

# **INVESTMENT REPORT 2024/25**

# **INNOVATION INTEGRATION AND SIMPLIFICATION IN EUROPE**



## Chapter 4

# **Social inclusion as a path to well-being and competitiveness**

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### **Social inclusion as a path to well-being and competitiveness**

**Investment Report 2024/2025: Innovation, integration and simplification in Europe**

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**About the Economics Department**

The mission of the EIB Economics Department is to provide economic analyses and studies to support the Bank in its operations and in the definition of its positioning, strategy and policy. The department and its team of economists is headed by Debora Revoltella, director of economics.

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# Chapter 4

## **Social inclusion as a path to well-being and competitiveness**



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## About the report

The annual EIB report on investment and investment finance is a product of the EIB Economics Department. The report provides a comprehensive overview of the developments and drivers of investment and investment finance in the European Union. It combines an analysis and understanding of key market trends and developments, with a thematic focus explored in greater depth. This year, the focus is Europe's ability to marshal the investment needed for the green transition and to support innovation. The report draws extensively on the results of the annual EIB Investment Survey (EIBIS) and the EIB Municipalities Survey, combining internal EIB analysis with contributions from leading experts in the field.

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## Chapter 4

# Social inclusion as a path to well-being and competitiveness

**Social inclusion and equality of opportunity are vital for Europe's future economic performance.** Equality of opportunity ensures that talent and skills are not wasted and is critical for productivity and competitiveness. It is supported by inclusive economic outcomes that enhance the well-being of Europeans.

**The European Union has been improving steadily in terms of social inclusion, well-being and equality of opportunity, but many barriers remain, such as those related to gender and educational background.** Recently, rising housing costs have increased impediments to home ownership and relocation, with implications for labour market inclusion and labour mobility. Inflation has had a disproportionate impact on poorer households and retirees.

**Education, childcare services, urbanisation and structural changes in the economy have supported rising labour force participation, particularly for women, but the green transition poses a challenge.** While labour force participation has increased for all workers aged 55 and above, among those under 50 it has risen for women only, mainly driven by improvements in educational attainment and childcare services, as well as a growth in service-sector employment. However, there is a gender gap in green skills that largely reflects the gap in science, technology, engineering, and mathematics (STEM) qualifications. For firms, scarcity of skilled staff is a major obstacle to investment, a problem that was exacerbated by the COVID-19 pandemic and remains acute in many regions. Overall, growth has been concentrated in capital regions, with the poorest regions suffering a brain drain.

**Greater equality of opportunity could unlock significant economic potential.** Implementing policies that reduce inequality of opportunity, particularly an individual's ability to participate in the labour market, can have a positive impact on overall economic output by tapping into Europe's unrealised human capital. For example, reducing the share of young people not in education, employment or training (NEETs) or closing the gender participation gap is shown to increase gross domestic product (GDP) by several percent. Similarly, supporting employment among men and women from less advantaged backgrounds is expected to increase GDP. Simulations clearly show the economic potential of enhanced inclusion, even if significant conditions must be met to fully realise it.

**Social investment in health, education and housing is critical to protecting and improving well-being and social cohesion, and also has a strong effect on EU competitiveness.** Active labour market policies, inclusive education and support for parents can improve labour market outcomes for women and vulnerable groups, helping people enter the workforce and keep their jobs. When it comes to adult training, the focus should be on helping European firms to close the gap in worker training. Increasing support for EU research and development and rolling out new technologies to provide healthcare can sustain improvements in outcomes. Local administrations play a key role in social investment and regional convergence, but face capacity and funding constraints.

**Making housing affordable and increasing the sustainability of housing requires a multi-pronged approach focused on reducing regulatory barriers, supporting innovation and facilitating access to finance.** The decade-long rise in house prices and rents has disproportionately affected some demographic groups, like young workers, middle- and low-income families, and in general, people moving to cities for work or education. Moreover, energy-efficiency requirements, the recent surge in inflation, and pandemic-related shortages increased construction costs, further restricting access to

home ownership. A lack of affordable housing in fast-growing regions deters migration, raises wages and constrains the expansion of employment in dynamic regions, with implications for EU growth. Revising regulations and land-use restrictions is necessary to facilitate an increase in the housing supply in regions where it is needed the most. Encouraging the adoption of new technologies in the construction sector will reduce costs and expand supply. New financing models to support social housing providers, finance-constrained households and businesses must be paired with policies that shore up availability of affordable housing.

## Introduction

A socially inclusive economy is vital for human well-being. Moreover, inclusive economic outcomes and equality of opportunity are necessary to ensure that everyone can participate in the economy to their full potential. This is critical for productivity growth and the competitiveness and success of Europe's economy. Labour force participation, skills and labour mobility play a key role in this regard – in fact, a lack of skills is one of the main impediments to firms' investment across Europe.

Europe's social model has been a success story for inclusion and well-being. There is evidence of considerable progress across different metrics of inclusion, equality of opportunity and well-being, putting Europe at the global forefront in these areas. This has largely been sustained in recent years, despite economic shocks like the COVID-19 pandemic. However, there is more progress to be made, and gains must be protected in the face of challenges like the green transition and the growing impact of climate change, the digital transition and demographic change. It is also important to note that some economic trends are already threatening inclusion and equality of opportunity, especially the rising cost of living, and of housing in particular.

This chapter examines these issues in three parts:

The first part looks at recent trends in inclusion, well-being and equality of opportunity, with a particular focus on labour force participation, education and the effects of housing market developments.

The second part examines labour force participation as a key channel for inclusion and productivity growth. It analyses the factors that have driven changes in who participates in the labour market, particularly regarding gender, and how changing skill demands from the green transition may affect labour market inclusion. It then looks at how housing affordability affects labour market participation and mobility, how these differ from region to region and how skills and labour mobility constraints are influencing firms' investments.

The third part investigates how policies, and especially social infrastructure investment, can protect and enhance social inclusion and equality of opportunity. It covers investments in education, training and health; how to promote labour market inclusion and increase housing supply and affordability; and the importance of technical capacity at the local government level to support social investment.

## The state of social inclusion in Europe

**The European Union's commitment to social inclusion and well-being is a cornerstone of its economic productivity and growth.** Safeguarding well-being, including equal access to quality healthcare and education, supports economic growth by ensuring a healthier and more productive workforce and the efficient allocation of skilled labour. The European Union's reputation for a high

quality of life also helps attract skilled professionals from around the world. Similarly, higher social mobility is associated with faster economic growth, as better opportunities to invest in human capital improve its accumulation and allocation.<sup>1</sup> Thus, inclusive labour markets not only facilitate upward social convergence in the European Union (for example, by narrowing gaps in gender employment and pay), but also support economic growth.

## Europe has made steady progress in social inclusion and well-being

**Well-being is a complex concept of interrelated dimensions, including health, education and economic security.** Measures of net national income, real household income and consumption are closely associated with material living standards. However, quality of life also depends on people's health, education, everyday activities – including the right to a decent job and housing – and the factors that shape their personal and economic security. Social inclusion can significantly enhance an individual's sense of well-being. Feeling included and valued can lead to higher self-esteem, reduced stress and better mental health overall. Equal access to resources like education, healthcare and employment reduces socioeconomic inequality and therefore barriers to well-being.

**EU residents live considerably longer and healthier lives than people in many other advanced economies.** Except for during the COVID-19 pandemic, life expectancy at birth in the European Union has risen consistently in recent decades (Figure 1). In 2023, life expectancy in the European Union was 81.5 years, squarely among the global leaders in this area. The lives of EU residents have also become healthier, as access to healthcare in the European Union has improved significantly over the past decade. In 2022, the number of healthy life years at birth was estimated to be 62.6 (or 77.7% of total life expectancy), up from 60.9 in 2005.

**The European Union is at the global frontier in terms of inclusion and well-being.** With 25 EU members in the top 50 of the UN Human Development Index, the European Union dominates the global leader board in terms of human development, scoring well across a broad range of well-being indicators (United Nations Development Programme (UNDP), 2024). EU countries have also recorded considerable progress (Figure 2a), with clear signs of convergence by countries in Southern Europe and Central and Eastern Europe. Figure 2b also illustrates the distance to the frontier (the best performing country, scaled to 1). The European Union is at the global frontier across a broad range of dimensions, recording exemplary scores in terms of life expectancy, mortality rates, inequality, gender employment and environmental outcomes.

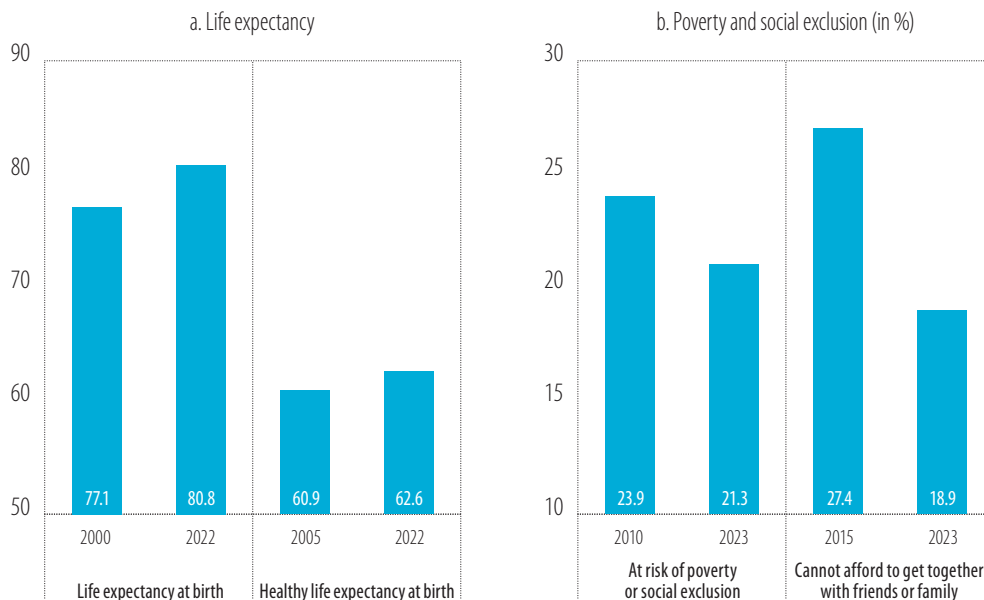
**Over the past decade, income in the European Union has risen and the hours worked to obtain that income have fallen, while income inequalities have decreased.** In the vast majority of EU members, median income has risen. On average, real incomes in the European Union rose by 18% in 2010-2023. National and regional variation in income growth highlights a clear catch-up in Central and Eastern Europe. For example, Romania recorded the highest growth in real income, with a 140% increase relative to 2010.<sup>2</sup> While real incomes rose, the weekly working hours to obtain this income gradually decreased, leaving more time for leisure. Weekly working hours for people aged 20 to 64 in their main job averaged 36.1 hours in the European Union in 2023, down from 38.2 hours in 2003. At the same time, income inequalities in the European Union shrank. In 2023, the Gini coefficient in the European Union recorded a low of 29.6.<sup>3</sup>

<sup>1</sup> See, for example, Bradbury and Triest, 2016; Neidhöfer et al., 2018; Güell et al., 2018; Neidhöfer et al., 2024.

<sup>2</sup> The exception here is Greece, where the real median income remains well below the pre-financial crisis level.

<sup>3</sup> The Gini coefficient, also known as the Gini index, is a measure of statistical dispersion intended to measure income or wealth inequality. Alternatively, the S80/S20 ratio measures the degree of inequality as the ratio between the total equalised net disposable income of the 20% of people with the highest income (S80) and the total equalised net disposable income of the 20% of people with the lowest income (S20). The S80/S20 ratio dropped from 5.05 in 2013 to 4.72 in 2023.

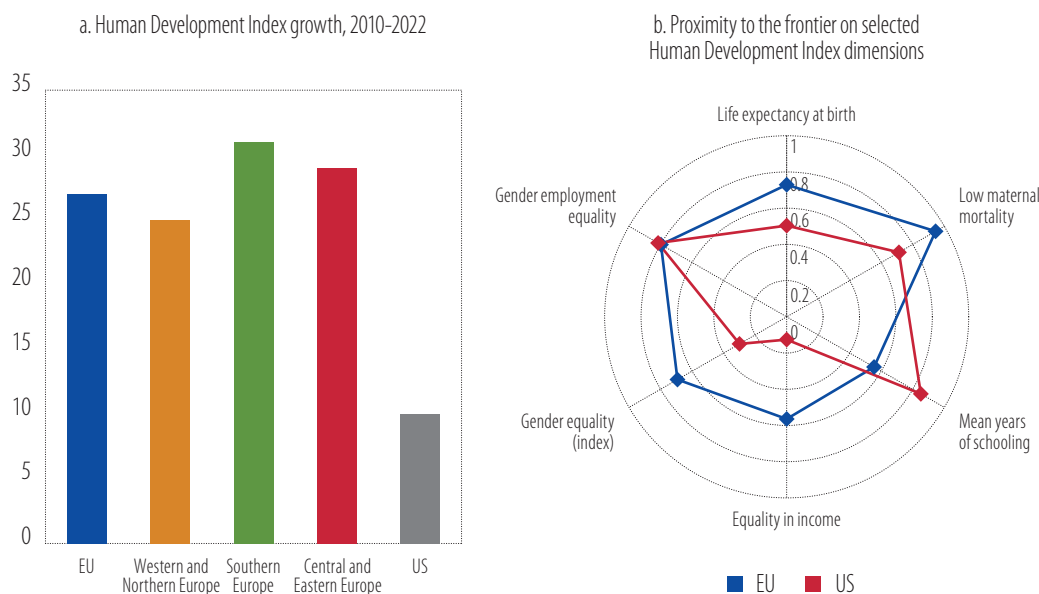
**Figure 1**  
**Well-being trends in the European Union**



Source: EIB staff calculations based on Eurostat, Organisation for Economic Co-operation and Development (OECD) World Bank World Development Indicators.

Note: Population weighted averages for the EU members.

**Figure 2**  
**Human Development Index**



Source: EIB staff calculations based on United Nations Development Programme (UNDP, 2024).

Note: The European Union is the population weighted average of the 27 EU members. Panel (b) plots the distance to the international frontier, with the best performing country scoring 1 and the least performing country in the Human Development Index top 25 or the European Union scaled to 0. Maternal mortality is measured as the number of deaths due to pregnancy-related causes per 100 000 live births. Mean years of schooling is measured as the average number of years of education received by people aged 25 or above. Inequality in income measures the inequality (see Atkinson index) in the distribution of incomes based on household survey data. The gender employment gap measures the difference between male and female labour force participation rates. Data refer to 2022 or the most recent year available.

**The share of people in the European Union at risk of poverty or social exclusion has been declining steadily.** In 2023, 94.6 million people in the European Union, or 21.3% of the EU population, were at risk of poverty or social exclusion, a considerable decline from 104 million (23.9%) in 2010 (Figure 1b).<sup>4</sup> Concretely, this means that fewer people are having trouble making ends meet, coping with surprise expenses, or simply enjoying a drink or meal with friends and family. In 2023, almost one in three people in the European Union (31.2%) reported being unable to cope with unexpected financial expenses, a decrease of 5.9 percentage points since 2010. Nevertheless, rates of severe material and social deprivation vary by region. While only 6.8% of the EU population experienced severe material and social deprivation in 2023, ten regions in the European Union recorded over 20% of people experiencing such deprivation, mostly in Southern Europe and Central and Eastern Europe.

**The share of workers in the European Union experiencing job insecurity is declining, promoting the distribution of Europe's prosperity.** Employment rates for men and women have increased steadily over the last few decades, reaching a record high of 75.3% in 2023. The gender employment gap also continues to decrease, with the employment rate of women in 2023 surpassing 70% for the first time.<sup>5</sup> An increasing number of young people are employed or in education and training. Accordingly, the share of the EU population living in households with very low work intensity has decreased, helping prevent people from falling into poverty.<sup>6</sup> Notwithstanding this progress, significant regional disparities exist within EU countries. Several regions across Belgium, France, Germany, Italy and Spain record high rates of people living in households with very low work intensity, exceeding 18% (2023 data, Eurostat).

**Rising inflation and housing costs had a major impact on households, with poorer households and retirees suffering more from the loss of purchasing power.** The inflation surge following the pandemic and the energy shock induced by Russia's invasion of Ukraine reduced purchasing power and welfare for lower income households. Poorer households were affected more severely than higher income households.<sup>7</sup> Inflation weighs more heavily on lower income households because more of their consumption spending is devoted to necessities like food, fuel and electricity, whose prices grew comparatively faster.<sup>8</sup> Overall losses were especially large for retirees due to the fall in the real value of their relatively large holdings of nominal assets (like cash and deposits) (Pallotti et al., 2023). While financial distress is now lessening again after the recent inflationary pressures, it remains particularly elevated for the lowest income households.

**Well-being is not a given for everyone in the European Union, as major insecurities and disparities between and within EU countries persist despite a broad upward convergence in educational and labour market outcomes.** For example, significant inter-regional disparities in employment remain between and within EU members (European Commission, 2024a). Job insecurity also has an impact on the perceived quality of life of those affected. While short-term temporary contracts have become less common in the past decade, they are still relatively widespread in some countries, mostly among young people and residents who are not nationals. Accordingly, young people are less satisfied with their jobs than older cohorts. The threat of unemployment may make workers feel excluded from society (Eurofound, 2023).

4 "At risk of poverty or social exclusion" refers to people who are either at risk of poverty, or severely materially and socially deprived or living in a household with a very low work intensity. At risk of poverty refers to people with an equivalised disposable income (after taxes and transfers) below the at-risk-of-poverty threshold, which is set at 60% of the national median equivalised disposable income.

5 The gender employment gap is defined as the difference between the employment rate of women and men aged 20 to 64.

6 A household with very low work intensity is one where the working-age household members worked 20% or less of their total work-time potential during the previous year.

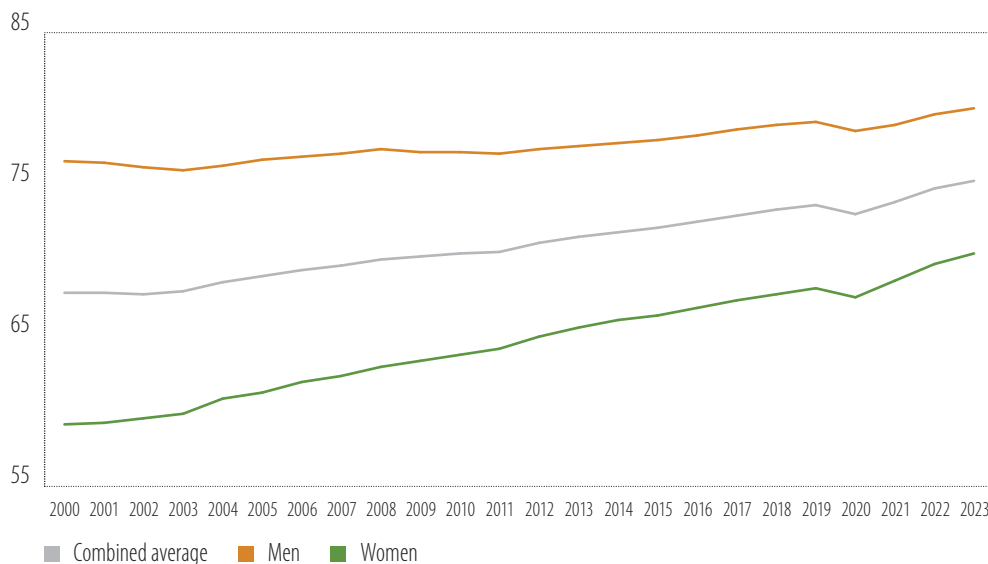
7 See, for example, Amores et al., 2023; Causa et al., 2023.

8 Fiscal measures compensated households for about a third of their welfare loss, though with significant differences between countries (Amores et al., 2023).

## Labour force participation and educational trends support inclusion

Europe has experienced a strong increase in employment in the last two decades. Since the early 2000s, labour force participation has consistently increased, only briefly interrupted in the pandemic period (Figure 3). From 2004 to 2023, labour market participation increased by 9%, driven by a rise in the participation rate of women, which grew by almost twice the overall rate. While this outpaced the small rise in male participation, the rise in female participation has not been sufficient to catch up with the activity levels of men: About 80% of men participated in the workforce in 2023, compared with roughly 70% of women. So, while progress has been achieved in mobilising female workers, a significant (though declining) gender employment gap remains.

**Figure 3**  
Trends in long-term labour force participation (in %)



Source: EIB staff calculations based on Eurostat.

Note: Labour force participation by men and women aged 15 to 64.

