



Chapter 4

**Trends in regional and
social cohesion**

EUROPEAN INVESTMENT BANK INVESTMENT REPORT
2022/2023

Resilience and renewal in Europe

Part II Resilience and renewal

Chapter 4 **Trends in regional and social cohesion**

Investment Report 2022/2023: Resilience and renewal in Europe.

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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 on how Europe is progressing towards a digital and green future amid an energy crisis. The report draws extensively on the results of the annual EIB Investment Survey (EIBIS) and the EIB Municipality Survey, combining internal EIB analysis with contributions from leading experts in the field.

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Chapter 4

Trends in regional and social cohesion



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Table of contents

Executive summary	1
Introduction	7
Part I Investment environment in a time of crises	
1. The macroeconomic context	13
2. Investment in Europe	45
3. A corporate sector buffeted by shocks	97
Part II Resilience and renewal	
4. Trends in regional and social cohesion	145
5. Progress on digital transformation	175
6. Green transition and the energy crisis	217
Data annex	251
Glossary of terms and acronyms	259

Chapter 4

Trends in regional and social cohesion

The economic consequences of the war in Ukraine risk exacerbating inequalities. Higher energy and commodity prices hit poorer households particularly hard because they have smaller financial buffers, spend relatively more on energy and food, and have less room to cut discretionary spending. For regions with significant energy-intensive production, the energy shock is accelerating the green transition to a breakneck speed. Regions with tight labour markets, especially in Central and Eastern Europe, stand to benefit from the arrival of highly qualified refugees from Ukraine, but those countries will also need to provide infrastructure to facilitate refugees' integration.

Social cohesion is at risk because the energy crisis has worsened the financial situation of households generally — particularly those that already lost income during the pandemic. Although policy support largely offset the pandemic's social impact, the financial situation of poorer, less skilled and younger households appears to have worsened compared to before the pandemic. Higher energy and commodity prices are now weighing particularly heavily on these groups. One reason is that their consumption spending is tilted towards food and energy. Another is that poorer households rarely own residential property, and therefore have not benefited from the increase in real estate prices. To counteract the effects of the energy price shock, governments have provided extensive support, balancing the need to act quickly with the desire to target the measures to those most in need.

Regional cohesion is at risk because the war in Ukraine places a greater burden on regions that are further east, those that have higher unemployment and those that rely on energy-intensive industries. Geopolitical crises are a source of uncertainty, and uncertainty depresses economic activity. There is tentative evidence that cross-border investment is starting to slow in EU members further east, which tend to be poorer. Within Central and Eastern Europe, it is mostly the richer regions (which offer better employment prospects) that are likely to benefit from the arrival of refugees. Many regions traditionally reliant on coal are also involved in energy-intensive production, and the transition towards a greener economy is being complicated by the energy shock, which is forcing energy-intensive firms to slow production. Authorities and firms in cohesion regions appear to have less capacity to step up and maintain high levels of the transformative investment needed for the green transition.

At times of tight national budgets, policy support should be precisely targeted, focusing on the groups and regions most affected. Even before the war in Ukraine, social and regional cohesion needed to be strengthened. Governments should make it easier for firms to transform, grow and innovate. They should avoid plain vanilla subsidies, and instead focus on supporting innovation and lowering widely recognised investment barriers. Good governance is important for improving the business environment, but it can be lacking in cohesion regions more often than in richer regions. Municipalities frequently cite access to finance as a constraint, particularly in cohesion regions. However, EU funds will provide ample support for improving the conditions for growth and convergence in cohesion regions, and the real challenge will be preparing and successfully implementing projects selected for investment.

Introduction

High inflation, amplified by the food and energy crises, is creating new challenges for social and regional cohesion. The rising cost of living is driving down living standards for all Europeans, but more vulnerable groups risk being hit harder, including those whose financial situation already deteriorated during the pandemic. The different regions of Europe will be affected in different ways — ways that reflect their economic structures and ability to transform. Geopolitical uncertainty might depress investment, particularly in regions closer to the European Union's eastern border. Migration from Ukraine poses challenges, but also brings opportunities, and it will ultimately be most beneficial for the regions that offer better employment prospects. As high energy costs drive the green transition relentlessly forward, regions with legacy industries (especially coal) will have greater difficulty keeping the social costs of transition contained.

