than 60% in 2017, with similar proportions among women and men. A comparable increase applies to the share of people who do not consider women to be primarily interested in home and children rather than paid work (Chart 2.11). The proportion of

<sup>(100)</sup> (Bertrand, 2020); (EIGE, 2023); (EIGE, 2018)

<sup>(101)</sup> See EU Gender Equality Strategy 2020-2025 here.

<sup>(102)</sup> The analysis builds on previous research on attitudes in this area, covering earlier developments in the EU context (Knight and Brinton, 2017); (Grunow, Begall and Buchler, 2018); (Brinton and Lee, 2016); (Scarborough, Sin and Risman, 2019)

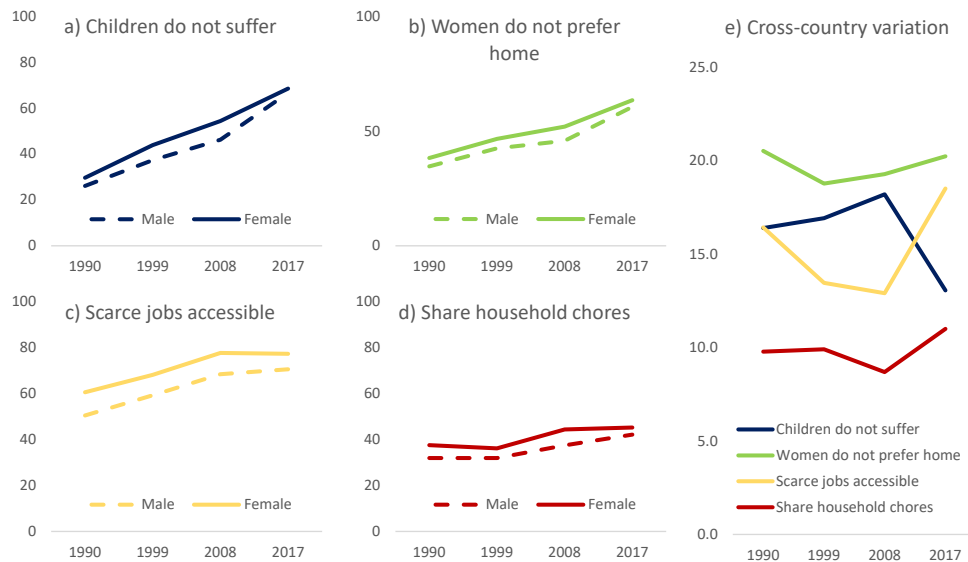
people who oppose preferential access to jobs for men in times of scarcity also increased considerably over the same period, reaching around 75% in 2017 compared to about 55% in 1990.

**Limited changes in attitudes towards equal sharing of unpaid work pose a challenge to equitable sharing of housework and unpaid care within households.** Just over 40% of the EU population believes that sharing household chores is important for a successful marriage or partnership, a minor improvement since 1990 (Chart 2.11).<sup>(103)</sup> Nevertheless, research shows that sizeable shares of the population hold dual beliefs about women's roles in society, supporting active roles for women in the labour market while also considering women the primary providers of unpaid work in the household.<sup>(104)</sup> This belief in women's role in the household is a persistent challenge to achieving higher employment rates of women.

Chart 2.11

#### Attitudes supporting gender equality in the labour market are more widespread

Proportion of population holding attitudes supportive of gender equality (%) and cross-country variation (standard deviation), 1990-2017, EU



**Note:** Chart shows the following attitudes: a) Children don't suffer – share of people disagreeing with the statement 'When a mother works for pay, the children suffer'; b) Women don't prefer home – share of people disagreeing with the statement 'A job is alright but what most women really want is a home and children'; c) Scarce jobs accessible – share of people disagreeing with the statement 'When jobs are scarce, men have more right to a job than women'; and d) Share household chores – share of people agreeing that sharing household chores is important for marriage or partnership. Data on children don't suffer missing for Austria in 1999 and data for women don't prefer home missing for Austria in 1999 and Sweden in 1990. Standard deviation is a measure of cross-country variation, the higher the standard deviation, the higher the cross-country variation.

**Source:** DG EMPL calculations based on European Values Survey data.

[Click here to download chart.](#)

**Persistent disparities in attitudes between countries complicate convergence towards more gender equal labour market outcomes.** Country variation in attitudes to sharing housework and reserving jobs for men in times of scarcity has increased since 1990 (Chart 2.11). This is also the case for variation in attitudes to working motherhood and well-being of children, although cross-country differences dropped sharply after 2008. Cross-country variation in beliefs about women preferring home and children over paid work remain unchanged.

**Attitudes supporting gender equality** have become more common in the EU since 1990, but differences remain significant. Over 80% of the population of northern Member States agrees that working motherhood is not harmful for children, that women do not prefer children and home over paid work, and that jobs should not be reserved for men in times of scarcity (Chart 2.12). The prevalence of beliefs supporting equality remains lowest in central and eastern Member States, typically ranging from 30% to 60%, which may be linked to the larger gender employment gaps typically observed in some of these countries. By contrast, considering sharing household chores as important is more common in eastern Member States than elsewhere and has become more prominent over the years (from 40% of eastern EU population in 1990 to around 60% in 2017). These finding comes with caveats: firstly, these attitudes only concern housework and not unpaid childcare; and secondly, they do not indicate whether sharing of household chores should be equal between partners. This may be of particular concern in eastern Member States, where beliefs indicating that women prefer taking care of children and staying at home over paid work are common.

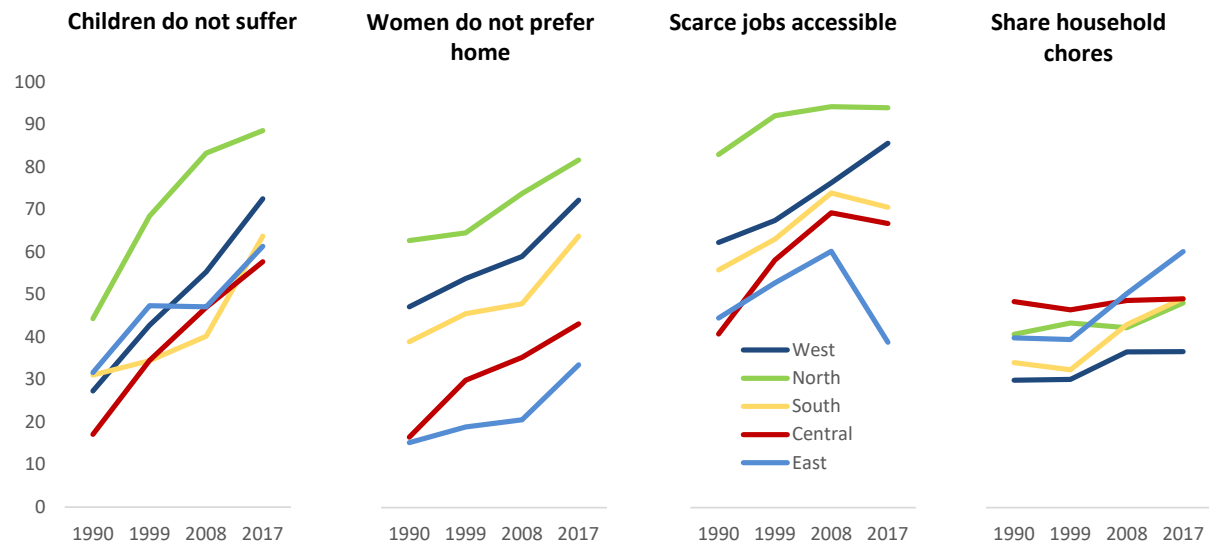
<sup>(103)</sup> Attitudes towards other types of unpaid work (such as childcare) and its sharing by women and men have not been tracked consistently over time.

<sup>(104)</sup> (Knight and Brinton, 2017); (Grunow, Begall and Buchler, 2018); (Brinton and Lee, 2016); (Scarborough, Sin and Risman, 2019)

Chart 2.12

**Considerable and persistent variation in attitudes across the EU**

Proportion of population holding attitudes supporting gender equality (%) by country clusters, 1990-2017



**Note:** Chart shows the following country clusters: west (Austria, Germany, France, the Netherlands); north (Denmark, Estonia, Finland, Sweden); south (Spain, Italy, Portugal); central (Czechia, Hungary, Poland, Slovenia, Slovakia); and east (Bulgaria, Lithuania, Latvia, Romania). Data on 'children don't suffer' missing for Austria in 1999, and data for 'women don't prefer home' missing for Austria in 1999 and Sweden in 1990.

**Source:** DG EMPL calculations based on European Values Survey data

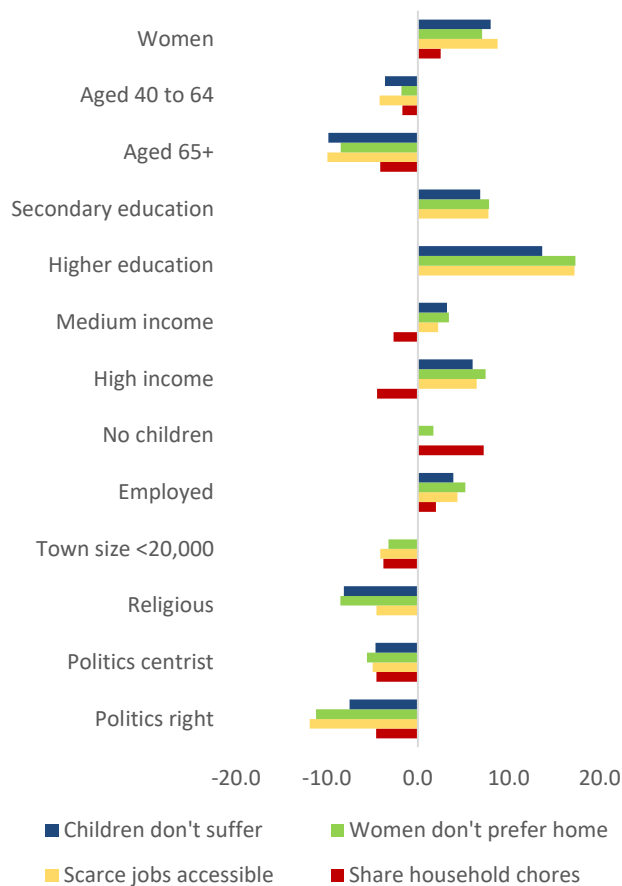
[Click here to download chart.](#)

**Women and people with higher educational attainment (or incomes) are more likely to support gender equality in the labour market.** Over the 1990-2017 period, women in the EU were around 8 pp more likely than men to reject the stereotypes that working motherhood harms children, that women prefer family over paid work and that men have a preferential right to scarce jobs (Chart 2.13). These views were also more common among people with higher educational attainment or (to a lesser extent) higher incomes. For example, those holding tertiary qualifications were around 13-17 pp more likely to report these attitudes than those without upper secondary or tertiary qualifications. At the same time, people who are aged 65+, are religious, or have more traditional voting preferences are more likely to think that working motherhood harms children, and that paid work is valued differently by women and men (Chart 2.13). The differences in attitudes across population groups showed little change over the 1990-2017 period.

Chart 2.13

**Attitudes towards women's position in the labour market vary between population groups**

Marginal change in probability of holding a given attitude (pp) by population group, 1990-2017, EU



**Note:** Probability differences reported against the following comparison groups: gender (men); age (20-39); educational attainment (finished education by 15 years of age); income (lowest income tercile); children (having at least one child); employment status (not in employment); town size (town of 500 000 inhabitants or more); religion (non-religious); political preferences (left-wing). Only statistically significant results (p-value<0.1) reported. Data on children don't suffer missing for Austria in 1999; data for women don't prefer home missing for Austria in 1999 and Sweden in 1990.

**Source:** DG EMPL calculations based on European Values Survey data.

[Click here to download chart.](#)

## 5. EU INITIATIVES TO SUPPORT SOCIAL CONVERGENCE

**The EU supports social convergence through its cohesion policy.** Since the 1950s, the main vehicle to foster territorial, economic and social convergence among Member States is European cohesion policy, delivered and implemented through the cohesion policy funds, including the European Development Fund, the Cohesion Fund, the European Social Fund+ and Just Transition Fund. It aims to correct imbalances between countries and regions while delivering on the Union's political priorities, especially the green and digital transitions. Although the funds support all Member States and regions, a large share is concentrated on less developed countries and regions to foster their catching-up and reduce economic, social and territorial disparities in the EU, encouraging territorial cooperation and addressing needs of outermost regions. More recent funding instruments, such as the Recovery and Resilience Facility (RRF) which provides EUR 648 billion to Member States (in 2022 prices) for implementing reforms and investments to make their economies and societies more sustainable, resilient and prepared for the green and digital transitions, also contribute to promoting social convergence. <sup>(105)</sup>

**Several initiatives launched within the European Pillar of Social Rights aim to reduce disparities among Member States and regions.** Proclaimed in Gothenburg in 2017, the European Pillar of Social Rights outlines 20 key principles necessary to progress towards a strong social Europe. To strengthen the implementation of the Pillar, the European Pillar of Social Rights Action Plan was adopted in 2021, containing more than 70 legislative and non-legislative actions to promote convergence of socio-economic outcomes in the Member States and proposing concrete targets. <sup>(106)</sup> Key policy initiatives supporting social convergence include

<sup>(105)</sup> Please see Recovery and Resilience Facility (2020-2024) – mid-term evaluation (europa.eu).

<sup>(106)</sup> An employment rate of 78% among the population aged 20-64, a 60% target for adults in training every year, and a reduction of at least 15 million in the population at risk of poverty or social exclusion (including at least five million children).

the Directive on a framework for adequate minimum wages in the EU, the Recommendation on adequate minimum income, the European Skills Agenda, the reinforced Youth Guarantee, the Aim, Learn, Master, Achieve (ALMA) initiative and the Communication on Harnessing Talent in Europe's Regions. Alongside policy action at government level, social partners play a crucial role in these, and other initiatives related to social investment and thus foster upward social convergence (Box 2.3).

**Over the last year, the EU has committed to initiatives that deepen analyses and policies supporting social convergence.** On 16 April 2024, signatories of the La Hulpe Declaration reaffirmed the importance of social investment for upward convergence in working and living conditions by reaping the full potential of skills, labour market and social policies for economic growth, productivity, and competitiveness.<sup>(107)</sup> The European Commission strengthened its analysis of employment, social and skills developments in the Member States by applying the principles of the Social Convergence Framework<sup>(108)</sup> to assess potential risks and identify policies that foster social convergence in each Member State. The Framework was applied for the first time in the 2024 European Semester, notably in the Joint Employment Report (JER), on a pilot basis<sup>(109)</sup> and, through this, the Commission monitors progress on the implementation of the principles of the European Pillar of Social Rights.<sup>(110)</sup>

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<sup>(107)</sup> In April 2024, the European Commission, the European Parliament, civil society, social partners and 25 Member States signed the La Hulpe Declaration, reconfirming the European Pillar of Social Rights as the EU's joint compass for a strong social Europe. The Declaration can be found [here](#).

<sup>(108)</sup> The Social Convergence Framework was developed following discussions in the Employment and Social Affairs Council (EPSCO) and work in the Employment Committee (EMCO) and Social Protection Committee (SPC) throughout 2022 and 2023. See EMCO-SPC Key Messages, based on the Report of the EMCO-SPC Working Group on the introduction of a Social Convergence Framework in the European Semester. This relative standing is expressed in terms of standard deviations from the mean of both the absolute level of the indicator value and its change compared to the previous year. See JER 2024 Annex 4 for more technical details, and Annex 9 for the Social Scoreboard tables supporting the Social Convergence Framework.

<sup>(109)</sup> (European Commission, 2023h)

<sup>(110)</sup> (European Commission, 2024). Recital 8 of Regulation (EU) 2024/1263 on the effective coordination of economic policies and on multilateral budgetary surveillance indicates that 'As part of its integrated analysis of employment and social developments in the context of the European Semester, the Commission assesses risks to upward social convergence in Member States and monitors progress on the implementation of the principles of the European Pillar of Social Rights on the basis of the Social Scoreboard and of the principles of the Social Convergence Framework'. On these grounds, Article 3 refers to 'The surveillance of the implementation by the Commission includes the progress in implementing the principles of the European Pillar of Social Rights and its headline targets, via the social scoreboard and a framework to identify risks to social convergence'.



### Box 2.3: Social partners' role in promoting upward social convergence

**Social partners play a key role in supporting social investment and convergence, including through collective bargaining.** Social dialogue results in more informed decision-making in policy development and can lead to more effective and sustainable solutions that benefit employers and workers. Through collective bargaining, social partners can support living standards and improve social outcomes.

**Eurofound's "industrial democracy" index indicates the rights of employees and employers to participate in governing the employment relationship, and countries with a higher score on the index fare better in economic and social terms.**<sup>(1)</sup> Furthermore, an ILO study investigating convergence of the EU28 in the period 2000–2016 found that high collective bargaining coverage not only relates to higher social and economic outcomes but also to a more equal distribution of those outcomes.<sup>(2)</sup>

**The last decade has seen no clear link between the speed of real wage convergence and collective bargaining coverage in the EU.** This reflects that real wage convergence was driven by large productivity gains in eastern European countries, which tend to have lower collective bargaining coverage.

**Strengthening and tailoring collective bargaining settings can nevertheless be an important lever for upward convergence by raising real wages and contributing to fairer sharing of productivity gains.** It enhances the bargaining power of those workers covered and a fall in collective bargaining coverage rates is associated with a drop in the relative pay of those covered.<sup>(3)</sup> Trade unions might support real wage convergence by indirectly improving productivity in the economy through their influence on local working conditions, training and re-training opportunities, leverage of other labour market institutions (such as unemployment benefits and active labour market policies) and their role in wage coordination.<sup>(4)</sup> Shoring up and promoting social dialogue can serve as a crucial catalyst for accelerating the catching-up process of eastern European countries. In this context, at the end of 2022, Romania adopted a law to promote collective bargaining as well as collective agreement coverage to empower trade unions to enhance wages.<sup>(5)</sup> This favours the catching-up process of a comparatively low-performing country and thus upward convergence.

**In addition, social partners promote diverse strategies for skills development and training and reinforcing social investment and enhancing economic and social convergence as well as the fair green transition.** For example, a joint project among EU social partners in the textile, clothing, leather and footwear sector identified actions and tools to assess skills needs and respond to those needs through training and re/upskilling initiatives.<sup>(6)</sup> In the SAWYER project, the social partners of the furniture sector take a holistic approach to meeting skills needs in the pursuit of transformation towards a circular economy.<sup>(7)</sup> IndustriALL Europe launched the Digital Youth Academy, a programme aimed at young trade unionists that focuses on the green transition and the future of trade unions.<sup>(8)</sup>

**To develop targeted policy responses to the COVID-19 pandemic, the energy crisis and inflation, trade unions and employers' organisations were involved in 41% and 45% out of 1 706 legislative acts, respectively, in recent years.**<sup>(9)</sup> To manage the COVID-19 pandemic, across Europe, trade unions negotiated with employers and governments on adequate short-term work models.<sup>(10)</sup> The resulting job retention schemes led to a much more moderate shock of COVID-19 on the economy and labour markets compared to the impact of the economic crisis in 2008.<sup>(11)</sup>

**Despite the positive impact of social dialogue, some challenges persist, and others may emerge.** While there is a trend towards increasing membership of women in trade unions, the overall membership of trade unions is decreasing. Further, the estimated average share of workers covered by collective agreements in the EU dropped by 10 pp between 2000 and 2019 (from 66% to 56%).<sup>(12)</sup> Current transformations such as the green and digital transitions as well as new forms of work (e.g. platform work) underline the need for robust and inclusive social dialogue models to foster an effective and fair transition that facilitates upward convergence within and between Member States and leaves no one behind. By requiring Member States to spend parts of their ESF+ funds on supporting capacity-building of social partners and/or NGOs, the EU is committing to continue the promotion of social partners to

<sup>(1)</sup> See Industrial democracy still in vogue | European Foundation for the Improvement of Living and Working Conditions (europa.eu)

<sup>(2)</sup> (Vaughan-Whitehead, Daniel (Ed.), 2019)

<sup>(3)</sup> (Zwysen and Drahoukoupil, 2023)

<sup>(4)</sup> (OECD, 2018)

<sup>(5)</sup> See Eurofound country profile here.

<sup>(6)</sup> Skills4Smart TCLF Industries 2030 available here.

<sup>(7)</sup> SAWYER – Holistic approach for the identification of Skills and safety needs towards a growing sustainability & circularity of furniture sector available here.

<sup>(8)</sup> IndustriALL Europe – Digital Youth Academy available here.

<sup>(9)</sup> Based on the information from the Eurofound EU PolicyWatch database.

<sup>(10)</sup> See Covid-19 Briefing Short Time Work Measures 27 November here.

<sup>(11)</sup> (Eurofound, 2024a)

<sup>(12)</sup> (European Commission, 2023)

(Continued on the next page)

*Box (continued)*

strengthen the European model of sustainable and inclusive social welfare. <sup>(13)</sup> In addition, the Directive on adequate minimum wages <sup>(14)</sup> is similarly supportive of social partners' capacity-building, promoting an institutional framework that fosters a strong social dialogue in wage-setting and collective bargaining coverage.

**In 2023, the Commission presented a new initiative to empower social dialogue to adapt to the changing world of work and new trends on labour markets.** A Council Recommendation on strengthening social dialogue in the European Union <sup>(15)</sup> seeks to support Member States in promoting social dialogue and collective bargaining at national level. This can help to enhance the representation of workers, including those categories of workers at risk of being left behind in some Member States. Furthermore, in the Commission's recently adopted action plan for labour and skill shortages, social partners have committed to addressing poor working conditions through collective bargaining in sectors characterised by inadequate working conditions.

<sup>(13)</sup> Regulation (EU) 2021/1057 requires Member States to whom a country specific recommendation on social dialogue has been addressed to spend at least 0.25% of the ESF+ funds on supporting the capacity-building of social partners and/or NGOs, while all other Member States must allocate an appropriate amount of ESF+ resources to this area.

<sup>(14)</sup> See Directive (EU) 2022/2041 of the European Parliament and of the Council of 19 October 2022 on adequate minimum wages in the European Union here.

<sup>(15)</sup> See Council Recommendation of 12 June 2023 on strengthening social dialogue in the European Union (europa.eu) here.

## 6. CONCLUSIONS

**Social and economic convergence is a long-standing objective of the EU, drawing on the goal of economic prosperity and social progress for all citizens.** Since the 1950s, socio-economic convergence is a major objective of EU cohesion policy, gaining importance during the EU enlargements in 2004 and the 2008 financial crisis, which had disproportionate impacts on certain Member States, regions and population groups. Accordingly, the notion of upward social convergence (i.e., a change in social outcomes towards a desirable policy target accompanied by reduced disparities within the Union) was placed at the heart of the European Pillar of Social Rights. The 2021 action plan to implement the pillar directly links the targets and actions needed to implement the Pillar's principles to 'fostering 'upward convergence and well-being' in the EU.