The overall increase in labour market activity has been driven by participation of older workers in general, and women in particular. Amid rapid demographic ageing and the baby boomer generation gradually retiring,<sup>9</sup> the percentage of elderly people in the workforce has risen significantly, at least partly dampening the impact of the drop in young people entering the labour market. Labour participation has increased overall, especially for people aged 55 and up, but the rise in women in this age bracket has been stronger than for men (almost 30% vs. around 22%) (Figure 4). Female participation across the entire working-age range also increased slightly following more frequent and longer periods of higher education.

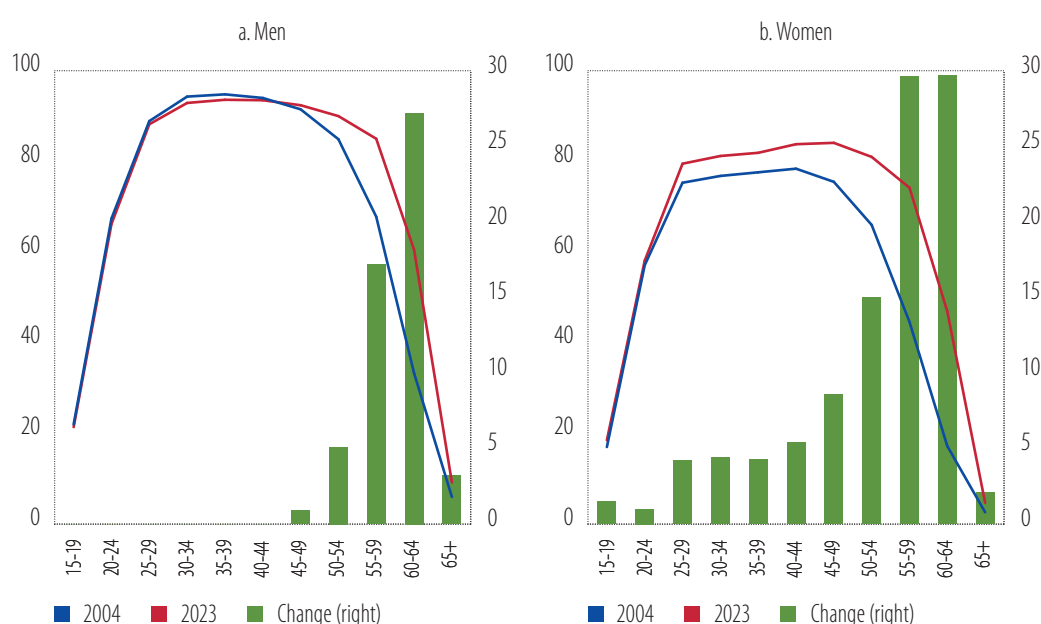
Narrowing the participation gap between women and men would lead to significant economic gains. Apart from the direct impact of a larger workforce on output, increasing female participation has been shown to raise productivity by bringing in new ideas for production and different management styles.<sup>10</sup> Since the early 2000s, Europe has made good progress in reducing the employment gap between men and women. The gap decreased to 10.2% in 2023, from 15.4% in 2004, despite the rising

<sup>9</sup> According to forecasts from the European Centre for the Development of Vocational Training, baby boomer generations across Europe will have retired by 2030. Overall, Europe is expected to lose around 7% of its working-age population due to ageing by 2040 (EIB, 2024a).

<sup>10</sup> See, for instance, Ostry et al. (2018); Cuberes and Teignier (2016).

workforce attachment of men. Further progress could bring substantial economic gains. Using a simple approximation, fully closing the gender participation gap in 2023 would result in a GDP increase of between 2% and 5% – depending on whether female participation converged towards the overall EU average, the European Union’s highest benchmark rate for female full-time participation (Lithuania), or men’s participation rates in individual countries (Figure 5). In GDP terms, narrowing the gap would yield an equivalent of EUR 440 billion to EUR 880 billion.<sup>11</sup> For that to materialise, employed women would need to work the same average number of hours as their male colleagues (assuming similar levels of labour productivity).

**Figure 4**  
Labour market activity rates (in %), by sex and age



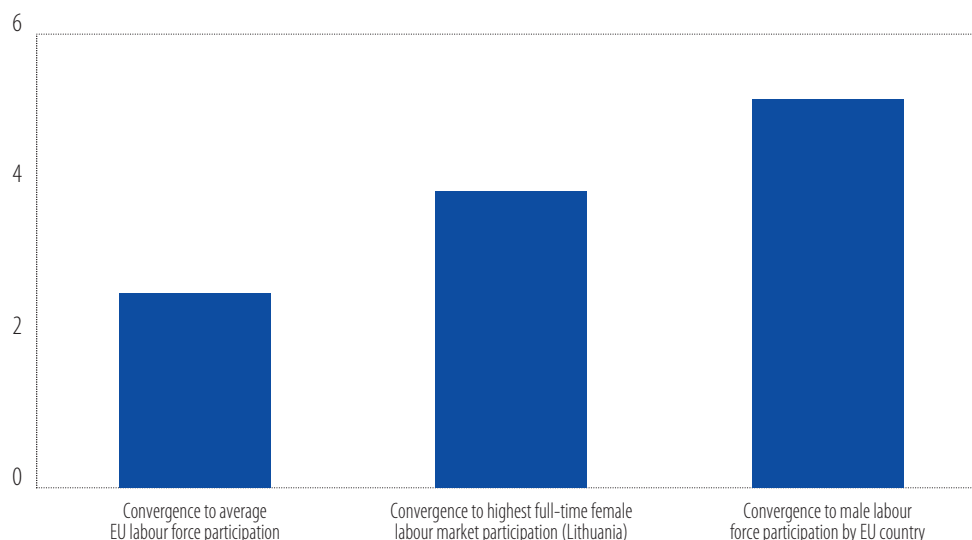
Source: EIB staff calculations based on Eurostat.

**Higher education attainment and skill levels have led to better prospects for joining the labour market.** The skills demanded of workers have changed and increased over time, reflecting growing complexity in the workplace and the need to learn new tasks amid the ongoing skill-intensive green and digital transition.<sup>12</sup> At the same time, Europe’s workforce has significantly increased its level of education, in line with the demands of current and future high-quality jobs. Younger people, and particularly women, attain higher levels of education on average than older people, with the trend growing. Over the last two decades, the share of people aged 25 to 64 with tertiary education has surged, from 20.8% in 2004 to 35.1% in 2023, while the share of the population with less than lower secondary education has decreased from 32.1% to 20.2%. This growing divergence has been driven by a steady increase in the share of women graduating from university, slowly reversing the gender gap in favour of women over time. While in 2004, 29% of women (vs. 23.5% of men) in the 25-34 age group already held tertiary education, even more women than men had a degree in 2023 (48.8% vs. 37.6%).

<sup>11</sup> The three scenarios use the respective gender employment gaps per EU country and the country’s wage share (in % of GDP).

<sup>12</sup> This is based on Eurofound’s Survey on Working Conditions in Europe (various years) asking workers about changing job requirements.

**Figure 5**  
**Economic gains (% GDP) from narrowing the gender employment gap**



Source: EIB staff calculations based on the annual macroeconomic database (AMECO) of the European Commission's Directorate General for Economic and Financial Affairs, Eurostat and OECD.

Note: Calculations based on a workforce aged 20 to 64. The first column refers to the average EU labour force participation rate of men and women. Lithuania as the benchmark country in the second column ranks highly in terms of female participation and has a very low rate of women working part-time.

**Besides its societal benefits, education is a basic determinant of the quality of life of individuals. Life satisfaction, for example, is often tied to the level of income, which often reflects the level of education.** Europeans are becoming increasingly educated, which offers them better job and income prospects. Higher educational attainment increases the likelihood of being employed and of engaging in lifelong learning. In the European Union, the average employment rate in 2023 was 58.3% for 20- to 64-year-olds without upper secondary education, 74.6% for those with upper secondary education, and 86.3% for those with tertiary education. Labour market participation adds to economic certainty: One in three of unemployed people aged 18 or older in the European Union were at risk of poverty or social exclusion in 2023.<sup>13</sup> Nevertheless, Europe has been losing ground in the quality of educational outcomes. The EU average combined PISA<sup>14</sup> score (for mathematics, reading and science) decreased from 2009 to 2018, and decreased further by 2022. At the EU level, about one-third of students in the PISA sample (particularly men) are considered functionally illiterate in mathematics and reading (European Commission, 2024b). Adult participation in education and training also remains well below the EU target for 2030.<sup>15</sup>

**Despite great strides made in improving inclusiveness, not everyone is benefiting equally from the labour market expansion.** There are still sizeable pockets of underused talent and underdeveloped skills, and population groups at risk of facing severe difficulty entering the labour market. Education and job-related training throughout life remain crucial in determining people's labour market outcomes at all ages. While average attainment levels have continuously improved and more young people than ever are entering the labour market with a university degree, many still cannot access education, or drop out before achieving an upper secondary qualification – or do not engage in

<sup>13</sup> By comparison, just 7.1% of the EU population employed full-time were at risk of poverty in 2023.

<sup>14</sup> PISA stands for the Programme for International Student Assessment, which is administered by the OECD.

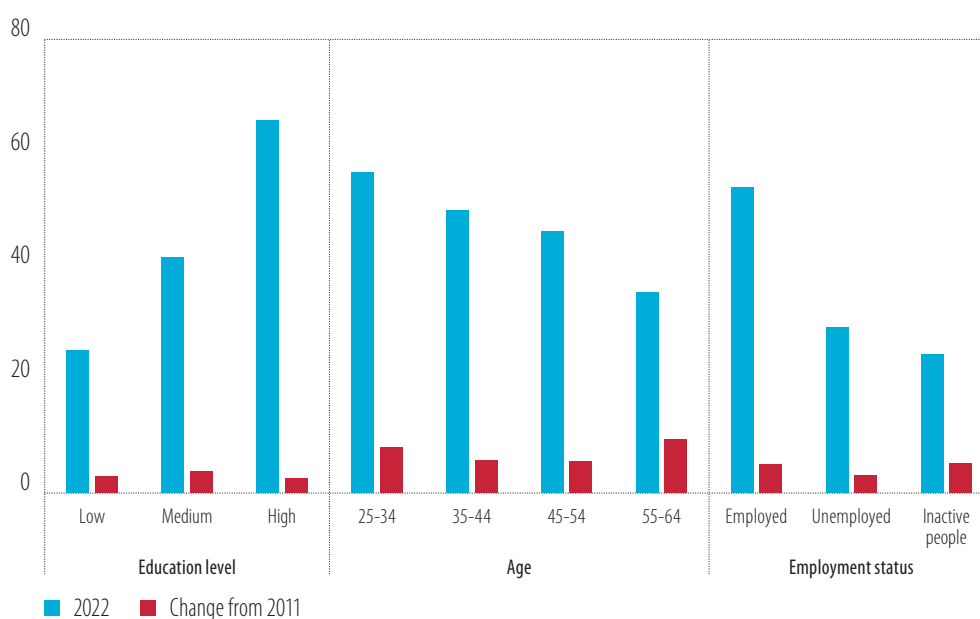
<sup>15</sup> In 2022, 46.6% of people aged 25 to 64 in the European Union had attended education or training during the past year (2022 Adult Education Survey). The EU target is to have at least 60% of adults participating in learning every year by 2030.

any productive activity at all. The continuing decline in quality basic education at a younger age, as evidenced by the average drop in the European Union's combined PISA test results for mathematics, reading and science between 2009 and 2022, poses a serious challenge for the next generations of workers. Also, much-needed digital skills have not shown significant improvements over time and the average level of computer and information literacy among European 14-year-olds has remained mediocre in global terms.<sup>16</sup>

**Lower levels of education greatly increase young people's risk of not staying in employment or continuing any form of education and training.** Leaving school early is linked to social exclusion, poverty and poor health. In 2023, an average of 9.5% of young people aged 18 to 24 in the European Union left education and training early. While this rate has come down over time, individual country rates vary dramatically, and currently range from 2.0% in Croatia to 16.6% in Romania. While the average rate of 18- to 29-year-olds not in employment, education or training (NEETs) fell from a peak of 19.1% in 2013 to an all-time low of 13.4% in 2023, low-skilled youth who did not complete upper-secondary schooling had an unemployment rate about 1.7 times that of tertiary graduates – despite a record number of job vacancies in recent years.<sup>17</sup> Young women are more likely to become NEETs, with young mothers saying that family care responsibilities were their biggest challenge. Reducing the 2023 rates of 18- to 29-year-old NEETs to the level of the best-performing country, the Netherlands, would increase EU GDP by about 0.8%, or EUR 115 billion.<sup>18</sup>

**Figure 6**

**Participation in adult learning (in %), by education, age and employment status**



Source: EIB staff calculations based on Eurostat.

**Economic transformation particularly affects older workers, since many of them do not have the necessary education or work experience.** With the workforce ageing, fostering continuous learning and skill development across all ages and socioeconomic backgrounds helps to comprehensively increase labour market activity, preserve expertise and spur overall productivity. However, adult

<sup>16</sup> See Fraillon (2024) based on results from the ICILS 2023 survey.

<sup>17</sup> For instance, Stemmer (forthcoming) finds an increasingly tight labour market in the wake of the pandemic despite a significant rise in labour force participation.

<sup>18</sup> This scenario assumes that the NEETs rates in Member States converge towards the lowest rate in the Netherlands (4.7%). The estimate is calculated using the observed workforce shares of young people aged 18 to 29 and the wage shares (in % GDP).

learning tends to benefit primarily those who already have better chances of labour market attachment (Figure 6). University educated, younger and already employed adults show substantially larger participation rates in adult learning programmes than less educated or unemployed people. Changes in participation rates in the last decade do not show significant progress amid a widening gap in skills between highly educated and low-educated adults. This stagnation coincides with comparatively low levels of willingness to train, based on the OECD Survey of Adult Skills (PIAAC 2012, 2015 and 2018). On average, slightly more than 50% of adults across EU countries did not or did not wish to participate in any training. Only about 12% participated in or were actively seeking further training.

**The increase in labour force participation coincides with a secular decline in hours worked.** While increasing flexibility in work time arrangements have benefited the attachment of women to the labour market, the bulk of new female entrants in the labour market have taken part-time arrangements. Around 80% of part-time jobs continue to be held by women. Thus, while the number of actual hours worked has been falling over the past two decades, policy reforms to increase flexible working hours might at least encourage involuntary part-timers who want to work more hours (very often women) to do so.<sup>19</sup>

## Inclusion has enhanced equality of opportunity, but more needs to be done

**Equality of opportunity ensures that talent and skills are used optimally.** Equality of opportunity is traditionally understood as the absence of barriers to education and jobs based on personal characteristics like economic class, gender and race. An equal opportunity society guarantees that those who exert an equal degree of effort, regardless of their circumstances, are able to achieve equal levels of outcome.<sup>20</sup> When barriers based on involuntary characteristics are removed, resources flow to where they are most productive.<sup>21</sup> This enhances overall productivity and competitiveness. Moreover, when individuals believe they can succeed based on their abilities and efforts, they are more likely to take risks and start businesses, driving innovation and growth. Overall, lower inequality of opportunity is associated with faster growth.<sup>22</sup>

**Involuntary circumstances affect labour participation and labour outcomes for those who work.** High employment disparities exist depending on people's circumstances, including their parents' education or whether they have a disability. In 2023, people whose fathers had a low level of education had higher shares of unemployment or inactivity (17.6%) than people whose fathers had a medium or high level of education (9.8% and 11.3%, respectively).<sup>23</sup> Adults with highly educated parents, for example, tend to have better literacy skills than those with less educated parents, improving their chances in the labour market.<sup>24</sup> Similar disparities exist across other dimensions of involuntary circumstances, such as disability and parental occupation. Social ties also play an important role in finding jobs. Almost half of individuals in developed countries obtain or hear about jobs through friends and family. Importantly, these ties are significantly more important for less educated individuals and immigrants.<sup>25</sup> For those who work, labour earnings are significantly lower for those in more vulnerable circumstances (Figure 7).

19 Astinova et al. (2024) document the dominant structural role of the income effect over the substitution effect in determining workers' labour supply at the intensive margin, that is, preferences in reducing working hours. The decline on the intensive margin has actually been driven by men, especially men with children, who opted to reduce working hours voluntarily.

20 Inequality of opportunity represents the non-effort-based component of inequality.

21 In addition to the underutilisation of human capital, obstacles to equality of opportunity may also prevent physical capital accumulation (for example, when associated with structural unequal access to credit).

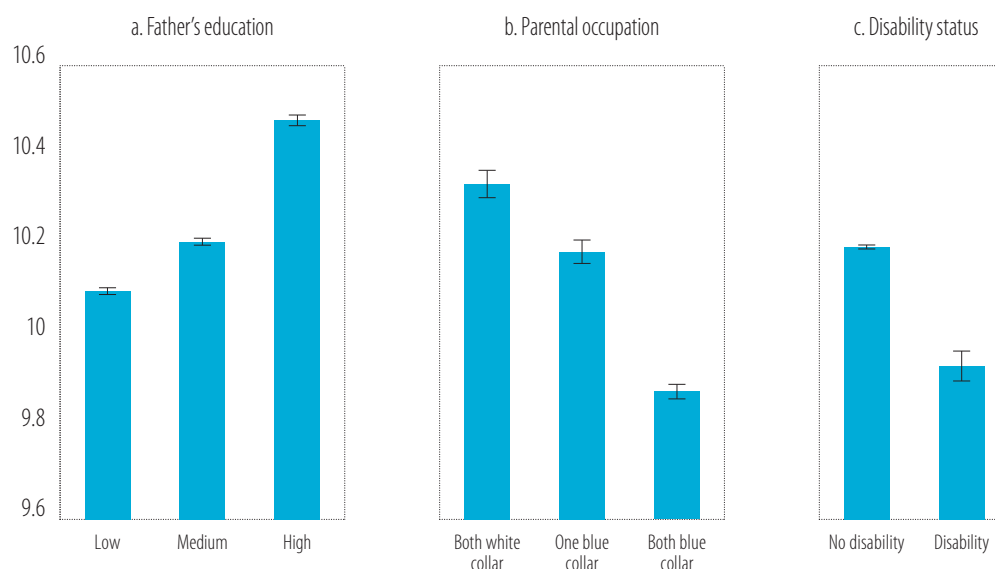
22 See, for example, Marrero and Rodriguez, 2013.

23 Following the definitions for the 2023 EU statistics on income and living conditions (EU-SILC), people with primary education or lower secondary education or below are classified as having low levels of education. Upper secondary education and post-secondary non-tertiary education are considered medium levels of education. High levels of education cover short-cycle tertiary education or a bachelor, master or doctoral level or equivalent.

24 Organisation for Economic Co-operation and Development (OECD), 2024b.

25 Kramarz and Nordström Skans, 2014; Moreno Galbis et al., 2020.

**Figure 7**  
Average labour earnings (in logarithms), by personal circumstance



Source: EIB staff calculations based on EU statistics on income and living conditions (EU-SILC) 2023 data.

Note: Bars indicate 95% confidence intervals around the means. The data cover employed and self-employed heads of household aged 25 to 65 in full-time work and show the labour earnings averaged across the sample of individuals in each category.

### Inequality of opportunity in the European Union has been gradually and consistently decreasing.

Analysis using detailed information on individual incomes, employment, household characteristics and the intergenerational transmission of these factors shows that the inequality of opportunity in the European Union has decreased over the past decade, improving conditions in the majority of EU countries.<sup>26</sup> While involuntary circumstances like gender, disability, parental education and occupation still accounted for 38.0% of the overall earning differentials in 2011, this share gradually and consistently decreased to 22.1% in 2023.<sup>27</sup> Inequality of opportunity across EU countries has also significantly converged over time.<sup>28</sup>

**Gender and education remain key barriers to opportunities in European labour markets.** Figure 8 illustrates the relative contribution of a variety of involuntary circumstances on the inequality of opportunities. Over the last decade, the importance of a parents' country of origin has declined. Nevertheless, parental education and gender persistently limit labour market opportunities across the European Union, accounting for around 80% of all variation explained by involuntary circumstances (Figure 8).<sup>29</sup> Narrowing down the findings by income quantile, sex and education are found to be of comparatively greater importance in explaining earning differentials among those with higher incomes, whereas a disability and one's geographical place of birth gain importance in explaining differentials across lower income individuals. Tackling these barriers is important because they constrain social mobility.<sup>30</sup>

26 The results in this section draw on the analysis of the EU-SILC detailed in van der Wielen (forthcoming). Inequality of opportunity is measured as the share of (winsorised) log labour earnings explained by involuntary circumstances. The estimations are based on EU-SILC data for employed and self-employed household heads aged 25 to 65 in full-time work.