This chapter examines the impact of the war in Ukraine on social and regional cohesion in the European Union. It consists of three sections. The first section analyses how social cohesion is affected by rising prices for food and energy against a post-pandemic backdrop. The section contains two boxes: one on how tackling energy poverty can support the green transition, and another on the impact of the energy price shocks on countries and households. The second section analyses the impact of the war on the various regions, focusing on geopolitical uncertainty, how Ukrainian refugees will affect the labour market and the energy price shock. The final section concludes with policy suggestions.

Another blow to social cohesion

Just a year after most pandemic-related restrictions had been lifted, the war in Ukraine has triggered another economic shockwave in the European Union and worldwide. Energy prices have skyrocketed, causing consumer price inflation to reach levels not seen for decades. Inflation has made everyone in the European Union poorer. Higher oil and gas prices have transferred wealth equal to about 3.5% of EU gross domestic product (GDP) to the countries that deliver fossil fuels to the European Union. And like with any inflation shock, poorer households are bearing the brunt. As a result, governments have once again moved to support households financially.

This section reviews the primary impact of the pandemic and the subsequent period of high inflation on the distribution of income and wealth, and it describes the main types of policies used to counter the regressive effects of these events.

Despite massive policy support, the pandemic may have left scars

The pandemic hit poorer households more severely than richer ones. Poorer households tend to work in professions less suitable for remote working, and under non-standard employment contracts that offer less protection against job losses. Eurostat (2020) estimates that compared to the previous year, aggregate income from employment in the second quarter of 2020 fell by about 7.5% for low-income earners and just over 5% for medium-income earners, but by less than 4% for high-income earners.¹ For all income groups, most of this income loss was due to work absences. It is only for the lowest income group that unemployment accounted for a substantial proportion (almost 2 percentage points) of the overall loss in income.

1 The lowest income group combines the bottom three deciles of the income distribution, while the highest combines the top three deciles.

Early studies suggest that policy support offset the regressive impact of the pandemic in the short run (see for example Palomino et al. (2020); Almeida et al. (2020) or Clark et al. (2020)).² The share of people at risk of poverty or social exclusion in the European Union increased, but not by much: from 21.1% in 2019 to 21.7% in 2021, with some variation across countries.³ Job retention schemes prevented job losses of most underoccupied employees.⁴ Clark et al. (2020) show that in Germany, Spain, France, Italy and Sweden, inequality (as measured by the shares of income going to different income groups) first widened from January to May 2020, and then decreased back to pre-crisis levels by September 2020.⁵

However, some evidence shows that the financial situation of poorer households deteriorated more drastically. The European Commission's consumer survey provides rich evidence about how the pandemic affected different segments of society.⁶ The financial situation of many low-income households deteriorated more than that of high-income households (Figure 1, blue bars). Furthermore, while the share of low-income households with a financial surplus in March 2021 had not changed since the start of the pandemic, that of high-income households had increased (Figure 2, blue bars). This may be because high-income households typically buy more discretionary items, which they could consume less of during the pandemic. The observation that high-income households cut their spending more during the pandemic is also supported for the United Kingdom by Hacıoğlu-Hoke, Känzig and Surico (2021) based on transaction data from a large personal financial manager. Across the European Union, the differences between low- and high-income households are also reflected in those between households with lower and higher levels of education, arguably because higher education is typically associated with higher income.

The financial situation of younger households also appears to have deteriorated more than that of older households. The financial situation of younger households worsened during the pandemic, which may well reflect an initial reduction in employment (shown below). By contrast, there is almost no change in the financial situation of older households from February 2020 to March 2021 compared to the 12 months leading up to the pandemic. In addition, while the share of younger households with a financial surplus in March 2021 was only moderately higher than in February 2020, a sharper improvement was seen among older households. The smaller impact on older households is not surprising because their income consists largely of pensions, which were unaffected by the pandemic.