**Labour market outcomes have contributed to upward convergence across the EU in the latter half of the period covered by this report (2007-2022).** The post-2014 period saw sustained improvements in employment, (youth) unemployment and NEET rates, accompanied by reduced cross-country disparities and catching-up of worse performing labour markets with better performing ones. These developments gradually erased the negative labour market impacts of the 2008 financial crisis. There were also gradual improvements in skill supply (measured by tertiary education attainment and adult learning participation) at EU level between 2007 and 2022, but these did not translate into sustained reductions in disparities between countries.

**Positive labour market developments are often associated with upward convergence in living standards.** Both GDP and real GDHI per capita have increased since 2007 at EU level, although this translated into reduced disparities across countries only in terms of household income. The prevalence of poverty risks, social exclusion, or housing cost overburden have declined since 2007, as have the differences in national prevalence rates. For each of these outcomes, poorly performing countries saw larger improvements, on average, than better performers, leading to a catching-up effect across the Member States.

**Converging outcomes at EU level do not always lead to regional convergence within Member States.** Tertiary education attainment diverged in almost all countries between 2007 and 2022 because of sharper increases in capital regions than in rural or peripheral regions. This contributed to talent development traps in regions with persistently low shares of university and higher-education graduates. Developments in labour market outcomes varied by Member State, converging in some but diverging in others. In-depth analysis of income data within several Member States shows that regional median incomes increased in all of these countries, but regional income disparities fell only in about half. Regional GDP per capita diverged within most Member States, reflecting a similar trend at EU level.

**Gender gaps in employment and pay are narrowing and converging, but the pace of progress has slowed.** Further progress in achieving gender equality is impeded by persistent gender segregation of the EU labour market and by different career trajectories of parents. Member States have made little progress in reducing gender segregation in their labour markets over the last decade. Women remain more involved than men in housework and unpaid caregiving, with limited improvements at EU level and few signs of convergence

across Member States. Such inequalities stem from entrenched stereotypes that foster gender differences in involvement in paid and unpaid work and contribute significantly to existing gender employment and pay gaps.

**Progress towards gender equality is bolstered by increasingly positive attitudes towards women's paid work.** The majority of the EU population believes that children are not negatively affected by mothers working and that women are not primarily interested in housework and taking care of children rather than paid work, which were still minority opinions in 1990. However, less than half of the EU population considers sharing household chores important and women are often regarded as the primary providers of unpaid care work. The prevalence of beliefs supporting gender equality in the world of work varies considerably across countries and population groups and these disparities have persisted over time.

# Annex: Technical Annex

## A2.1. MEASUREMENT OF CONVERGENCE

In this report, convergence is broadly understood as a reduction in disparities across geographical entities (countries or regions) over time. This broad understanding of convergence was operationalised in several ways in previous research, focusing on:

- Declining variation of an outcome across regional entities (Sigma convergence)
- Catching up of worse performing countries with better performing ones (Beta convergence)
- Changes in country outcome rankings (Gamma convergence)
- Declining distance from the best-performing group of countries (Delta convergence)
- Sigma and Beta convergence are the most commonly used methods for assessing convergence and are the key focus of this research. It is also important to assess the direction of convergence, i.e. whether countries or regions converge towards a better or worse outcome from a policy perspective. This technical annex presents a detailed methodology for assessing these two types of convergence and their direction. Assessing Delta and Gamma convergence goes beyond the scope of this report.

### Reduction in disparities across Member States or regions over time (Sigma convergence)

Sigma convergence occurs when variation in a given outcome across geographical entities (countries or regions) declines over time. Conversely, divergence occurs when variation in national or regional outcomes increases over time. The analysis plots a chosen measure of outcome variation over time and assesses trends in its development.

For most of this report, the measure chosen to assess variation is standard deviation, calculated according to the following formula,

$$\sigma_t = \sqrt{\frac{\sum_{i=1}^n (x_{i,t} - \mu_t)^2}{N}}$$

where  $x_{i,t}$  stands for a value of outcome  $x$  for a geographical entity  $i$  in a given year  $t$ , and  $\mu_t$  stands for the mean value of an outcome  $x$  across all geographical entities in a year  $t$ . In statistical terms, standard deviation is an absolute measure of variation of an outcome around its mean value. This is a suitable measure of variation for most socio-economic outcomes covered in this report, where distance from the mean is of principal interest. For example, if countries fall within 2 pp of a mean EU unemployment rate of 2%, this can be considered a similar variation in outcomes to the case where countries fall within 2 pp of a mean EU unemployment rate of 4 %.

Using standard deviation as a measure of variation poses some challenges. Firstly, the magnitude of standard deviation is sensitive to the unit in which outcome is measured, which makes comparison of standard deviation across outcomes measured in different units uninformative (e.g., comparing cross-country standard deviation in employment rates and GDP per capita is meaningless, as the former is expressed as a percentage and the latter is expressed in EUR). Secondly, standard deviation only focuses on measuring absolute distances from the mean and has little to say about changes in relative terms. This is problematic for some of the socio-economic outcomes covered by this report (GDP per capita, wages, income), which tend to grow over longer periods of time and have no upper bound. For example, if GDP grew by 50% in each country considered, this would by default lead to a 50% increase in standard deviation across countries, even though the relative positions of the countries would remain the same.

To account for this, the report also analyses convergence using a coefficient of variation for those indicators (GDP per capita, wages, income), for which focusing solely on standard deviation would be too restrictive. Coefficient of variation is defined as standard deviation divided by the mean:

$$CV = \frac{\sigma_t}{\mu_t}$$

Coefficient of variation adjusts standard deviation by developments in outcome mean over time and is therefore insensitive to level changes (e.g., a 50% increase in GDP per capita in all countries considered would not change the value of coefficient of variation). It measures variation relative to the mean rather than in absolute terms.

### Catching-up of worse performing Member States or regions (Beta convergence)

Beta convergence assesses whether countries or regions that start with worse outcomes improve faster over time than those starting with better outcomes. Where this is the case, Member States or regions are considered converging. Conversely, if countries or regions with better initial outcomes improve faster than others over time, this signifies divergence.

Beta convergence is estimated via a logarithmic regression model, which regresses the growth of an indicator over a certain period of time on its initial value. The specification of this model is as follows,

$$\ln(\Delta y_{i,t}) = \alpha + \beta \ln(y_{i,t-1}) + \varepsilon_{i,t}$$

where  $y_{i,t}$  is the indicator value in country  $i$  at a time  $t$ ,  $\Delta y_{i,t}$  is the growth rate of this indicator at time  $t$ ,  $\alpha$  and  $\beta$  are coefficients to be estimated and  $\varepsilon_{i,t}$  is the error term.

Beta convergence exists if the estimated regression coefficient  $\beta$  is statistically significant and negative, i.e. if countries that performed worse at the start of the period of interest improved faster than those that started in better positions. In this report, whenever beta convergence is analysed, it is referred to as catching-up.

### Direction of convergence

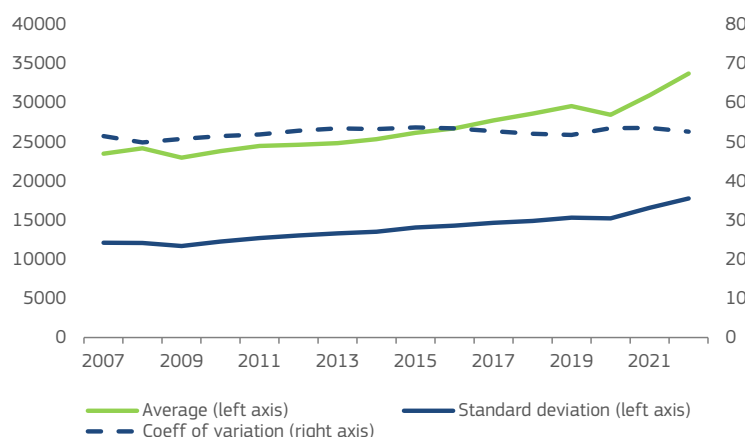
The report also considers the overall direction of convergence patterns: where convergence is accompanied by improvements in mean EU outcomes (increase in the mean for a maximisation indicator, such as employment rate, or decrease for a minimisation indicator, such as AROPE), this is defined as upward convergence. Where mean EU outcome deteriorates (decrease in the mean for a maximisation indicator and increase for a minimisation indicator), this is considered downward convergence. From an EU policy-making perspective, it is important to achieve upward convergence, i.e., improvement in average outcomes at EU level accompanied by reduced geographical disparities:

## A2.2. REGIONAL CONVERGENCE

Chart A2.1

### Convergence patterns of economic gains differed across NUTS2 regions

GDP per capita in EUR and their cross-regional variation (measured by standard deviation and coefficient of variation, hence adjusted by average EU GDP), EU-NUTS2



**Note:** Standard deviation is a measure of cross-regional variation, the higher the standard deviation, the higher the cross-regional variation. The EU average levels are unweighted values representing an average NUTS2 region

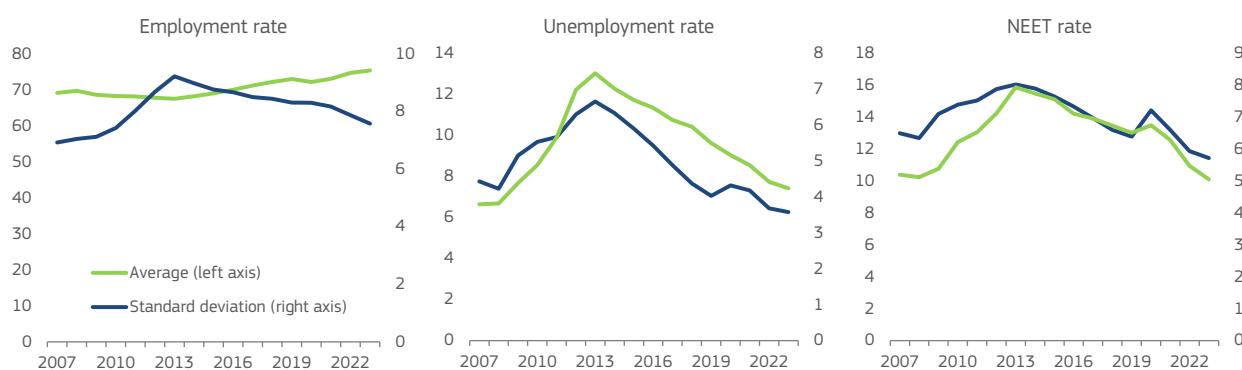
**Source:** DG EMPL calculations based on Eurostat dataset nama\_10r\_2gdp

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Chart A2.2

**Since 2014 regional labour market outcomes improved, accompanied by convergence**

Employment rate, % of population 20-64, unemployment rate, % of labour force 15-74, young people neither in employment nor in education and training (NEET), % of population 15-29, and their cross-regional variation (measured by standard deviation), EU-NUTS2



**Note:** Standard deviation is a measure of cross-regional variation, the higher the standard deviation, the higher the cross-regional variation. The EU average levels are unweighted values representing an average NUTS2 region.

**Source:** DG EMPL calculations based on Eurostat datasets lfst\_r\_lfe2emprt, lfst\_r\_lfu2gan and edat\_lfse\_38

[Click here to download chart.](#)

Table A2.1

**Catching-up of worst performing regions between 2007-2023**

Beta-convergence patterns and regression coefficients at national level, by indicator

Time period	
Indicator	2007-2023
GDP per capita	Catching up (-0.02)
Employment rate, % of population aged 20-64	Catching up (-0.01)
Unemployment rate, % of labour force aged 15-74	Catching up (-0.03)
NEET rate, % of population aged 15-29	Catching up (-0.01)
Adult participation in learning (in the last 4 weeks), % of population 25-64	Catching up (-0.01)
Tertiary education attainment, % of population aged 30-34	Catching up (-0.03)

**Note:** Statistically significant logarithmic regressions coefficients marked in green, with coefficient in brackets. \*GDP per capita data is only available until 2022.

**Source:** DG EMPL calculations based on Eurostat data

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# The role of social investment

## 1. INTRODUCTION <sup>(111)</sup>

**Social investment contributes to economic growth while pursuing social objectives.** It can positively impact growth by enhancing human capital, easing labour market transitions, increasing labour supply, raising productivity, and strengthening innovative capacity. This particularly refers to reforms and investments that contribute to addressing skills shortages and mismatches via education as well as upskilling, reskilling and lifelong learning. It also refers to those reforms and investments that increase labour market participation via active labour market policies (ALMPs), reforms of the tax-benefit system, the provision of early childhood education and care (ECEC), and active inclusion policies. Well-designed welfare systems combine a strong social investment dimension with protection and stabilisation functions. As such, they increase the effectiveness and efficiency of social policies while ensuring ongoing support for a fairer and more inclusive society. This goal is underlined in the Social Investment Package put forward by the European Commission in 2013 and underpinned by the European Pillar of Social Rights. While there is no commonly agreed definition of what constitutes social investment yet, this report adopts a definition of social investment largely based on that used in the context of the ECOFIN Council meeting in March 2024. The report thus considers social investment as public spending related to investments and reforms that, on top of pursuing social objectives and therefore fostering upward social convergence, are expected to produce returns in terms of economic growth through their impact on human capital and productivity, including via stronger innovative capacity and absorption of new technologies, and/or labour supply. <sup>(112)</sup>

**Social investment can support upward convergence across a broad range of economic and social indicators.** Investment in ECEC can improve the labour market participation of parents, especially mothers, speeding-up the narrowing and convergence of gender employment and pay gaps (see Chapter 2, section 4.). It can also help to reduce disparities in skill supply, poverty and social exclusion by improving education for children resulting in better labour market opportunities later on. Through the positive impact on employment for parents and children later on in life, investment in ECEC is expected to promote upward convergence in economic outcomes such as GDP per capita. Investment in education and training as well as ALMPs can support upward economic and social convergence, as reducing labour mismatches and shortages can foster economic growth and improve employment outcomes. A similar rationale applies to other types of social investment.

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<sup>(111)</sup> This chapter was written by Jakub Caisl, Karolina Gralek, Eva Schoenwald, Nora Wukovits-Votzi, Alessia Fulvimari and Nadja Najjar, with contributions from Argyrios Pisiotis, Markus Sommersgutter and the Joint Research Centre (JRC) EUROMOD, RHOMOLO, and JRC-GEM-E3 teams.

<sup>(112)</sup> See note from the Council on “Social investments and reforms for resilient economies- Investing in people to boost productivity and growth prospects”, March 4, 2024.

**Social investment plays a key role in delivering the European Pillar of Social Rights and its Action Plan.** Building on the technical work of the Informal Working Group on Social Investment set up by the Spanish and Belgian presidencies, the opinion of the Employment Committee and Social Protection Committee endorsed by the Council (EPSCO) in November 2023 underlines that ‘national reforms and investments based on the social investment approach, if adequately designed, can be vehicles for the implementation of the principles of the European Pillar of Social Rights’. <sup>(113)</sup> The reformed Economic Governance Framework adopted by co-legislators in February 2024 aims to strengthen debt sustainability and promote sustainable and inclusive growth through reforms and investments that contribute to common EU priorities, such as the European Pillar of Social Rights, the green transition, the digital transition, and the build-up of defence capabilities. In this context, the identification of returns on social investment also plays a role.

**This chapter discusses the role of social investment and its contribution to upward social convergence between Member States.** Section 2. presents current knowledge on the social investment concept and underlines EU policies that facilitate social investment. Section 3. provides an in-depth analysis of some social investment policies, such as investment in education, including ECEC, skills, and ALMPs. Section 4. estimates the effectiveness of selected housing policies on reducing poverty and promoting upward social convergence. Section 5. concludes with a brief overview of the chapter findings.

## 2. WHAT DO WE KNOW ABOUT SOCIAL INVESTMENT?

**Well-designed social investments can raise productivity and economic growth.** For instance, investments and reforms in education and skills can foster economic growth through increases in productivity, innovative capacity and employability. Investments in ECEC are expected to have the strongest impact. ALMPs and well-functioning public employment services (PES) can improve the efficiency of labour market matching and activate population groups that are underrepresented in the labour market. Investments in health can improve the population’s health status at every age, which increases the productivity of the (current and future) population of working age and can prolong working lives; such investments can prevent work-related illnesses, and help (re-)integrate people with disabilities and those returning from longer-term sick leave into the labour market. All of these investments and reforms can lead to a double dividend, ensuring additional revenue through employment and health gains, while reducing dependence on social benefits. <sup>(114)</sup> Social investment might also help to address labour shortages and skills mismatches, support resilient economies, <sup>(115)</sup> and increase well-being.

**Analysing returns on social investment should take a life-course perspective.** Social investment generates a multiplier effect that leads to cumulative returns over the life-course at both individual and macro levels. <sup>(116)</sup> Research shows that returns tend to be highest when invested in early life stages. <sup>(117)</sup> For instance, investing in ECEC improves individuals’ future educational outcomes, leading to better labour market opportunities and potentially reducing inequality of opportunity for the next generation. However, changing skills needs, including in the context of the green and digital transitions, might necessitate additional social investment to fully reap the benefits of previous investment in ECEC and initial education and ensure that workers’ skillsets correspond to labour market needs (see Box 3.4 for a discussion in the context of the green transition). <sup>(118)</sup>

**Significant challenges are associated with measuring returns on social investment.** While social investment policies can have a direct economic impact, not all returns can be easily translated into direct quantitative effects on employment, productivity or economic output. Some returns might only materialise in the medium to long term, requiring the collection of data over a longer timeframe (e.g. from surveys or administrative sources). The successful implementation of a number of EU initiatives will be crucial, namely the European Data Strategy, the Open Data Directive, the European Data Governance Act, and the European Data Act. Some social investment and related enabling and complementary policies may have spillover effects, complicating the attribution of returns to a specific intervention. <sup>(119)</sup>

<sup>(113)</sup> See Opinion of the EMCO and SPC on Social Investment – Endorsement, 15418/23, available here, Informal Working Group on Social Investment – Social Investments for resilient economies and Technical Note on Social Investment for Resilient Economies from the Belgian Presidency of the Council of the European Union (2024).

<sup>(114)</sup> (European Commission, 2023j). See also Council conclusions on the future of the European Health Union: A Europe that cares, prepares and protects.

<sup>(115)</sup> The 2020 Strategic Foresight Report defined resilience as the ‘ability not only to withstand and cope with challenges but also to undergo transitions in a sustainable, fair, and democratic manner’ (European Commission, 2020a).

<sup>(116)</sup> (European Commission, 2023j); (European Commission, 2019b); (Hemerijck, Ronchi and Plavgo, 2023).

<sup>(117)</sup> (Hemerijck, 2018); (Hemerijck, 2015); (European Commission, 2019b).

<sup>(118)</sup> (European Commission, 2023b).

<sup>(119)</sup> (Plavgo, 2023) ; (European Commission, 2016); (European Commission, 2024d); (Nieuwenhuis, 2022) and (Bakker and van Vliet, 2021).

**Methods to estimate returns on social investment are complex and cannot account for all relevant elements at once.** Cost-benefit analysis can be used to measure the monetary returns of policies. Where returns cannot be expressed in monetary units, multi-criteria decision analysis considers a wide range of assessment criteria.<sup>(120)</sup> A complementary approach to cost-benefit analysis is a distributional impact assessment, which estimates income impacts for different income groups.<sup>(121)</sup> At micro level, many existing studies rely on microsimulations and counterfactual impact evaluations (CIEs).<sup>(122)</sup> Existing research at macro level often uses ex-post regression-based methods and micro-macro modelling.<sup>(123)</sup> The Council has endorsed voluntary guidance principles for evaluating the economic effects of social investment, discussing methodological approaches and access and availability of data for research purposes among others.<sup>(124)</sup>

**There is wide public support among Europeans for social investment.** When asked about areas where the EU should take action to prepare the future of Europe, people selected social investment in healthcare (38%), education, training and lifelong learning (22%), and active support to employment (17%). The majority (78%) of Europeans believe that overall public spending on key social policies should increase.<sup>(125)</sup> Views vary between countries, ranging from 45% in Denmark to 93% in Portugal, and strongly depend on personal characteristics and attitudes towards the government.<sup>(126)</sup>

**Safeguarding public finances and ensuring efficient spending on social investment is crucial.** In its 2023 report, the High-Level Group on the Future of Social Protection and of the Welfare State in the EU emphasised the need to find new sources to sustainably finance social protection and social investment, including broadening the tax base and readjusting the revenue mix. This is particularly relevant against the present backdrop of higher debt levels, interest rates and investment needs, including in light of the green and digital transitions, the ongoing stepping-up of defence capabilities, and demographic changes. Certain social policies can also mitigate social risks and future social expenditures related to the costs of inaction, thus supporting macroeconomic stabilisation.<sup>(127)</sup> Evidence shows that when public investment and social protection expenditure are safeguarded, fiscal adjustments can have higher returns on growth in the long term.<sup>(128)</sup> In this context, it is key to ensure spending is efficient to safeguard public finances.

**The EU promotes social investment at national level through various policy initiatives and EU funds.** Several policies launched through the European Pillar of Social Rights and its Action Plan support individuals over their life course and help to build human capital, enhance access to quality inclusive education, broaden labour market opportunities, support lifelong learning, and combat poverty and social exclusion. Box 3.1 presents an overview of selected EU policies that foster social investment and contribute to upward social convergence. Several EU funds provide resources to support social investment at national level. The EU has financed several programmes to enhance cohesion and convergence across Member States and regions since the creation of the European Social Fund (ESF) in 1957 and the European Regional Development Fund (ERDF) in 1975, followed by an overarching cohesion policy since the 1980s. In addition, several more recent investments in social policies were implemented through the RRF, which helps Member States to recover from the COVID-19 pandemic while promoting EU priorities such as the green and digital transitions. These were largely also based on country-specific recommendations issued in the context of the European Semester and addressed in the national recovery and resilience plans. In addition, the Commission provides, through the Technical Support Instrument (TSI) and upon demand, technical expertise to Member States to design and implement national or sectoral reforms and strategies to address labour and skills shortages and to anticipate future needs of the workforce.<sup>(129)</sup>

<sup>(120)</sup> (European Commission, 2020b).

<sup>(121)</sup> In September 2022, the Commission issued a Communication on better assessing the distributional impact of Member States' policies (European Commission, 2022a).

<sup>(122)</sup> Such as quasi-experimental methods and randomised control trials; (Crato and Paruolo, 2019).

<sup>(123)</sup> (European Commission, 2024d).

<sup>(124)</sup> (Employment Committee and Social Protection Committee, 2024).

<sup>(125)</sup> 2024 Eurobarometer on Social Europe; 2022 Eurobarometer on Fairness, Inequality and Intergenerational Mobility.

<sup>(126)</sup> Respondents who agreed that the national government takes account of the views of people like them when designing or reforming public benefits programmes and services more often think that the national governments should take measures to reduce income differences (85%, compared to 79% disagree and 66% neutral) (European Commission, 2023e).

<sup>(127)</sup> See Council conclusion on the role of labour market, skills and social policies for resilient economies.

<sup>(128)</sup> (European Commission, 2020b), (Balasundharam et al., 2023)

<sup>(129)</sup> Regulation (EU) 2021/240 of the European Parliament and of the Council of 10 February 2021 establishing a Technical Support Instrument (OJ L 57, 18.2.2021, p. 1–16).