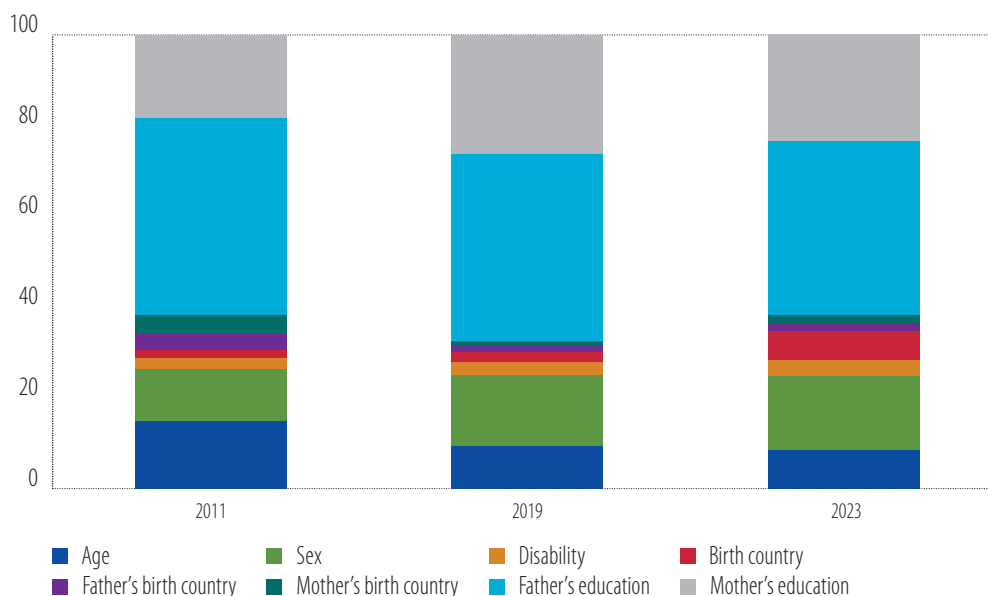
27 The results are in line with earlier findings. For the European Union, applications to earlier data vintages have also documented a decrease in the relative inequality of opportunity (Filauro et al., 2023). Earlier country-specific estimates can be found in Marrero and Rodríguez (2012), Checchi et al. (2016), Palomino et al. (2019), Suárez Álvarez and López Menéndez (2021), Brunori et al. (2023), and Filauro et al. (2023).

28 This is in line with earlier convergence tests by Suárez Álvarez and López Menéndez (2021) and Filauro et al. (2023).

29 Another important factor is parental occupation (blue collar vs. white collar). Due to data limitations, it cannot be accounted for in the 2023 data. Results for 2011 and 2019 show it is equally important as parental education. Including it would not change the above conclusions.

30 Indices of inequality of opportunity are strongly correlated with, for example, indicators of intergenerational mobility (see, for example, Brunori et al. (2013)). The importance of gender as a barrier is also in line with evidence that the intergenerational mobility of daughters is lower than that of sons (Carmichael et al., 2020).

**Figure 8**  
**Contribution of circumstances to inequality of opportunity (in %)**



Source: EIB staff calculations based on EU-SILC.

Note: Inequality of opportunity is measured as the share of labour earnings explained by involuntary circumstances.

**Reducing inequality of opportunity could unlock significant macroeconomic potential.** Policies that reduce the inequalities affecting labour market participation and overall outcomes will affect economic output more broadly. For example, based on 2023 data, closing the gender participation gap is expected to increase GDP by up to 5% (Figure 5). Similarly, leading men and women not in work and with low-educated fathers towards employment could increase EU GDP by 2.7%.<sup>31</sup> Facilitating the entry of people with disabilities into the labour market could add approximately 1% to EU GDP.<sup>32</sup>

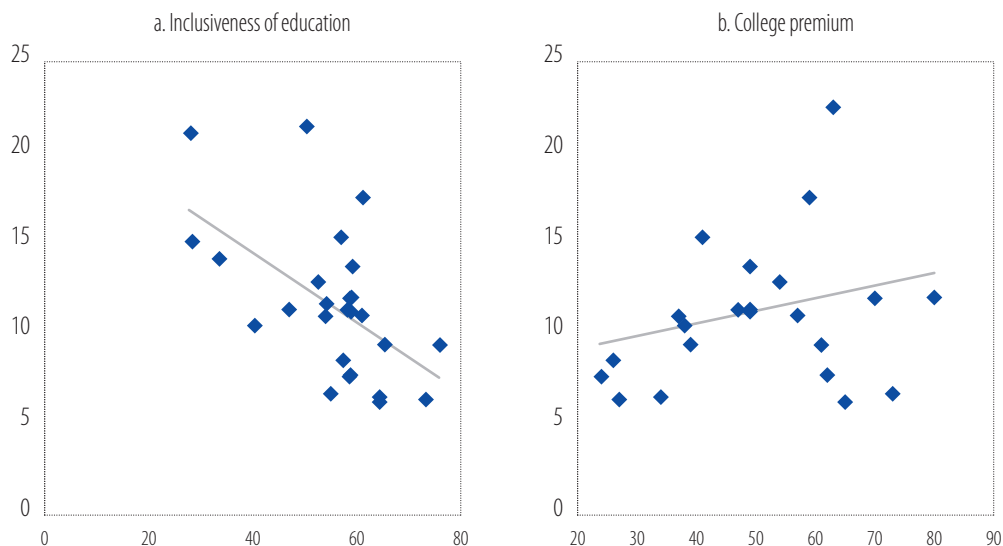
**Public policies help promote the formation and effective employment of human capital.** Public policies may offset how people's circumstances determine their opportunities. Figure 9 presents the relationship between inequality of opportunity and a range of public policies across EU countries. Education and labour market policies, for example, are key instruments to reduce the extent to which labour outcomes are related to personal background. There is a clear relationship between the inclusiveness of education and equality of opportunity (Figure 9a). Educational inequities are reflected in earnings. Systems with higher inequality of opportunity are typically characterised by higher college premiums (Figure 9b). Countries may spend the same fraction of GDP on education, but with different outcomes. If spending is directed to high-quality, accessible early childhood education and care, it is more likely to benefit those facing obstacles to opportunities (Figure 9c).<sup>33</sup> Higher enrolment in early childhood education and care also coincides with lower inequality of opportunity (Figure 9d). This is encouraging, as participation in early childhood education and care in the European Union has been increasing.

31 The GDP potential assumes that all EU members achieve the employment rate for the target group of the best-performing country (Denmark). The scenario is calculated using the observed shares of individuals with low-educated fathers in the 2023 EU-SILC and the wage shares (in % GDP) in AMECO.

32 The economic potential is based on a scenario in which all Member States lead 68% of working-aged people with disabilities towards jobs (the share achieved by the second-place country). The scenario accounts for the fact that disabled workers work slightly fewer hours per week on average.

33 Similar trends have been documented by Checchi et al. (2016).

**Figure 9**  
**Social policies (x-axis, in %) and inequality of opportunity (y-axis, in %) in the European Union**

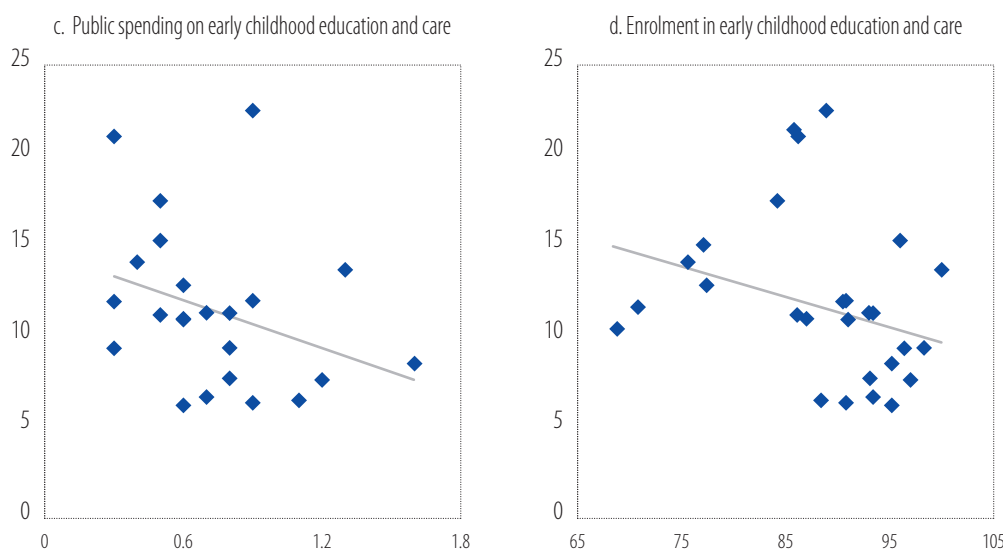


Source: EIB staff estimations based on EU-SILC and PISA 2022 results.

Note: Measured by the share of 15-year-olds at or above proficiency level 2 in mathematics, reading and science. The diamonds represent EU countries for which data are available.

Source: EIB staff estimations based on EU-SILC and OECD Education at a Glance 2022.

Note: Measured as the premium in employment earnings of 25- to 64-year-olds with a tertiary education compared to peers with an upper secondary education. The diamonds represent EU countries for which data are available.



Source: EIB staff estimations based on EU-SILC and PISA 2022 results.

Note: Measured by the share of public spending on early childhood education and care relative to GDP. The diamonds represent EU countries for which data are available.

Source: EIB staff estimations based on EU-SILC and OECD Education at a Glance 2022.

Note: Measured by the share of 3- to 5-year-olds enrolled in early childhood education and care services and primary education. The diamonds represent EU countries for which data are available.

## Amid rising living costs, housing affordability is a key concern

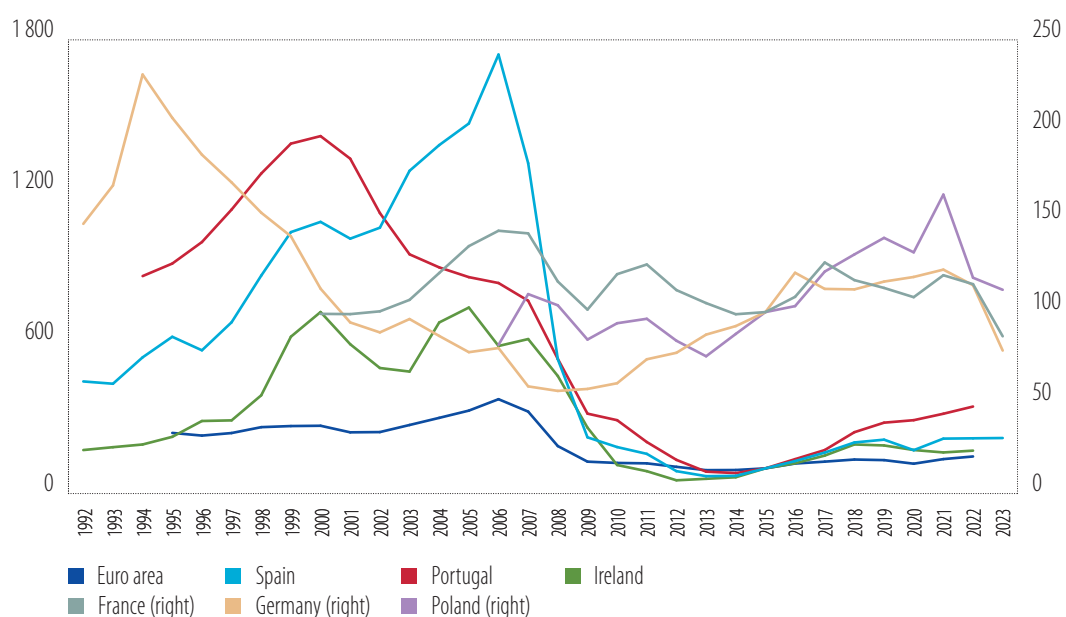
**The cost of living, and particularly the cost of housing, is a major concern for Europeans.** Driven by structural trends in monetary policy, demographics, and housing supply, the rising cost of housing has had a significant impact on key demographic groups and has become a serious concern. Expensive energy efficiency renovations add an additional cost.

**House prices and rents have increased above income levels in recent years.** The concentration of population in cities is creating regional imbalances. Regions affected by negative net migration are experiencing a drop in housing demand, while regions with positive net migration are unable to meet the higher housing needs. As a result, from 2013 to 2023, rents increased by 50% to 100% in many cities, including Lisbon, Dublin, Budapest, Berlin and Luxembourg, with many households spending more than 40% of their income on rent. In addition, high home prices and rents, especially in cities that have seen huge increases, spill over into high prices of non-tradable goods and services, like restaurants and hair salons, as high labour costs adjust (Stroebe and Vavra, 2019). This further deteriorates the purchasing power of workers.

**Coastal cities and tourist destinations also experienced a rapid rise in rents and housing prices.** In many regions, the high percentage of vacant houses (including holiday homes) and short-term rentals puts further pressure on the housing market. Over 20% of homes in Portugal, Spain, Malta and Estonia are vacant, according to the OECD Affordable Housing Database. The expansion of short-term rentals and second homes is especially problematic in tourist destinations, as it limits the housing available to residents and drives prices well above the average income of local workers.

**Since the 2007-2008 financial crisis, new housing supply has remained sluggish in many countries, despite rising prices.** In some countries, annual housing starts never recovered from the housing bubble (Figure 10), remaining below pre-2007 levels despite the buildup of housing demand since the 2010s.

**Figure 10**  
Housing permits for selected EU countries (an index, 2015=100)

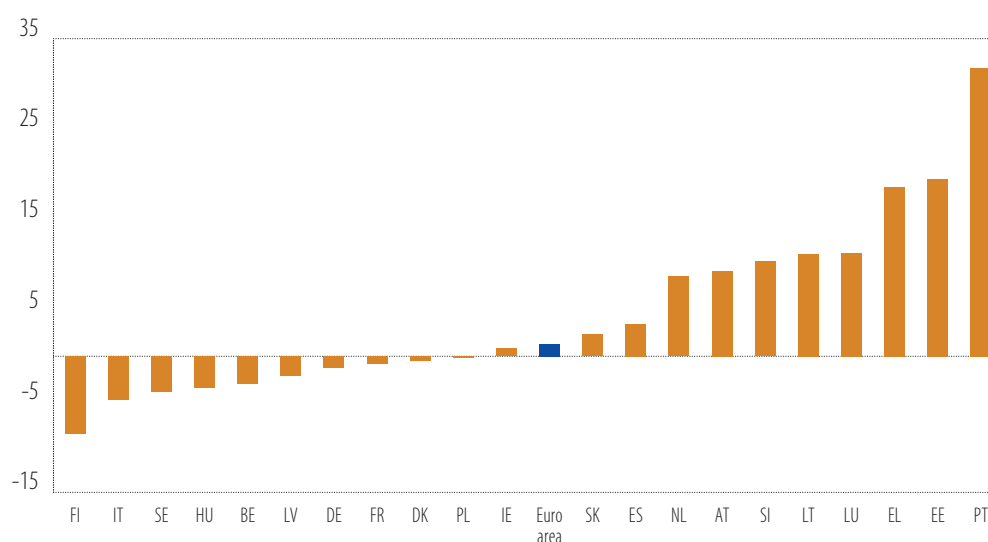


Source: EIB staff calculations based on Datastream and Federal Reserve Economic Data (FRED).

**Limited land availability, high construction costs and regulatory constraints are among the key drivers of high housing prices.** The availability of land is constrained by natural limitations (geographical barriers like bodies of water, mountains and other types of non-developable terrain) as well as large populations and high population density, which are among the main factors limiting the elasticity of housing supply in many European regions (OECD, 2019c). However, other factors, including regulation and land-use restrictions, can play an important role in limiting the availability of land for housing development, and consequently increase land prices. For new construction, the high cost of decontaminating former industrial sites also contributes to high housing prices. Increasing the housing supply also creates costs for local municipalities, as they must expand the supply of public facilities like roads and schools to prevent overcrowding. And while more stringent energy requirements decrease energy bills for households, they push up construction costs. In addition, European regions with a high presence of institutional investors active in the European housing market, particularly investment funds, also display larger deviations in prices than from underlying macroeconomic fundamentals (European Central Bank (ECB), 2023).

**Housing prices peaked during the pandemic, when supply-side shortages prevented the market from responding to increased demand that was supported by macroeconomic policies.** In the pandemic years house prices soared, pushed by supply-side constraints, including labour and material shortages. At the same time, expansionary monetary and fiscal policies were keeping housing demand high. House prices have partially readjusted since then, while wages began to catch up with inflation, mortgage rates responded to monetary policy and fiscal stimulus was largely withdrawn. Still, house price to income ratios remain significantly higher than the pre-pandemic levels in many countries (Figure 11).

**Figure 11**  
Difference in house price to income ratios (in %), 2023 vs. 2019



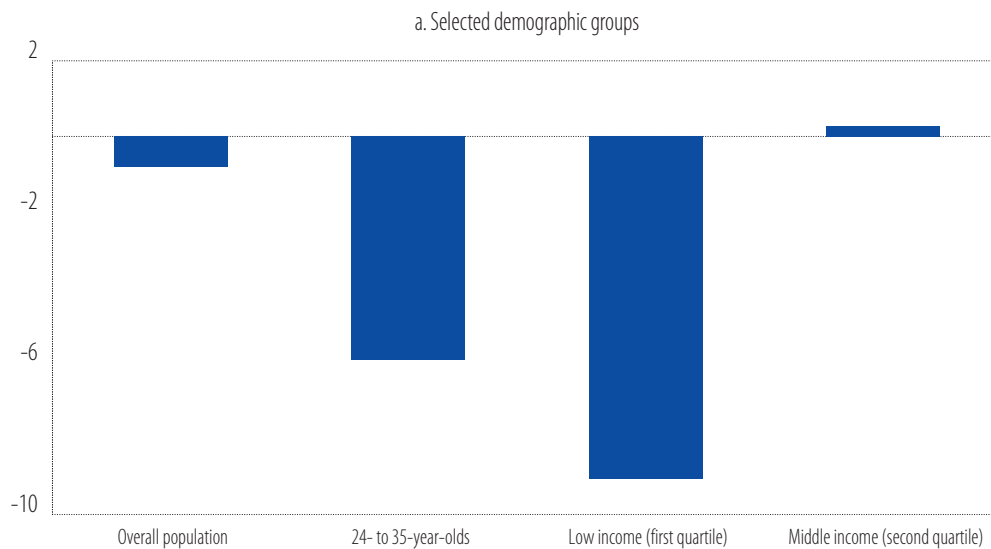
Source: OECD.

**Housing price increases greatly benefited homeowners.** Housing is the largest component of households' wealth. Therefore, as residential property experienced larger capital gains than other investments, households that held a large share of their wealth in real estate saw that wealth rise by more than those that did not own property or invested in other assets. Reflecting this development, the share of EU households overburdened by housing costs (those spending more than 40% of the household budget on housing costs) has steadily decreased in the last 20 years because interest rates

on mortgages have remained low and growth in household income has been robust, notably in Central and Eastern European countries.

**However, rising housing prices also reduced access to home ownership, particularly for younger generations and low- and middle-income households.** As house prices increased, access to housing became more difficult for some demographic groups, including renters, those that did not own a house before the price surge, or those that had to relocate to the most expensive cities. The home ownership rate for 24- to 35-year-olds decreased by 5.9 percentage points from 2005 to 2023, compared with 0.8 for the overall population (Figure 12a).<sup>34</sup> The largest drops in youth home ownership rates were recorded in Spain, Cyprus and Estonia. Among other strongly affected demographic groups, low-income households experienced a larger deterioration in home ownership than richer households. Ownership rates fell to 62% in 2023 from 71% in 2005 for poorer households (first income quartile), compared with a 2.5 percentage point increase for households in the fourth quartile of the income distribution. Access to home ownership worsened across most types of occupation, but the brunt of the impact was felt by workers in elementary occupations (Figure 12b). On the opposite end, managers and clerical support workers have increased home ownership rates over the last 20 years.