Scarring effects, which could have hit poorer and younger households relatively hard, appeared largely contained by the speed of the 2021 economic recovery. During the pandemic, employment rates tended to fall more for young people, those without higher education and immigrants from outside the European Union, all of whom tend to earn less money. Had their spells without employment lasted longer, these groups might have lost some of the skills needed to become re-employed. The rapid economic recovery certainly facilitated their re-employment. On average in 2021, the employment rates of some groups were still below pre-pandemic levels. For example, the share of young people from 15 to 29 years of age who were not in employment, education or training exceeded 2019 levels. The same was true for people not native to their EU country of residence (Figure 3). In contrast, the employment rates for people with lower secondary education or below returned approximately to their pre-pandemic levels, just as they did for those with higher education.

² Stantcheva (2022) provides a detailed literature overview of the distributional impact of the pandemic.

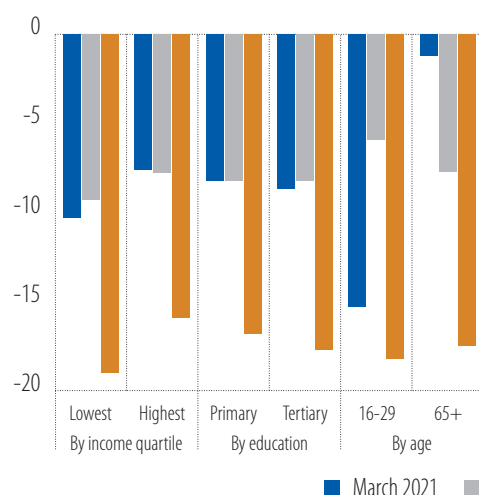
³ There is a break in the Eurostat data measuring the share of persons at risk of poverty in 2020 for many EU countries, including Germany and France. Among the countries without a break in the data, Spain stands out with an increase of 0.9 percentage points from 2020 to 2021 for persons at risk, as does Greece with a decrease of 1.6 percentage points.

⁴ See for example Müller et al. (2022) for a discussion of the characteristics of job retention schemes across different EU countries.

⁵ Eurostat (2020).

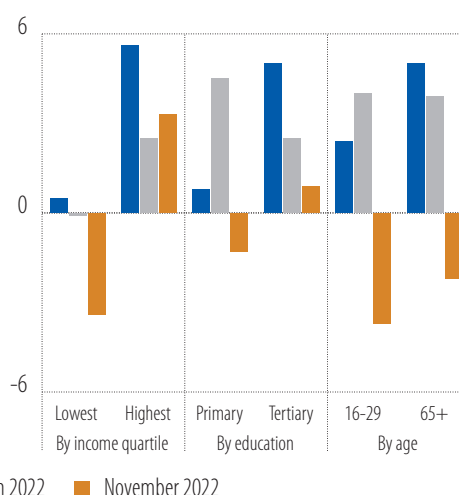
⁶ We interpret the confidence scores relative to their pre-pandemic values, which is an attempt to abstract from changes in the composition of the different income groups.

Figure 1
Effect of the pandemic and the war in the Ukraine on households' financial situation during the preceding 12 months (index points, changes vs. February 2020)