### Box 3.1: EU policies fostering social investment and upward social convergence

In November 2023, the Council endorsed an opinion of EMCO and SPC which underlined that social investment policies that strengthen skills, increase labour market participation and prevent exclusion have significant potential to support stronger and more inclusive economic growth and raise productivity levels. They are also crucial to implementing the principles of the **European Pillar of Social Rights** and facilitating the digital and green transitions. The EU has adopted many policy initiatives and measures to reinforce social investment at national level, which will help to foster social convergence and improve living conditions for citizens in the EU.

The **European Child Guarantee** was adopted by the Council in 2021 to prevent and combat social exclusion from the very beginning of people's lives. It guarantees effective access to a set of key services for children in need, including free ECEC, free education, free healthcare, healthy nutrition, and adequate housing. As part of the **European Care Strategy**, access to high-quality and affordable ECEC services is reinforced in the 2022 **Council Recommendation on early childhood education and care**, which revised upwards the **Barcelona 2030 targets on children's participation in ECEC** to 45% of children aged 0-2 and 96% of children from the age of 3 to compulsory school age. Those initiatives are expected to improve children's well-being and development, as well as increasing the labour market participation of parents (see Chapter 2, Section 4). The reinforced Youth Guarantee enhances employment opportunities of young people under the age of 30 by providing a good quality offer of employment, continued education, apprenticeship or traineeship within four months of becoming unemployed or leaving education.

To build the **European Education Area** (EEA), a genuine common space for quality education and lifelong learning across borders for all, the Commission <sup>(1)</sup> and the Council <sup>(2)</sup> have set out the building blocks of a single policy, strategy and investment framework for European cooperation in education and training, including strategic priorities for national reform and European cooperation, EU-level actions to support Member States in implementation, mobilisation of EU funds towards EEA priorities, a reformed governance framework and EU-level targets to measure progress. In this context several Council Recommendations and Communications were adopted.

To facilitate upskilling and reskilling throughout people's professional lives, in 2020, the Commission presented the new **European Skills Agenda** for sustainable competitiveness, social fairness and resilience. It sets out 12 ambitious actions for five years, contributing to upward social convergence in the EU and successful implementation of the green and digital transitions. Three Council Recommendations were adopted:

1. The 2020 Council Recommendation on vocational education and training (VET) defines key principles to ensure that VET flexibly adapts to labour market needs and provides quality learning opportunities for all age groups;
2. The 2022 Council Recommendation on micro-credentials promotes lifelong learning by supporting the development, implementation and recognition of micro-credentials;
3. The 2022 Council Recommendation on individual learning accounts aims to ensure that everyone has access to tailored training opportunities.

Education and training, labour market and social outcomes of some vulnerable groups are supported through the **EU Gender Equality Strategy 2020-2025**, the **Strategy for the Rights of Persons with Disabilities 2021-2030**, the **EU Roma strategic framework for equality, inclusion and participation 2020-2030**, the 2022 **EU Directive on adequate minimum wages** (which improves enforcement and monitoring of the minimum wage protection and promotes collective bargaining on wages), and the 2023 **Council Recommendation on adequate minimum income** (which pursues adequate income support, access to enabling and essential services, and labour market integration of those who can work). <sup>(3)</sup> In addition, the 2016 **Council Recommendation on the integration of the long-term unemployed into the labour market** supports long-term unemployed people by encouraging the registration of jobseekers with an employment service, promoting individual in-depth assessments of jobseekers' employability prospects, barriers to employment and previous job-search efforts, and offering job integration agreements. In 2021, the Commission adopted the **Social Economy Action Plan** to enhance social innovation, support the development of the social economy, and boost its social and economic transformative power. The 2023 **Council Recommendation on developing social economy framework conditions** aims to foster access to the labour market and social inclusion, while stimulating fair and sustainable economic and industrial development.

In 2021, the Commission put forward a **long-term vision for rural areas** to improve rural quality of life, achieve balanced territorial development and stimulate economic growth. In 2022, the Council adopted a **Recommendation on ensuring a fair transition towards climate neutrality**. It sets out guidance for Member States on promoting

<sup>(1)</sup> Communication from the Commission on achieving the European Education Area by 2025.

<sup>(2)</sup> Council Resolution on a strategic framework for European cooperation in education and training towards the European Education Area and beyond (2021-2030); Council Resolution on the governance structure of the strategic framework for European cooperation in education and training towards the European Education Area and beyond (2021-2030).

<sup>(3)</sup> Other EU-equality strategies and inclusion frameworks that have important education, skills and/or labour market components include the EU anti-racism action plan (2020-2025), the LGBTIQ equality strategy (2020-2025), the Action Plan on integration and inclusion (2021-2027) and the EU strategy on combatting antisemitism and fostering Jewish life (2021-2030).

*Box (continued)*

quality employment, access to quality education and training, fair tax-benefit and social protection systems, and access to affordable essential services. In the context of the digital transition, the Council adopted a **Recommendation on the key enabling factors for successful digital education and training** and a **Recommendation on improving the provision of digital skills and competences in education and training** in 2023. In 2024, the Commission put forward the **Action Plan on Labour and Skills Shortages**.

Finally, to support individuals throughout all stages of their life, the **European Care Strategy**, accompanied by the 2022 **Council Recommendation on long-term care**, aims to ensure that long-term care is timely, comprehensive, accessible, affordable and of high quality, including fair working conditions and training for care staff, and support for informal carers. The Commission launched the **New European Bauhaus** and the **Affordable Housing Initiative**, as well as the **European Platform on Combating Homelessness**, to increase the affordability, sustainability and inclusiveness of housing.

### 3. SELECTED TYPES OF SOCIAL INVESTMENT

**This section examines how selected types of social investment can support individuals and contribute to social convergence and growth in the EU.** This chapter considers as social investment those investments and reforms that, on top of pursuing social objectives and therefore fostering upward social convergence, have substantial positive returns on economic growth through their impact on human capital and productivity, including via stronger innovative capacity and absorption of new technologies, and/or labour supply in line with the considerations on the definition of social investment discussed in Section 1. <sup>(130)</sup> It provides in-depth analysis and new evidence of how investment in education, including ECEC, skills and ALMPs, can support individuals over their life course and contribute to upward social convergence and growth in the EU.

#### 3.1. Investing in early childhood-education and care (ECEC)

**Investment in high-quality ECEC leverages long-term upward convergence in a range of socioeconomic outcomes.** Participating in ECEC helps children to develop key cognitive, language and physical skills early in life, boosting their employment prospects and reducing their likelihood of facing poverty risks. <sup>(131)</sup> It also enables parents of young children, particularly mothers, to work, contributing to higher employment rates among women and potentially reducing child poverty, as well as addressing labour shortages.

**ECEC participation reduces socioeconomic inequalities from very early ages.** Evidence shows that when children from disadvantaged backgrounds participate in high-quality ECEC it has particularly beneficial effects on cognitive skills and school readiness, improving their educational attainment. <sup>(132)</sup> This makes equal access to good quality ECEC central to securing equal opportunities for children in disadvantaged situations, reducing social exclusion and improving intergenerational social mobility. Recent estimates show that across most Member States, adults who faced socioeconomic disadvantage in their childhood are, on average, between 3 pp and 6 pp less likely to be in employment and have 20% lower earnings than those from more privileged backgrounds. A large part of this effect is linked to the fact that socioeconomic disadvantage in childhood tends to translate into lower levels of education, health, and lifetime work experience. The total economic cost of childhood disadvantage <sup>(133)</sup> is estimated at 3.4% of GDP in the EU, ranging from 1.4% of GDP in Finland to 6.1% of GDP in Lithuania. <sup>(134)</sup>

**Women's participation in the labour market can be enhanced through more comprehensive provision of ECEC.** <sup>(135)</sup> Recent estimates in eight Member States show that increasing participation of under-3s in ECEC to 50% could improve mothers' labour participation rates by between 5% and 30%. <sup>(136)</sup> Further analysis shows that the effect on labour market participation could be particularly positive for mothers from low-income families (9 pp to 21 pp increase, depending on the country), potentially helping to reduce poverty risks for the children in those households. <sup>(137)</sup> Such increases in women's labour market participation could help to halve the gender gap

<sup>(130)</sup> See technical note from the Belgian Presidency of the Council of the European Union, 2024, on social investment for resilient economies, available here.

<sup>(131)</sup> (OECD, 2021).

<sup>(132)</sup> (European Commission, 2022d); (OECD, 2021).

<sup>(133)</sup> These costs are composed of labour market penalties (costs of lost employment and individual earnings losses) and the health-related costs stemming from the individual's loss of quality-adjusted life years.

<sup>(134)</sup> (OECD, 2022).

<sup>(135)</sup> (EIGE, 2020).

<sup>(136)</sup> (Narazni et al., 2023).

<sup>(137)</sup> (European Commission, 2023b).

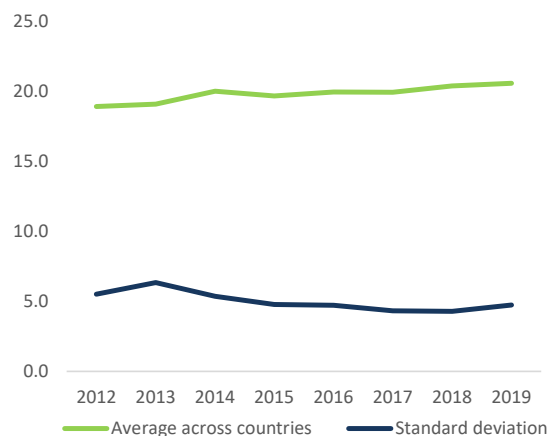
in employment by 2030, in line with the commitment outlined in the European Pillar of Social Rights Action Plan as part of the efforts to reach the EU 2030 headline employment target. This would help to generate sizeable long-term improvements in economic performance at EU level (see Chapter 2, Section 4.).

**Public expenditure on ECEC has increased slightly in the EU since 2012, with variation between countries showing a slight decline.** For the 15 Member States with data consistently available over time, <sup>(138)</sup> ECEC public expenditure per pupil (measured as share of national GDP per capita) increased from 18.9% in 2012 to 20.5% in 2019 (Chart 3.1). In 2019 (the last year for which data are available), the ECEC expenditure per pupil ranged from 12.2% of GDP per capita in Austria to 29.8% in Bulgaria. The variation in expenditure on ECEC between countries declined slightly over time, as evident in the downward sloping line of the standard deviation as a measure of cross-country variation (Chart 3.1). There may also be variations in ECEC quality across countries, but these are extremely difficult to assess with existing data. Box 3.2 presents the European Commission's latest estimates of future investment needs in ECEC.

Chart 3.1

#### Mild growth in public expenditure on ECEC accompanied by signs of convergence across countries

Public expenditure on ECEC per pupil (% of national GDP per capita) and variation across countries (standard deviation), 15 Member States



*Note:* Reported average across countries is unweighted. Data not available consistently across the 2012-2019 period for: Belgium, Czechia, Denmark, Ireland, Greece, Croatia, Cyprus, Latvia, Hungary, Malta, Portugal, Romania.

*Source:* Eurostat dataset [educ\_uoe\_fine09].

[Click here to download chart.](#)

<sup>(138)</sup> Eurostat data are only available for the 2012-2019 period. Data are missing for several Member States for start/end year and those Member States are excluded from the analysis. Denmark and Malta are missing data for some intermediate years and are also excluded.



### Box 3.2: Future investment needs in Early Childhood Education and Care

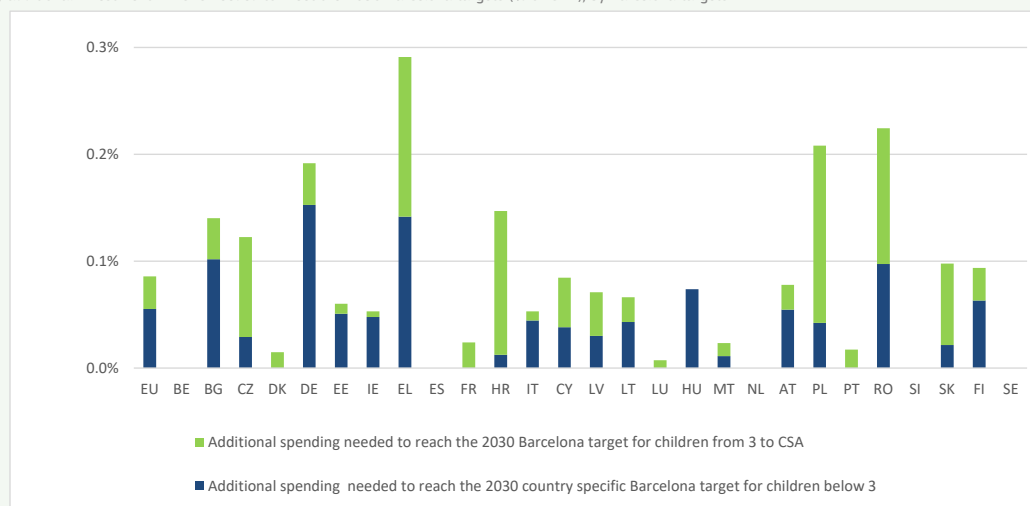
**Further investment is needed to increase children's participation in ECEC to the Barcelona target levels at EU level**, notably for the under-3s. Such investment would help to address several barriers to children's access to ECEC, including the lack of available places and high access costs. For example, by creating new ECEC places, training, hiring and paying new staff, or refurbishing existing/building new facilities, while ensuring accessibility and affordability.

**Additional yearly spending on ECEC needed to reach the EU Barcelona Targets by 2030 would amount to 0.085% of EU GDP** (more than EUR 11 billion) according to recent estimates.<sup>(1)</sup> This amount varies by Member State, ranging from 0% (in Member States that have already reached the target) to nearly 0.3% in Greece and around 0.2% in Germany, Poland and Romania (Chart 1).

Chart 1

#### Additional investment needs in ECEC vary by Member State

Yearly additional investment in ECEC needed to meet the 2030 Barcelona targets (% of GDP), by Barcelona targets



Source: DG EMPL calculations based on Eurostat data.

<sup>(1)</sup> The additional investment need is estimated as follows. First, based on current participation rates (Eurostat ilc\_caindformal dataset), the number of additional children who should be enrolled to meet the Barcelona targets is estimated. This number is then multiplied by the yearly average public expenditure on ECEC per participating child (Eurostat educ\_uoe\_fine09 dataset) to obtain the additional yearly spending needs to reach the Barcelona targets. It is assumed that the level of spending per participating child remains constant over the years.

**A large majority of preschool age children participate in ECEC in the EU, with participation rates converging across Member States.** <sup>(139)</sup> The share of children aged three to compulsory school age (CSA) participating in ECEC broadly stagnated, going from about 87% in 2014 to 89% in 2023 (Chart 3.2). The COVID-19 pandemic resulted in a temporary decline in participation and a spike in cross-country differences in 2020. In 2023, national participation rates still varied considerably. For example, participation was above the Barcelona target of 96% <sup>(140)</sup> in seven Member States (Belgium, Denmark, Spain, France, Hungary, the Netherlands, Sweden), but was less than 80% in three countries (Poland, Romania, Slovakia). Cross-country differences declined between 2014 and 2023, as countries with lower participation rates caught up with those with higher participation. <sup>(141)</sup>

**While the average ECEC participation rate of the youngest children (0-2 years of age) rose over the last decade, disparities across Member States also increased.** Over the last ten years, the share of children participating rose from about 28% in 2014 to 37% in 2023, with a short lapse during the 2020 closures due to the COVID-19 pandemic and an increase by 1.5 pp in 2023 compared to the previous year (Chart 3.2). To

<sup>(139)</sup> (Eurofound, a).

<sup>(140)</sup> Note that the Barcelona target for this age group (3+) is based on UOE data (educ\_uoe\_enra21) and not on data from EU-SILC survey.

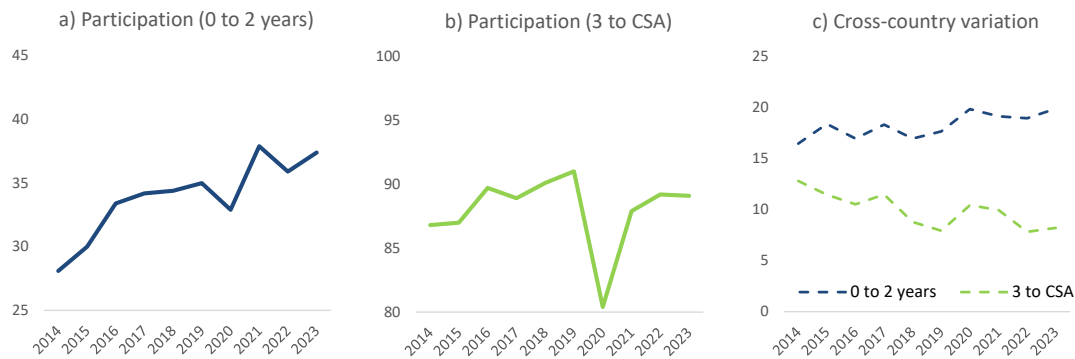
<sup>(141)</sup> Standard deviation dropped from 5.3 to 4.7. Beta coefficient is negative (-0.07) and statistically significant at 1% significance level.

date, ten Member States <sup>(142)</sup> have reached the revised Barcelona participation target of 45% for this age group set at EU level, <sup>(143)</sup> while six countries recorded participation rates lower than 20% in 2022. <sup>(144)</sup> In the remaining Member States, between 20% and 45% of children participated in ECEC. The overall level of disparity between countries grew somewhat since 2014, despite evidence that some Member States with low participation rates caught up with others. <sup>(145)</sup> Low levels of participation in ECEC for some Member States call for higher investment. Box 3.2 provides an estimate of future investment needs in the EU assuming constant level of spending per participating child.

Chart 3.2

### Growing ECEC participation accompanied by convergence in attending preschool education

Proportion of children participating in ECEC, by age group and variation across countries, 2014-2022, EU-27



Note: Data missing for Italy in 2020.

Source: DG EMPL calculations based on EU-SILC data [datasets ilc\_caindformal (for 2014) and ilc\_caindform25 (from 2015 onwards)].

[Click here to download chart.](#)

**Young children from disadvantaged backgrounds are less likely to participate in ECEC, especially in some Member States.** <sup>(146)</sup> In 2022, children facing different types of disadvantage (monetary poverty, material deprivation, low work intensity) had participation rates at least 10 pp lower than those from non-disadvantaged backgrounds, regardless of the type of disadvantage (Chart 3.3). <sup>(147)</sup> However, this gap varied between Member States, with children at risk of poverty or social exclusion participating considerably less often (by more than 20 pp) in some Member States, <sup>(148)</sup> and at a similar rate or more often than those not at risk in others. <sup>(149)</sup> On average across all Member States, children who can benefit most from attending ECEC tend to participate least. <sup>(150)</sup>

<sup>(142)</sup> Belgium, Denmark, Spain, France, Luxembourg, Malta, the Netherlands, Portugal, Slovenia, Sweden.

<sup>(143)</sup> Specific targets apply to Member States that have not reached the 2002 Barcelona target of 33% participation for this age group.

<sup>(144)</sup> Bulgaria, Czechia, Lithuania, Poland, Romania, Slovakia.

<sup>(145)</sup> Beta coefficient is negative (-0.03) and statistically significant at 10% significance level.

<sup>(146)</sup> (Employment Committee and Social Protection Committee, 2023).

<sup>(147)</sup> Data for 2023 was not available at the time of writing. For analysis of earlier periods, see (European Commission, 2019b).

<sup>(148)</sup> Belgium, France, Italy, the Netherlands, Spain.

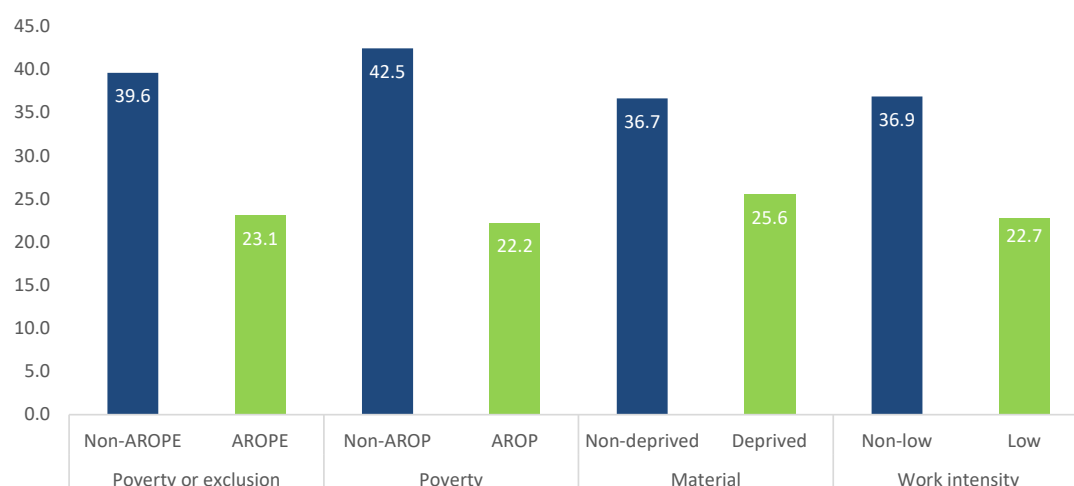
<sup>(149)</sup> Bulgaria, Denmark, Croatia, Hungary, Austria, Romania.

<sup>(150)</sup> Convergence analysis cannot be carried out due to data limitations.

Chart 3.3

**Children from disadvantaged backgrounds participate less in ECEC**

Proportion of children aged 0 to 2 participating in ECEC, by population group (% of all children in the group), 2022, EU-27



Source: DG EMPL calculations based on EU-SILC microdata.

[Click here to download chart.](#)

### 3.2. Impact of investment in school education on learning outcomes

**Education underpins long-term gains for individuals and enhances society's human capital.** It does so by increasing people's labour market opportunities and mitigating poverty and social exclusion risks. Individual benefits accrue to the economy and society as a whole, fostering the productivity, competitiveness and innovation necessary for successful implementation of the green and digital transitions. Simulations assuming a gradual improvement over 15 years show that increasing basic skills by 25 PISA <sup>(151)</sup> points could lead to a 0.5 pp higher average annual growth rate in EU GDP in the long term. <sup>(152)</sup> Recent evidence from Portugal suggests that well-designed reforms expanding the Vocational Education and Training (VET) offer in public schools increase upper secondary graduation rates. The reform introduced a VET track alongside an academic track (high school), which particularly benefitted those that otherwise tend to leave school earlier. The effects are larger for low-achieving students, children of less educated parents, and welfare recipients, including leading to higher wages and other positive outcomes for participants over several years. <sup>(153)</sup> Evidence shows that low-income countries with higher shares of graduates with tertiary education experienced stronger catching-up towards the average GDP per capita between 2008 and 2021. <sup>(154)</sup>

**During the COVID-19 pandemic, the composition of total public expenditure shifted away from education.** Spending on education was 9.5% of total public expenditure in 2022, 0.6 pp below pre-COVID-19 pandemic levels in 2019 (see Chapter 1, Section 3.6.). However, the latest available data from 2022 show that expenditure increased slightly (by 0.1 pp) compared to 2021, potentially indicating some signs of recovery. In 2022, over 70% of public spending on education went to school education, which includes both (pre-)primary and secondary levels, each accounting for roughly similar shares (34% and 36.8%, respectively) (Chart 3.4). Tertiary education received 16.6% of public expenditure on education. At Member State level, the allocation of public expenditure to different education levels is driven by various factors, such as the duration of compulsory education, relative wages in the education sector, or class size. <sup>(155)</sup> Between 2012 and 2022, the share spent on school education increased slightly (+0.4 pp), driven by pre-primary and primary levels (+2.5 pp), but decreased for tertiary education (-0.5 pp) which might (partly) reflect the changes in demographic composition.