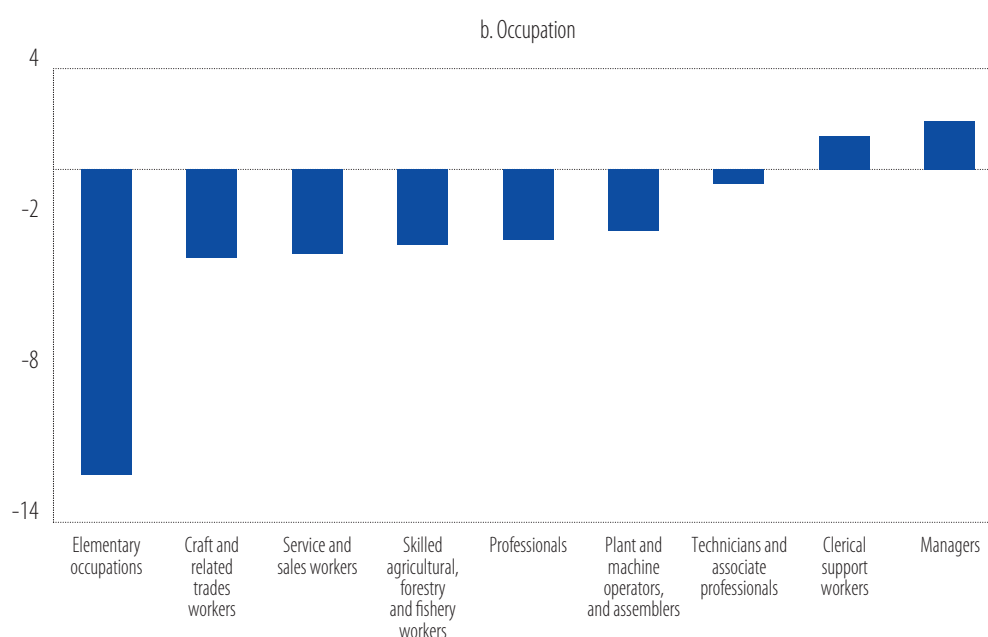
**Figure 12**  
Change in home ownership rates (EU average, in percentage points), 2023 vs. 2005



Source: EIB staff calculations based on EU-SILC.

Note: The following countries are included: Austria, Cyprus, Czechia, Estonia, Greece, Spain, Finland, France, Hungary, Italy, Lithuania, Luxembourg, Netherlands, Portugal, Sweden, Slovenia and Slovakia.

<sup>34</sup> When including only the population in the labour force (and therefore excluding people who are retired, studying or staying at home), the drop in home ownership rate between 2005 and 2023 is 3% for the overall population and 7% for 24- to 35-year-olds.



Source: EIB staff calculations based on EU-SILC.

Note: The following countries are included: Austria, Cyprus, Czechia, Estonia, Greece, Spain, Finland, France, Hungary, Italy, Lithuania, Luxembourg, Netherlands, Portugal, Sweden, Slovenia and Slovakia.

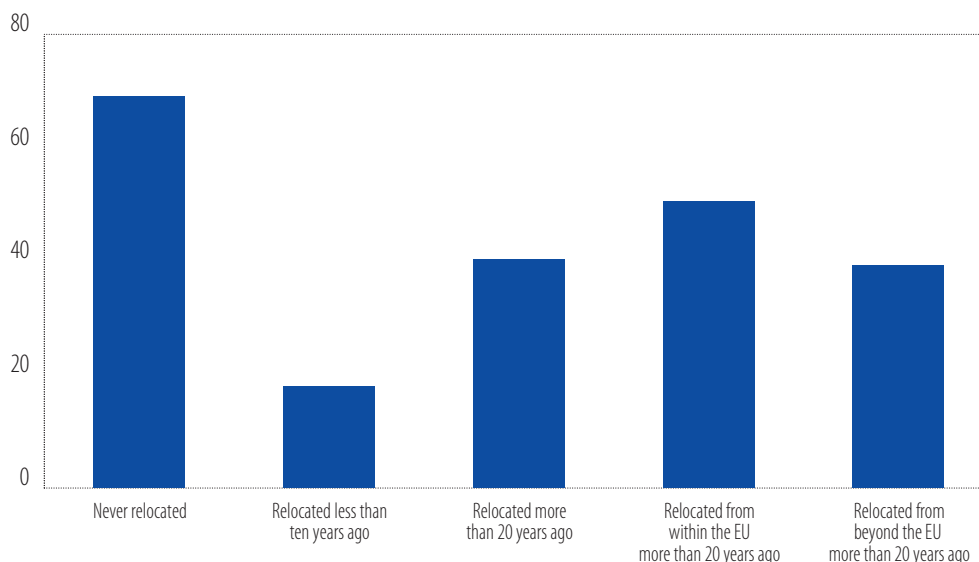
**People relocating within the European Union experience lower home ownership rates, even decades after they move.** People relocating to a new country have lower home ownership rates than people born in that country. Among people who relocated to an EU country less than ten years earlier, 18% own their home, compared to 69% of people who were born in that country (Figure 13). However, the gap in home ownership is present even when relocation lies far in the past. More than two decades after relocation, 40% of non-native residents own their home, well below the home ownership rates for locals. Relocating decreases the odds of owning a home even among people relocating within the European Union, for whom the rate of home ownership is 51%.<sup>35</sup>

**The heavy costs of renovation and energy efficiency retrofitting will limit the use of the current housing stock and contribute to high housing costs.** Half of the current housing stock in the European Union was built before 1980. In addition, about half of the EU housing stock has an energy rating of D or worse and requires renovation to be brought up to modern housing standards (European Commission, EU Building Stock database). Residential housing accounts for about 20% of greenhouse gas emissions, and heating remains a significant component of household electricity consumption. Despite significant improvements over the last decade, in 2023, 10.6% of EU residents were unable to keep their homes adequately warm – 3.7 percentage points higher than the historical low of 6.9% in 2021, as the energy crisis has increased the cost of heating. Raising the energy efficiency of current buildings could halve the emission intensity of residential buildings and reduce the financial burden of heating on households. However, the financial viability of such renovations has been compromised by rising material and construction costs, coupled with higher interest rates, which have collectively reduced the return on investment for these necessary upgrades (European Mortgage Federation, 2023). It takes more than 12 years to reap the financial benefits of energy efficiency renovations, with longer times to return on investment in many countries, including France, the Netherlands, Bulgaria and Germany (European Mortgage Federation, 2023). In addition, although retrofitting and energy

<sup>35</sup> The findings may also reflect a compositional effect linked to the relocation of workers from high-home ownership countries in Southern Europe and in Central and Eastern Europe to low-home ownership countries in Western and Northern Europe.

efficient building techniques reduce energy spending later in the life of a building, they entail upfront costs that may be difficult for households to bear, particularly vulnerable groups.

**Figure 13**  
Home ownership rates across different groups (in %), 2021-2023



Source: EIB staff calculations based on EU-SILC.

Note: The following countries are included: Austria, Belgium, Cyprus, Czechia, Germany, Denmark, Greece, Spain, Finland, France, Italy, Lithuania, Netherlands and Portugal.

## Labour market participation as a driver for inclusion and productivity growth

**Access to the labour market and to quality jobs is key for social inclusion.** However, not everyone who wishes to participate is equally equipped to contribute to the workforce. The ability of workers to adapt to fast-changing work environments is critical amid the green, digital and demographic transition. But work-related adaptability and resilience are set up early in life by high-quality education, which also determines future participation in lifelong learning and skill transformation. The level and quality of education, together with factors like age, gender, mobility, access to affordable and high-quality housing, and public policies targeting better labour market access, influence the link between personal circumstances and individual achievements, and thus labour market outcomes.

### Education, childcare and urbanisation improve labour force participation

**European labour markets show long-term trends of increasing labour force participation, and economic downturns have barely slowed the process.** This development is broadly based on a change in the composition of the labour force, with the rising share of highly skilled workers driven by increasing educational attainment and workforce attachment, supported by a growing service-oriented economy. Higher educational attainment and quality throughout life, gradual improvements in the availability of childcare and flexible working time arrangements, as well as widespread changes in retirement rules, have led to stronger workforce attachment of women and older workers. Moreover,

pandemic-induced changes to working life like the spread of teleworking, helped by a massive rollout of digitalisation, have had a positive impact on flexibility and social inclusion.<sup>36</sup>

**The ongoing increase in workforce participation and significant shift in its makeup can be attributed to several key enabling factors.** On average, obtaining higher levels of education, the availability of childcare, agglomeration effects around urban areas with more job opportunities – and, to some extent, structural changes like increasing service employment and openness to trade – have strongly supported overall labour force attachment (Figure 14).<sup>37</sup> Women aged 25 to 54 in particular seem to have profited from higher educational attainment, better access to childcare and greater flexibility in work arrangements, which has influenced their willingness to participate in the labour force. Taken together, these factors have accounted on average for about 50% of the increase in working-age female labour participation across EU countries since the mid-2000s. Apart from childcare, these factors also contributed to the rising labour force activity of working-age men, albeit less dramatically. Moreover, urban areas provide a wide range of employment opportunities and tend to foster employment by attracting a highly skilled workforce, which is associated with high levels of productivity. However, while concentration effects of employers and knowledge externalities of jobs in cities have an undeniable impact on economic dynamism, the related constant inflow of potential workers may also put strain on already tight housing markets, which can impair the efficient allocation of labour.<sup>38</sup> Common components across countries over time, as captured by year effects, like increasing life expectancy or changes to early retirement rules, have drawn men and women across all age groups into the labour force.<sup>39</sup>

**Workforce attachment has also shown to be responsive to tax and benefit systems and labour market institutions.** Social security systems and pension schemes provide essential insurance against illness and unemployment or support a decent lifestyle in older age, and are thus inextricably linked to the well-being of workers and retirees. However, higher labour tax wedges<sup>40</sup> and social benefits, like substantial long-term support for the unemployed or more generous pension benefits, tend to be associated with lower labour force attachment – particularly for men at a working age, but also beyond.<sup>41</sup> Conversely, active labour market policies that facilitate the job-matching process<sup>42</sup> and support wage-setting institutions, like better coordinated wage bargaining through unions,<sup>43</sup> are important tools for including older workers in the labour force.

36 Growing evidence shows that work-from-home schemes provide some relief from the burden of care time at home for women and foster the inclusion of people with disabilities. Touré (2023), for instance, shows that since the pandemic, amid an overall increase, more women than men have teleworked in OECD countries, which may have helped to increase women's bargaining power and improve gendered work-life balance. Ameri et al. (2022) find that pandemic-related telework was higher among disabled women than men, with the likelihood decreasing with age.

37 Based on a panel regression framework, the underlying specifications also account for cyclical factors, year effects common across countries, and control for serial and spatial dependencies through the Driscoll-Kraay estimator.

38 Davis and Dingel (2019), for instance, view cities as the primary location for highly skilled workers to learn and exchange ideas, which increasingly draws educated labour to urban areas, driving up housing prices.

39 The same specification has also been estimated for male and female workers aged 54 to 64. These results confirm the main findings.

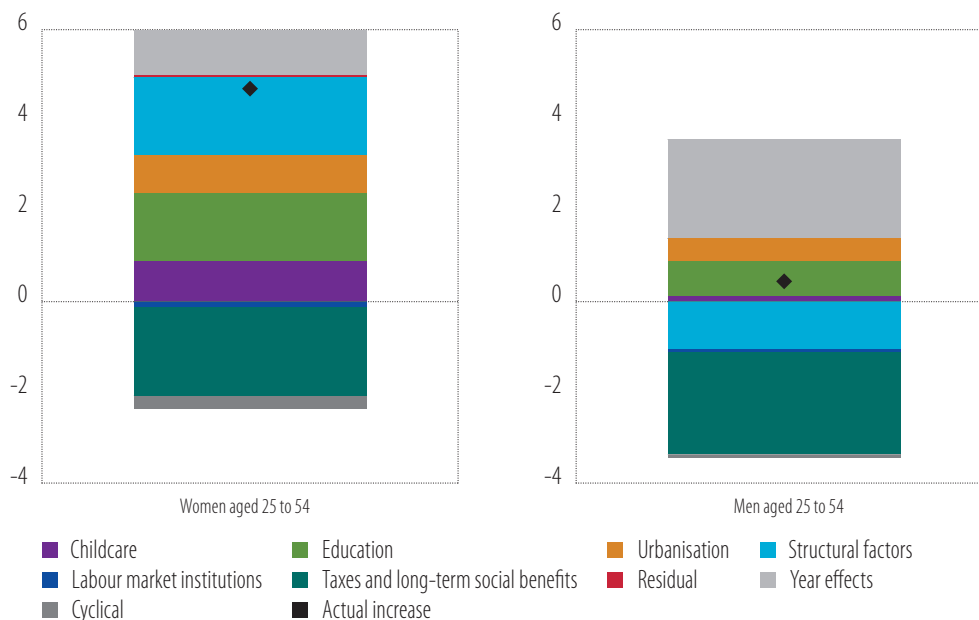
40 A tax wedge measures the difference between the total labour cost of employing a person and the worker's net earnings.

41 See, for instance, Gal and Theising (2015) for the literature on the relationship between social benefits and labour force activity.

42 Renewed evidence for the supportive role of active labour market policies and of tighter social benefits in engaging in the labour market, for example for Germany, comes from Weber (2024).

43 More coordinated wage setting tends to allow for a greater role of unions in accommodating the economy's position in the business cycle in the wage bargaining process (Bassanini and Duval, 2009).

**Figure 14**  
**Factors contributing to changes in labour force participation (EU average, in percentage points), 2007–2019**



Source: EIB staff calculations based on Eurostat, OECD.

Note: Estimations are based on a sample of 20 EU countries for the period of 2007-2019. Childcare refers to public spending on child daycare as a percentage of GDP. Education includes tertiary and below secondary education. Structural factors include the relative share of industry to services employment, trade openness, and gross domestic expenditure on R&D. Labour market institutions combine the contributions of expenditure on active labour market policies, long-term unemployment benefits, and the degree of wage setting coordination. Taxes and long-term social benefits include the labour tax wedge and the generosity of pension benefits. Cyclical factors such as the lagged output gap or the unemployment rate control for business cycle effects. Actual increase refers to the achieved average increase in the labour force participation rate for men and women across the 20 sample EU countries.

## Childcare is an important factor in female labour force participation

The European Union aims to decrease the gender employment gap to 5.6 percentage points by 2030, down from an average of 10.2 percentage points in 2023. For instance, around 22% of NUTS 2 regions<sup>44</sup> had already achieved this target in 2023, while the rest still faced significant challenges and entry barriers for women, including unpaid care responsibilities, inadequate childcare, hiring discrimination, underrepresentation of women in leadership, tax disincentives and occupational segregation into activities characterised by lower wages or lower opportunities for career development.<sup>45</sup>

**Women who lack care facilities are less likely to work than their peers.**<sup>46</sup> In 2022, 28% of EU households contained children up to five years of age, and 59% had children under 15. Among women with children under the age of six, 65% were employed, compared to 70% of women without young children and 90% of men with children under the age of six. A shortage of care facilities is a key factor constraining labour

<sup>44</sup> NUTS refers to the Nomenclature of Territorial Units for Statistics, or La nomenclature des unités territoriales statistiques in French. It is used to reference the administrative divisions of countries for statistical purposes.

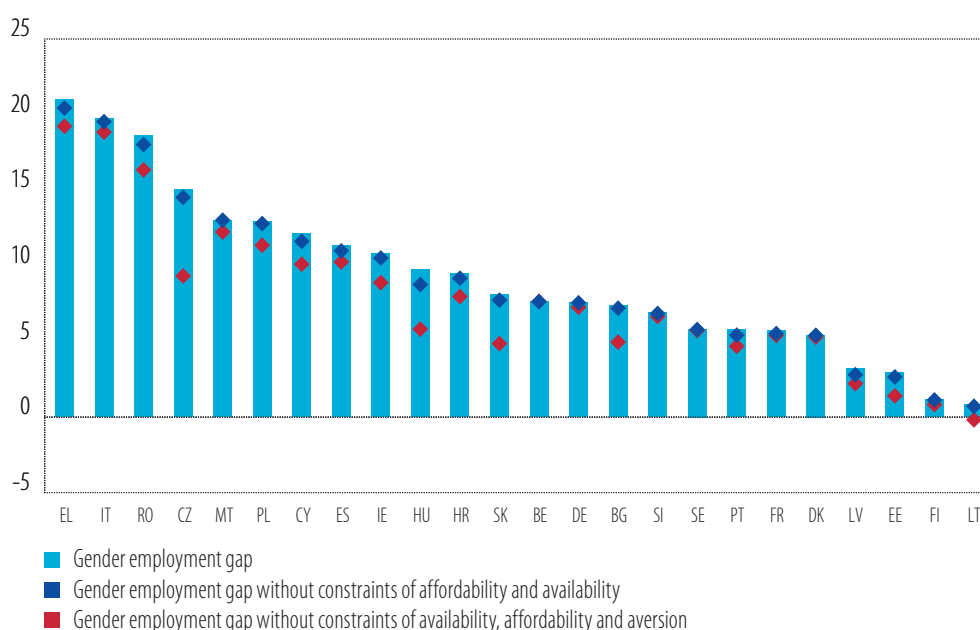
<sup>45</sup> Using data from the Spanish Labour Force Survey (LFS), Cervini-Plá and Silva (2024) found that parents without childcare constraints experience a much lower gender gap in labour outcomes, with career breaks longer than two years having the most detrimental impact on labour supply. Recent research also shows that information constraints regarding the financial consequences of reduced hours affect mothers' labour supply decisions (Costa-Ramón et al., 2024).

<sup>46</sup> Results are based on the analysis of EU LFS microdata using the latest available year, 2022.

supply, to the extent that there are women who would like to work but cannot do so right away because they have to care for their children. Out of the women aged 20 to 64 with small children who would be available to work if they were offered care facilities, 9% report a lack of childcare facilities, 8% complain about affordability, 69% prefer to care for their children themselves (arguably including cases in which they are not happy with the quality of such facilities), and 13% cite other factors.

**A policy simulation suggests that addressing these barriers could significantly narrow the gender employment gap (Figure 15).** For instance, improving the availability and affordability of childcare in the Baltic states could reduce the gender employment gap by over 12% on average, and in Hungary by more than 10%. With broader reforms targeting the quality of childcare (and assuming that cultural norms do not stand in the way of sending children to childcare facilities), an additional three EU members (Portugal, Slovakia and Bulgaria) could reach the 2030 gender employment gap target of 5.6 percentage points. Remarkably, the gender employment gap could turn negative in Lithuania, and almost disappear in Finland, with reductions exceeding 30% in six other countries, including Estonia, Hungary and Czechia.

**Figure 15**  
Reducing the gender employment gap (in percentage points), by eliminating care facility constraints



Source: EIB staff calculations based on 2022 EU Labour Force Survey (LFS) data.

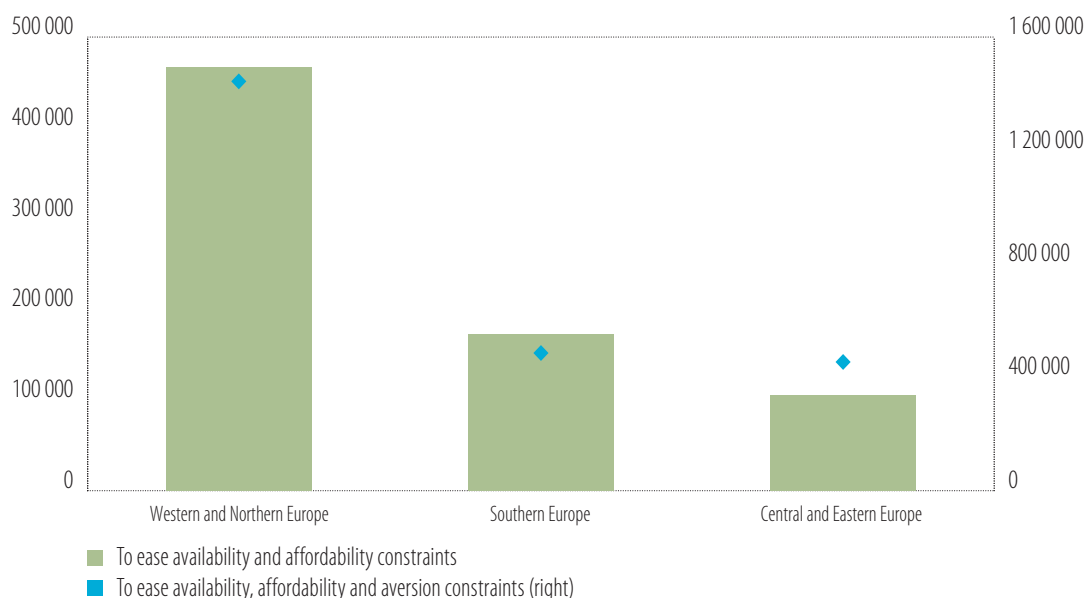
Note: The gender employment gap without affordability and availability constraints is calculated considering the potential growth in female employment if women were able to rely on care facilities that are currently unavailable or unaffordable to them. The gender employment gap without constraints of availability, affordability and aversion is calculated considering the potential growth in female employment if women were able to rely on care facilities that are currently unavailable or unaffordable, or which they currently prefer not to use.

**A significant share of women with young children who are employed part-time express a desire to work more hours but face constraints.** In countries in Western and Northern Europe and in Central and Eastern Europe, 34% of women working part-time report such constraints, compared to 13% in Southern Europe. Care responsibilities remain the primary barrier, affecting 61% of these women. Of those constrained, 20% point to the availability or affordability of childcare, while 68% indicate a preference to provide care themselves.