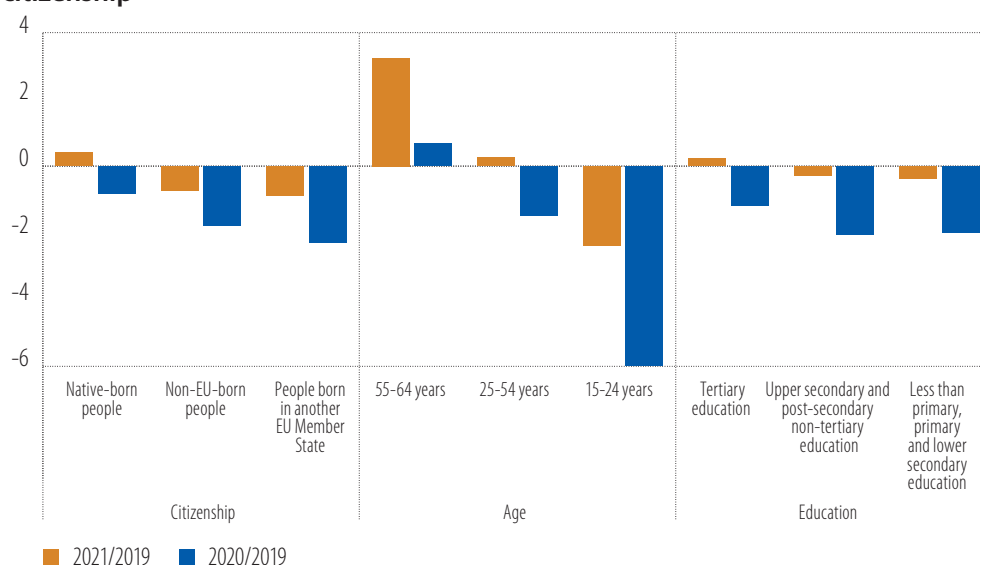
Source: EIB staff estimates based on Eurostat data.
Note: The bars show the change in an index of households' financial situation relative to February 2020. The index quantifies households' qualitative assessments of their financial situation, from "Our financial situation has considerably deteriorated over the past twelve months" to "Our financial situation has considerably improved over the past twelve months."

Figure 2
Effect of the pandemic and the war in the Ukraine on households' financial surplus (index points, changes vs. February 2020)



Source: EIB staff estimates based on Eurostat data.
Note: The bars show the change in an index of households' financial surplus relative to February 2020. The index quantifies households' qualitative assessments of their financial situation, from "We are taking on debt" to "We are saving a lot."

Figure 3
Change in employment rates since 2019 (percentage points), by education, age, and citizenship



Source: EIB staff estimates based on Eurostat data.
Note: There is a break in the time-series data for non-EU-born people from 2020 to 2021.

In the longer run, increasing remote work might widen the gap between higher and lower incomes. Remote work is incompatible with many lower-income jobs (Sostero et al., 2020) but it tends to increase the productivity of higher-income workers. Based on a representative survey on self-reported productivity conducted in June 2020 in the United Kingdom, Etheridge et al. (2020) show that low-income workers report being less productive than a year before the pandemic, in contrast to workers with higher incomes. Differences also exist between sectors. Workers in the education, administrative, entertainment and accommodation sectors report significant decreases in productivity, while those in the financial, insurance and information technology sectors report increases in productivity.

The energy crisis weighs more heavily on poorer households than richer ones

The energy crisis triggered by the war in Ukraine worsened the financial situation of all households, and it seems to have degraded the finances of poorer and older households more severely. In March 2022, high- and low-income households judged the evolution of their financial situation (Figure 1, grey bars) to be equal to that of March 2021 (Figure 1, blue bars). At the end of the first nine months of the war in Ukraine, all households reported that their financial situation had deteriorated further (Figure 1, orange bars). At the same time, low-income households were much more likely to have to take on debt than high-income households, most of whom continued to save (Figure 2, orange bars). Energy poverty, already an issue before the energy crisis (Box A), is likely to have worsened during the pandemic.

Box A

Energy poverty at the outset of the Ukraine crisis

Energy poverty is a persistent problem for many households across the European Union, and it has been aggravated by increasing prices. From 2019 to 2022, spending on energy increased by more than one-third on average across EU members. In some countries, it almost doubled. High and rising prices and a weakening economic climate increase the risk that even more households will no longer be able to pay their bills (Halkos and Gkampoura, 2021; European Commission, 2022a).

Energy is vital for good living conditions. Energy poverty can negatively affect living and health conditions (Thomson et al., 2017). Different indicators are used to measure and track energy poverty across the European Union (Thema and Vondung, 2020). These include expenditures (for example, comparing the energy costs of households against predefined thresholds), self-reported assessments and direct comparisons (like tracking energy consumption, such as heating in homes, against a standard). We compile such indicators using data from the EU Statistics on Income and Living Conditions (EU-SILC) to measure energy poverty.