<sup>(151)</sup> See OECD's Programme for International Student Assessment (PISA) [here](#). It measures 15-year-olds' ability to use their reading, mathematics and science knowledge and skills to meet real-life challenges.

<sup>(152)</sup> (European Commission, 2019b).

<sup>(153)</sup> (Ferreira and Martins, 2023).

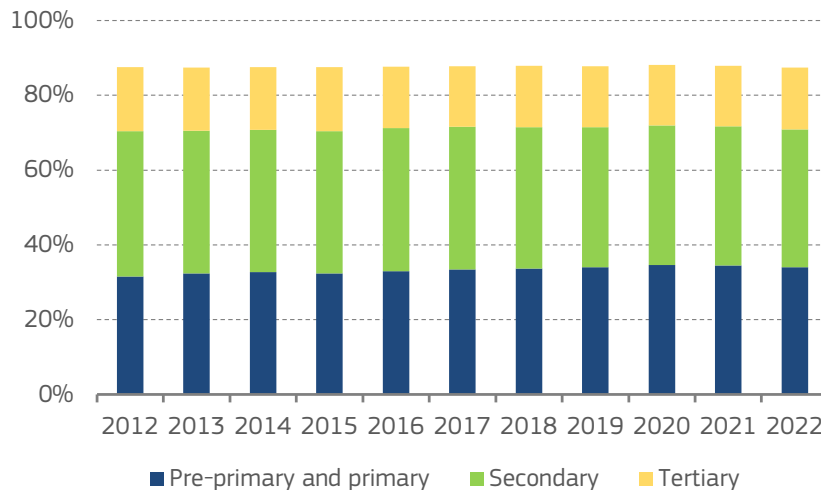
<sup>(154)</sup> (Eurofound, b).

<sup>(155)</sup> (European Commission, 2023g).

Chart 3.4

**School education receives the largest share of public expenditure on education**

Weighted average EU share of government expenditure on education, by education level, 2012-2022



*Note:* School education includes (pre-)primary and secondary levels. Further categories of public expenditure on education not included in the chart are post-secondary non-tertiary education, education not definable by level, subsidiary services to education, research and development (R&D) education, and education not elsewhere classified.

*Source:* Eurostat [gov\_10a\_exp].

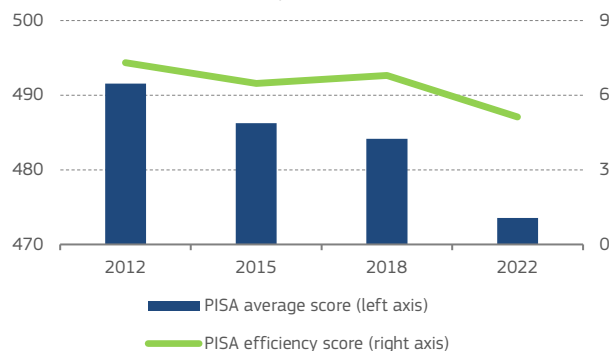
[Click here to download chart.](#)

**PISA outcomes point to worsening basic skills in the EU over time, with potential negative impacts on EU competitiveness and wage developments in the longer term.** The average PISA score across reading, mathematics and science subjects decreased by 10 points since the last wave in 2018, and by 18 points over the last 10 years in the EU (Chart 3.5).<sup>(156)</sup> While this declining pattern was also observed in other industrial countries (with the average PISA score dropping by 9 points since 2018 and 19 points since 2012 in OECD countries on average), the EU performed quite poorly compared to other advanced economies such as the US, the UK, Canada or Japan. In 2022, for example, it had the highest percentage of underachievers across all three subjects, and one of the lowest shares of top performers among those countries. Although PISA outcomes had already started to decline prior to the COVID-19 pandemic, learning losses during lockdowns might have intensified this downward trend among other possible factors. Box 3.3 presents a case study on Italy, showing the persistent impacts of COVID-19 pandemic school disruptions on student achievement, with learning losses still significant in 2021 and 2022.

Chart 3.5

**Basic skills and efficiency of cumulative expenditure on education per student decreased post-COVID-19 pandemic**

Average EU PISA score across reading, mathematics and science, and PISA EU efficiency score, 2012-2022



*Note:* PISA efficiency score measures the number of PISA points produced by USD 1 000 (expressed in purchasing power parity (PPP)) of cumulative expenditure on education per student, following the methodology in European Commission (2023d). It is calculated as  $1\,000 \times (\text{average PISA score over reading, mathematics and science}) / (\text{cumulative expenditure per student from age 6-15 (in USD, PPP)})$ , and can be interpreted as an approximate measure of the pay-off from additional expenditure for a school education system. Yearly averages for Member States for which data are available.

*Source:* OECD PISA data for 2012, 2015, 2018, 2022.

[Click here to download chart.](#)

<sup>(156)</sup> To approximate the average annual pace of learning among 15-year-olds, OECD (2023) used 20 score points in PISA as a common benchmark for all countries. However, this benchmark should not be used to convert the differences across countries and changes over time in PISA scores as years-of-schooling equivalents, given differences in the pace of learning at a given age, organisation of schooling, resources invested in education, and quality of education across countries, as well as possible changes in the pace of learning over time.

### Box 3.3: Impact of COVID-19 pandemic schooling disruptions on student achievement in Italy

**Italy was one of the countries first and most severely hit by the COVID-19 pandemic.** It experienced 13 weeks of complete school closure in spring 2020 and 22 weeks of partial closures during the 2020-2021 school year. The study found greater learning losses in reading than in mathematics and among boys rather than girls, with impacts found to be mixed for different socioeconomic backgrounds.

**In Italy, learning losses due to online or hybrid learning were greater in reading than in mathematics. <sup>(1)</sup>**

This is somewhat inconsistent with previous research suggesting that learning in mathematics is more dependent on in-person instruction than reading, and that, in the EU, learning deficits in mathematics were significantly larger than in languages and other subjects. <sup>(2)</sup> As the study on Italy considered students of two different secondary level grades, this inconsistency could not be explained by the better ability of most parents to help children with reading rather than mathematics.

**There were significant gender differences in the impact of physical school closures in Italy.** On average, girls did better than their male peers. For reading and mathematics, the learning loss in 2021 was much lower for girls than for boys, with the gender gap widening further in 2022 and 2023 (Table A3.1 in the Annex). These results are consistent with both pre- and post-COVID-19 pandemic international patterns, with the difference ascribed to higher levels of intrinsic motivation and self-discipline among girls than boys.

**Learning losses for students from different economic, social and cultural backgrounds presented a mixed pattern.** The OECD measured parents' socioeconomic and cultural status (ESCS measure). In Italy, students in the highest ESCS quartile suffered the largest learning loss in 2020-2021 (Table A.1 in the Annex). <sup>(3)</sup> This finding for Italian students is inconsistent with EU-level findings <sup>(4)</sup> and may be due to differential baselines, with standardised scores for the lowest ESCS quartile considerably below the population average and thus potentially too low to register substantial losses due to remote learning measures.

**Learning losses among Italian students in 2021 showed no significant difference in the impact of remote and hybrid learning between native students and students of foreign origin.** In the first two years after the outbreak of the COVID-19 pandemic, natives and first- and second-generation migrants showed the same learning loss associated with online and hybrid learning in reading and mathematics (Table A3.1 in the Annex). However, in 2023, the learning loss among native pupils was larger than among their first- and second-generation migrant peers in mathematics.

**Italian students' performance did not bounce back to pre-COVID-19 pandemic learning levels upon their return to regular schooling modalities.** Similar to other research, <sup>(5)</sup> the study does not detect signs of learning loss recovery. The considerable learning loss observed in 2021 remained largely stable in 2022 and 2023 compared to 2021. <sup>(6)</sup> If targeted policies do not mitigate learning losses and increase education systems' resilience to disruption, the accumulation of losses could amplify the long-term negative effects on human capital and, eventually, the economy. <sup>(7)</sup>

<sup>(1)</sup> (Amer-Mestre and Flisi, 2024). The study selected students in Italy at the end of upper secondary school (grade 13) as the treatment group, and students at the end of lower secondary school (grade 8) as the control. It implemented a difference-in-differences strategy to identify the causal effects of online and hybrid learning on performance, estimating the effect of school closures not only on one cohort who was in grade 13 in 2020-2021, but also for subsequent cohorts in grade 13 up to the 2022-2023 school year.

<sup>(2)</sup> (European Commission, 2024e).

<sup>(3)</sup> Due to data quality concerns for later years, only the impact on the 2020-2021 school year was analysed.

<sup>(4)</sup> Immigrant or ethnic minority backgrounds of students and parents contributed to learning disadvantages during school disruptions (European Commission, 2022d).

<sup>(5)</sup> (European Commission, 2024e)

<sup>(6)</sup> The observed return of educational achievement to pre-COVID-19 pandemic levels in some countries (e.g. France) may have resulted from changes in examination content rather than learning recovery (European Commission, 2022d).

<sup>(7)</sup> (Di Pietro, 2023).

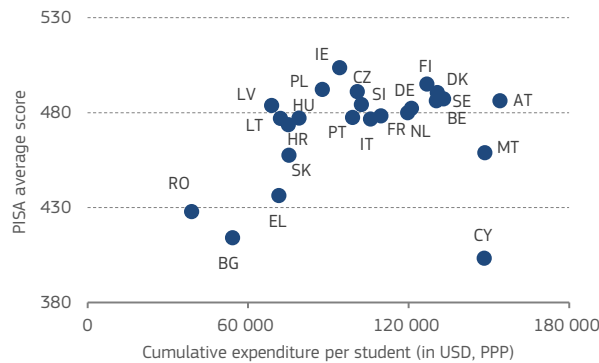
**Higher public expenditure on education is not sufficient to achieve better outcomes in basic skills pointing to other structural factors and the importance of reforms.** Countries with higher levels of spending per student from ages 6-15 do not always have higher PISA scores. In 2022, Cyprus and Malta achieved similar average PISA scores compared to Bulgaria and Croatia, respectively, but at much higher cumulative expenditure per student (Chart 3.6). At the same time, some countries with similar levels of spending per student (Austria, Malta and Cyprus) achieved different levels of PISA scores (with the PISA score in Austria being 27 and 83 points higher than Malta and Cyprus, respectively). Prior to the COVID-19 pandemic, the efficiency of spending

on education outcomes, as measured by the PISA efficiency score,<sup>(157)</sup> showed some smaller variations from year to year but remained quite stable on average (Chart 3.5). In 2022, the average PISA efficiency score recorded a sharper decline, with an additional investment of USD 1 000 per student translating into an increase of merely 5.1 points of average PISA scores, down from 6.8 points in 2018. Efficient spending ensures that resources are channelled to areas where they have sufficient impact and are spent effectively, enhancing value for money. Research suggests that reducing inefficiencies in spending on education could lead to substantial gains in the EU, with the potential to increase annual growth of GDP per capita by 0.8 pp in the long term.<sup>(158)</sup>

Chart 3.6

### Higher expenditure on education does not necessarily lead to better PISA outcomes

Average EU PISA score across reading, mathematics and science, and cumulative expenditure on education per student from ages 6-15 (USD, PPP), 2022



Note: Data missing for Luxembourg (full set of data) and Estonia (cumulative expenditure per student).

Source: OECD PISA 2022 data.

[Click here to download chart.](#)

**Equity and excellence in education can be promoted at the same time.** Evidence from PISA studies suggests that Member States with lower levels of underachievement tend to reach higher levels of top educational performance (i.e. a higher share of students achieving a high level of competence in a specific grade).<sup>(159)</sup> However, alongside the quantity of spending, other factors such as the quality of education and allocation of resources can also play a key role in determining the effectiveness of investment in education. In 2019, the Council<sup>(160)</sup> identified several policy actions that could help to improve efficiency, effectiveness and equity of education.<sup>(161)</sup> These include enhancing quality and equal opportunities through policies ranging from ECEC to higher education, VET and adult learning, fostering competencies in line with future labour market needs, reconsidering financing models for education and training (including through synergies with EU funds), and fostering synergies with complementary structural policies.

**High-quality education for all will help Europe achieve its economic and social objectives and is thus a key element of the European Pillar of Social Rights.** The Commission is working with Member States on the development of the European Education Area. This will be underpinned by a comprehensive policy, governance, and investment framework, EU-level targets on education and training to measure progress, and EU-level actions and funding to support European cooperation and national reforms in Member States.

### 3.3. Investing in skills

**Effective investment in skills can increase employment, competitiveness and productivity, fostering economic growth.**<sup>(162)</sup> Changing skills needs, particularly in the context of the green and digital transitions, will require additional investment in adult learning, upskilling and reskilling. These investments can improve employability prospects, addressing skills shortages and mismatches.<sup>(163)</sup> Investment in lifelong learning helps people to develop their skills in line with labour market needs throughout their entire career, increasing their chances of remaining in the labour market. A labour force with an up-to-date skillset is central to boosting productivity and growth, supporting wages as well as firms' competitiveness.<sup>(164)</sup> The European Pillar of Social

<sup>(157)</sup> The definition of PISA efficiency score follows the methodology used in European Commission (2023d). It measures how many PISA points are produced by USD 1 000 (in PPP) of cumulative expenditure per student from age 6-15 and is calculated as  $1\,000 \times (\text{average PISA score over reading, mathematics and science}) / \text{cumulative expenditure per student from age 6-15 (in USD, PPP)}$ , and can be interpreted as a rough measure of the pay-off from additional expenditure for a school education system.

<sup>(158)</sup> (European Commission, 2020c).

<sup>(159)</sup> (European Commission, 2024e).

<sup>(160)</sup> In its joint Economic and Financial Affairs (ECOFIN) and Education, Youth, Culture and Sport (EYCS) formation, 8 November 2019.

<sup>(161)</sup> (European Commission, 2021b).

<sup>(162)</sup> (Hemerijck, 2017).

<sup>(163)</sup> (European Commission, 2023b).

<sup>(164)</sup> (European Commission, 2019a).



Rights Action Plan sets an EU headline target of at least 60% of adults participating in training each year by 2030, compared to a participation rate of 39.5% in 2022. The analysis below examines a selection of social investments and illustrates the return on investment in skills of young unemployed people and productivity-enhancing training for the broader population. Within this, Box 3.4 provides additional analysis on the investment needs related to re- and upskilling in the context of the green transition.

### Investment in skills for young unemployed people

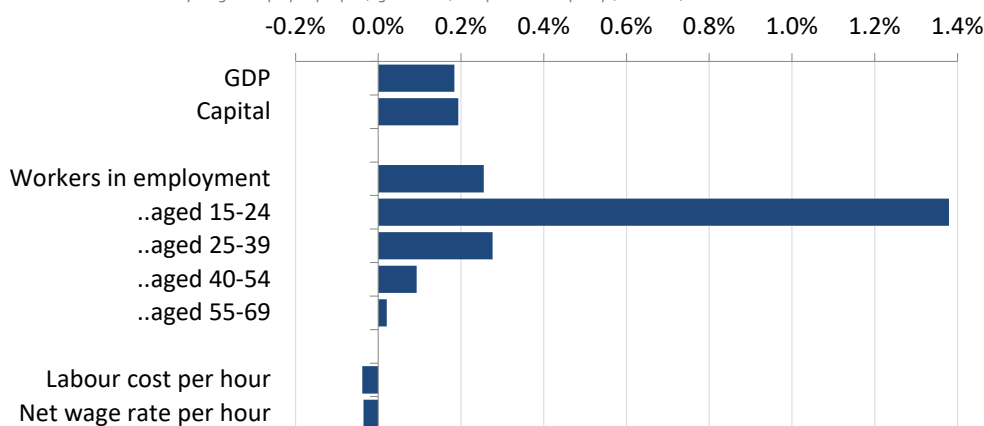
**Young people who are not in employment nor in education or training (NEET) face a higher risk of becoming disconnected from the labour market and social exclusion, with potential negative long-term effects on their entire working lives.** <sup>(165)</sup> In the context of the European Pillar of Social Rights Action Plan, the EU strives to reduce the share of young people who are NEET, from 12.6% in 2019 to 9% by 2030. Different types of interventions and pathways can support young people to enter the labour market. For instance, a majority of trainees feel that a past traineeship experience supported their professional development and made their transition from school to work easier. <sup>(166)</sup> Vocational education and training and apprenticeships can help develop job-related skills and help young people enter the labour market.

**Additional well-designed investment to increase the skills of young unemployed workers is expected to increase employment across all ages in the long term.** Investing in the skills of young unemployed people (aged 15-24) can tackle high youth unemployment rates. The average macroeconomic effects of skill-enhancing interventions for young unemployed people for the six countries with the highest youth unemployment rates in 2022 <sup>(167)</sup> were estimated using DG EMPL's Labour Market Model (LMM) (Box A3.1 in the Annex). <sup>(168)</sup> Based on the model simulation, young workers are expected to experience the strongest employment gains, with the number of people aged 15-24 employed increasing by 1.4% due to around a 0.1 pp increase in investment in skill-enhancing training (Chart 3.7). Overall, employment is expected to increase by 0.25%, with early investment in skills assumed to have a sustainable, although decreasing, impact on employability throughout people's lives. Increasing investment in skills for young unemployed people can contribute to upward social convergence. Assuming that training is well-designed – and thus effective at enhancing skills and reducing unemployment rates – the analysis suggests that the additional spending would lead to a small reduction in disparities and prompt catching-up in unemployment and employment rates, not only for the beneficiaries of the training (aged 15-24) but for the overall working-age population. <sup>(169)</sup>

Chart 3.7

#### Skills-enhancing investments for young unemployed people are expected to increase employment and GDP in the long-term

Long-term impact of investment in skills of young unemployed people (aged 15-24) compared to no-policy (reference) scenario



Source: DG EMPL calculations based on LMM.

[Click here to download chart.](#)

**Helping young people to improve their employability leads to broader positive macroeconomic returns, driving investment and GDP.** The initial cost of the measure is estimated to be more than offset by larger economic returns. The overall rise in employment is expected to trigger additional investment to equip new

<sup>(165)</sup> (Cedefop, n.d.).

<sup>(166)</sup> (European Commission, 2023d).

<sup>(167)</sup> Greece, Spain, Italy, Romania, Slovakia, Sweden.

<sup>(168)</sup> DG EMPL's LMM is a general equilibrium model that places a special emphasis on labour market institutions.

<sup>(169)</sup> Beta coefficient is negative and statistically significant for both unemployment (aged 15-24) and employment (aged 15-24; aged 25-59) rates, respectively. An analysis of the employment rate of 15-64-year-old was not possible due to the age breakdown of the LMM.

workers with additional capital. As a result, GDP is projected to increase by 0.18% in the long term, compared to a scenario without any additional investment in young unemployed people (Chart 3.7).

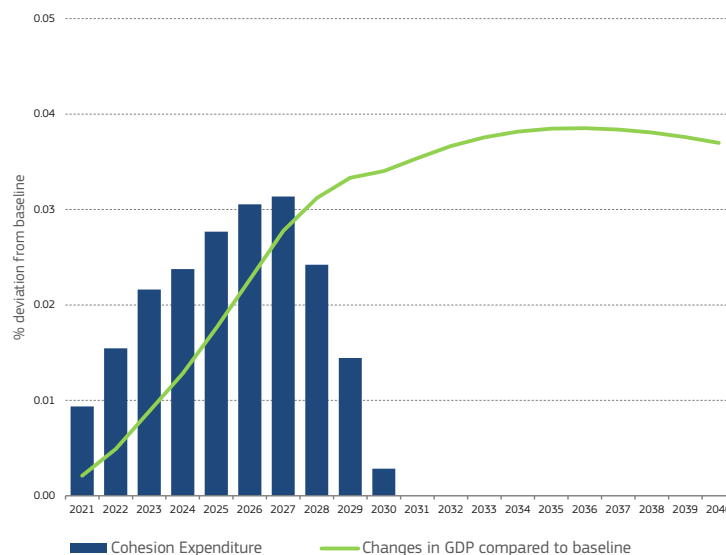
## Investments in skills enhance productivity

**Regional investment in skills in the context of the European Social Fund Plus (ESF+) can lead to significant increases in economic activity in the long term.** The European Commission's RHOMOLO model is used to simulate the potential regional macroeconomic impact of ESF+ investments in skills over the 2021–2027 funding period, which are assumed to increase labour productivity (Box A3.1 in the Annex).<sup>(170)</sup> The simulations illustrate that ESF+ funding for skills, in addition to the direct employment and social benefits expected in the areas and sectors targeted by the projects financed, could increase EU GDP by up to 0.039% at its peak in 2036 relative to baseline GDP (Chart 3.8). GDP is expected to remain above its baseline level even after expenditure on ESF+ terminates, as the structural effects of increased labour productivity and corresponding adjustments by firms and households materialise. Overall, the initial cost of the measure, at less than 0.035% of GDP per year, is more than offset by the long-term economic returns, which are significantly larger than the original investment.

Chart 3.8

### Investment in skills can lead to long-term GDP gains

Expenditure on skills-related ESF+ programmes over 2021–2027 programming period (% over baseline GDP) and expected impact of the investment on GDP (% deviation from baseline GDP)



Note: 'Baseline' constitutes a scenario with no additional investment.

Source: JRC calculations based on RHOMOLO model.

[Click here to download chart.](#)

**Targeted investments in skills can lead to employment gains throughout the funding period and in the long-term.** At their peak in 2026, EU-level employment gains are projected to be 0.024% compared to the baseline scenario of no investment, with the largest employment gains expected for the lowest income quintiles (Chart 3.9).<sup>(171)</sup> This impact is larger in regions with more significant investments.<sup>(172)</sup> When the demand stimulus related to the ESF+ funds ends, employment decreases and temporarily dips below its initial level,<sup>(173)</sup> before recovering and rising above the initial level in the long term.<sup>(174)</sup> Developments in the unemployment rate mirror these results, with decreases in unemployment rates projected in the short and long term, as vacancies for upskilled individuals who benefitted from the programmes are filled (Chart 3.9).

<sup>(170)</sup> (Christou et al., 2024).

<sup>(171)</sup> The lower income quintiles also experience larger increases in real wages compared to the richest income quintile, as their labour productivity increases relatively more.

<sup>(172)</sup> For instance, in the Bulgarian region BG31, Severozapaden, and the Portuguese region PT20, Região Autónoma dos Açores, impacts at the peak are +0.195% and +0.185%, respectively.