**In any employment situation, women are affected by personal, household and institutional circumstances, including the role of childcare.** Econometric analysis confirms the main determinants of working status (not working, working part-time or working full-time): childcare constraints, the number of small children and the presence of elderly people in the household, the level of education, general health and immigrant status. Average, bad or very bad health increases the probability of not working by 14%, 35% and 45%, respectively, and decreases the probability of working full-time by 16%, 34% and 39%, respectively. Removing childcare constraints like availability and affordability would decrease the probability of women not working or working part-time by 20% and 35%, respectively, while increasing the likelihood of full-time employment by 55%. In addition, taking measures to help women overcome an aversion to childcare would yield comparable results.

**Eliminating childcare barriers would require between 745 000 and 2.3 million additional places in childcare across the European Union.** Childcare constraints are particularly acute in rural areas, in households with small children, and for women with immigrant backgrounds. These groups report higher incidences of constraints related to availability, affordability, or aversion to childcare. Another policy simulation exercise considers women constrained by childcare facilities regardless of their employment status and quantifies the number of missing places in childcare facilities, based on the number of children under six in their households. Moving beyond the 745 000 additional childcare places associated with the availability and affordability constraints, that number would rise to 2.3 million if aversion to childcare was also addressed and cultural barriers to using childcare facilities for young children no longer played a role. Around 63% of these missing places would be required in Western and Northern Europe, followed by Southern Europe (23%) and Central and Eastern Europe (14%).

**Figure 16**  
**Number of childcare places missing to address existing childcare constraints**



Source: EIB staff calculations based on 2022 LFS data.

**Tackling childcare constraints could yield substantial economic benefits, including enabling women to enter the labour market and harness the potential of highly skilled women.** For instance, Bach et al. (2020), using German data and microsimulations, demonstrated that investments in childcare facilities could potentially be self-financing through increased income tax revenue and

reduced benefit payments. This holds even without accounting for long-term gains such as higher female wages and shorter career breaks. The cost-effectiveness of investments in childcare or care facilities depends largely on country-specific factors, including childcare benefits or tax incentives, warranting a country-by-country approach.

## Closing skill and gender gaps is vital for an inclusive green transition

**The green transition will have far-reaching effects on labour markets in general, and skill requirements in particular.** With the European Union and national governments increasing their commitments to tackling climate change and making economies and societies more resilient, there is a growing need to seize opportunities, but also to identify the risks to workers associated with the emergence of new jobs and the transformation of old ones. Placing skills at the centre of the green transition is thus essential for addressing already widespread labour shortages, supporting workforce development, and promoting social inclusion amid the gradual emergence of a green economy.

**Green jobs are on the rise and benefit workers who have them.** From 2018 to 2024, jobs related to the greening of the economy grew steadily, at around 5% per year on average across EU countries, according to recent data from LinkedIn. At the same time, these jobs expanded at nearly twice the rate as the number of workers with the skills to occupy them, and the pace is growing.<sup>47</sup> These jobs have multiple benefits for workers. Beyond the positive skill premium<sup>48</sup> – when workers with specific skills are rewarded with a premium on the market – green jobs improve workforce attachment, as they are predominantly full-time positions with a permanent contract. They have also proven to resist times of economic uncertainty (Barslund et al., 2024).

**The green transition tends to favour higher skilled workers who can cope in ever more complex jobs.** While the economy's shift towards a stronger service orientation with knowledge-intensive jobs already favours well-educated workers – as evidenced by the changing composition of the labour force – the ongoing green transformation is having an even more profound impact on workers' skill requirements and knowledge base. Information processing skills for acquiring new knowledge and cross-functional skills, such as complex problem solving and decision-making, have become increasingly important in a greening economy characterised by rapid technological advancement (OECD, 2024a). These skills are inherent in most high-skill jobs, and especially in STEM-related jobs, with only small differences in the skills required. For low-skilled workers, new green jobs will demand much higher levels in all skills than other job categories.

**Younger, more educated workers currently gain the most from demand for green skills.** The average growth in green skills is highest among workers of the younger generations and decreases with age (Figure 17).<sup>49</sup> Millennials born from 1981 to 1996 have seen the strongest increase in the share of green talent, which has been growing by an average of about 13% per year since 2015. People aged 44 to 59 have also exhibited significant growth of necessary green skills, at a rate of 10% per year. The baby boomer generation currently in the process of retiring shows the least expansion in green talent.

**This age inequality appears to be related to the rising trend of higher education among younger generations.** From 2015 to 2021, the average annual EU-wide growth rate of workers with green skills and at least an undergraduate university degree was only slightly higher than that of workers with only upper secondary education (11% vs. 9%). However, within countries, differences in favour of tertiary education are more pronounced and show higher growth rates (Figure 18). Romania and France, for

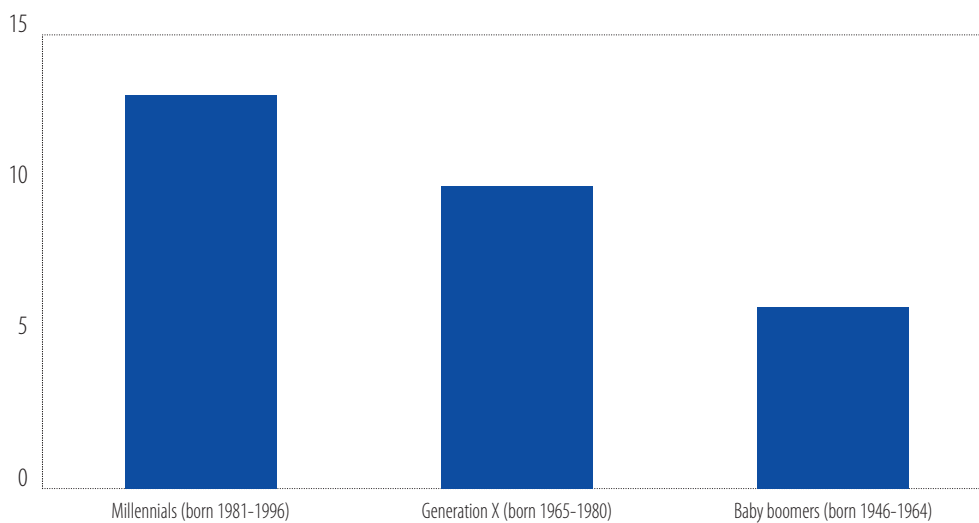
47 Based on LinkedIn (2024), in 2023 and 2024, demand for green skills grew by around 12% while the number of workers with green skills rose by 8%.

48 See, for example, Bluedorn et al. (2023). Recent evidence even shows a higher premium for women than for men, unlike for non-green jobs (Alexander et al., 2024).

49 LinkedIn has coined the term "green talent" for workers who have either added green skills to their LinkedIn profile or who work in an occupation requiring a relatively high intensity of green skills.

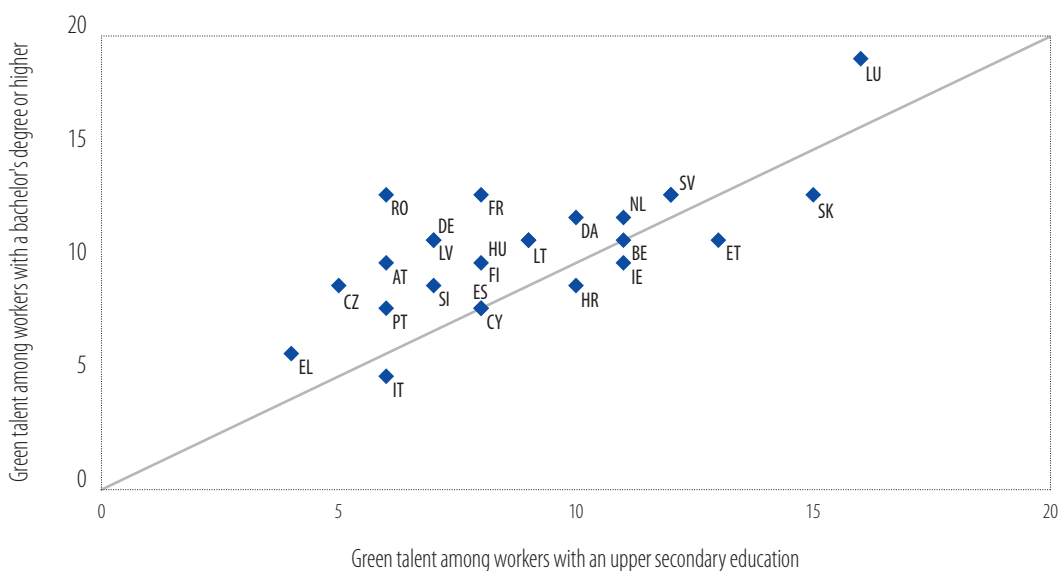
instance, have an average growth rate of 13% for green talent with university education, while the rate is only 6% in Romania and 8% in France for green talent with an upper secondary education level. At the same time, in certain countries, many workers can also access quality, well-developed vocational education that may help them access these jobs, which could explain some of the high growth rates of talent below the level of tertiary education.<sup>50</sup>

**Figure 17**  
Annual average growth in share of global green talent (in %), 2015-2021



Source: EIB staff calculations adapted from LinkedIn.

**Figure 18**  
Annual growth in the share of workers with green skills (in %), by education level 2015-2021

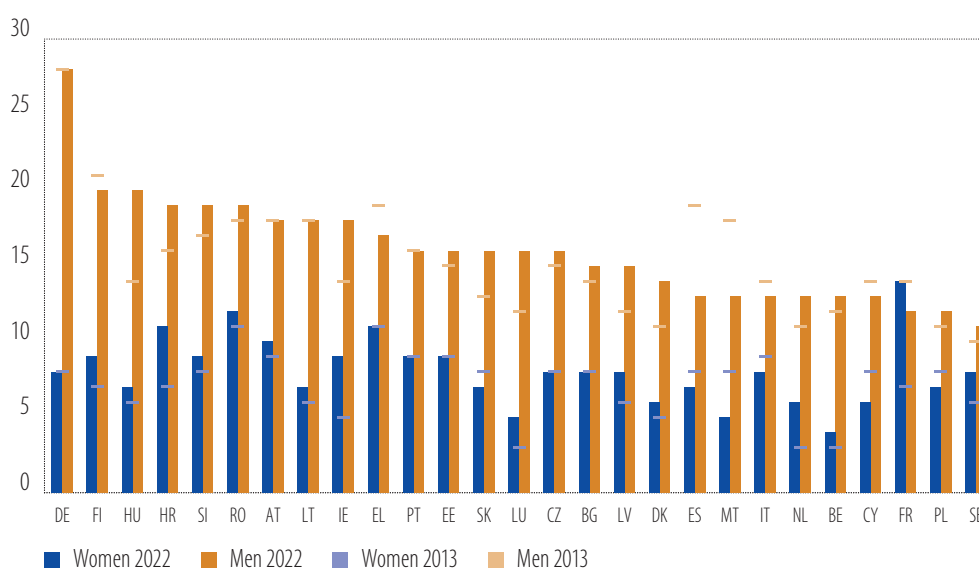


Source: EIB staff calculations adapted from LinkedIn.

<sup>50</sup> In Belgium, for instance, more than half of the workers in green shortage jobs have a secondary education level (Barslund et al., 2024).

**Closing skill and gender gaps is essential for making the green transition more inclusive.** The emergence of green jobs and the related demand for green skills highlights a discrepancy, which is that women tend to achieve higher educational outcomes than men<sup>51</sup> but are less likely throughout the European Union to hold green jobs. According to LinkedIn, and notwithstanding an increase in female green talent,<sup>52</sup> the current gender gap of 67 women for every 100 men who are considered green talent has remained roughly unchanged since 2015. Moreover, despite requiring a relatively broad set of skills, about 60% of green jobs tend to require some form of technical or STEM skills, which are essential for successfully transitioning into a green economy. Therefore, the gender gap likely reflects the gender disparity in STEM education. As Figure 19 shows, the graduation gap in STEM fields between men and women has not only persisted but in many cases widened over time. While across most EU countries fewer women graduated with STEM degrees (relative to all other disciplines) in 2022 than in 2013, the number of male graduates predominantly increased.

**Figure 19**  
STEM graduates across EU countries, by gender



Source: EIB staff calculations based on 2022 LFS data.

## Promoting housing affordability is vital to preventing the misallocation of labour

**The trend of rising home prices could also affect individual labour market outcomes and labour mobility.** Housing difficulties and unemployment are closely intertwined. Spells of unemployment could result in housing difficulties, but the reverse is also true. The lack of a stable, healthy home environment has a negative impact on labour market outcomes, even many years after the fact. A lack of affordable housing also creates barriers and disincentives for labour mobility, exacerbating skill shortages for firms and reducing overall labour market efficiency.

51 Delaney and Devereux (2021) and references therein.

52 Some countries in Europe have, however, made progress in closing the gender gap, including Ireland, the Netherlands, Denmark and Malta (LinkedIn, 2023).

**There is some evidence that housing shortages increase labour misallocation and have a negative impact on growth and productivity.** In several EU countries, and in particular in European cities, there are substantial rigidities in the housing supply.<sup>53</sup> In general, housing supply rigidities deter migration, raise wages and constrain the expansion of employment in dynamic regions.<sup>54</sup> For instance, in the United States, relaxing housing constraints in just three highly constrained housing markets (New York, San Francisco and San Jose) would increase aggregate GDP by 9% with perfect mobility and 3.7% with imperfect mobility (Hsieh and Moretti, 2019).<sup>55</sup> More research is needed to establish how these results would apply to the European Union. It is still unclear whether the GDP implications from housing restrictions would be larger or smaller for the European Union than they are in the United States. On the one hand, housing restrictions are higher (including due to higher population density and lower land availability). Relaxing them might therefore lead to greater gains. On the other hand, differences in productivity between regions and workers' willingness to relocate are lower in the European Union, which would suggest lower gains from relaxing housing constraints. Relocation could also reduce wage inequality between poorer regions and the richest ones.<sup>56</sup>

**Fast-rising rents dilute workers' incentives to participate in productive labour markets and could therefore dampen aggregate output.** When rents increase faster than wages, income gains accrue disproportionately to landlords and homeowners, to the detriment of renters and first-time buyers. This increases income inequality (net of housing costs) and reduces the incentives and ability for workers to relocate. From 2005 to 2022, the fastest growing regions in the European Union experienced average annual real productivity growth well above the EU average: about 2% for regions in the upper quartile, compared with an EU average of 0.5%.<sup>57</sup> Larger productivity gains were concentrated in regions in Central and Eastern Europe (Bulgaria, Poland, Romania, etc.) and large cities (Warsaw, Bucharest, Dublin, Sofia and Riga). Productivity gains benefited workers living in those regions. In 2005-2023, an average annual labour productivity growth that was one percentage point higher than the EU average was associated with an annual disposable income growth that was 0.2 percentage points higher. However, during the same period, rents increased disproportionately in many of these regions. In particular, outside of the euro area, workers in fast-growing regions (the upper quartile by labour productivity growth) paid on average 19% of their income in rents in 2023 – 6 percentage points more than in 2005 (up to 10 percentage points more in some regions). As a larger part of the benefits of high productivity growth are absorbed by higher rents and house prices, incentives for workers to relocate to the most productive regions are diluted.

**For people who experienced homelessness, poorer labour market outcomes can persist for many years.** In the European Union, more than 13 million people have experienced housing difficulties in the last five years. Those people were also more likely to be unemployed (17%, compared with 8% among the rest of the population in 2023, see Figure 20). Higher unemployment rates were also observed among people who experienced housing difficulties more than five years ago (16%). Of course, unemployment may itself be a cause of housing difficulties. When restricting the sample to people who experienced housing difficulties more than five years ago for reasons unrelated to financial circumstances, the unemployment rate is just as high (16%). Even among those who experienced housing difficulties in the past due to relationship or family problems, the unemployment rate is 14%.

53 Cavalleri et al., 2019; Bétin and Ziemann, 2019; Combes, Duranton and Gobillon, 2019.

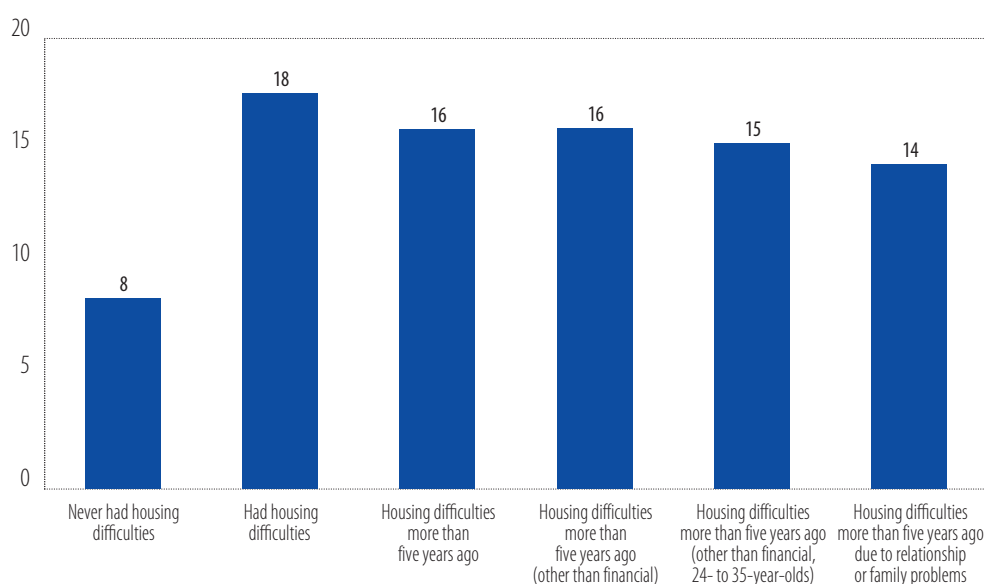
54 Ganong and Shoag, 2017; Saks, 2008; Eliasson et al., 2024; Glaeser and Gyourko, 2018.

55 See also Duranton and Puga, 2019, who reach similar conclusions using a different model.

56 This is true in the absence of agglomeration externalities. Gaubert (2018) estimates that half of the productivity differential between large and small cities in France is due to firm sorting, while the rest comes from agglomeration externalities.

57 Real productivity estimated as productivity per employed person, based on the ARDECO dataset.

**Figure 20**  
Unemployment rates (in %) among people experiencing housing difficulties, EU average 2023



Source: EIB staff calculations based on EU-SILC.

## Tackling labour market imperfections eases skill shortages for firms

**Among the investment obstacles cited by firms, the availability of skilled staff is of particular importance.** In every round of the EIB Investment Survey (EIBIS), respondents are asked whether nine factors constitute a major or minor barrier to investment. Since 2016, availability of staff with the right skills has been among the two most frequently cited obstacles to investment. But it is not just that many firms face skill shortages. The European Investment Bank (2024b) has shown that skill shortages affect firms that have good investment opportunities and that are more productive than the average. The analysis suggests that economy-wide productivity would increase if these skill shortages were remedied. This section explores in more detail the geographic correlates of skill shortages, as well as the role of wages.

**European firms continue to suffer from a shortage of skilled staff, but rarely provide training accordingly.** Over time, the share of European firms reporting the availability of skilled workers as a major long-term barrier to investment has increased to 51% in 2024, from about 38% in 2016, peaking at 62% in 2022 in the wake of the pandemic.<sup>58</sup> However, the share of firms that provided training, but also the average amounts invested, remained relatively constant over time. This includes the recovery period following the pandemic trough, which brought the frequency of training back to pre-pandemic levels, or below them in some cases. Only firms in select, highly innovative sectors have increased training in response to staff shortages. Reporting a significant shortage of skilled staff led to only a marginally higher share of firms providing training, compared to firms that did not declare skills to be a major investment barrier.