While the share of households affected by energy poverty has been shrinking in recent years, the recent spike in prices could reverse that trend. Past shocks and crises like the European sovereign debt crisis and the COVID-19 crisis were associated with increases in the share of people experiencing energy poverty across the European Union. In fact, periods of crisis have been found to result in energy poverty, through changes in household income, austerity measures and high energy prices (Halkos and Gkampoura, 2021).

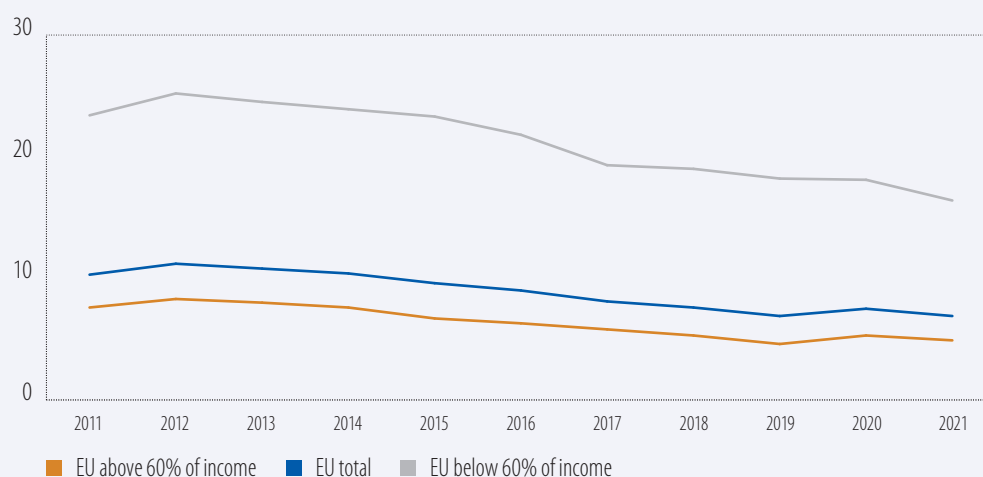
While the share of energy poor households has decreased across income levels, poorer households remain more than three times as likely to experience energy poverty compared to more affluent ones. Differences among income levels persist (Figure A.1).

Household characteristics influence energy poverty. While income is a key driver, household size, type of employment contract and building quality also have an impact. In the European Union, households in rural areas report energy poverty more often. In addition, older people, single-person households

with dependent children, and those with three or more children are more often affected (Figure A.2). Analyses also suggest that the least energy-efficient households (those in poorly insulated dwellings) are more likely to be energy poor.

Figure A.1

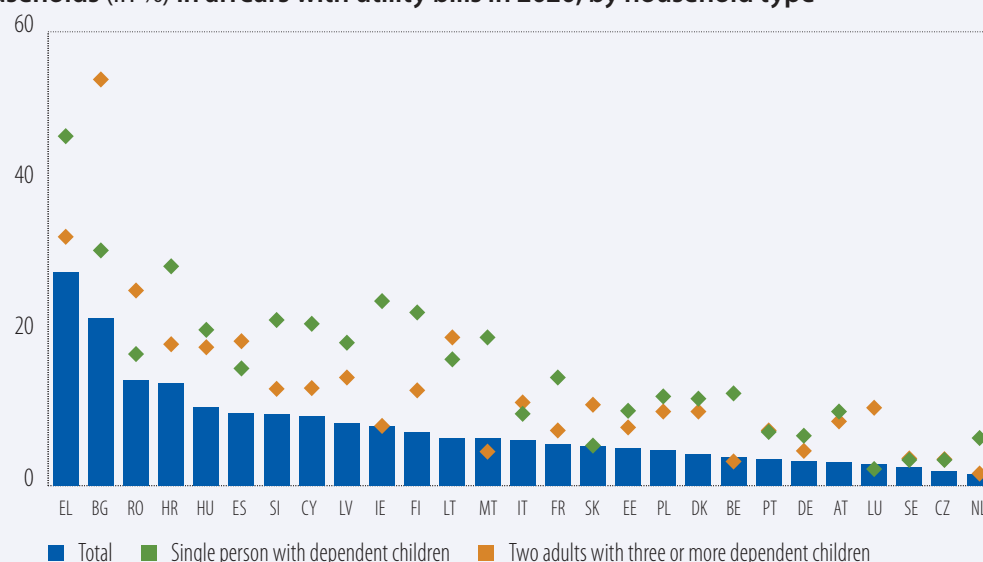
Share of people in the European Union (in %) that cannot keep their home adequately warm, by income



Source: European Union Statistics on Income and Living Conditions (EU-SILC).