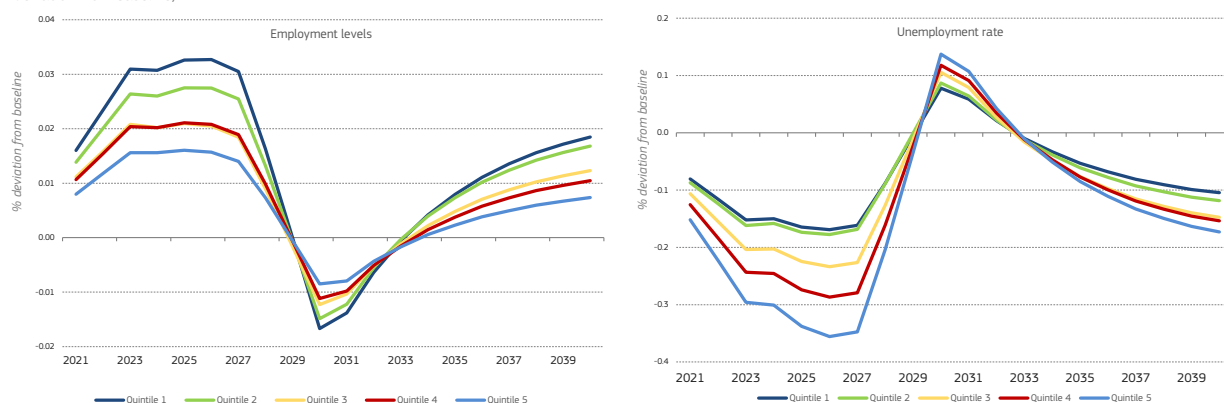
<sup>(173)</sup> The temporary decrease in employment below initial levels stems from modelling specificities. In the model, agents are myopic and make decisions based only on past and current economic conditions. Thus, they cannot anticipate the end of the monetary injection (at the end of the implementation period), nor the full positive impact of the supply-side effects of the policy intervention that will materialise in the future. The combination of positive shocks (increased government spending and increased productivity) and negative shocks (contributions needed to finance the policy) together with the asymmetric nature of the shocks across regions and agents being myopic can lead to a temporary negative effect at the end of the implementation period.

<sup>(174)</sup> Despite ESF+ spending of less than 0.1% of EU GDP for each year of the programming period, employment would still be 0.013% higher than the baseline 20 years after the start of the programme.

Chart 3.9

**Investment in skills can improve labour market outcomes in the short and long term**

Expected EU-level impact of ESF+ investment in labour productivity-enhancing programmes on levels of employment (left) and unemployment rate (right) by income quintile (% deviation from baseline)



Note: Income quintile 5 indicates the richest income quintile and quintile 1 the poorest.

Source: JRC calculations based on RHOMOLO model.

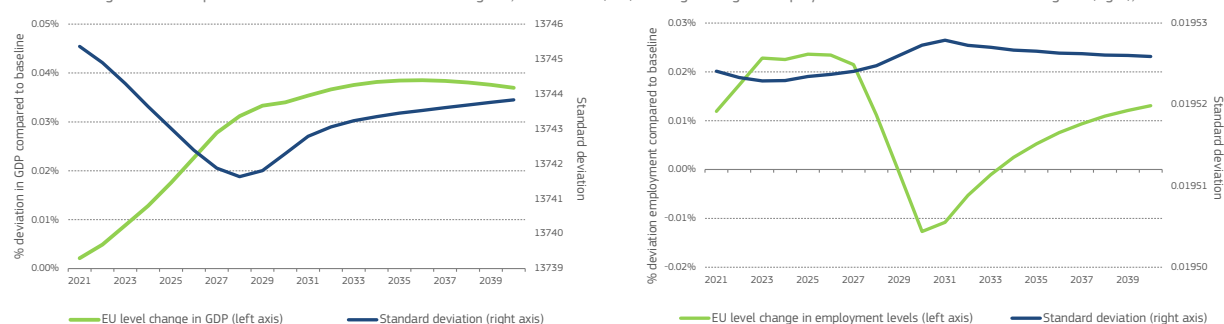
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**Targeted investment in skills has the potential to contribute to sustained regional economic convergence.** The simulation suggests upward convergence in GDP per capita between NUTS2 regions in the EU as a result of the ESF+ 2021-2027 funding period (Chart 3.10).<sup>(175)</sup> Regions with lower relative GDP per capita are projected to grow more strongly as a result of the funding, catching up with regions with higher initial GDP per capita levels.<sup>(176)</sup> Despite evidence of regional convergence in employment levels during the funding period,<sup>(177)</sup> these effects are not sustained in the medium and long term. This could be because of an overall improvement in outcomes in regions not directly receiving ESF+ funding but experiencing positive spillover effects. This is in line with previous analyses showing that improvements in skills-matching in some regions may have positive spillover effects into other regions.<sup>(178)</sup> These overall improvements would thus limit the potential for convergence across regions (Chart A3.1 in the Annex).<sup>(179)</sup> Individuals might also need to be retrained in the medium to long term in line with changing skills needs, reducing the effect of the intervention in the medium to long term.<sup>(180)</sup> More generally, the convergence impact of skills-related ESF+ investments on labour market outcomes appears to be limited, as the changes in the standard deviations (as a measure of convergence) are relatively small in scale (Chart 3.10).

Chart 3.10

**Investment in skills contributes to upward regional convergence in GDP, with only limited short-term convergence in labour market outcomes**

EU-level change in GDP compared to baseline and variation across regions, 2021-2040 (left). Average change in employment levels and variation across regions (right), 2021-2040



Note: Standard deviation is a measure of regional variation, the higher the standard deviation, the higher the regional variation.

Source: JRC calculations based on RHOMOLO model.

[Click here to download chart.](#)

<sup>(175)</sup> The coefficient of variation of the GDP per capita indicator follows a similar decreasing trend to the standard deviation.

<sup>(176)</sup> Beta coefficient is negative (-0.008) and statistically significant at 1% significance level, measured at year 10 relative to baseline, and remains negative and significant over the time horizon of the analysis (20 years since the start of the funding period).

<sup>(177)</sup> Beta coefficient is negative (-0.0004) and statistically significant at 1% significance level, measured at year 5 relative to the baseline.

<sup>(178)</sup> (European Commission, 2023b).

<sup>(179)</sup> This finding can be explained through other regions profiting from the increased demand and increased production in regions benefitting from the investment, for example through the provision of intermediate inputs and additional trade dynamics that may improve labour market outcomes in regions not originally affected.

<sup>(180)</sup> The immediate effect of the intervention is modelled to depreciate over time.

### Box 3.4: Investments for a fair green transition

**Social investment can help to advance the fair green and digital transitions and adapt to demographic change in the EU.** This box provides novel evidence on how social investment can support the fair green transition, based on recent findings from the DG EMPL-JRC AMEDI and DISCO(H) project. <sup>(1)</sup>

#### *Investment needs in the transition towards a climate-neutral economy: policy context*

**The ambition of the European Green Deal requires massive public and private investment and systemic change, including re- and up-skilling the workforce, changes in business models, and lifestyles.**<sup>(2)</sup> Since its launch in 2019, the EU has set climate targets in law to reduce greenhouse gas (GHG) emissions by at least 55% by 2030, and the Commission recommended a new 2040 target to reduce GHG net emissions by 90% (both compared to 1990 levels). The Council Recommendation on ensuring a fair transition towards climate neutrality<sup>(3)</sup> guides Member States to adopt concrete policy packages on quality employment in the green economy, skills and training, social protection, and access to essential services (including affordable housing, energy and transport), and to align investment flows with the investment needs for a just transition.

**Investments in decarbonisation, infrastructure, as well as human capital are central to achieving the goals of the European Green Deal.** While the importance of social investments linked to the green transition is recognised in the 2020 European Green Deal Investment Plan, human capital and social infrastructure are still underfinanced. Investment needs for retraining, reskilling and upskilling in manufacturing of strategic net-zero technologies alone are estimated at around a total of EUR 3.1 to 4.1 billion by 2030.<sup>(4)</sup> The EU is currently mobilising investments for a fair green transition through several funding mechanisms, such as the Just Transition Mechanism (EUR 55 billion over 2021-2027), the Social Climate Fund (EUR 86.7 billion over the period 2026-2032), the RRF (EUR 275 billion),<sup>(5)</sup> and ESF+ (EUR 9.6 billion over the period 2021-2027).

**The analysis presented in this box assesses social investment needs related to reskilling and upskilling with a particular focus on the renewable energy sector.** To scale up manufacturing of clean technologies (wind, solar, batteries, heat pumps, electrolyzers), the European Commission has proposed the Net Zero Industry Act (NZIA). According to the needs assessment accompanying the Act, between 30 000 and 100 000 additional jobs will be created by 2030 to produce wind and solar-related technologies, depending on factors such as specific technologies used, pace of adoption and innovation, scale of investment, and policy frameworks. However, the biggest job creation will be across the value chain: the installation and deployment of wind and solar power generation could lead to about 130 000 to 145 000 additional skilled workers in other sectors by 2030. <sup>(6)</sup> The main sectors affected by the investment in wind and solar power generation are construction and services, where the bulk of these jobs are concentrated (about 90%). This is followed by the transport sector, where additional jobs come mainly from the infrastructure development for the installation of windmills. According to new estimates, the additional wind and solar capacity to deliver European Green Deal targets may require an investment in skills of EUR 1.1 to 1.4 billion by 2030. Achieving the REPowerEU targets will require the creation of over 3.5 million jobs by 2030. <sup>(7)</sup>

**Countries with a higher share of renewables in power generation tend to have lower job creation and training costs associated with the installation and deployment of wind and solar power generation by 2030 and vice versa.** Countries such as Belgium, Ireland and Italy need a high number of additional workers, about 1 job created per thousand people in the labour force by 2030, due to the deployment needs of wind and solar power generation (Figure 1, left map). The average share of renewables between 2020 and 2022 (based on Eurostat data) is comparably low for these countries (between 27% and 38%). Conversely, job creation should be close to 0.4 jobs per thousand people in Portugal or Sweden, which have a higher share of renewables (59% and 78%, in wind and solar power generation, respectively). Similarly, Member States with relatively higher installed capacity today show lower (re-)training expenses per person in the workforce, as additional job creation is not as high (Figure 1, right map). For instance, Belgium, Ireland and Italy plan to undergo a catching-up process in wind and solar deployment between 2025 and 2030. Currently, they are exploring their available renewable potential and increasing the share of wind and solar in their energy mix, stimulating the need for different skillsets and tasks in those sectors (e.g. drivers bringing blades for wind power generation to sites).

<sup>(1)</sup> See [Assessing and Monitoring Employment and Distributional Impacts of the European Green Deal \(AMEDI\)](#) project here. See [Distributional Assessments of the Consumption Footprint of Households in the EU \(DISCO\(H\)\)](#) project here.

<sup>(2)</sup> The European Green Deal is Europe's policy framework for the transition towards a fair, modern, resource-efficient and carbon-neutral society and economy by 2050.

<sup>(3)</sup> (European Commission, 2022b)

<sup>(4)</sup> Equivalent to EUR 8 749 to EUR 8 754 per worker (European Commission, 2023b)

<sup>(5)</sup> (European Commission, ). See [Recovery and Resilience Scoreboard](#) here.

<sup>(6)</sup> (European Commission, 2023b)

<sup>(7)</sup> (EurObserv'ER, 2022)

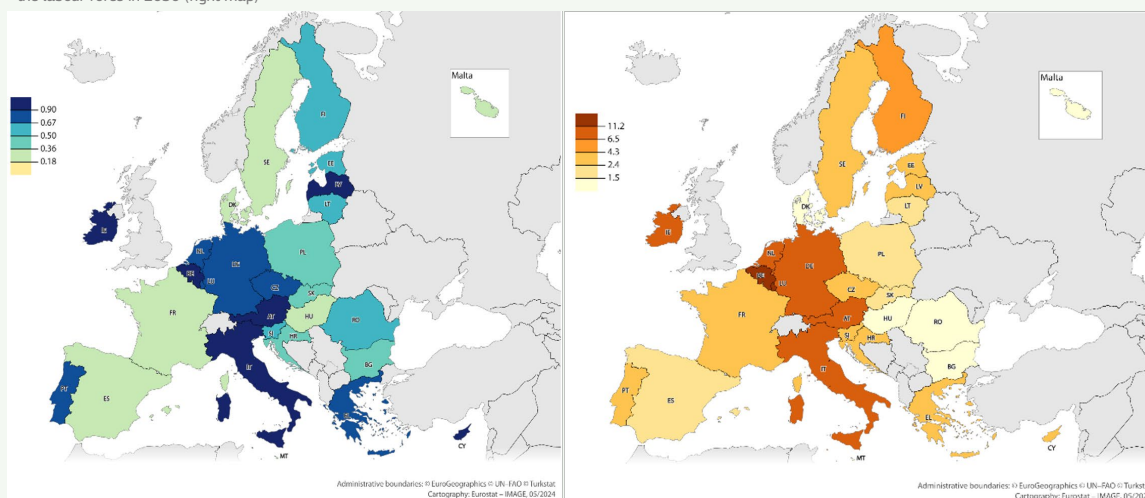
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Box (continued)

Figure 1

**Job creation and training costs for installation and deployment of wind and solar power generation by 2030 is expected to be more prominent in Member States with a lower share of renewables now**

Additional workers needed for installation and deployment of wind and solar power generation by 2030, per thousand people (left map). Training costs (EUR per person) in the labour force in 2030 (right map)



Source: JRC calculations under AMEDI project, based on information from multiple sources (PRIMES and POTEnCIA energy models, EU 2020 Reference scenario (European Commission, 2021), JRC-GEM-E3 model investment matrix for the EU-27 and retraining costs estimates per person per year (European Commission, 2020c); (Vandeplas et al., 2022).

### *Investing on promoting lifestyle changes and levers to achieve climate neutrality*

**Beyond investing in human capital, investing in affordable and sustainable mobility, food, energy and housing is also central to achieving climate neutrality in a fair manner.** Changes in lifestyles and behaviours are important levers to transition towards a resource-efficient, climate-neutral, and pollution-free circular economy and could help to reduce GHG emissions by 40-70% by 2050.<sup>(8)</sup> Sustainable lifestyles are 'a cluster of habits and patterns of behaviour embedded in a society and facilitated by institutions, norms and infrastructures that frame individual choice, in order to minimise the use of natural resources and generation of wastes, while supporting fairness and prosperity for all'.<sup>(9)</sup>

**Reducing the consumption impacts of those contributing most to resource use, pollution and GHG emissions can enable a fair transition.** The distributive aspect of the consumption footprint shows that the consumption patterns of higher income groups have larger environmental and climate impacts. Higher income households tend to consume significantly more than other income groups, resulting in higher environmental and climate pressures. The consumption footprint for the 20% of the population with the highest income is 1.8 times higher than the footprint of the poorest 20% in the EU (see Chart A3.2 in Annex). Higher income households have larger environmental and climate impacts due to their mobility and transport choices (22%), as well as from the consumption of household goods and appliances (11%). On the other hand, as poorer households spend a higher proportion of their income on food (54%) and housing-related expenses and particularly energy (25%), measures to encourage and enable more sustainable lifestyles need to keep affordability in mind if they are to avoid having regressive effects. More granular information on the precise types of expenditure within each broad consumption is needed in order to design policies that can foster sustainable lifestyles in a fair manner. In this context, the design of green tax reforms is crucial to ensure that these measures are fair and do not reinforce inequalities.

**The design of green tax reforms is crucial to ensure that these measures are fair and do not reinforce inequalities.** Simulations demonstrate that while carbon taxes such as country-level or EU-level flat carbon taxes can be regressive, this effect can be offset by compensatory measures such as lump-sum cash transfers.<sup>(10)</sup> Green allowances that exempt either the first 2.2 tonnes (compatible with the Paris Agreement, which is around 2-3 tonnes per year, according to some studies, and in line with 1.5 degree lifestyles)<sup>(11)</sup> or 5.17 tonnes (compatible with the EU 2030 target) of consumed GHG from taxes can have inequality-decreasing effects, as they target emissions related to luxury product consumption.

<sup>(8)</sup> (Creutzig et al., 2022)

<sup>(9)</sup> (Akenji and Chen, 2016)

<sup>(10)</sup> Under Green EUROMOD (based on HBS-SILC data and information from Exiobase) developed by the AMEDI project.

<sup>(11)</sup> (Ivanova and Wood, 2020); (Akenji et al., 2021).



### 3.4. Investing in Active Labour Market Policies

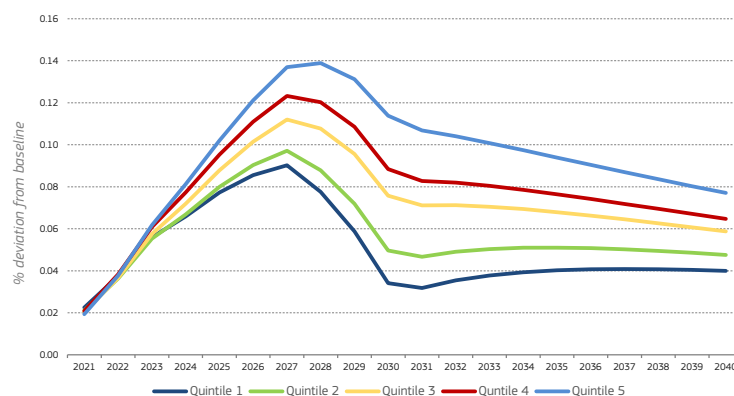
**Well-functioning and effective active labour market policies <sup>(181)</sup> can provide economic and social returns in the medium to long term.** Research suggests that investment in ALMPs is associated with economic growth and positively impacts employment by helping to reduce labour mismatches and shortages, equipping workers with relevant skills, supporting job transitions, and strengthening labour market participation of underrepresented groups. <sup>(182)</sup> Evidence shows that job search assistance programmes are more effective for disadvantaged participants, while employment subsidies and training work better for long-term unemployed people. A review of studies on evaluations of ALMPs found that the average impact of ALMPs increases in the medium to long-term, that women and long-term unemployed people tend to benefit more than other demographic groups, and that ALMPs have more positive effects during recessions. Design and implementation of programmes also play a role in ALMPs' efficacy, which may depend on the availability of other social policies, including access to ECEC. <sup>(183)</sup> In light of rapid technological advances and changing skills needs, reinforcing investment in ALMPs through lifelong learning policies is key to maximise returns. <sup>(184)</sup>

**According to impact evaluation studies, spending on ALMPs can yield positive returns in the longer term, including longer working careers, with corresponding tax revenue, social security contributions and better pensions for workers. <sup>(185)</sup>** A recent evaluation identified positive fiscal effects for a direct job creation scheme in Austria in the long run, focused on disadvantaged groups. <sup>(186)</sup> For social outcomes, ALMPs have poverty-reducing effects, particularly for those with lower levels of skills. <sup>(187)</sup> Recent policy impact evaluations in Germany also found positive effects of ALMP participation on well-being. <sup>(188)</sup> However, more evidence is needed from microeconomic evaluations of the social outcomes of ALMPs to better understand their social investment returns for health, well-being, and education-related outcomes, as well as to compare the efficiency of spending on different types of ALMPs.

Chart 3.11

#### Investment in ALMPs is projected to increase employment during and after the investment period

Expected impact on employment of investment in labour supply increasing intervention fields of the ESF+, 2021-2027 programming period, by income quintile (% deviation from baseline)



Note: Income quintile 5 indicates the richest quintile, and quintile 1 the poorest.

Source: JRC calculations based on RHOMOLO model.

[Click here to download chart.](#)

**Investment in ALMPs can have positive effects on employment and GDP well beyond the timeframe of the original investment.** Simulations using the RHOMOLO model (Box A3.2 in the Annex) estimate the long-term effects of increasing the labour supply through ALMP interventions funded through ESF+ in the 2021-2027 programming period. Regional ESF+ investments in ALMPs are expected to improve employment outcomes in the 20 years following the original investment, reaching a peak of +0.11% in 2027 (Chart 3.11). The investments are

<sup>(181)</sup> 'Active labour market policies (ALMPs) are publicly financed interventions intended to improve the functioning of the labour market by inducing changes in labour demand and labour supply, as well as their matching process. Specifically, these policies aim to preserve existing jobs and create new employment opportunities, encouraging labour market attachment and the reintegration of long-term unemployed and inactive individuals, and facilitating the job-search and job-matching process. In practice, they target labour market outsiders – all unemployed and inactive individuals' (Ernst et al., 2022).

<sup>(182)</sup> (Sakamoto, 2020); (Card, Kluve and Weber, 2018); (Levy-Yeyati, Montané and Sartorio, 2019).

<sup>(183)</sup> (Kluve et al., 2019); (Plavgo and Hemerijck, 2021); (Nieuwenhuis, 2022).

<sup>(184)</sup> (European Commission, 2016).

<sup>(185)</sup> (Brown and Koetti, 2012).

<sup>(186)</sup> (Walch and Dorofeenko, 2020).

<sup>(187)</sup> (Rovny, 2014); (Cammeraat, 2020); (European Commission, 2016).

<sup>(188)</sup> (Tübbicke and Schiele, 2023).

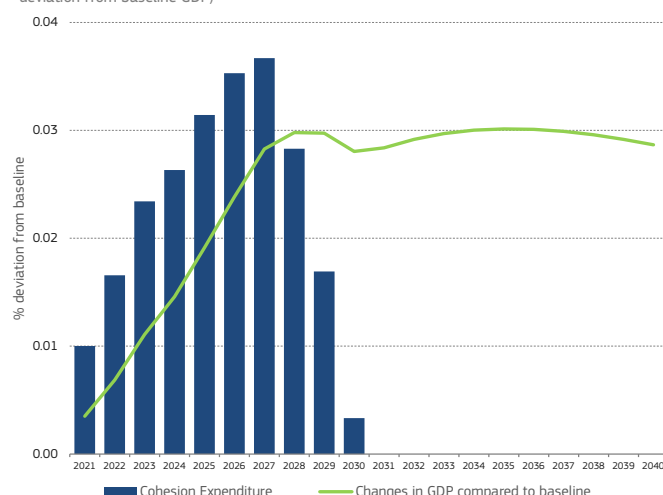


also projected to raise economic activity in the long-term, more than offsetting the initial investment, increasing EU GDP by approximately 0.029% per year, even 20 years after the start of the programme (Chart 3.12). <sup>(189)</sup>

Chart 3.12

### Investment in ALMPs can lead to long-term GDP gains

Expenditure on labour supply increasing intervention fields of ESF+ programmes, 2021-2027 programming period (blue bars, % over baseline GDP) and expected impact on GDP (green line, % deviation from baseline GDP)



Source: JRC calculations based on RHOMOLO model.