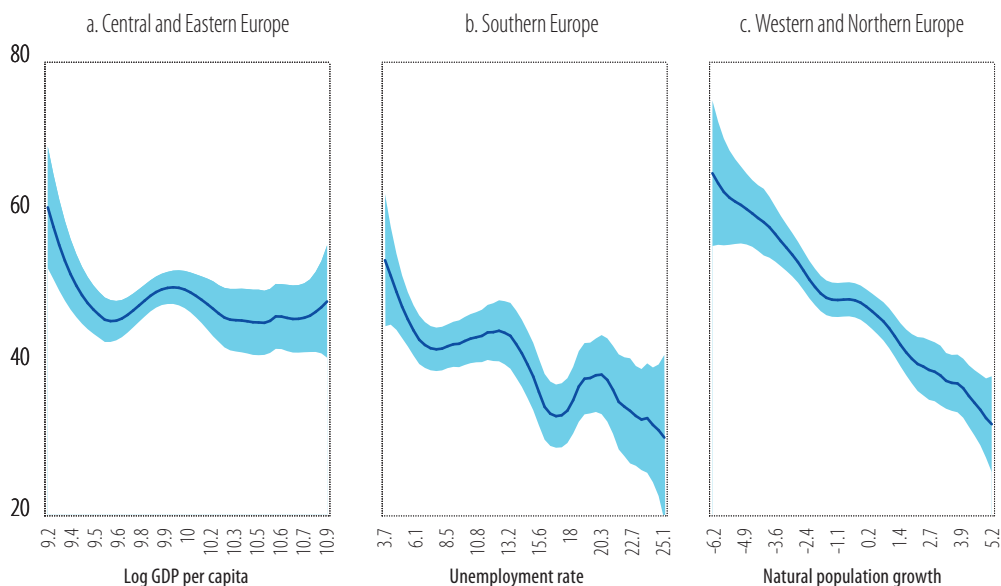
**The most salient drivers of skill shortages differ by region.** The European Union is economically diverse, so that the effects of the various mechanisms documented in Figure 17 tend to cancel out at the EU level. Specifically, Figure 21 presents the results of local linear regressions of the skill obstacle

<sup>58</sup> Figures are based on EIBIS waves from 2016 to 2024.

aggregated at the NUTS 2 level on log GDP per capita, the unemployment rate and the natural population growth rate.

**GDP per capita is a strong predictor of skill shortages in Central and Eastern Europe.** As the left most panel of Figure 21 shows, the average level of skill shortages is elevated. European labour markets are still imperfectly integrated, with language being a major barrier. However, Figure 21 suggests that when wage differences are large, people do move towards opportunity. The regions with the lowest GDP per capita are particularly affected – a pattern consistent with brain drain. Strong wage growth and improving quality of life in Central and Eastern Europe have the potential to bring back a large pool of highly qualified expats. It is essential, however, that the region continue to converge to the technological forefront, offering incentives for innovation and highly skilled jobs.

**Figure 21**  
Drivers of skill shortages across Europe (% of firms)



Source: EIB staff calculations based on EIBIS 2024 and Eurostat.

Note: Results from local linear regressions. The dependent variables are given by the percentage of firms at the NUTS 2 level that consider the availability of staff with the right skills to be a major obstacle to investment.

**In Southern Europe, the association between skill shortages and unemployment is particularly striking.** On average, in regions with substantial labour market slack – as reflected in a high unemployment rate – fewer firms complain of a lack of staff with the right skills. This appears to be a legacy of the European sovereign debt crisis. Conversely, regions with tight labour markets are characterised by a large share of firms citing skill shortages as a barrier to investment.

**In Western and Northern Europe, demography is strongly associated with the availability of skills.** The natural rate of population growth is calculated from the difference between the birth rate and the death rate. The majority of NUTS 2 regions in Western and Northern Europe have natural growth rates between -5 and 5 per 1 000 individuals. The right panel of Figure 21 documents a steep negative gradient between natural population growth and the availability of skills. It is important to note that the natural population growth rate is itself an economic outcome as individuals move towards opportunity.

**Firms experiencing skill shortages could offer higher wages to find the employees they need.** As argued by Fuest and Jäger (2023), higher wages will encourage employees to move towards highly productive firms. Firms that cannot pay higher wages, however, will eventually exit the market. Some

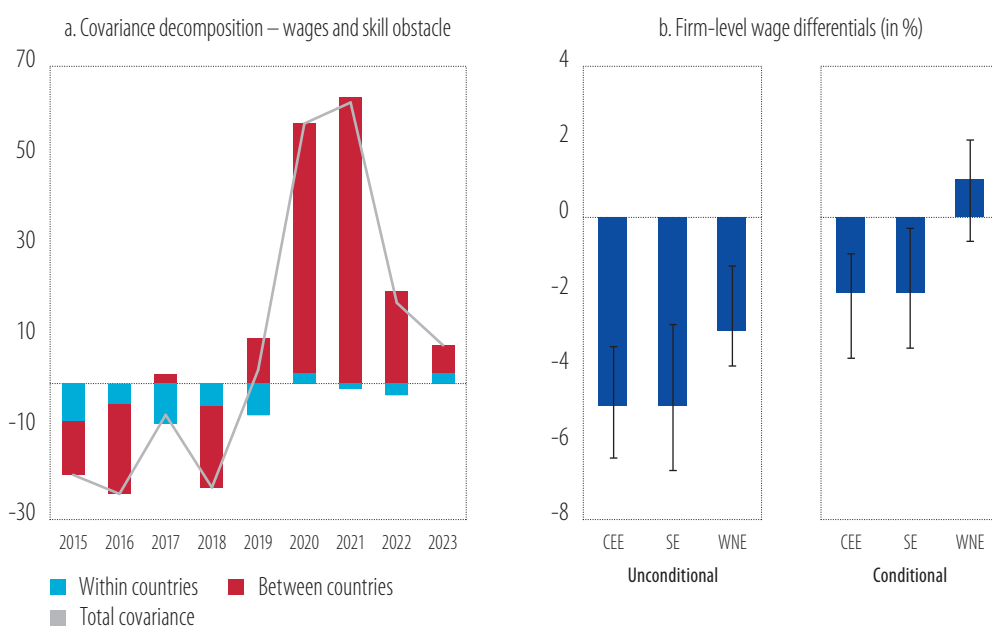
tasks with a marginal product lower than the going wage rate will be automated. Higher wages would also tend to increase the labour supply, as some individuals may decide to enter the labour market or increase their working hours.

**The wage-driven reallocation of skills between and within borders in the European Union has been distorted by the pandemic.** We decompose the relationship between regional wages and reported skill-related obstacles to investment into two parts: differences between countries and differences within countries (Figure 22).

**Between countries and regions, wage differentials matter for mobility. Post-pandemic, these differentials have narrowed.** Before the pandemic, countries and regions with higher wages tended to face fewer skill-related obstacles to investment, suggesting that higher wages were effective in moving talent between and within countries. Wages thus helped to allocate labour and skills more efficiently. Since the pandemic, however, this relationship has been impaired. Cross-border mobility restrictions and lockdowns impeded labour mobility to the extent that higher compensation, at least where feasible, was not enough to attract the right skills. While in the aftermath of the pandemic the free movement of resources was restored, and nominal wages in countries in Central, Eastern and Southern Europe substantially increased, wages have not yet reached the levels necessary to reallocate the skills between and within countries, to the extent this used to occur.

**Figure 22**

### Relationship between regional wages and skill-related obstacles to investment



Source: EIB staff calculations based on EIBIS and Eurostat.

Source: EIB staff calculations based on EIBIS and Bureau van Dijk ORBIS.

Note: Coefficient estimates and 95% confidence intervals from regressions of the average wage on the availability of skills as a major obstacle to investment. The unit of observation is the firm. Separate regressions are estimated for each country group. CEE is Central and Eastern Europe; SE is Southern Europe; and WNE is Western and Northern Europe.

**The EIBIS offers an empirical perspective on the relationship between skill shortages and wages.** Figure 22 shows predictions from a regression of the average wage on whether a firm experiences skill shortages. The unit of observation is the firm. The regression is estimated separately for each country group. The specifications referred to as “unconditional” have no firm-level covariates and exploit

variation between firms that operate in the same country, at the same time, in the same industry. These specifications can be interpreted as capturing the perspective of the employee, as they inform the decision to work for a particular company. The specifications labelled “conditional” control for the structure of production and the financial health of the company.<sup>59</sup> They capture the average wage that the firm can be expected to pay.

**The results indicate that firms experiencing skill shortages pay lower wages on average.** In Central and Eastern Europe and in Southern Europe the difference exceeds 4% and is thus non-negligible. In Western and Northern Europe, the wage difference is smaller but still statistically significant. It is therefore not surprising that these firms find it difficult to attract workers. Moreover, in Central, Eastern and Southern Europe, firms experiencing skill shortages pay lower wages even after controlling for their economic and financial structure. This raises the question of why these firms do not simply pay higher wages to attract the employees they need.

**Labour market imperfections may limit the ability of wages to address skill shortages.** Taxes and social security contributions drive a wedge between the wage firms pay and the wage workers earn. Empirically, however, the wage difference between firms with and without skill shortages does not vary significantly with taxes and social security contributions. Large employers may benefit from local monopsony power, which may enable them to push wages down (Manning, 2003 and 2021). This possibility cannot be investigated with EIBIS data. However, monopsonists could share their rents with employees to address skill shortages. A methodological caveat is that the specifications underlying the results in Figure 22 do not control for employee characteristics. Hence, individual workers may receive a wage commensurate with their skills even though the average wage in the firm is low.

## Green, digital and demographic challenges call for better inclusion across regions

**Increasing differences across regions has become a visible feature of the economic convergence process.** The rapid process of catching up in many European regions has been disrupted by a series of shocks (pandemic, energy crisis) in recent years. Although per capita income and employment across the European Union have risen, the ongoing convergence process of many regions has not brought the same benefits to all. The gap between capital and non-capital regions within individual countries, which emerged after the global financial crisis, has persisted, and has become more entrenched in some EU members (Figure 23a).<sup>60</sup> The different intra- and inter-regional economic performances are the result of a variation in the factors that drive structural competitiveness, and aspects like economic structure or overall education levels, which influence development differently from region to region. At the same time, accompanying social inequalities (for example, diverging levels of well-being or social and workforce inclusion) have materialised as well, and have led to different realities of social inclusion and labour market opportunities.<sup>61</sup>

**Recent socioeconomic shocks have had uneven regional consequences and have contributed to multiple challenges for capital and non-capital regions.** A widespread slow-down in labour productivity and lower innovation, especially in the digital sphere, are two examples of specific trends

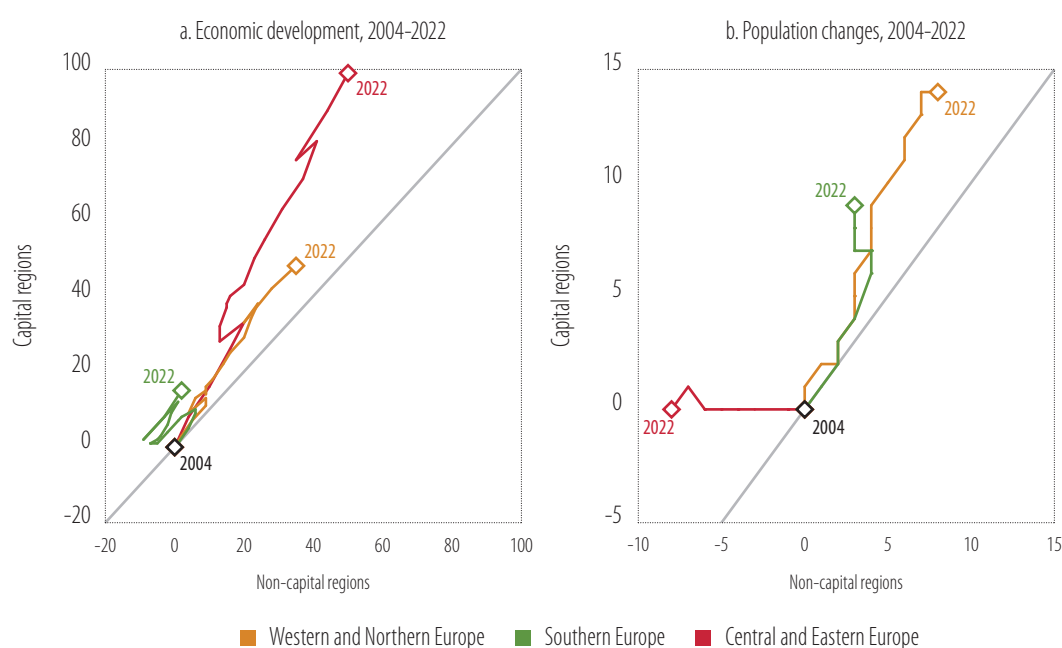
59 Specifically, the regressions control for labour productivity, the capital labour ratio, return on assets, leverage, fixed asset growth over the last three years, firm size and age.

60 The NUTS 2 GDP level of some capital regions may be overestimated due to daily commuting in by workers who live in other regions. However, there is no simple method of adjusting the underlying regional data.

61 For example, see an analysis of developments of a traditionally industrial region in Belgium in Bisciari (2024) or the heterogenous effects of EU cohesion policy across regions in Di Caro and Fratesi (2022). Consequences of regional developments and their implications for the political process are analysed in Rodríguez-Pose et al. (2024).

that have affected regions in the aftermath of the global financial crisis.<sup>62</sup> These trends, in combination with more rigid labour market structures and less forward-looking institutions, have negatively affected competitiveness and depressed economic development. Additionally, the necessary structural adjustments stemming from the ongoing green and digital transformation pose the next challenge for many regions across Europe,<sup>63</sup> resulting in the emergence of development traps<sup>64</sup> and talent gaps. The lack of adequate physical and digital infrastructure, gaps in the availability of important public services, and insufficient funding of local authorities can also be added to the list of obstacles. Unsurprisingly, the deepening divide between capital and non-capital regions – noticeable, for instance, in indicators measuring (industrial) production, output and real wages – has been discernible in population movements for quite some time (Figure 23b).<sup>65</sup> Particularly in poorer parts of Central and Eastern Europe, where slack economic performance, deteriorating socioeconomic factors and spatial barriers (such as remoteness, or limited access to services due to low population density) have prompted internal migration and emigration to other EU members.

**Figure 23**  
Developments in EU capital and non-capital regions (cumulative growth in %)



Source: EIB staff calculations based on Eurostat.

Note: Only countries with capital and non-capital regions available are included. Real GDP = real gross value added (GVA) at basic prices. Simple average over gross value added growth in NUTS 2 regions of selected countries, accumulated since 2004. The grey line represents the 45-degree line.

Source: EIB staff calculations based on data from the European Commission Directorate-General for Regional and Urban Policy (DG REGIO) and Eurostat.

Note: Only countries with capital and non-capital regions available are included. Some NUTS 2 population developments are estimates. See the original source. Simple averages over population growth in NUTS 2 regions of selected countries, accumulated since 2004. The grey line represents the 45-degree line.

62 Innovation measured in terms of international patent applications. See, for example, Fuest et al. (2024). See also International Monetary Fund (IMF, 2024) for the analysis of EU enlargement effects, structural reforms and global value chain links.

63 Such as traditionally industrial regions which, due to the green transition, are currently in need of substantial modernisation or facing a possible exit; or agricultural or climate-specific regions that are now more exposed to extreme weather events.

64 Diemer et al. (2022) provide the notion of regional development trap as a situation in which regions face significant structural challenges in recovering past dynamism or improving prosperity for their residents. Rodríguez-Pose et al. (2024) illustrate some implications of development traps.

65 This view does not explicitly control for immigration and emigration. Stemmer and Zdarek (forthcoming) provide a more detailed analysis of the dynamics behind the diverging regional trends.

## Social investment as a tool for improving well-being and competitiveness

**Policy interventions to protect and increase social inclusion will make a vital contribution to Europe's productivity growth, cohesion and competitiveness.** Going forward, labour market and social outcomes will be challenged by subdued growth, persistent labour shortages and demographic change. Strengthening the labour force and the development of skills will be key to tackling the challenges of an ageing society and making the climate transition and digital transformation a success. Ultimately, effective investments in social cohesion and well-being that help remedy the remaining inequality of opportunity will lay the foundation for a thriving and inclusive economy.

### Unlocking potential through social investment

**Social investments can have a positive long-term impact on labour market outcomes and economic growth by increasing employment, competitiveness and productivity.** Regional investments in skill development, for example, can lead to significant gains in employment and economic activity in the long run (see Box A). Similarly, social investments supporting inclusion have important long-term economic effects. Equal access to education, training, healthcare and affordable and sustainable housing leads to a more skilled and productive workforce.

**Social factors are critical catalysts in ensuring everyone benefits from Europe's prosperity. Effective social investment contributes to upward socioeconomic convergence.**<sup>66</sup> Investments in early childhood education and care, for instance, tend to promote upward economic convergence through their positive impact on the employment of mothers – and of their children, later in life.<sup>67</sup> Better schooling, higher social capital, less inequality and more inclusion tend to coincide with better social mobility.<sup>68</sup> Social inclusion also increases trust in both national and EU institutions.<sup>69</sup>

**By maintaining robust economic growth, the European Union can uphold its commitment to social cohesion and well-being, reinforcing its strength in these areas.** Overall, EU members tend to offer relatively strong protection of the most vulnerable through their social safety nets, including redistributive tax and benefit systems. At the same time, continued economic growth is key to sustaining the social policies that underly the European Union's global leadership in well-being. Economic growth generates the necessary resources to fund comprehensive social programmes, such as healthcare, education and social security, which are critical for maintaining high standards of living and social inclusion. A growing economy also creates jobs, reducing economic and non-economic risks to people's well-being.<sup>70</sup> Furthermore, sustained economic growth fosters innovation and competitiveness, ensuring that the European Union can continue to invest in and improve its social infrastructure.<sup>71</sup>

66 See European Commission (2024a) for evidence across a range of economic and social indicators.

67 Elango et al., 2015; Nieuwenhuis et al., 2019; Olivetti and Petrongolo, 2017; Nieuwenhuis, 2022; Narazani et al., 2023.

68 Chetty et al., 2014; Acciari et al., 2022; van der Weide et al. (2024).

69 There is a strong link between people's financial constraints and employment status and their trust in institutions (Eurofound, 2022a). Labour force participation and perceptions of unfairness may therefore shape voter priorities and turnout.

70 Among other things, income growth and inequality affect the level of social mobility, see Berman (2022), for example.

71 Aghion et al. (2019) show that innovation is positively associated with social mobility.

## Investing in quality, inclusive education

**The conditions for lifelong learning and labour market participation are set early in life.** That is why promoting improved performance in primary and secondary education is critical for setting people up to deal with rapidly changing workforce needs, and for longer working lives. Confronting the poor educational performance of disadvantaged students and schools is not just critical from a social inclusion perspective. Given the shrinking number of younger workers, it becomes increasingly important not to waste untapped potential by leaving groups of young people unequipped to participate in the workforce, in an increasingly demanding workplace for skills.

**A priority for social investment is ensuring high-quality primary and secondary school outcomes.** Here, policy should focus on improving the quality of teacher training and school curricula – including ensuring a sound basis for STEM and digital skills – and tackling disparities in education by making resource allocation more effective and better targeting allocations to underprivileged students and schools. Providing quality schooling would further broaden access to tertiary education.

**In a fast-changing labour market, further action should be taken to help higher education respond to labour market needs.** Education and training are essential for individuals to navigate the changing work environment and the skills demanded.<sup>72</sup> On the supply side, governments must align the incentives for higher education institutions to link their offerings to labour market demand. Collaboration between employers and tertiary institutions on course offerings and curricula can prepare students for the available jobs. Demand-side policies, in turn, can better link education with the workplace, for example, by expanding career counselling services in schools and tertiary education establishments. Generally, increasing employer involvement and workplace learning across the tertiary education system will better prepare students for jobs.

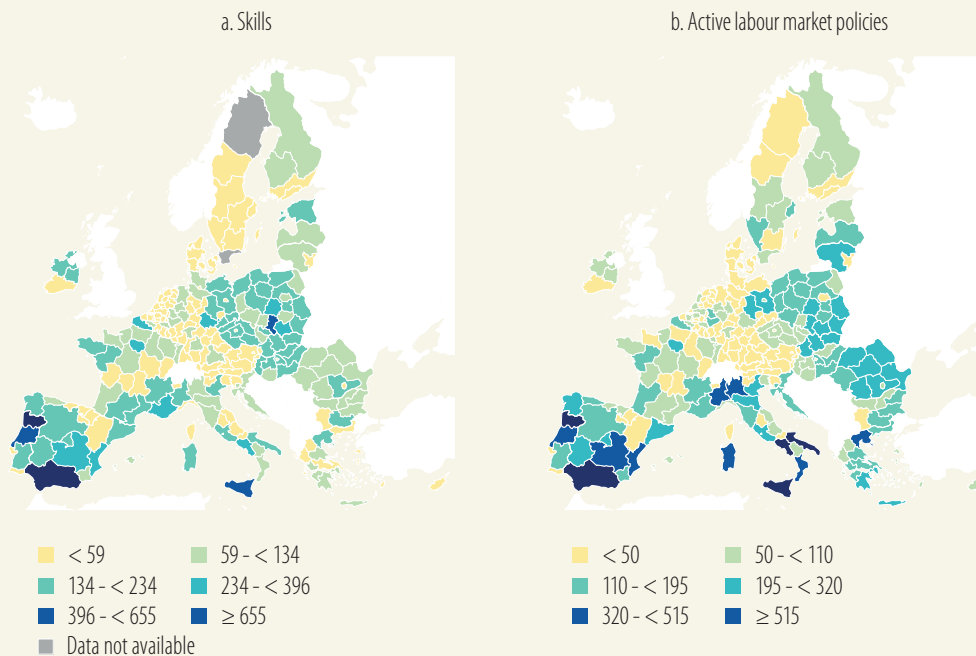
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72 See OECD (2019a) for further discussion.