Figure A.2

Households (in %) in arrears with utility bills in 2020, by household type



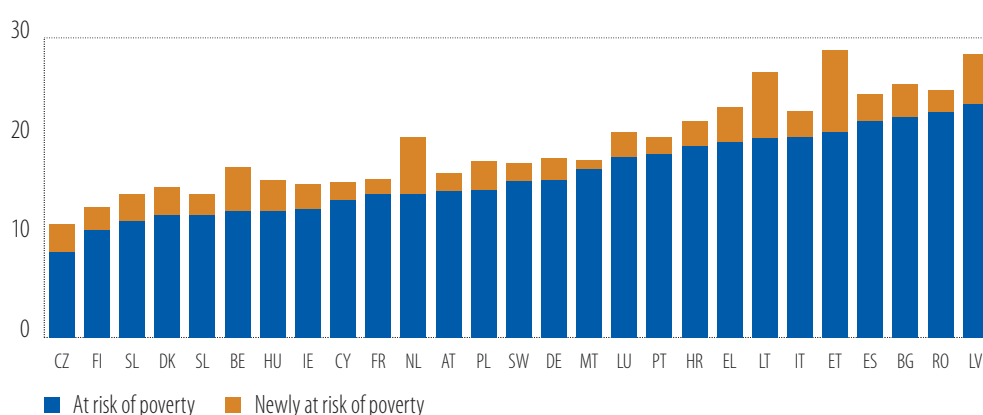
Source: EU-SILC.

Tackling energy poverty has three dimensions: social, energy supply and infrastructure. For fragile social groups, income support for vulnerable households and measures to facilitate labour market participation can help reduce energy poverty. Energy policies also play a crucial role, by ensuring a supply of energy at affordable prices. Finally, investment in infrastructure such as energy generation and networks, but also in housing that is energy efficient and affordable, can reduce energy poverty levels and increase households' ability to withstand further energy shocks.

One reason for the greater impact of inflation on households with lower incomes is that their spending is tilted towards food and energy. Inflation has risen since Russia's invasion of Ukraine — most dramatically for energy and food, on which poorer households tend to spend a greater share of their income. From August 2020 to August 2021, the price of the consumption basket of the poorest 20% of households in the European Union increased by 11.4%, about 3 percentage points more than the consumption basket of the richest 20% of households. Soaring inflation is likely to push more people in the European Union into poverty (Figure 4), and more so in countries with an already unequal distribution of income (Figure 5). Box B provides details.

Figure 4

Share of the population (in %) at risk of poverty because of rising prices



Source: EIB staff estimates based on Eurostat and the European Commission 2022.

Note: Blue bars indicate existing shares (end of 2021). Orange bars show estimated increases. See Box B for details on computation.

Figure 5

Increase in the share of the population at risk of poverty vs. income inequality, by region



Source: EIB staff estimates based on Eurostat.

Note: See the annex for details on computation for share of people newly at risk of poverty as a result of recent price increases. The GINI coefficient (X-axis) measures inequality among values of the income distribution with higher values indicating greater inequality.