[Click here to download chart.](#)

### Targeted investments in ALMPs at regional level can contribute to socioeconomic convergence between regions.

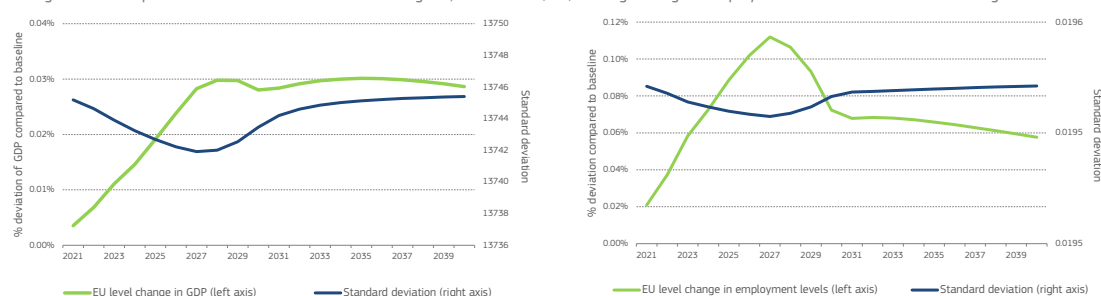
Increases in labour supply in the targeted regions are projected to lead to a reduction in regional disparities in GDP per capita, with EU regions with lower baseline GDP per capita growing faster, prompting a catching-up effect. That catching-up effect is expected to be sustained in the long term, with regions with lower baseline GDP per capita still projected to have stronger increases in per capita GDP 20 years after the beginning of the investment period (Chart 3.13, left). <sup>(190)</sup> The rate of change towards upward regional economic convergence is stronger in the short term. <sup>(191)</sup> The analysis also points to increased employment and upward social convergence in employment levels during the period of deployment of funds and beyond. <sup>(192)</sup> Regions with lower initial employment rates are projected to witness stronger increases in employment for the years where the funds are disbursed, <sup>(193)</sup>

leading to a reduction in disparities between regions during the programming period. However, this catching-up effect is not expected to be sustained in the long term (Chart 3.13, right).

Chart 3.13

### Investment in ALMPs is projected to contribute to upward regional convergence in GDP and employment rates

EU-level change in GDP compared to baseline and variation across regions, 2021-2040 (left). Average change in employment levels and variation across regions 2021-2040 (right).



Note: Standard deviation is a measure of regional variation, the higher the standard deviation, the higher the regional variation.

Source: JRC calculations based on RHOMOLO model.

[Click here to download chart.](#)

**Investments in ALMPs also have positive impacts on employment-related earnings and social outcomes.** A European Commission-OECD project applies CIEs to generate new causal evidence based on national administrative and survey data. The evaluations showed positive impacts of vocational training programmes in Lithuania and Finland on employment and income, particularly for women and older jobseekers. <sup>(194)</sup> Recently, CIEs were conducted for wage subsidies and training programmes in Greece (Box 3.5) and public work programmes in Ireland (Box 3.6).

<sup>(189)</sup> Funds are expected to be disbursed over 10 years in accordance with the time profile detailed in Table A.3 in the Annex. On average, ESF+ spending reaches 0.023% of GDP over the 10 years.

<sup>(190)</sup> Beta coefficient is negative (-0.0006 and -0.0005, respectively) and statistically significant at 1% level, measured at year 10 and year 20, respectively, relative to baseline.

<sup>(191)</sup> This long-term effect is even more pronounced and sustained until 2040, when considering the coefficient of variation of the GDP per capita indicator, a relative measure (see discussion in Chapter 2).

<sup>(192)</sup> Measured relative to the regional population.

<sup>(193)</sup> Beta coefficient is negative (-0.0004) and statistically significant at 1% level, measured at year 5 relative to baseline.

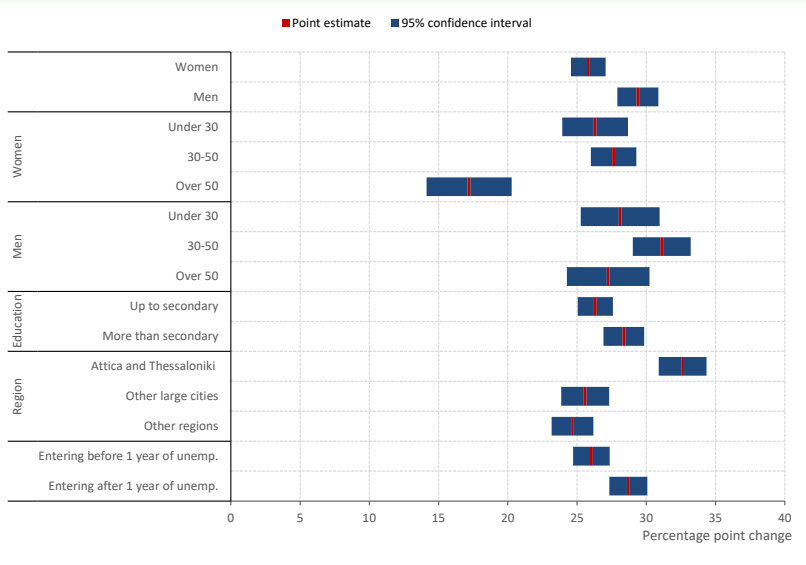
<sup>(194)</sup> (European Commission, 2023b)

Box 3.5: Impact evaluations of wage subsidy and training programmes in Greece

**Recent evidence in Greece suggests that wage subsidies have a positive effect on employment and earnings, with participants almost twice as likely to be employed after three years.** Jobseekers participating in the wage subsidy programmes evaluated were more likely than non-participants to become employed and to spend more days in employment (Chart 1). While the largest impacts are observed immediately after individuals enter the programme, positive employment effects persist even months after the programme ends. More specifically, three years after entering the programme, wage subsidy participants are almost twice as likely to be employed as similar individuals in the comparison group. Wage subsidies are particularly effective at boosting employment for long-term unemployed people, compared to participants who have been unemployed for less than one year. <sup>(1)</sup>

**Three Greek training programmes have increased the probability of employment, particularly for younger people and those with higher levels of education.** One programme offers training in high-demand sectors, while the two others provide tertiary education graduates with ICT training (targeting individuals aged 25-29 and 30-45 years). One year after starting a training programme, CIEs show that the probability of employment is 7 pp higher for training participants compared to similar non-participants, reaching 9 pp two years after entering the training. Training programmes are effective for many different groups of jobseekers, especially for younger people and those with higher levels of education. For instance, two years after entering training programmes, men and women under 30 are more likely to be employed than similar jobseekers who do not participate in training (19 pp and 16 pp, respectively). The higher effect for jobseekers with higher education levels is somewhat driven by ICT training, which is available to jobseekers with tertiary education.

Chart 1  
**Wage subsidies in Greece are particularly effective for certain groups, including long-term unemployed people**  
Effect in employment probability (pp) 36 months after starting wage subsidy programmes



*Note:* The analysis presents nearest-neighbour propensity score matching results which matches individuals based on several characteristics. More information can be found in (OECD, 2024b).  
*Source:* (OECD, 2024b).

<sup>(1)</sup> (OECD, 2024b)

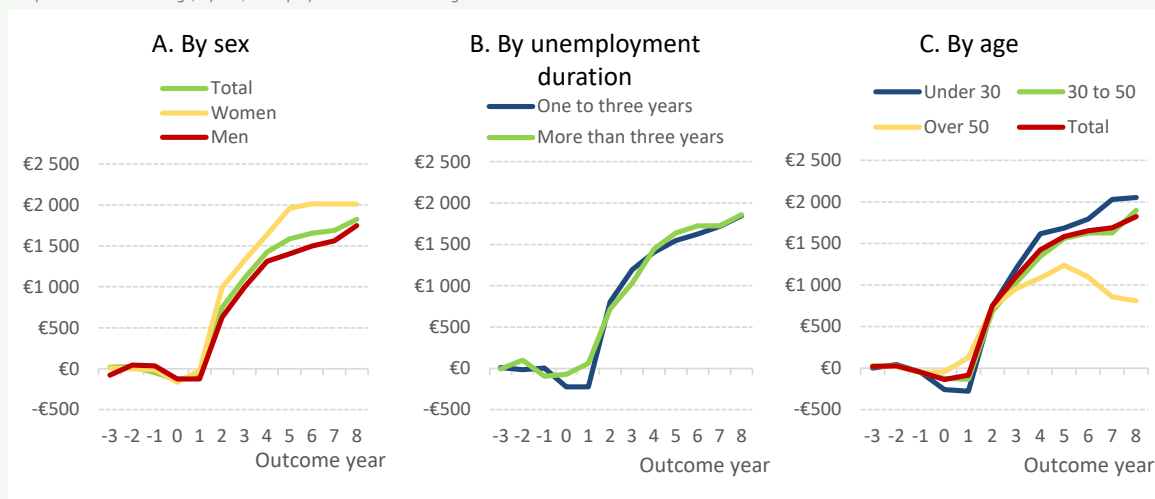
## Box 3.6: Evaluation of job creation schemes in Ireland

**In Ireland, two direct job creation schemes were found to have positive effects on earning outcomes for (mostly long-term unemployed) participants.** The research found that, after initial lock-in effects, the Community Employment (CE) scheme, <sup>(1)</sup> which primarily targets people who have been unemployed for more than 12 months, has a positive impact on total annual earnings, raising the probability of any earnings in a given year and annual weeks of employment in the regular labour market. More specifically, CE participants earn around EUR 2 000 per year more than matched non-participants and work an average of four weeks longer per year. The Tús (Start) scheme, a community work placement scheme offering short-term work opportunities for long-term unemployed people, was also found to have a positive, albeit modest, impact on the number of jobseekers exiting the unemployment register, as well as a lasting positive effect on earnings (Chart 1). <sup>(2)</sup>

Chart 1

### Women and younger jobseekers experience a greater boost in earnings following participation in Ireland's Tús scheme

Impact of Tús on earnings, by sex, unemployment duration and age



Source: (OECD, 2024a) calculations based on Department of Social Protection administrative data.

**The two schemes have positive impacts on social outcomes, with different effects on specific groups of long-term unemployed people.** Participation in CE reduces future reliance on disability allowance and enhances take-up of education subsidies, indicating that the scheme has possible broader health and engagement in education effects. Six years after starting CE, former participants are 6 pp less likely to receive disability allowance, compared to similar participants who did not enter the scheme. This impact is even stronger for older jobseekers. Younger CE participants seem to benefit more in respect of labour market outcomes. For the Tús scheme, women, and jobseekers under 30 experienced a slightly greater increase in their earnings (Chart 1).

<sup>(1)</sup> CE is a public work programme and is one of the most widely used ALMPs for long-term unemployed people in Ireland. Its main objectives are to connect jobseekers with the labour market to increase employment levels and to promote social inclusion, as it seeks to reduce social isolation and social barriers for jobseekers.

<sup>(2)</sup> (OECD, 2024a)

## 4. IMPACT OF HOUSING POLICIES ON POVERTY REDUCTION AND UPWARD SOCIAL CONVERGENCE

**Access to social housing or housing assistance of good quality for those in need is enshrined in Principle 19 of the European Pillar of Social Rights and is a relevant determinant of people's labour market outcomes.** A number of social policies can complement and further support social investment. These include, for example, social protection and housing policies. Access to affordable and adequate housing is crucial for reducing poverty and social exclusion. It also broadens people's ability to access opportunities in education and the labour market, and positively influences people's physical and mental health. In its 2018 report, the High-Level Task Force on Investing in Social Infrastructure in Europe underlined the importance of investment in housing – particularly affordable housing – for promoting upward social convergence in the EU. Similarly to housing policies, social protection can also act as enabler for effective social investment. A focus on the role of social protection is provided in Box 3.7.

**House prices, together with the available stock of housing and mortgage rates, affect the affordability of housing for prospective homeowners and tenants.** Easier access to mortgages, including via low interest rates, usually increases demand for houses which can subsequently drive-up house prices. These reflect the value of real estate transactions, including second homes, holiday homes and dwellings used for investment, and thus have a limited direct impact on monthly housing costs for tenants in the short term.<sup>(195)</sup> However, by reducing the affordability of homeownership, higher house prices make renting more appealing, increasing demand for rentals and hence contributing to higher rents. Higher house prices and interest rates can also be taken into account by landlords when setting rents for new lease contracts, contributing to higher rents over time thus increasing housing costs for tenants.

**Housing prices and rents have increased considerably over the last decade.** After the substantial increase recorded between 2014 and 2022 (51.8%), house prices started to moderate in 2023 (-0.3%), due to weakening borrowing capacity following the increases in interest rates. However, rents continued their upward trend (+11.3% since 2014, and +3% in 2023), resulting in higher housing costs for tenants (Chart 3.14).

**Housing costs constitute a substantial part of household disposable income and cannot be easily reduced in the short term.**<sup>(196)</sup> The share of housing costs in household disposable income decreased from 22.4% in 2014 to 18.5% in 2020. While still below 2014 levels, the share of housing costs increased again to 19.7% on average in the EU by 2023 (Chart 3.14).<sup>(197)</sup> This was likely driven by the increase in housing costs, mostly due to higher electricity and gas prices, as well as increases in rents and interest rates of mortgages. Member States with the highest shares of housing costs in household disposable income exhibited stronger reductions over this period.<sup>(198)</sup>

<sup>(195)</sup> (European Commission, 2019a).

<sup>(196)</sup> Housing costs include mortgage interest payments for main dwelling net of any tax relief (for owners), rental payments (for tenants), structural insurance, mandatory services and charges (sewage removal, refuse removal, etc.), regular maintenance and repairs, taxes on dwelling, and the cost of utilities (water, electricity, gas and heating). Mortgage interest payments and rental payments are considered gross of housing benefits (i.e. housing benefits are not deducted from the total housing cost). For tenants, only those costs paid by tenants are taken into account (as opposed to those paid by landlords). For more analysis of housing affordability, see (European Commission, 2019a).

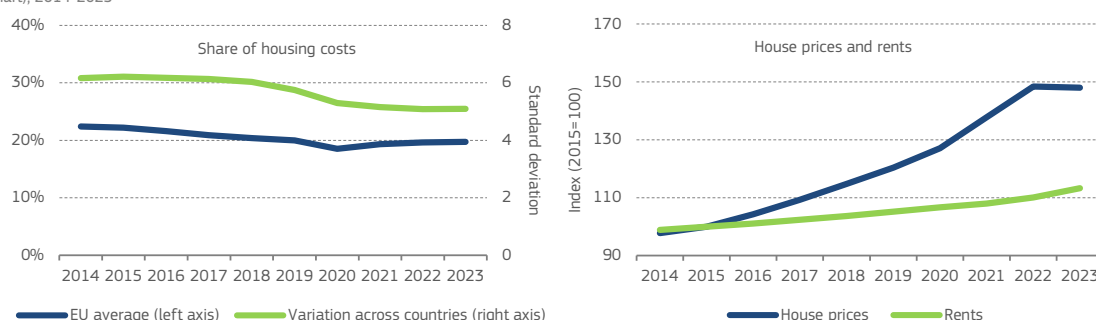
<sup>(197)</sup> Housing costs analysed constitute average costs as a share of disposable income, thus mark considerable heterogeneity by different factors such as location, as well as household composition and potential adjustments in the choice of dwelling and behavioural responses (in terms of the type of housing chosen) to changes in housing costs or in income.

<sup>(198)</sup> Beta coefficient is negative (-0.04) and statistically significant at 5% significance level.

Chart 3.14

### Share of housing costs in household disposable income declined but house prices increased sharply between 2014 and 2023

Weighted EU average share of housing costs in household disposable income and variation across countries (in standard deviation, left chart), and house price index and rent index (right chart), 2014-2023



Note: In the left chart, 2021 data exclude France, which did not report housing costs in 2021. Standard deviation is a measure of cross-country variation, the higher the standard deviation, the higher the cross-country variation.

Source: Eurostat [ilc\_mdcd01], [prc\_hpi\_a] and [prc\_hicp\_aind].

[Click here to download chart.](#)

**Housing policies can help improve housing affordability.** At national level, housing policies can include the provision of social housing, housing allowances, tax deduction for housing costs, and utility subsidies, as well as rent regulation or subsidies for improving energy efficiency. <sup>(199)</sup> These policies often target specific population groups (e.g. low-income households, tenants vs homeowners) and can have other objectives, such as improving the quality of housing or increasing homeownership. Some housing policies, in particular housing allowances, need to be targeted to help contain the fiscal cost and ensure they are not translated into higher housing or rental prices. The impact of housing policies on housing cost reduction depends on many factors. These include their generosity, coverage and take-up, regulatory environment, stock of housing supply and requirements for renovation, as well as employment, environmental, urban and spatial policies. The analysis below examines how two housing policies, – housing allowances and social housing – contribute to poverty reduction. These two policies have been selected on the grounds of data availability. Housing allowances are intended to compensate for housing costs based on a means-test and can be granted to both tenants and owner-occupiers. <sup>(200)</sup> As a proxy for social housing, this report uses social rent subsidies for tenants, thereby capturing the difference between social rent and estimated market rent for the dwelling. <sup>(201)</sup>

**Housing policies are relevant for the labour market outcomes of individuals.** The lack of affordable housing may affect the accessibility to good quality education, training and job opportunities, and discourage labour mobility, increasing the probability of higher unemployment rates and contributing to labour and skills shortages. <sup>(202)</sup> Living in poor quality accommodation can negatively affect health and well-being, likely reducing productivity. In turn, worse labour market outcomes (e.g. being unemployed, frequently moving in and out of employment, working on a fixed contract, receiving a lower wage) might prevent housing conditions from improving in the absence of buffers. For example, they might reduce the ability to pay rents and the chances of obtaining a mortgage, especially in more expensive areas with better job opportunities, limiting mobility, or not providing sufficient means to improve housing quality. <sup>(203)</sup> The design of housing policies and their complementarities to other policies also matter. For instance, in the presence of high transaction costs, housing policies supporting home ownership might reduce labour mobility, increase the acceptance of lower wages or increase demand.

**Increasing the supply of housing, including by investing in social housing, is very often essential to improve housing affordability, especially for households with lower incomes.** Social dwellings are usually publicly owned (with countries investing in the stock of social housing, enabling them to benefit from an economic rent accruing to owners of property) or semi-privately owned (by housing corporations) but can also be privately owned. <sup>(204)</sup> Social housing usually takes the form of rental accommodation provided at below-market prices. In recent decades, social housing models in Europe have increasingly focused on lower-income

<sup>(199)</sup> See (Eurofound, 2023b) for a more detailed mapping of housing policies in the Member States.

<sup>(200)</sup> Housing allowances compensate for housing costs, such as rent, gas, electricity, heating, water or utility bills. They can be granted to both tenants and owner-occupiers, and do not include social housing policy organised through the tax-benefit system and capital transfers (notably investment grants).

<sup>(201)</sup> Social rent subsidies (as a proxy for social housing) are estimated using the imputed rents variable (HY030G) for social tenants (those who indicated paying below-the-market rent) from EU-SILC. The imputed value is the equivalent market rent that would be paid for a similar dwelling to that occupied, reduced by any rent actually paid.

<sup>(202)</sup> (Borg and Brandén, 2018).

<sup>(203)</sup> (Arundel and John, 2017).

<sup>(204)</sup> (Eurofound, 2023b) ; (European Commission, 2023f).

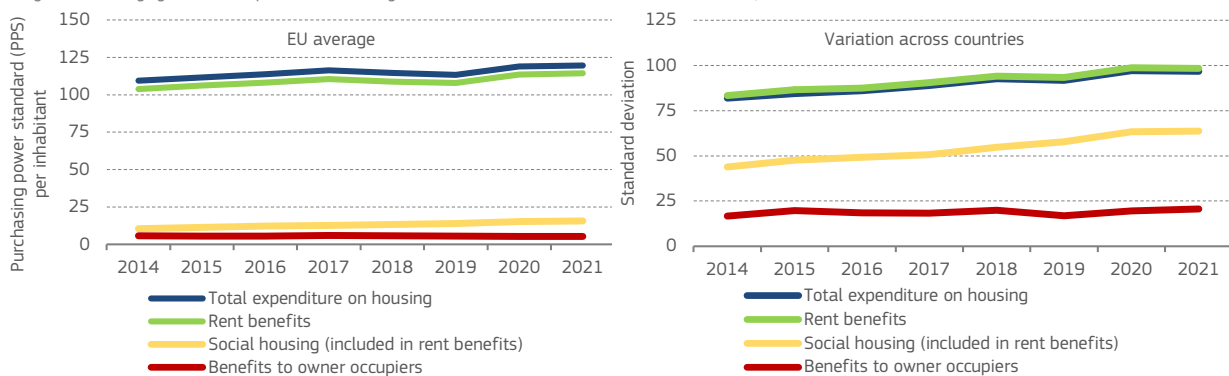
households, primarily targeting older people and single-parents, while other vulnerable groups, such as single-person households, households without children, and migrants, are often low on the priority list or not eligible for social housing. <sup>(205)</sup> In addition to improving housing affordability, social housing can support macroeconomic objectives by easing supply bottlenecks, thereby mitigating house price pressures. This can in turn help to address labour shortages. <sup>(206)</sup> Social housing also plays a key role in housing first-type programmes for homeless people. In this respect, social and affordable housing policies underpin the EU social economy strategy. <sup>(207)</sup> More broadly, increasing the supply of housing can require a coherent mix of investments and reforms to address diverse issues such as the supply of basic infrastructure, spatial planning and other regulatory restrictions, or an insufficient supply of qualified labour.

**The stock of social housing is quite low in the EU, with big investment gaps.** The lack of affordable, good quality housing has several structural drivers, including low incentives, bottlenecks in construction and investment gaps regarding in particular energy efficiency and social housing production. The construction of social housing has decreased across the EU in recent decades, and some countries, particularly in Eastern Europe, have privatised large parts of the social housing stock. <sup>(208)</sup> Currently, social housing as a proportion of the overall housing stock exceeds 20% in only three Member States: the Netherlands (34.1% in 2021), Austria (23.6% in 2019) and Denmark (21.3% in 2022). It is between 10% and 20% in France (14% in 2018), Ireland (12.7% in 2016) and Finland (10.9% in 2021). <sup>(209)</sup> Long waiting lists are common in Member States with both larger and small social housing stocks, reducing the effectiveness of social housing in improving housing affordability for the most vulnerable households. <sup>(210)</sup> This issue is intensified by tenants who continue to occupy social housing after their income improves. While this chapter focuses on the effects of housing policies on tenants and owner-occupiers, supply-side policies such as investment in the construction and innovation of social housing form a key part of the broad range of housing policies that affect the availability and affordability of housing.

Chart 3.15

#### Public spending on housing increased but dispersion widened between 2014 and 2021

Weighted EU average government expenditure on housing and variation across countries (in standard deviation), 2014-2021



Note: Social housing is part of rent benefits and is included in the green line.

Source: Eurostat [spr\_exp\_fho].

[Click here to download chart.](#)

**Between 2014 and 2021, government expenditure on housing benefits per inhabitant, aimed at improving access to housing, increased in the EU.** Taking into account differences in the cost of living between countries, it went from 109 to 120 PPS per inhabitant <sup>(211)</sup> on average, ranging from less than 1 PPS per inhabitant in Bulgaria, Croatia and Portugal to over 300 PPS per inhabitant in Ireland and Finland in 2021. It was strongly driven by expenditure on rent benefits, mostly comprising housing allowances (86.2% of rent benefits in 2021), with the exception of Belgium, Estonia, Ireland, Lithuania, the Netherlands, Romania and Slovenia, where social housing expenditure constituted a major share of rent benefits. Countries with the lowest initial levels of public spending on housing caught up more strongly between 2014 and 2021, <sup>(212)</sup> but the overall dispersion

<sup>(205)</sup> (Eurofound, 2023b); (Scanlon, Fernández Arrigoitia and Whitehead, 2015); (Heylen, 2024).

<sup>(206)</sup> (Whitehead, 2017); (European Commission, 2023f).