**Box A****The macroeconomic impact of investing in skills and active labour market policies**

Investment in skills development and active labour market policies has been shown to boost employment, competitiveness and productivity. By equipping workers with relevant skills, facilitating job transitions and promoting the participation of underrepresented groups, such investments can drive economic growth and reduce labour market imbalances. Moreover, the current green and digital transformations make it even more important for individuals to acquire new skills, enhance their employability and address skill shortages. Doing so can lead to better labour market outcomes, stimulate economic growth and contribute to greater economic convergence within the European Union.

To assess the potential macroeconomic impact of investment in skills and active labour market policies, this box zooms in on the long-term effects of European Social Fund Plus (ESF+) spending on skills and active labour market policies during 2021-2027 (Figure A.1). The analysis<sup>73</sup> employs the RHOMOLO model, a dynamic spatial general equilibrium model calibrated using data from 235 EU NUTS 2 regions. The standard version of the model distinguishes between five labour income groups and is extended to allow endogenous labour market participation.<sup>74</sup> ESF+ funds targeting skills are assumed to increase labour productivity, while active labour market policy interventions 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. Both effects are assumed to decline over time at a rate of 5% per year.

**Figure A.1****Total amount of regional allocation of investment (EUR million), by region**

Source: Christou et al. (2024) using the RHOMOLO model.

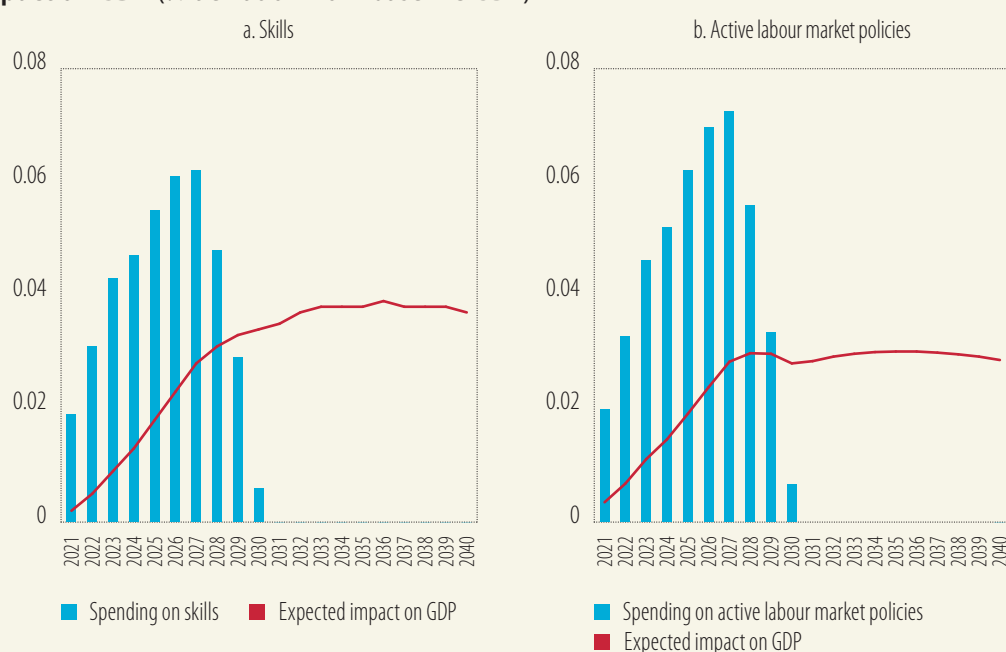
73 Described in detail in European Commission (2024a).

74 As in Christensen and Persyn (2022). In the standard version of the model, the only possible adjustment in the labour market is through changes in the unemployment rate. The modification introduced here allows for an additional transmission mechanism through the change in hours worked and the choice to participate in the labour market.

The investments targeting skills planned under the ESF+ are expected to increase EU GDP by up to 0.039% at its peak in 2036 relative to baseline GDP (Figure A.2). The impact remains positive and above its baseline after spending on the programme ends as the structural effects of increased labour productivity and corresponding adjustments by firms and households materialise, providing gains that are significantly larger than the original investment. Investments in active labour market policies are also projected to expand economic activity in the long term, increasing EU GDP by approximately 0.029% per year even 20 years after the start of the programme.

**Figure A.2**

**Spending on skills and active labour market policies (% EU GDP) and expected impact on GDP (% deviation from baseline GDP)**



Source: Christou et al. (2024) using the RHOMOLO model.

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 from investments in skills are projected to be +0.024% compared to the baseline, with the largest employment gains expected for the lowest income quintiles. Investments in active labour market policies also have a positive impact on employment-related earnings and social outcomes, as they are shown to improve employment outcomes in the decades following the original investment, with a peak of +0.11% expected in 2027.

## Stepping up adult learning and training

**Participation in lifelong learning in Europe is low, and it is critical for the private and public sectors to step up the availability and quality of this type of training.** Expanding lifelong learning matters even more for individuals and the economy in light of the shrinking and ageing workforces in many countries, and of the major ongoing economic shifts. This includes training workers in current roles and retraining those in declining sectors, or retraining people to switch to new technical professions and preparing them to adapt to new demands for green and digital skills. The rapid economic transition requires firms in Europe to invest more in training and skills, an area in which they are not doing enough.

**Time, resources and perceptions are barriers to formal training in firms.** New case study evidence shows that certified training tends to be available for health, safety and security, and to be job-related practical or technical training (OECD, 2021). Soft skills or IT skills are less likely to be offered. A lack of time is a major barrier for employees and management in undergoing or providing training (European Commission, 2024a). Financial constraints put an additional squeeze on what is possible, and a negative view of training is a further impediment. Although online training accelerated during the pandemic, it was more easily provided by large and/or multinational enterprises, while smaller firms faced more challenges. Much training takes place informally in the workplace. This type of learning is hard to measure but offers important opportunities for workers through initiatives like job rotations, mentoring and peer learning, and learning events like trade fairs and knowledge-sharing events on new technologies.

**Adult training can positively influence economic mobility.** For instance, studies have found large wage impacts for sectoral employment programmes and occupational programmes in high-demand areas.<sup>75</sup> Public provision should be tailored to equip workers with certified, transferable, in-demand skills. Assessing training outcomes is important internally in firms and, crucially, also for public programmes and external training providers. Here, the government can play a role in certification to ensure quality and assess outcomes, including the impact on earnings and employment rates.

**Policymakers have many tools at their disposal to support the acceleration of training for adults in the workforce.** Possible instruments include support through information and technical content and guidance for companies; building management capacity to plan training and use career development frameworks; and financial incentives for providing targeted training, for example by embedding skills development and training into public support programmes (such as the apprenticeship and quality job requirements put in place under the US Inflation Reduction Act). The private and public sectors face the challenge of continuously upgrading technological infrastructure to enable high-quality technical training and effective support for people navigating career changes.

## Developing skills for the green and digital transition

**Well-targeted policies can help to tackle the green and digital skills challenge.** Education and training targeted to current shortcomings can play a big role in bringing green and digital skills to existing professions and supplying companies with workers ready to take on new specialist roles (OECD, 2024a). Several European countries, for example, have increased the attractiveness of STEM degrees for young people with targeted policies, ranging from STEM-related university scholarships to a broad set of tailored measures in education in close collaboration with local firms (OECD, 2018). Expanding vocational education and apprenticeships can also ensure that specialisations are targeted to labour market needs.

**The needs of the green economy should be reflected not just in resources for younger people and people entering the labour market, but also in adult learning and career guidance.** Training plays a key role in enabling individuals and businesses to benefit from the green economy and is best served through active engagement by all stakeholders. Fostering strong collaboration between companies, private sector training providers and public education may help to build curricula that are tailored to job- and sector-specific needs and equip students with high-quality skills needed to find a job.<sup>76</sup>

<sup>75</sup> See Katz et al., 2022.

<sup>76</sup> See, for example, OECD (2019b) for an example on building teaching capacity.

**To end the underrepresentation of women in green and digital roles, skill development needs to happen equitably.** Policies should strengthen incentives for women to pursue STEM education. This includes exposure to math and sciences from an early age to counteract potential biases. STEM subjects should be taught across all levels of education, through gender-conscious curricula with specialised training for educators. The private sector should also contribute, for instance through mentorships and partnerships with firms.

## Reducing structural barriers to labour market participation

**Increasing opportunities for women to participate in the labour market involves providing access to childcare and parental leave and overcoming barriers inherent in the design of tax and benefit systems.** Policies should ensure the neutral treatment of second earners by the tax system.<sup>77</sup> Incentives could also include targeted support for childcare expenses, especially for those for whom these expenses prevent them from pursuing education or taking a job; ensuring adequate parental leave for both parents; and increasing the availability and accessibility of childcare, given the lack of availability and disproportionately high costs in some countries.<sup>78</sup>

**Active labour market policies can help people enter the workforce and keep their jobs.** Publicly supported programmes that focus on at-risk groups ensure the best use of resources. This includes measures supporting employment for young people and women, and measures that help people transition to new jobs following job loss, thereby preventing the risk of detachment from the labour market.<sup>79</sup> Box A, for example, illustrated the positive impact of spending on active labour market policies as part of the European Social Fund Plus. Targeted, resource-intensive public policies have proven effective: for example, taking a case management approach that is tailored to unemployed individuals, with curated services like one-to-one interviews and development plans, and job matching systems.

## Sustaining improvements in health outcomes

**Europe's relatively strong performance in health outcomes can be further strengthened with strategic investments.** Helping people stay healthy while ageing calls for continuous investment in integrated care systems. Investment should focus on disease prevention and on using the latest technologies – particularly to build on the successes in the area of non-communicable diseases and to make further progress, for example in the fight against cancer. European scientists and firms producing innovative technologies can make further gains in life expectancy and reduced morbidity possible. Policies can help them continue the already strong research and development and the scaling of new health technologies, such as cancer vaccines, gene therapy, and digital diagnostic tools incorporating artificial intelligence. Investments towards upgrading health infrastructure will need to continue and grow. Pressure on social and long-term care provision systems is mounting as the oldest segment of the population grows, and smart infrastructure to support active lifestyles and care for elderly people will continue to grow as an investment priority. To support these developments, the chronic health workforce shortage faced by many countries and regions will need to be addressed through policies that attract, retain and continue to train health and care sector workers.

<sup>77</sup> See, for instance, Bick and Fuchs-Schündeln (2018).

<sup>78</sup> Andresen and Havnes (2019) find a significant impact of childcare on the increase of labour supply by cohabiting mothers both on the intensive and the extensive margin.

<sup>79</sup> See European Commission (2024a).

## Increasing the supply, affordability and sustainability of housing

**Public support could target innovation in construction and improve the availability of affordable and sustainable housing.** This chapter highlights the distributional cost of high home prices and reduced access to affordable and sustainable housing. As prices have increased over the last two decades, the housing supply has remained sluggish and has not responded promptly to rising demand. This is a localised issue that has disproportionately affected certain cities, regions and demographic groups. Box B provides an overview of the annual additional housing demand in each country in 2025 and compares it with the additional housing supply, to highlight the the housing gap in the European Union, where unmet housing needs are expected to exacerbate an existing shortage.

**Addressing the innovation gap in construction is critical.** The construction sector has low productivity growth. A small share of construction companies invests in innovation: 75% of construction companies do not innovate, and do not even adopt practices that are new to the firm – compared with 67% for firms in other sectors (EIB, 2024b). Construction firms are also less likely to use digital technologies: 55% of construction companies use advanced digital technologies, compared to 76% of firms in other sectors (EIB, 2024b). At the same time, there are labour and skill shortages in the construction sector. A shrinking workforce will make it difficult for this sector to increase supply and keep construction costs low. More widespread adoption of key innovations in construction (including digitalisation, off-site methods like modular construction, mass customisation and robotics, and innovation in building materials) would make construction faster, increase the housing supply elasticity and improve safety. Any specific financial support for the sector should therefore target research, development and innovation (including fostering innovation clusters), with the goal of increasing productivity, facilitating the adoption of new technologies and digitalisation, improving manufacturing and construction practices, and running pilot projects to spur innovation. Public procurement can be used to provide predictable, stable demand for disruptive technologies like modular construction.

**The housing supply cannot be expanded without removing regulatory barriers.** Housing construction is subject to regulations at the EU, national, regional and local levels, resulting in a high degree of complexity and fragmentation of the market. Obtaining building permits is also slow and time-consuming. Enhancing European standards for construction products and moving away from recipe-based standards and towards performance-based standards would foster innovation. Making vacant land available for urban development and reducing obstacles to densification – while considering ecological conservation objectives and the availability of sufficient public facilities – would increase the supply and facilitate large-scale housing projects, which are typically cheaper than other options.

**To provide enough affordable housing, new financing models must be paired with policies to facilitate supply.** Institutional investors, particularly investment funds, have recently markedly increased the available financing in the residential real estate market (ECB, 2023). However, this additional investment has often translated into the construction of high-end luxury housing units. At the same time, the affordable housing segment has remained underserved. In many countries, the low number of affordable and social housing providers – which often have only limited capital – has constrained the growth of the stock of affordable housing units. Soaring costs related to regulatory barriers, increased input costs and limited innovation in the construction sector have exacerbated this situation. The current context of increased construction, financing and renovation costs is causing many social housing projects to be postponed or dropped altogether (Housing Europe, 2023).

**In the medium term, fostering the development of the securitisation market in a manner consistent with financial stability could expand access to mortgages for lower income households and reduce funding costs in underserved markets.** In the short term, public investment could support models to increase affordable housing supply, particularly if accompanied by planning and tax reforms to reduce building costs and encourage the more efficient use of scarce development land. Scaling up innovative

practices also plays a role in improving quality and reducing costs and labour needed in the sector, in a context of labour shortages. Government funding and public policies must be made more effective and targeted, moving away from inefficient approaches such as rent controls and demand subsidies, towards targeted supply-side incentives (see Chapter 2 for an overview of current housing policies).

**Raising energy standards for new and existing buildings requires deep financial resources.** For new buildings, clear and transparent regulation on energy standards would help construction and related industries respond optimally to new requirements. Fostering innovation in the sector could partly offset the resulting higher construction costs. Energy efficiency requirements add to the upfront cost of purchasing a house, at a time when house prices are already high. Renovation costs are a barrier to improving the energy efficiency of existing buildings, particularly for financially vulnerable households, as the upfront investments are large and the benefits are uncertain and slow to materialise. Policy can support households in the green transition by continuing to provide public funding for energy efficiency investments, limiting the financial burden on the most vulnerable households and fostering green finance for real estate, including green mortgage-backed securities (MBS). To enable a wave of energy efficiency renovations, policy must address the different causes of high renovation costs, including supply chain shortages, demanding procedures and building permit requirements, and the need for extensive technical expertise. For buildings that are energy efficient, better data transparency would make it easier to provide evidence of the lower maintenance and running costs, allowing home buyers and banks to incorporate these extra savings into their investment decisions.

### Box B

#### Estimating housing investment needs in the European Union

In the context of growing concerns about housing affordability and the effect of housing costs on inclusion and labour mobility, it is useful to get a sense of whether housing investment in the European Union is sufficient to meet demand. This requires estimating both housing supply and housing demand. This box provides an estimate of the additional annual housing demand in the European Union in 2025 and compares it with the expected additional supply of housing to see how large the mismatch is in 2025. This analysis therefore does not take into account the pent-up demand built up in previous years.

Estimating the growth of supply is relatively straightforward. It can be estimated by the number of completed dwellings or, looking ahead, the number of construction permits for dwellings or housing starts (two years ahead<sup>80</sup>). In this analysis, we use data on building permits for new dwellings. Supply of dwellings could also be increased through measures to unlock access to vacant properties or subdivide larger dwellings, but such effects are not included here.

Estimating housing demand is no simple task. This box provides details of the methodology used to estimate the European Union's housing needs, specifically, the number of dwellings that need to be created each year to meet the additional demand in each country. The analysis is based on existing studies and estimates of housing needs from national sources.

Formally, annual additional housing demand (housing needs) depends on the following components:

$$\begin{aligned} \text{Annual additional housing demand} = & \\ & \text{Household formation} + \text{Obsolescence of housing stock} + \\ & \text{Change in demand for second homes} + \text{Change in demand from non-residents} \end{aligned}$$

80 See Banco de España (2024); Chapter 4 assumes that housing starts in 2022–2023 can proxy housing completions two years later (2024–2025).

Household formation is the number of new households created in a year. It is calculated as the difference in the projected number of households between two consecutive years, which includes the effect of migration. Household formation projections are generally produced by national statistical offices on the basis of expected population dynamics and household size trends (with household size typically declining in developed economies).

The obsolescence of the existing housing stock represents the share of dwellings that have become suitable for demolition and depends on the age and condition of the housing stock. The existence of second homes increases the demand for housing over and above the number of households. Finally, housing demand by non-residents is related to the purchase of houses in coastal or tourist areas by people from outside the country.

After reviewing the literature and sources at country level, we identified studies and estimates of housing needs carried out by reliable national sources (statistical offices, central banks, ministries, research institutes, etc.) for the following ten countries: Ireland, Spain, Germany, Italy, France, the Netherlands, Belgium, Czechia, Slovakia and Austria. These ten countries represent 71.2% of the EU population. We collected and revised the latest data for these countries on household projections, household size, population, housing stock, vacant dwellings and occupied dwellings.

On the basis of the information collected and according to the national sources, the annual additional housing demand in all countries, with the exception of Ireland, is proxied by household formation.<sup>81</sup> In the case of Ireland, the study also takes into account the rate of obsolescence of the housing stock. Housing needs estimates vary from year to year as household formation projections are not constant (they depend on population dynamics and the evolution of household size in each country).

An initial calculation of annual additional housing demand in 2025 for these ten countries comes to some 900 000 units, or 1.3 million if we extrapolate to the remaining 29% of the EU population. However, this initial estimate has limitations. Household projections are annual for Belgium, Spain, France and the Netherlands but they are not revised at the same frequency. In the other countries, projections were more approximate or were only produced or revised from time to time. We therefore compared data on building permits for new dwellings with estimates of annual additional housing demand by country and cross-checked the data against annual government housing targets, double checking sources where there was a large discrepancy.<sup>82</sup>

In the case of Germany, estimates of supply based on dwelling permits were well below government housing targets. Although the methodology used for setting the national policy target is unclear, it seemed preferable to take the government target as a benchmark in view of recent population inflows. Government targets in France and Italy also suggest higher additional housing needs than household formation projections. Initial calculations were therefore revised upwards where government targets were higher.

The additional housing demand in the European Union for 2025 is estimated to be 2.25 million units. Given that the average period of housing construction is 24 months, we can assume that the maximum number of new dwellings completed in 2025 (that is, the additional housing supply) will be equal to the number of dwelling permits in 2023. Taking the 2023 permits for the ten countries and extrapolating them to all EU members, as we did with the demand, we expect 1.32 million units

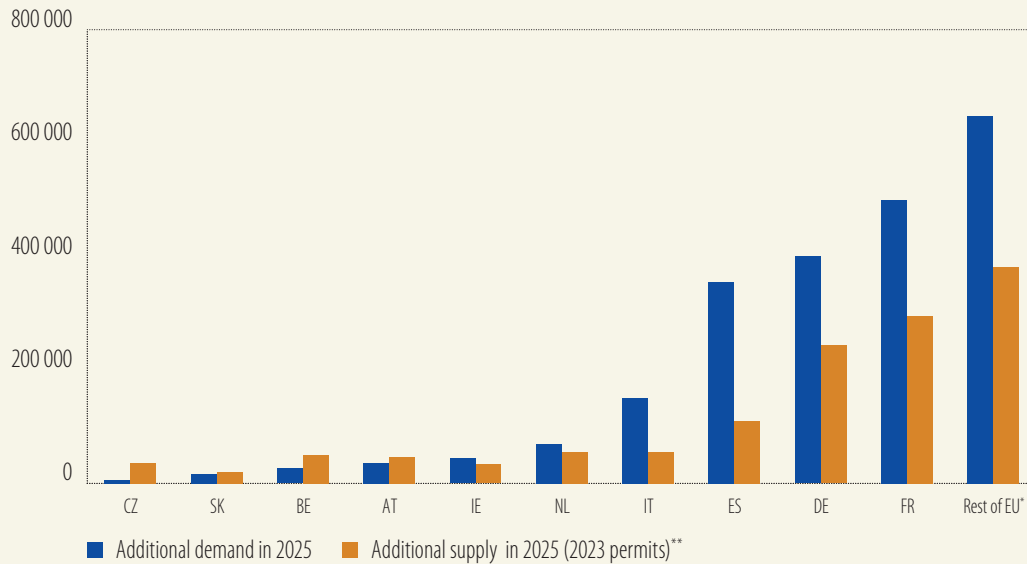
81 The national sources for household formation (housing demand) are: Austria: Statistik Austria, Household projections, 2024; Belgium: Federal Planning Bureau, Household projections 2024-2070, June 2024; Czechia: Český Statistický Úřad (CSU), 2005; France: Institut National de la Statistique et des Études Économiques (INSEE), 2024; Germany: Statistisches Bundesamt (DESTATIS), 2020; Ireland: Bergin and Egan, 2024; Italy: Istituto Nazionale di Statistica (ISTAT), 2024; The Netherlands: Statistics Netherlands (CBS), households in the future, June 2024; Slovakia: Inštitút informatiky a štatistiky (INFOSTAT), 2014; Spain: Instituto Nacional de Estadística (INE), Household Projections years 2024-2039, June 2024.

82 The sources of annual government housing targets are as follows: Italy: Cavestri (2024); France: Lefebvre (2021); Germany: Federal Government of Germany (2022)

to be completed in 2025, indicating a gap of 925 000 units. This suggests that the 2023 construction rate of new dwellings should have been 70% higher to meet the additional demand in 2025.

**Figure B.1**

**Annual additional housing demand and supply (units), by country in 2025**



Source: EIB staff calculations based on national sources.

Note: \*Rest of the European Union is calculated as the difference between the total EU estimation and the data for the ten countries listed here. \*\*Dwelling permits in 2023 for all the countries except for Ireland, for which we use data on housing starts.

These estimates of housing demand may be considered conservative. First, this analysis does not account for pent-up demand built up in previous years (as it was done only for one year), which appears high in countries like Spain and France. Second, internal migration may also increase housing demand in certain regions while reducing it in others, so housing pressures may be more acute in faster growing areas than aggregate household formation suggests. Third, the analysis does not consider demand for second homes by residents and non-residents and the ageing of the housing stock (except for the Ireland estimates), which would further increase housing needs.

On the supply side, this analysis has only considered the construction of new dwellings. To close the gap in the provision of housing, it is also vital to consider the role of renovation and policy in achieving a fuller utilisation of the existing housing stock. Policies could seek to incentivise the use and renovation of vacant housing, the subdivision of underused large dwellings (given rising demand from one- and two-person households) and the redirection of short-term rentals to long-term ones or occupancy by property owners.

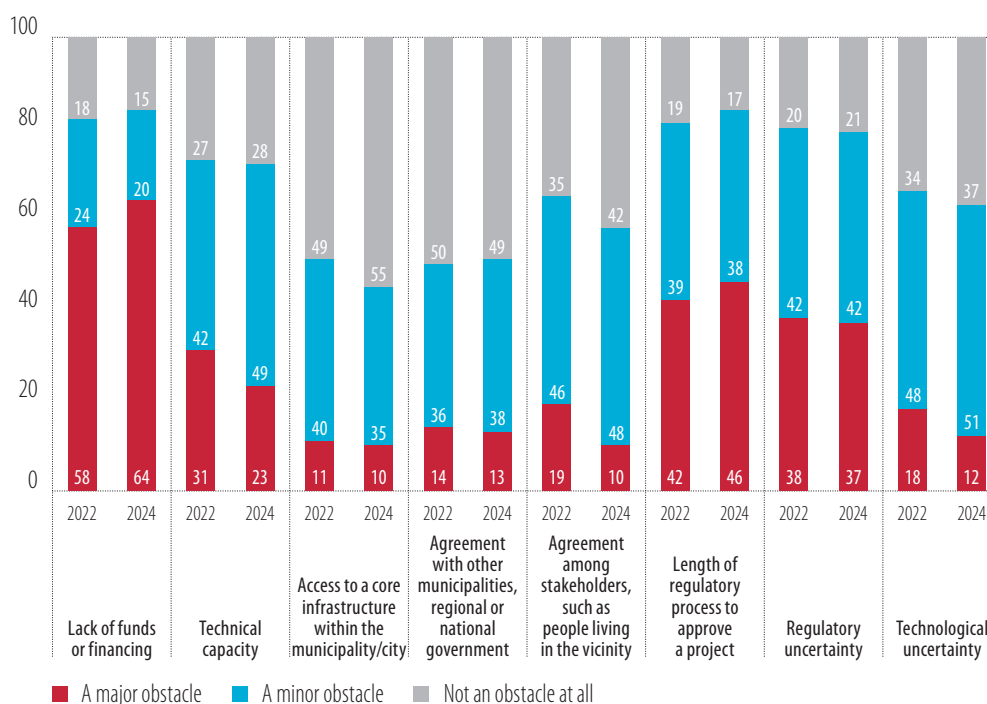
## Increasing local government capacity for social investment

**Improving social infrastructure requires local, regional and national governments to possess the capacity and competencies needed to invest effectively.** Governments below the national level have a substantial economic and social impact and are helping to finance the ongoing twin (or triple<sup>83</sup>) transition. In 2021, these governments in OECD countries were responsible for over one-third

83 Some authors highlight a separate need to address structural features of the long-term demographic challenges alongside the green and digital transition; see for example European Committee of Regions (2024).

of total public spending (education and health in particular), and over half of total public investment on average (OECD, 2022b and 2024b).<sup>84</sup> Local and regional governments are often among the largest employers in a country, with wages representing a substantial share of expenditures. Local governments must function properly to create an environment conducive to local economic and social activity, attractive to the private and public sectors.<sup>85</sup> Institutional quality<sup>86</sup> also has an impact on the effectiveness of resource allocation (including public investments; see Álvarez et al., 2023 and Zavorská et al., 2024). Effective resource allocation is one of the key factors supporting further economic integration and facilitating exchange and cooperation between regions and beyond. This is especially true for the service sector, which is typically relatively mobile and less dependent on complex supply chains.<sup>87</sup> A further problem seems to be a shortage of information and analysis that could be used to select the most suitable projects. Only around one-third of municipalities perform independent assessments of infrastructure projects regularly (on more than half of projects).<sup>88</sup>

**Figure 24**  
**Obstacles to the implementation of investment activities (% of survey respondents)**



Source: EIB Municipalities Survey, EIB staff calculations.

Note: All municipalities (excluding don't know/no answer). The number of responses varies according to the subcategory.

Question: To what extent is each of the following an obstacle to the implementation of your infrastructure investment activities?

84 Between 2004 and 2022, the share of EU regions and cities in total government investment ranged between 54% and 58%; see European Committee of Regions (2024). A larger share of investment in budgets can be observed at lower levels of subnational government (municipalities) than at higher ones (regions or states); see Council of European Municipalities and Regions (CEMR) (2023). However, the share of actual spending on investment in total public spending remains very low by international standards; see for example Giordano et al. (2024) or Chapter 2 of this report.

85 Recently adopted fiscal rules on economic governance in force since the end of April 2024 (see Council of the European Union, 2024) may have implications for financing flows between central (federal) and regional governments. They will also impact the negotiations of the EU multiannual financial framework for the period 2028-2034. For many municipalities, transfers are a major component of the annual investment budget, including allocations for infrastructure investments.

86 There are substantial differences at the NUTS 2 level across the European Union. Capital regions do not necessarily enjoy the highest quality government in a country, as documented by the Quality of Government (QoG) Index; see Charron et al. (2024).

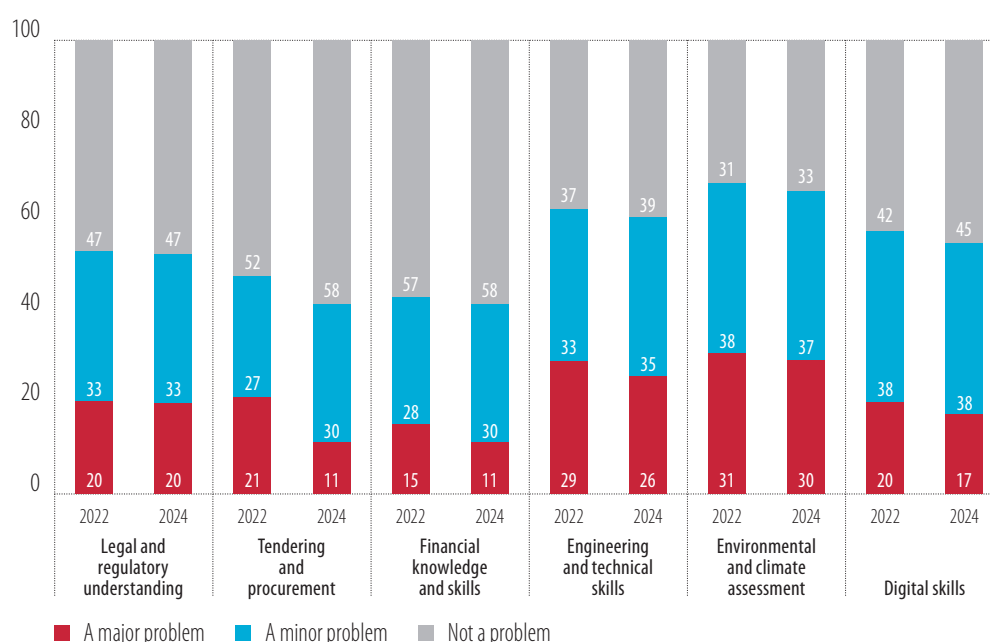
87 However, service sector firms tend to localise and depend on the availability of skilled workers, and can create polarisation effects that increase inter-regional inequalities. For example, see Springford et al. (2024).

88 This is despite the fact that many infrastructure projects require impact assessments to be eligible for public funding, among others. The size and location of a municipality do not significantly impact the likelihood of projects there being evaluated.

**Removing barriers to regional development in a timely and targeted manner will require structural adjustments and investments.** According to the EIB Municipalities Survey 2024 (EIB, forthcoming), one of the biggest challenges municipalities face is a large funding gap, followed by demanding regulatory procedures (Figure 24). The funding gap is likely to persist unless additional resources are brought in, especially in a time of more constrained fiscal policy (reduced fiscal space and increasing debt-to-GDP levels), which is the case across EU members. Overcoming regulatory difficulties would require a review and streamlining of administrative procedures, especially given the increased administrative burden from the twin transition.<sup>89</sup> Recent international survey evidence that includes a number of EU members shows relatively supportive environments for business, compared with the total sample of 50 countries worldwide (mostly low- and middle-income).<sup>90</sup> However, EU countries' performance could be improved in terms of regulation and efficiency, which could create better business conditions to help firms prosper.<sup>91</sup> The survey also shows room for improvement in digital public services and environmental issues (for example, approval procedures).

**Figure 25**

**Access to experts as a problem for municipalities (% of survey respondents)**



Source: EIB Municipalities Survey, EIB staff calculations.

Note: All municipalities (excluding don't know/no response). The number of responses varies according to the subcategory.

Question: For each of the following areas, to what extent is access to experts a problem for the delivery of your municipality investment programme?

**Apart from well-known problems, such as a lack of funding or the administrative burden, many local governments have difficulty finding skilled labour to implement investment projects.** A lack of experts with the necessary technical skills is a major obstacle that ultimately complicates the implementation of municipal investments (Figure 25). In the EIB Municipalities Survey, about 60% of municipalities reported

<sup>89</sup> A recent survey of members of the Council of European Municipalities and Regions (CEMR), which represents local and regional governments and local government associations across 41 EU members, shows that the main barriers to implementing climate-related legislation are: (a) lack of funding, (b) lack of staff and (c) lack of experts/complexity of funding (see CEMR, 2024).

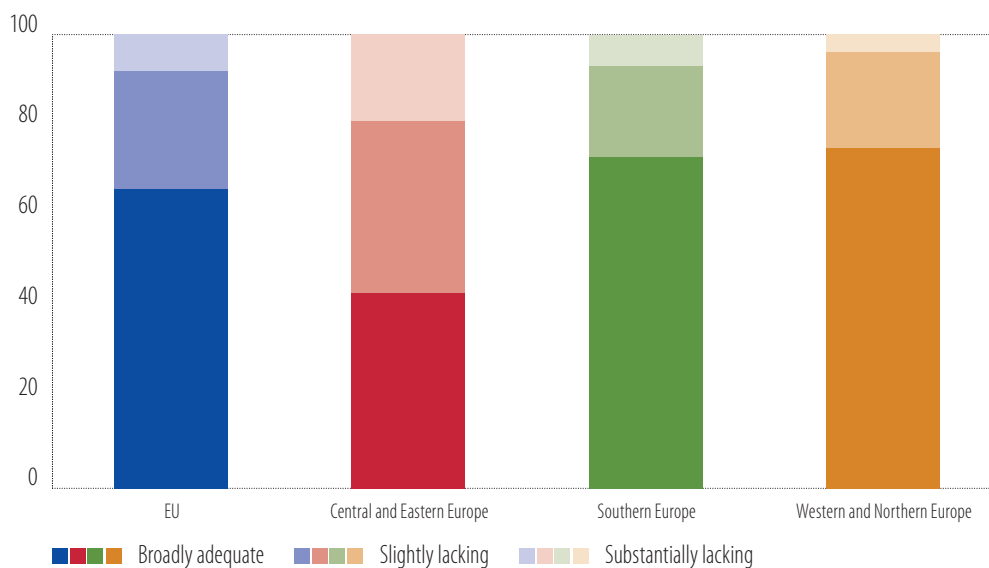
<sup>90</sup> From 2024 onwards, the World Bank's Business Ready (B-READY) project replaces its Doing Business series. It takes a new approach to assessing the business and investment climate across countries and covers three areas (in order of importance): (a) regulation, (b) public services and (c) operational efficiency. It also aims to analyse topics at both the national and the local level (as opposed to the city level, as was done under Doing Business). The 2024 B-READY Report includes data on 12 Member States and EU candidate countries, but only in the regions Central and Eastern Europe and Southern Europe, and the Balkans (see World Bank, 2024).

<sup>91</sup> See also Giordano et al. (2024), which identifies the main obstacles to higher levels of investment in Europe.

major or minor problems finding experts with technical engineering, environmental, climate-related or digital skills,<sup>92</sup> as opposed to other types of skills associated with more common or more administrative roles like finance or procurement.<sup>93</sup> This problem is difficult to overcome, as the persistence of these barriers across different survey years shows (for 2022 data see EIB, 2023).

**Local governments report high needs in the areas of social investment and climate change mitigation.** The EIB Municipalities Survey lends insight into investment activities and needs across municipalities. The survey finds that around one-third of municipalities perceive their social infrastructure investments in the past three years to be inadequate (Figure 26), which is almost unchanged from the previous survey (2022). Perceived adequacy is even lower for climate change mitigation and adaptation investments, but only mitigation is viewed as a slightly more pressing priority than social infrastructure investment for the next five years.<sup>94</sup> Note that around two-thirds of climate change spending, representing over 1.1% of GDP, takes place at the local level (data from 25 EU and eight OECD countries in 2019; see OECD, 2022a). A decomposition by macroeconomic region reveals substantial differences: 57% of municipalities in Central and Eastern Europe view their past investments as “insufficient” vs. only around one in four municipalities in the other two regions. But it is social infrastructure investments – in better skills and education, affordable housing, robust networks and access to services – that can help bridge the current divide between regions across all EU countries. These investments improve well-being for everyone and support sustainable growth during an economic and social transition by equipping local institutions to face the challenge.

**Figure 26**  
Social investment (in %)



Source: EIB Municipalities Survey, EIB staff calculations.

Note: All municipalities (excluding don't know/no response). Only one out of six subcategories asked in the question is shown. The number of responses varies according to the subcategory.

Question: In the last three years, would you say that within your municipality the level of investment in infrastructure projects was broadly adequate, slightly or substantially lacking?

<sup>92</sup> According to the responses, the lack of experts with engineering and technical skills represents a slightly more severe problem for municipalities in Western and Northern Europe than in the other two regions (65% vs. 59% for the other two). For environmental and climate-related skills the problem is worse in Western and Northern Europe and in Central and Eastern Europe than it is in Southern Europe (68% for the first two vs. 63%).

<sup>93</sup> The variation across cohesion or macro-regions is relatively small, showing that this is a general problem any municipality across the European Union might face.

<sup>94</sup> However, response shares for all three categories of investment (climate change mitigation, social infrastructure and climate change adaptation) only differ by a few percentage points. For further details, see EIB (forthcoming).

## Conclusions and policy recommendations

**The European Union has been improving steadily in terms of social inclusion and well-being.** This includes better health outcomes than in other regions and reductions in income inequality and job insecurity. However, many disparities remain, between and within EU members.

**Recent decades have seen improvements in equality of opportunity, although gender and educational background remain key barriers.** Involuntary circumstances like gender, parental occupation and disability have less of an impact than a decade ago, but still account for around 18% of earning differentials.

**Rising housing costs have increased barriers to home ownership and relocation, with implications for labour mobility, while inflation has had a disproportionate impact on poorer households and retirees.** Rising house prices and rents have benefited existing homeowners but have hurt renters and reduced access to home ownership, particularly for the young. This may have lasting effects. Individuals who have experienced housing difficulties persistently show higher unemployment rates, while high housing costs are also a barrier to mobility (particularly in cities), affecting equality of opportunity and labour market efficiency. The rising cost of necessities has affected poorer households in particular, while retirees have suffered from falling real value of cash and deposits.

**Education, childcare services, urbanisation and structural changes in the economy have supported rising labour force participation, particularly for women.** Notably, while labour force participation has increased for all workers aged 55 and over, among those under 50 it has risen for women only, mainly driven by improvements in educational attainment and childcare access, and the growth of service sector employment. High labour tax burdens and generous long-term social benefits have been associated with negative labour force attachment.

**The green transition will increase demand for technical skills, which may have a negative impact on female labour force participation.** Green transition-related jobs are less likely to be held by women in the European Union. The gender gap in green skills largely reflects that in STEM qualifications.

**For firms, scarcity of skilled staff is a top obstacle to investment, a problem that was exacerbated by the pandemic and remains acute in many regions.** In Central and Eastern Europe, growth has been driven by capital regions, with the poorest regions suffering a brain drain. Across the European Union, pandemic-related barriers to internal EU migration strongly impaired firms' ability to attract skilled workers by offering higher wages.

**Social investment in health, education and housing, as well as broader social policies, are critical to protect and improve well-being and social cohesion and have a strong effect on the competitiveness of the European economy.** In the face of long-term challenges like demographic change and the green and digital transition, attention to these areas will be essential to maintaining a thriving and inclusive economy.

**More and better investment in education and health will have long-term societal benefits.** Ensuring high-quality and inclusive education outcomes will be critical for continuing to increase equality of opportunity. In the area of adult training, the focus should be on helping EU firms provide more training. Further supporting research and development and scaling advances in health technology in Europe can sustain the improvements in health outcomes that have already been achieved.

**Active labour market policies, support for parents, and inclusive education can improve labour market outcomes for women and vulnerable groups, helping people enter the workforce and keep their jobs.** A focus on targeting resources well and reaching at-risk groups can reduce the risk of

detachment from the labour market. Policies to ensure that the tax system does not penalise second earners, to increase access to childcare and to give both parents adequate parental leave would further boost equality in labour force participation. Investment in skills acquisition is needed to mitigate gender disparities in employment related to the green and digital transition. An analysis of survey data provides further evidence of the supportive effect of childcare services on female labour force participation.

**Housing policy should address the issue of housing affordability, including for energy renovations, and the need for innovation in construction.** Adopting innovative construction technologies and practices is critical to bringing construction costs down. To increase housing supply, regulatory barriers must be reduced, and public support should focus on shortcomings in affordable housing and on making energy efficiency renovations affordable for low-income households.

**Local governments play a key role in social investment and regional convergence, but face capacity and funding constraints.** According to the EIB Municipalities Survey 2024, the funding gap constitutes the main challenge for municipalities, followed by the complexity of regulatory procedures. Financial support and administrative reform are needed, along with technical support and training to fill gaps in expertise that hinder investment.

**For future social investment, more and better prioritisation, greater efficiency and higher quality of spending by the European Union and its members will be vital.** Significant amounts have already been spent (see Chapter 2). National government expenditure on health and education, for instance, amounts to 12% of GDP on average across the European Union, with spending per person ranking among the highest in OECD member countries. However, countries are feeling budget pressures. Going forward, transforming spending into productive growth hinges on targeted and efficient efforts that ensure quality outcomes.

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