<sup>(207)</sup> (European Commission, 2021c).

<sup>(208)</sup> (Scanlon, Fernández Arrigoitia and Whitehead, 2015); (Whitehead, 2017); (Eurofound, 2023b).

<sup>(209)</sup> See OECD Affordable Housing Database here.

<sup>(210)</sup> (Eurofound, 2023b); (Pestel-Institut, 2024).

<sup>(211)</sup> PPS is the artificial currency unit that eliminates price level differences between countries, i.e. one PPS can buy the same volume of goods and services in all countries. Government expenditure on housing in PPS is derived by dividing the government expenditure on housing of a country in national currency by the respective PPPs, which are obtained by comparing price levels for a basket of comparable goods and services representative of consumption patterns in the various countries.

<sup>(212)</sup> Beta coefficient is negative (-0.03) and statistically significant at 5% significance level, primarily driven by the convergence in rent benefits (beta coefficient for benefits to owner occupiers is not statistically significant).

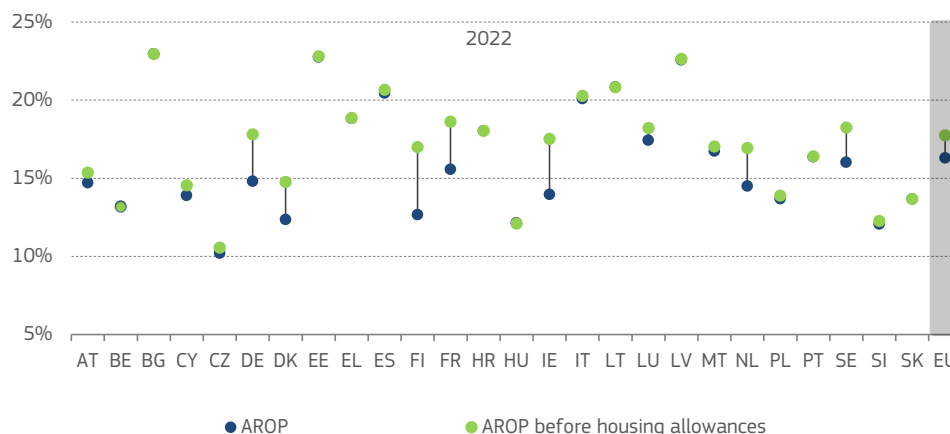


across countries widened (Chart 3.15).<sup>(213)</sup> In light of recent trends, many Europeans responding to a recent survey believe that addressing the high cost of living (48%) and the lack of social housing and homelessness (23%) should be a main priority in their country. Around 6 in 10 respondents think that their governments should increase their spending on housing, with variation across countries ranging from below 30% in Finland and Denmark to over 80% in Cyprus, Ireland and Greece.<sup>(214)</sup>

Chart 3.16

**Housing allowances reduce the AROP rate**

Differences in AROP and AROP rates before housing allowances, 2022



Note: AROP rate before housing allowances is calculated by excluding housing allowances from equivalised household disposable income and by calculating the share of people with an equivalised adjusted disposable income below 60% of the national median. AROP before housing allowances rate is missing for Romania, which does not collect data on housing allowances.

Source: EU-SILC scientific use files, 2022.

[Click here to download chart.](#)

**Social housing and housing allowances reduce the AROP rate in the short term, without accounting for the possible longer-term effects on housing prices and housing affordability.** Comparing the adjusted AROP rate, which excludes social rent subsidies and/or housing allowances from equivalised household disposable income,<sup>(215)</sup> to the standard AROP rate provides a good measure of the impact of both policy instruments in reducing poverty. It does not however capture other relevant aspects of housing affordability such as supply and demand for affordable housing, underlying drivers or broader societal impacts. In 2022, housing allowances decreased the AROP rate by an estimated 1.4 pp (from 17.7% based on AROP rate before housing allowances to 16.3% of AROP rate) in the EU on average, with the biggest decreases in Finland (4.3 pp), Ireland (3.5 pp), France (3.1 pp) and Germany (3.0 pp) (Chart 3.16).<sup>(216)</sup> Similarly, in 2019, the provision of social housing proxied through social rent subsidies decreased the AROP rate in the EU by an estimated 0.4 pp on average (from 18.1% in AROP rate before housing allowances and social rent subsidies to 17.7% in AROP rate before housing allowances).<sup>(217)</sup> The highest decreases were observed in Ireland (3.7 pp) and Belgium (2.4 pp). The higher average impact of housing allowances could be due to relatively low public spending on social housing (Chart 3.15). While this analysis suggests that social housing and housing allowances reduce poverty, it does not account for the impact of other related policies or institutional setups and bottlenecks relevant for the functioning of rental and housing markets, thus likely reflecting the upper bound of the impact. For instance, the potential shift of (part of) housing allowances to landlords through higher rents might reduce the effectiveness

<sup>(213)</sup> While countries with the lowest initial levels catch up relatively to those with the highest initial level of public spending on housing, changes in the public spending of other countries contributes to increased variance thus increasing overall dispersion.

<sup>(214)</sup> 2024 Eurobarometer on Social Europe; 2022 Eurobarometer on Fairness, Inequality and Intergenerational Mobility.

<sup>(215)</sup> Share of people with an equivalised adjusted disposable income below 60% of the national median, and further referred to as AROP before housing allowances and social rent subsidies, and AROP before housing allowances, respectively.

<sup>(216)</sup> Romania is excluded from both averages, as it does not collect data on housing allowances (variable HY070G in EU-SILC). The reported results assume that no housing allowances are shifted towards landlords through higher rents. The rather small impact of housing allowances in reducing the AROP rate in some countries is largely due to low spending on these policies. However, part of the differences in impact on poverty reduction between countries might also be driven by the design of housing allowances, with some countries targeting households at risk of poverty more effectively.

<sup>(217)</sup> Social rent subsidies (as a proxy for social housing) are estimated using the imputed rents variable (HY030G) for social tenants (those who indicated paying below-the-market rent) from EU-SILC. Since 2021, this variable is no longer part of the annual EU-SILC but will be provided on a three-yearly basis as part of the module "labour and housing conditions" (starting in 2023). Some countries (Denmark, Germany, Malta, the Netherlands, Slovakia, Sweden) did not collect data on imputed rents for social tenants for most years considered and are excluded from the analysis on social housing, in addition to Romania (where housing allowances do not exist). While data for social rent subsidies (imputed rents) are available until 2020, data for 2019 were used to avoid estimating the impact of temporary measures adopted during the COVID-19 pandemic.

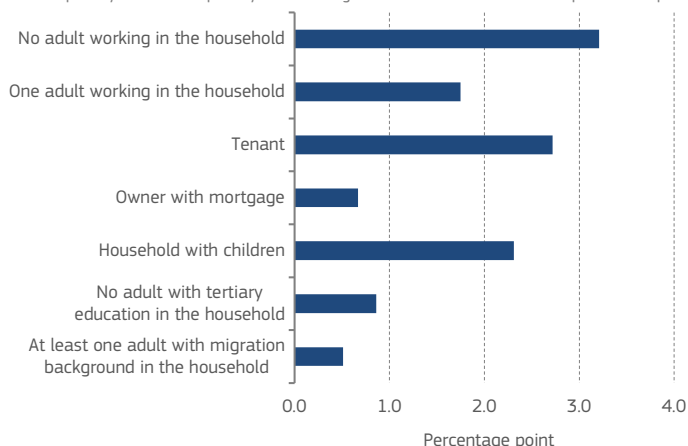
of housing allowances in reducing poverty, i.e. in the absence of effective rent regulation policies. <sup>(218)</sup> Depending on the design, however, housing allowances might instead drive-up housing prices and reduce housing affordability over time, especially in markets with limited housing supply. <sup>(219)</sup>

**The estimated direct impact of housing allowances on poverty reduction is particularly strong for vulnerable households.** For example, households where no adult (+3.2 pp) or only one adult (+1.8 pp) is employed are more likely to be at risk of poverty after housing allowances are excluded from equivalised disposable income, compared to households where more than one adult is employed (Chart 3.17). Similarly, this probability is higher for tenants (+2.7 pp) and owners with a mortgage (+0.7 pp), compared to outright owners. Households with children (+2.3 pp), households with no adult with tertiary education (+0.9 pp), and households with at least one adult with a migration background <sup>(220)</sup> (+0.5 pp) are also more likely to be at risk of poverty after housing allowances are excluded from equivalised disposable income.

Chart 3.17

#### Housing allowances contribute substantially to reducing poverty among vulnerable households

Probability of a status change from not at-risk-of-poverty to at-risk-of-poverty after housing allowances are excluded from equivalised disposable income, 2014-2022



*Note:* Excludes Romania, as it does not collect data on housing allowances. All estimates significant at 1% significance level. Reference categories in brackets: no adult working in the household, one adult working in the household (more than one adult working in the household); tenant, owner with mortgage (outright owner); household with children (household with no children); no adult with tertiary education in the household (at least one adult with tertiary education in the household); at least one adult with migration background in the household (no adult with migration background in the household). Model controls for country and year fixed effects.

*Source:* EU-SILC 2014-2022.

[Click here to download chart.](#)

<sup>(218)</sup> (Laferrère and Le Blanc, 2004); (Viren, 2013).

<sup>(219)</sup> (International Monetary Fund, 2024); (Hyslop, 2019).

<sup>(220)</sup> Defined as being born outside the country of residence and/or having a foreign citizenship.

### Box 3.7: Promoting upward social convergence and poverty reduction through social protection

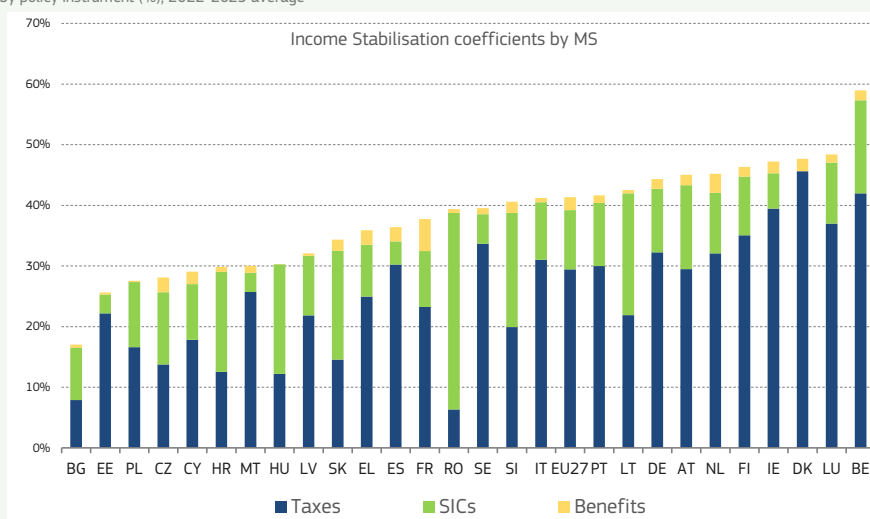
**Well-designed, inclusive social protection systems and social investment policies complement and reinforce one another as necessary components of modern welfare states.** Social protection systems provide a safety net that protects individuals from economic and social risks by helping them maintain at least a basic level of income and thus contributing to macroeconomic stabilisation. They can mitigate the impacts on poverty and economic growth by increasing income and consumption, particularly through countercyclical spending during economic downturns. Evidence also points to complementarities between social protection and social investment, with spending on ALMPs and ECEC tending to have more positive effects where total social protection expenditure is more generous. <sup>(1)</sup>

**Income stabilisers have the potential to contain poverty in times of economic downturn.** The shock-absorption properties of effective tax-benefit systems can prevent diverging trends in inequality and social outcomes during recession and strengthen the resilience of a country. The analysis below <sup>(2)</sup> uses EUROMOD to quantify how the overall tax-benefit system mitigates the transmission of a market income shock to disposable household incomes. It simulates a 5% hypothetical reduction in gross market income <sup>(3)</sup> and estimates the share of income loss absorbed by a country's tax-benefit system. As no changes in labour market status or prices are considered, <sup>(4)</sup> income stabilisation is driven by increases in means-tested benefits and reductions in taxes <sup>(5)</sup> and lower social insurance contributions (SICs). Stabilisation properties are measured through an income stabilisation coefficient (ISC), which varies between 0% and 100%, with higher values pointing to stronger stabilisation (Box A3.3 in Annex).

Chart 1

#### Substantial variation in the extent and composition of income stabilisation after a 5% market income shock across Member States

Country-level ISC, by policy instrument (%), 2022-2023 average



Source: JRC calculations based on EUROMOD, version I6.0+.

**Tax-benefit systems can stabilise incomes, particularly through direct taxes yet with substantial heterogeneity across Member States.** On average, tax-benefit systems in the EU in 2022-2023 would have absorbed almost half of the simulated 5% market income shock, with the ISC averaging 41.4% across the Member States. <sup>(6)</sup> Direct taxes would have absorbed 29.4% of a market income shock in 2022-2023, followed by SICs (9.8%) and means-tested benefits (<0.5%). However, the variation between countries is substantial, ranging from 17% in Bulgaria to 58.9% in Belgium (Chart 1). Within the different tax-benefit components, direct taxes would have absorbed 29.4% of a market income shock in 2022-2023, followed by SICs (9.8%) and means-tested benefits (<0.5%). Also for the various components, considerable differences emerge between Member States. In five Member States, SICs (rather

<sup>(1)</sup> (European Commission, 2016)

<sup>(2)</sup> While social protection addresses both the risk of economic downturn and risks that occur in the context of sickness or retirement, this section will focus on the role of social protection in stabilising incomes.

<sup>(3)</sup> Market income includes employment and self-employment incomes, investment and property incomes, pensions from individual private plans, and regular net inter-household transfers, all reported in gross terms.

<sup>(4)</sup> Transitions into unemployment or changes in indexation of benefits following an increase in prices would require additional assumptions and estimations and are outside the scope of this analysis. See Box A3.3 in the Annex.

<sup>(5)</sup> Due to the progressive nature of personal income taxation.

<sup>(6)</sup> EU-level ISC computed by aggregating changes in market income and disposable incomes across countries. The result is an EU-level weighted average, with the shares of country-specific market income shock out of total market income shock as the weighting factor. EU-level results in this analysis are thus more influenced by larger countries.

(Continued on the next page)

Box (continued)

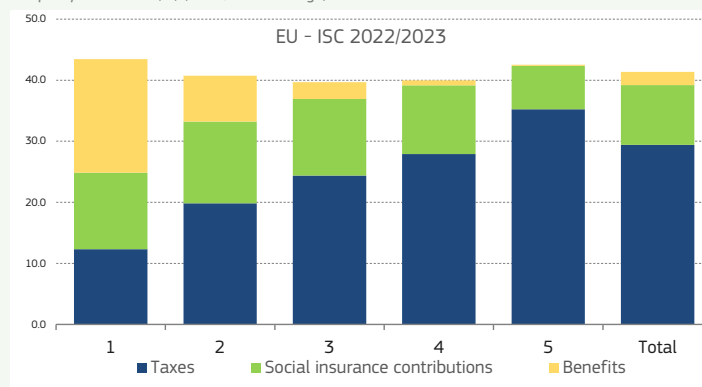
than direct taxes) represent the largest component of income stabilisation.<sup>(7)</sup> The degree of income stabilisation provided by each component also varies by Member State, ranging from 6.3% in Romania to 45.6% in Denmark for direct taxes; from 0% in Denmark <sup>(8)</sup> to 32.4% in Romania for SICs; and from less than 0.5% in Hungary, Poland, Estonia and Latvia to 5.3% in France for means-tested benefits (Chart 1).

**The degree and composition of income stabilisation after an income shock varies between income quintiles.** On average, incomes at the bottom (43.5%) and top (42.6%) of the income distribution are more cushioned against a market income shock than those in the middle (39.7%) (Chart 2). While increased benefits lead to a larger shock-absorption among households in the bottom income quintile (providing a stabilisation of 18.6%), the reduction in taxes due to the income loss among households in the top income quintile leads to an almost equally high degree of income stabilisation as for the bottom quintile, despite almost no increase in benefits (0.2% stabilisation). <sup>(9)</sup> Similarly, personal income taxes absorb an increasingly higher share of the market income shock for the higher the income quintile, increasing from 12.3% for households in the first quintile to as much as 35.3% for households in the fifth quintile.

Chart 2

**Relative significance of taxes and benefits in absorbing a 5% market income shock varies substantially across the income distribution**

EU-level ISC, by income quintile and policy instrument (%) (2022/2023 average)



Source: JRC calculations based on EUROMOD, version 16.0+.

<sup>(7)</sup> Bulgaria, Croatia, Hungary, Romania, Slovakia.

<sup>(8)</sup> Result for Denmark follows from the classification of labour market contributions in EUROMOD as taxes rather than SIC and from the fact that unemployment benefit contributions and supplementary labour market contributions do not depend directly on earnings.

<sup>(9)</sup> Chart A3.3 in the Annex presents the relative significance of taxes and benefits in absorbing a 5% market income shock, by income quintile and Member State.

## 5. CONCLUSIONS

**Well-designed social investment policies can enhance productivity and competitiveness and have positive impacts on economic growth and fiscal sustainability, as well as employment, poverty reduction and social inclusion.** They contribute to more inclusive and environmentally sustainable economies and societies, underpinning upward social convergence, helping to advance the fair green and digital transitions, and adapting to demographic change in the EU. Simulations also highlight the potential for social investment to positively impact fiscal sustainability, with the resulting long-term GDP growth more than offsetting the initial cost of the measure analysed.

**Measuring the exact returns on social investment policies is challenging.** Returns might only materialise in the medium to long term, or are not always easily captured in monetary terms. In addition, social investments might reinforce one another, including over individuals' life courses, and might also depend on the effectiveness of other policies, such as social protection. Changing skills needs, including in the context of the green and digital transitions, might necessitate additional social investment to fully reap the benefits of previous investment. While many methods are available to estimate the returns on social investment, they are often complex, require good quality (longitudinal) data and cannot account for all relevant elements at once. The efficiency of spending on social investment is also crucial. In this respect, ensuring that social investment is of high quality, well-designed and evidence-informed is key.

**Social investment at earlier stages of life, such as in education (including ECEC), is associated with higher economic and social returns over the course of people's lives.** Investment in ECEC can improve the education and labour market opportunities for children and increase the labour market participation of parents. Evidence shows that increasing participation of young children in ECEC could result in sizeable improvements in mothers' labour market participation, with particularly beneficial impacts for mothers from low-income families. However, while ECEC participation in the EU is improving, several Member States still fall far behind the Barcelona participation target of 45% for children aged 0-2. Children who can benefit most from attending ECEC, such as those from disadvantaged backgrounds, tend to participate least. For school education, the learning outcomes of 15-year-olds worsened significantly after the COVID-19 pandemic, which likely intensified an already negative trend. This was accompanied by the decrease in efficiency of expenditure on education per student, underlining the relevance of other factors, such as quality of education, in determining the effectiveness of investment in school education.

**Effective investment in skills is associated with positive effects on labour market and economic outcomes, contributing to upward convergence.** ESF+ investments in skills in the 2021-2027 programming period are projected to increase employment and GDP both in the short term and well beyond the funding period. Similar effects are found for young unemployed people in countries with the highest youth unemployment rates. These interventions are also expected to lead to a catching-up of regions lagging behind, reducing disparities across regions and leading to long-term economic convergence.

**Employment and GDP are supported by investments in ALMPs, such as wage subsidies and training programmes, promoting upward convergence.** ESF+ investments in ALMPs in the 2021-2027 programming period are projected to increase employment and GDP in both the short and long term and to promote a catching-up of regions that are lagging behind, reducing disparities in the short term in particular. Impact evaluations of specific ALMPs in the Member States found that training programmes, job creation schemes and wage subsidies are effective at increasing employment, earnings, and social outcomes, particularly among long-term unemployed people.

**Good quality and affordable housing can help to improve labour market outcomes, mitigate labour and skills shortages, and promote upward social convergence.** Housing allowances and social housing are found to reduce poverty in the short term. However, factors such as insufficient stock of social housing, inefficiencies in the occupancy of social housing, or the ability of landlords to capitalise (part of) housing allowances through higher rents might limit the effectiveness of these housing policies to increase housing affordability for the most vulnerable households. This calls for a comprehensive approach when designing housing policies so as to maximise returns.

**Social investment and related enabling policies play an important role in facilitating a fair green transition.** To reach climate neutrality by 2050, investment is needed in reskilling and upskilling of workers. The required investment will be higher for countries that need to catch up in their deployment of renewable energy sources and green technologies. Investments in social infrastructure and levers such as affordable and sustainable mobility, food, energy and housing can help to increase the accessibility and affordability of energy-efficient and sustainable lifestyle solutions and reduce inequalities in consumption footprints.

**By stabilising incomes, well-designed social protection systems complement social investment policies and can prevent diverging trends in social outcomes during recessions.** These two components of modern welfare states can reinforce one another, with social protection supporting effective social investment. Simulations show that tax-benefit systems would absorb almost half of a negative market income shock, albeit with substantial variation across Member States. The degree of income stabilisation provided by tax-benefit systems following a market income shock is stronger for households with lower and higher incomes compared to those in the middle of the income distribution.

**Social investment and social protection are fully embedded in the European Pillar of Social Rights and are essential to its implementation.** Several policies and reforms adopted under the Pillar are supported by EU funds such as the ESF+, the ERDF, the RRF as well as the TSI. The reformed Economic Governance Framework facilitates and encourages Member States to implement reforms and investments that improve resilience, economic growth, and fiscal sustainability, and address the common objectives of the EU, including upward social convergence.

## Annex: Promoting upward social convergence in the EU

**Research shows learning deficits across the EU following the disruption of traditional learning modalities during the COVID-19 pandemic.** Studies in different countries show negative effects of physical school closures and changes in schooling on the level and equality of learning outcomes.<sup>(221)</sup> The learning deficits disproportionately affected students from disadvantaged socioeconomic backgrounds, exacerbating existing educational inequalities. Table A.1 summarises the evidence for different population groups from a new study in Italy that disentangles the disruption of in-person schooling from other negative effects of the COVID-19 pandemic.

Table A3.1

Learning loss due to COVID-19 pandemic across reading and mathematics, by population group in Italy

Population group	2021		2022		2023	
	Reading	Mathematics	Reading	Mathematics	Reading	Mathematics
Overall	-0.25 SD	-0.15 SD	-0.28 SD	-0.17 SD	-0.25 SD	-0.15 SD
Girls	-0.22 SD	-0.12 SD	-0.21 SD	-0.10 SD	-0.22 SD	-0.07 SD
Boys	-0.28 SD	-0.17 SD	-0.29 SD	-0.17 SD	-0.31 SD	-0.17 SD
Highest ESCS quartile	-0.36 SD	-0.23 SD	NA	NA	NA	NA
Lowest ESCS quartile	-0.17 SD	-0.06 SD	NA	NA	NA	NA
Native-born	-0.25 SD	-0.15 SD	-0.25 SD	-0.14 SD	-0.27 SD	-0.13 SD
First- and second-generation migrants	-0.25 SD	-0.15 SD	-0.25 SD	-0.14 SD	-0.27 SD	-0.07 SD

*Note:* ESCS = OECD measure for parents' socioeconomic and cultural status. NA = not available. Standard deviation (SD) = a measure of cross-country variation – the higher the SD, the higher the cross-country variation.

*Source:* JRC.

[Click here to download table.](#)

<sup>(221)</sup> (World Bank, 2022).



### Box A3.1: Modelling improved matching for young unemployed people, using the Labour Market Model

**The European Commission's Labour Market Model (LMM) is a general equilibrium model that places a special emphasis on labour market institutions.** It is designed to simulate the impacts of reform scenarios on various macroeconomic and labour market-specific variables. It captures a detailed picture of the institutional settings in the EU-27, built on a microfoundation explaining optimal behaviour among households and firms.

**The LMM is used to model the long-term impact of training provided to young unemployed people (aged 15-24) in several Member States.** It simulates a skills-enhancing investment in the six Member States with the highest youth unemployment rates in 2022. The increase in spending is set to match the increase in total training expenditure required for Member States to increase their current spending on training to match third quartile spending on training among the Member States for which data are available, amounting to 0.185% of GDP. <sup>(1)</sup> On average, the additional expenditure simulated amounts to 0.128 pp across the six countries.

**The effect of increased spending on improving the skills profiles of young unemployed people is modelled in the LMM by an improved probability of finding a job matching their profile.** The increase in matching efficiency is also assumed to impact the likelihood of successful matching at older ages, albeit at a lower rate. <sup>(2)</sup> The improved matching efficiency is thus built into the model, assuming that the training provided is effective at increasing the probability of finding a job due to workers' sharpened skill profiles.

#### Increasing matching efficiency in the LMM

**The LMM incorporates a matching function. Worker effort to find a job (search intensity) is a determinant of labour supply, while the number of vacancies posted by firms reflects the demand side.** Frictions in the market imply that only a certain proportion of the vacancies posted and search units supplied will lead to a match. The proportion also depends on the tightness of the labour market: the smaller the number of vacancies per jobseeking worker, the more difficult for them to find a match.

**The improved matching efficiency is built into the LMM <sup>(3)</sup> by modelling increases in spending on training through elasticities for 21 OECD countries. <sup>(4)</sup>** They show that if the governments were to spend an amount equalling 4% of GDP per capita on every unemployed person, unemployment would decline by between 0.2 pp and 0.6 pp. The analysis assumes that governments increase their spending on training to 0.185% of GDP from their baseline level of training expenditure in 2021. The amount of additional expenditure on training for young unemployed people thus depends on the countries' initial level of expenditure and varies by Member State. In Greece, for example, increasing the expenditure on training as a percentage of GDP to 0.185% implies additional expenditure of 0.175% of GDP. This would equate to 24% of GDP per capita spent on every young unemployed worker. Assuming a reduction at the lower margin of 0.2 pp, spending 24% of GDP per capita on every young unemployed worker would reduce young people's unemployment by approximately 1.2 pp in Greece. The matching efficiency parameter for young people in the model is increased until the reduction of unemployment for young people (aged 15-24) reaches that country's benchmark. For the budgetary effect, it is assumed that governments finance the cost of the policy measure through levying additional lump-sum taxes on all households.

<sup>(1)</sup> Based on 2021 public expenditure on training (all age groups), OECD Employment and Labour Market Statistics database (data on expenditure and participants, 20: see 2021 training data here). Zero prior spending was assumed for the two Member States included in the simulations where no prior public expenditure data are available.

<sup>(2)</sup> A degressive depreciation rate is applied as in (European Commission, 2018), assuming that half of the additional human capital will be depreciated at age 25-39, 67% at age 40-54, 75% at age 55-69.

<sup>(3)</sup> Following (Berger et al., 2009).

<sup>(4)</sup> Elasticities identified by (Bassanini and Duval, 2006).

### Box A3.2: Simulation of long-term macroeconomic impact of ESF+ investments on GDP and labour market outcomes in NUTS2 regions

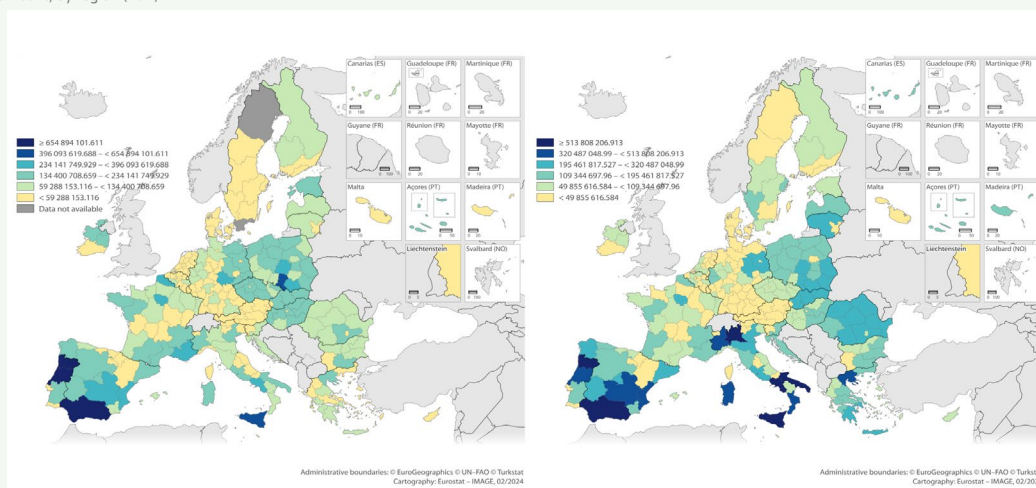
The potential macroeconomic effects of investing in skills (see Section 3.3 in Chapter 3) and ALMPs (see Section 3.4 in Chapter 3) are simulated using the spatial dynamic Computable General Equilibrium (CGE) RHOMOLO model, <sup>(1)</sup> calibrated using data for 235 EU NUTS2 regions. The analysis uses a version of the RHOMOLO model with endogenous labour market participation <sup>(2)</sup> and five income groups for the labour force. The results provide an overview of the macroeconomic impact of investments in skills and ALMPs and their contribution to upward convergence.

The analysis simulates the long-term effects of ESF+ spending on skills and ALMPs in the 2021–2027 Cohesion Policy. Figure 1 shows the regional allocation of funds by EU NUTS2 region, which was used as input for the analysis. For modelling purposes, intervention fields as defined in the first dimension of the 2021–2027 categorisation system of the Common Provisions Regulation of the Cohesion Policy were grouped under the overarching headings of investment in skills, or investment in ALMPs, respectively (Table A3.2.). Investment in skills is modelled to increase labour productivity, while ALMPs are simulated to increase labour supply. All long-term labour productivity and labour supply effects are assumed to decay over time at a 5% yearly rate. Over the period where the funds are disbursed, investment in the targeted regions stimulates aggregate demand via increased government expenditure, and a lump-sum tax is levied on regional income to finance the interventions. <sup>(3)</sup>

Figure 1

#### Regional allocation of investments in skills (left map) and ALMPs (right map) as modelled in RHOMOLO analysis

Total amount, by region (EUR)



Source: Directorate-General for Regional and Urban Policy (DG REGIO) (2023).

<sup>(1)</sup> See also (Christou et al., 2024).

<sup>(2)</sup> Endogenous labour market participation provides households with a choice to decide whether to enter the labour market based on the opportunity cost of leisure, leading to adjustments both at the intensive (average hours worked) and extensive (entering the labour market) margin (Christensen and Persyn, 2022); (Christou et al., 2023)).

<sup>(3)</sup> The tax is proportional to the GDP weight of the regions, i.e. richer regions pay more than less-developed regions.

## Description of input data

The ESF+ funds allocated to investments in skills and ALMPs are inputs to RHOMOLO. ESF+ funds are assumed to increase labour productivity, while ALMP interventions are assumed to increase labour supply. In both cases, on the demand side, the funds are modelled as increases in government current expenditure and a lump-sum tax is levied on regional income. Table A3.2 shows total amounts allocated per field of intervention, while Chart A3.1 shows the regional allocation of these interventions.

Table A3.2

ESF+ investments in skills and ALMPs, 2021-2027 programming period (EUR)

ESF+ no	Description of intervention	Amount (EUR)	RHOMOLO model shock	Demand-side effects	Supply-side effects
<b>Investment in skills</b>					
145	Digital skills	1 482 766 824	Labour productivity	Increase in government consumption	Increase in labour productivity
146	Adaptation to change of workers, firms and entrepreneurs	5 616 552 855			
151	Adult education (excluding infrastructure)	5 236 043 584			
152	Equal opportunities & participation in society	4 484 939 494			
153	Employment integration for disadvantaged people	7 207 023 300			
	Total	24 027 326 057			
<b>Investment in ALMPs</b>					
134	Access to employment	6 754 300 663	Labour supply	Increase in government consumption	Increase in labour supply
135	Access to employment of long-term unemployed	667 330 037			
136	Youth employment and socio-economic integration	10 844 195 343			
137	Self-employment and business start-up	2 566 906 514			
138	Social economy and social enterprises	1 429 549 230			
139	Modernise labour market institutions to anticipate needs	1 353 449 592			
140	Labour market matching and transitions	2 392 503 181			
141	Labour mobility	407 893 252			
142	Women's labour market participation and non-segregation	1 010 040 743			
	Total	27 426 168 554			

Source: DG REGIO (2023).

[Click here to download table.](#)

## Modelling assumptions

**In the version of the RHOMOLO model used for this analysis, the labour force is split into five income groups.** Each group represents 20% of the per capita income distribution within a region.<sup>(222)</sup> The funds are disbursed gradually to regions across time, according to a time profile that generally concentrates most of the spending in the central part of the period (Table A3.3). The shocks directly affect the labour force embedded in the model. The simulation is run for 20 time periods, each corresponding to a year, and the results are presented as deviations from the baseline year, assumed to be in equilibrium unless explicitly indicated otherwise.

Table A3.3

Time profile of ESF+ investments, 2021-2027 programming period, unweighted average across Member States

Member State	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
EU-27	0.05	0.08	0.11	0.12	0.13	0.15	0.15	0.12	0.07	0.01

Source: DG REGIO (2023).

[Click here to download table.](#)

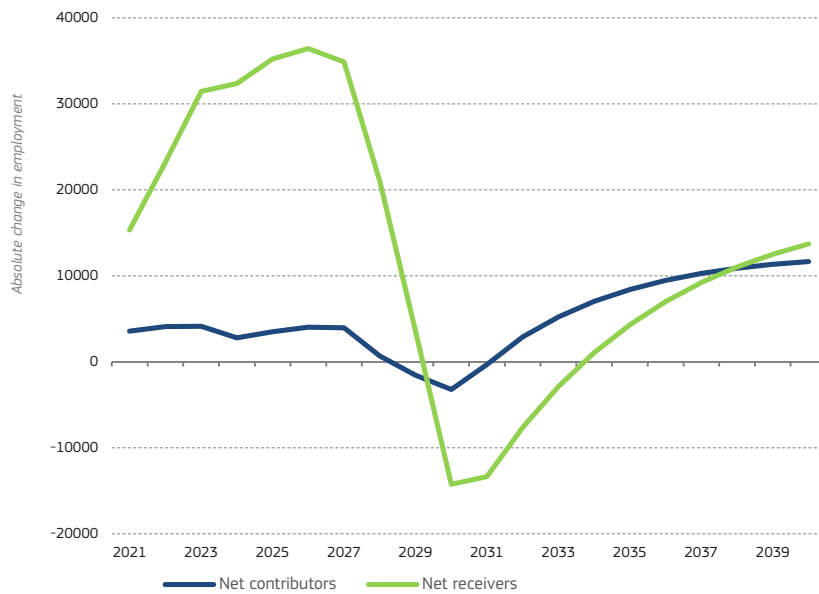
<sup>(222)</sup> On average, the distribution of people across the five income groups in the EU regions is roughly uniform.

## Simulation results

Chart A3.1

### Employment increases for regions not receiving ESF+ investment due to spillover effects

Absolute change in employment following ESF+ investment in skills



Source: JRC calculations based on RHOMOLO model.

[Click here to download chart.](#)

### Box A3.3: Calculating Income Stabilisation Coefficients

#### Analytical approach

**Following earlier research, this note uses EUROMOD to study the stabilisation properties of the tax-benefit systems of the EU-27. <sup>(1)</sup>** It does so by measuring an income stabilisation coefficient (ISC), defined as the percentage of a market income shock absorbed by the country's tax-benefit system.

**The calculation of the ISC involves simulating a reform scenario that considers a 5% reduction in gross income, uniformly applied to any form of market income.** EUROMOD is then used to calculate taxes, benefits and disposable income for both the baseline and reform scenarios. The model's underlying data come from EU-SILC. The comparison of the two scenarios provides an estimate of the stabilisation capacity of the tax and benefit systems. The household-level ISC is calculated as:

$$ISC_h = 1 - \frac{\Delta Y_h}{\Delta M_h} = \frac{\Delta T_h}{\Delta M_h} - \frac{\Delta B_h}{\Delta M_h}$$

where  $Y_h$  is household  $h$  disposable income,  $M_h$  is gross market income,  $B_h$  are social benefits received,  $T_h$  are taxes and social insurance contributions (SICs) paid and the  $\Delta X_h = X_{hR} - X_{hB}$  is the change in variable  $X$  due to the drop in 5% market income between the baseline and the reform scenarios ( $X$  being either gross market income, social benefits received, taxes or social insurance contributions paid and household disposable income).

The higher the coefficient, the stronger the stabilisation effect. For instance, a coefficient of 30% indicates that 30% of a shock to market income is absorbed by the public budget and only 70% of the shock is transmitted into disposable income. Ultimately,  $ISC_h$  is equal to 100% if no change in disposable income is observed following the shock (i.e. fiscal policies fully absorb the shock) and equal to 0% if the change in market income is fully transmitted to disposable income. Given the nature of the analysis and the type of shock considered (income decrease rather than a change in labour market status), the policy instruments that will react to the changes are taxes, SICs, and all benefits except unemployment benefits. To analyse convergence of ISCs among Member States, the contribution of discretionary policies to the stabilisation of incomes is reduced by considering average ISCs across two years. <sup>(2)</sup>

<sup>(1)</sup> (Coady et al., 2023); (Dolls, Fuest and Peichl, 2012); (Dolls et al., 2022).

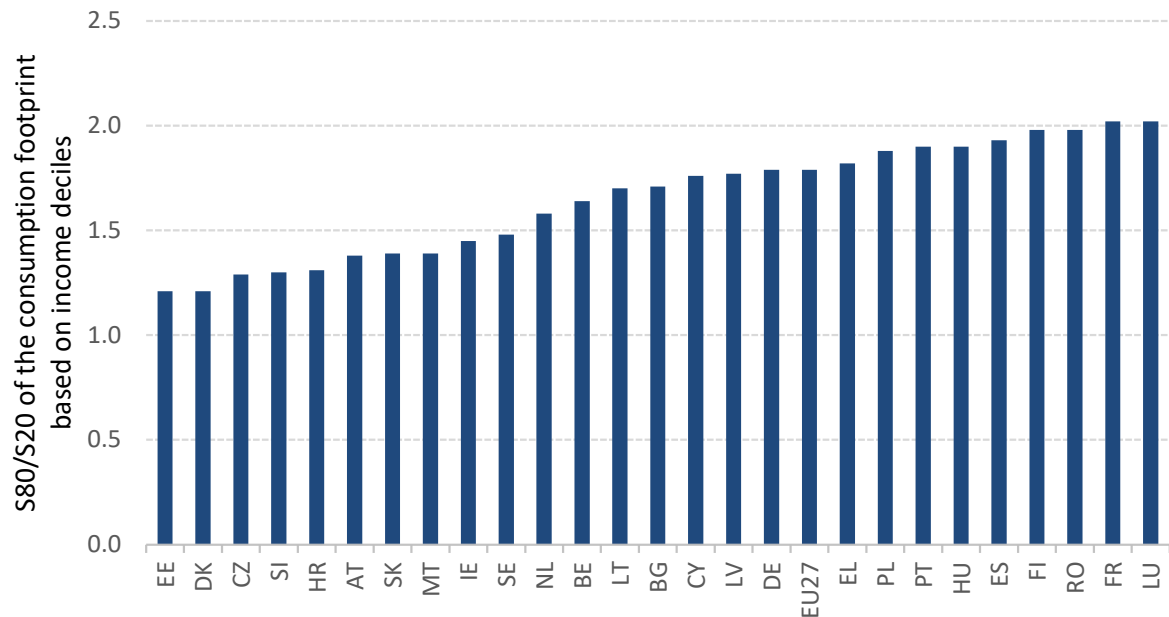
<sup>(2)</sup> Convergence analysis compares ISCs before the COVID-19 pandemic (2014-2015 average) and the latest years for which data are available (2022-2023 average).

## Results – additional graphs

Chart A3.2

### The richest 20% of households have almost double the consumption footprint of the poorest 20% of households in the EU

Consumption footprint inequality: comparing top 20% to bottom 20% income earners (S80/S20 ratio) across Member States, 2021



**Note:** The EU average refers to EU-27 without Italy, as household income data are not available for Italy in the Household Budget Survey (HBS). Italy's consumption footprint inequality rate is calculated with expenditure-based data and would significantly influence the EU average.

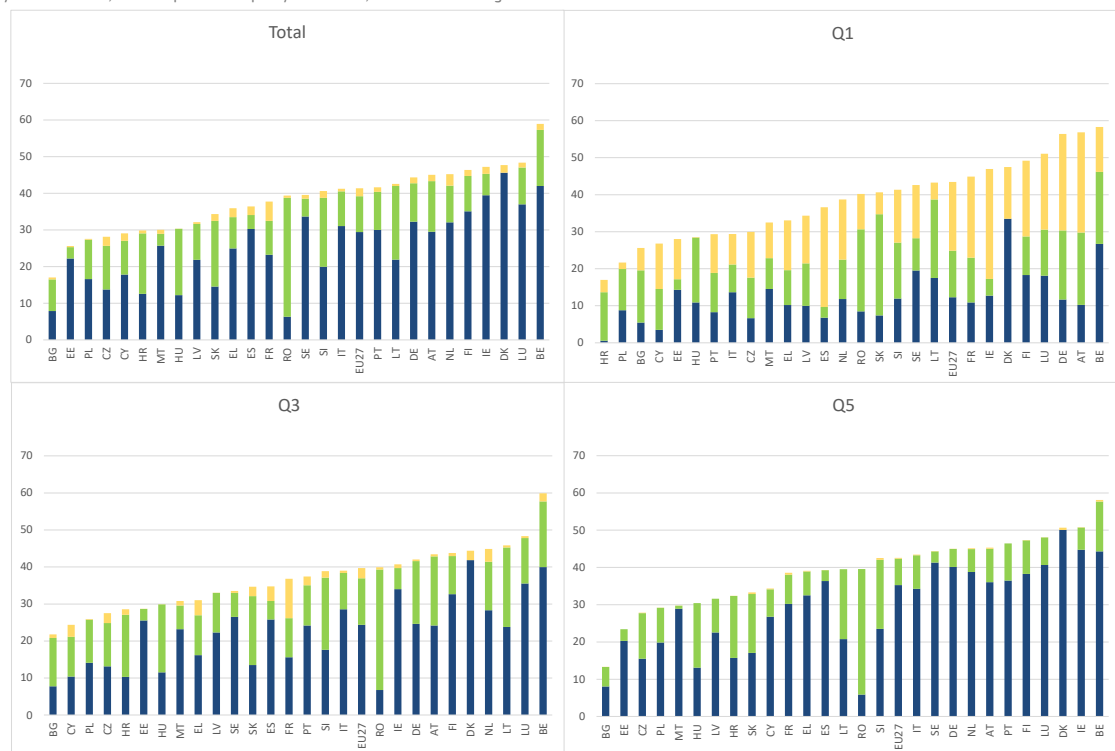
**Source:** DISCO(H) project.

[Click here to download chart.](#)

Chart A3.3

### Relative significance of taxes and benefits in absorbing a 5% market income shock varies substantially across Member States

ISCs, by Member State, income quintile and policy instrument, 2022-2023 average



**Source:** JRC calculations based on EUROMOD, version I6.0+.

[Click here to download chart.](#)

# DATA SOURCES AND DEFINITIONS

Most of the data used in this report originates from Eurostat, the Statistical Office of the European Union. The main data sources used are:

- European Union Labour Force Survey (EU-LFS):
  - [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU\\_labour\\_force\\_survey\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU_labour_force_survey_statistics)
- ESA2010 National Accounts:
  - [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=National\\_accounts\\_\(incl.\\_GDP\)](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=National_accounts_(incl._GDP))
- EU-Statistics on Income and Living Conditions (EU-SILC):
  - [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU\\_statistics\\_on\\_income\\_and\\_living\\_conditions\\_\(EU-SILC\)\\_methodology](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU_statistics_on_income_and_living_conditions_(EU-SILC)_methodology)

## Definition and data sources of main indicators

Real GDP: Gross Domestic Product (GDP), volume, annual change (Source: Eurostat, ESA2010 National Accounts [nama\_10\_gdp]). Dataset available [here](#).

Employment rate: number of people employed divided by the population in the 20-64 age bracket (Source: Eurostat, EU-LFS [lfsi\_emp\_a]). Dataset available [here](#).

Activity rate: labour force (employed and unemployed) as a share of total population in the 15-64 age group (Source: Eurostat, EU-LFS [lfsi\_emp\_a]). Dataset available [here](#).

Unemployment and youth unemployment rate: unemployed as a share of the labour force in the (respectively) 15-74 and 15-24 age group (Source: Eurostat, EU-LFS [une\_rt\_a]). Dataset available [here](#).

Long-term unemployment rate: persons in the 15-74 age group unemployed for a duration of 12 months or more as a share of the labour force (Source: Eurostat, EU-LFS [une\_ltu\_a]). Dataset available [here](#).

At-risk-of-poverty or social exclusion rate. Percentage of a population representing the sum of persons who are: at risk of poverty, or severely materially and socially deprived, or living in households with very low work intensity (Eurostat, EU-SILC [ilc\_peps01n]). Dataset available [here](#).

At-risk-of-poverty rate. Share of people with an equivalised disposable income (after social transfer) below the at-risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income after social transfers (Eurostat, EU-SILC [ilc\_li02]). Dataset available [here](#).

Severe material and social deprivation rate. Inability to afford a set of predefined material items that are considered by most people to be desirable or even necessary to experience an adequate quality of life (Eurostat, EU-SILC [ilc\_md11]). Dataset available [here](#).

Share of persons living in households with very low work intensity. Share of persons living in a household where the members of working age worked a working time equal or less than 20% of their total work-time potential during the previous year. (Eurostat, EU-SILC [ilc\_lvhl11n]). Dataset available [here](#).

Income quintile share ratio S80/S20. Ratio of total income received by the 20% of the population with the highest income (the top quintile) to that received by the 20% of the population with the lowest income (the bottom quintile) (Eurostat, EU-SILC [ilc\_di11]). Dataset available [here](#).

NEET: Young people not in employment, education or training. Share of people aged 15 to 29 who are not employed (i.e. either unemployed or economically inactive) nor engaged in any kind of further (formal or non-formal) education or training (Eurostat, EU-LFS [lfsi\_neet\_a]). Dataset available [here](#).



## References

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