Box B**The impact of energy price shocks on countries and households**

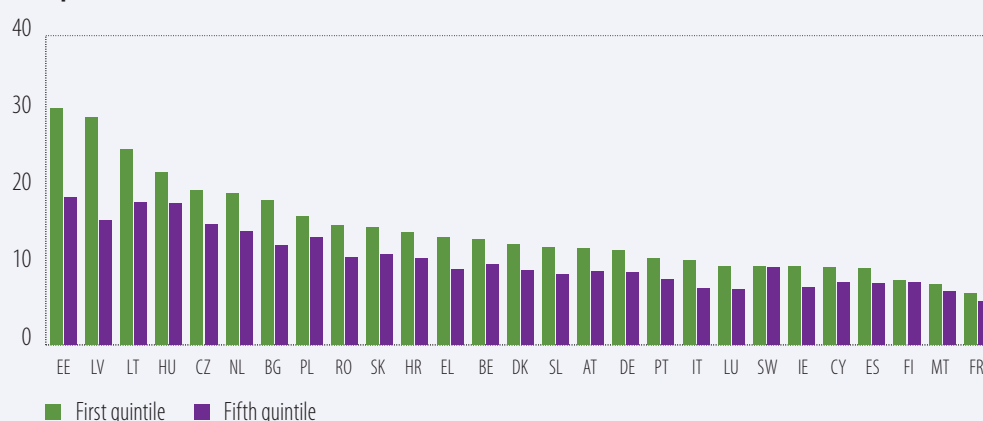
This box explains how we derived the impact of the higher food and energy prices on households' real disposable income, and consequently their risk of falling into poverty (Figure 4 and Figure 5 in the main text). We follow Eurostat in defining households "at risk of poverty" as those with disposable income (including transfers) below 60% of the median. The estimation depends on three factors: the size of the price shock, consumption patterns at different points of the income distribution, and the shape of the income distribution itself, because it determines the threshold for poverty.

The price shock tends to be larger in countries with lower per-capita income (such as countries in Central and Eastern Europe). We define the shock as the change in the contribution of energy and food prices to headline inflation relative to a calm period: January 2003 to June 2007. In this period, headline annual inflation averaged 2.1% in the euro area, to which food contributed 0.5% and energy 0.6% (a total of 1.1%). During 2022, the combined contribution of food and energy to headline inflation was about 5.9%.⁷ Our estimate of the energy and food price shock (that is, the abnormal contribution of energy and food prices to inflation) is therefore (after rounding) 4.7%. The size of the shock differs substantially across countries because the weights of food and energy in the national consumption basket differ⁸, because of measurement issues and different market structures of these goods in each country. The shock ranges from 0.9% in Malta and 2.7% in France, to 12% in Lithuania and 14.8% in Estonia.

The impact of higher food and energy prices is larger for poorer households, which spend more of their income on food and energy. The weights of food and energy in the consumption basket differ not only across countries, but also across households within a country. They are provided in the EU-SILC database by quintile of the income distribution. The consumption basket of households with lower income contains a larger share of food and energy. The price of the consumption basket of low-income households is therefore rising more steeply than that of high-income households. The differences tend to be bigger in countries where income is less equally distributed, and particularly large in the Baltic states and Greece (Figure B.1).

Figure B.1

Estimated increase (in %) in prices from August 2022 to August 2021, by country and income quintiles



Source: EIB staff estimates using Eurostat and EU-SILC data.

⁷ At the time of writing, figures were available only until August 2022. We assume that for the remainder of the year, annual food and energy price inflation remained at their August 2022 levels.

⁸ The weights in the Harmonised Indices of Consumer Prices (HICP) for Member States are different and based on each national consumption basket (see Box B in Chapter 1).

Rising food and energy prices shift all real incomes down, although the effect is bigger for lower-income households. The price shock causes the entire distribution of real disposable income to shift down. Several assumptions must be made to approximate the increase in the share of households below the poverty line because the details of the income distribution are not known. (Consumption basket weights are only available by quintile, but Eurostat publishes household income data by decile.) We assume that the consumption basket weights are identical for all households within a quintile, and that the incomes are identical within each decile. We also hold constant the real value of the poverty threshold, with households below it assumed to be at risk of poverty.

Estimates find that around 11 million people may fall into poverty in the European Union. The price shock exacerbates poverty to a greater degree in countries that have higher inequality and experience a larger shock. The countries tend to be in Central and Eastern Europe. In the Baltics, the effect is particularly pronounced. A comparatively large share of households was just above the poverty line, and rising energy prices has pushed that share below the poverty line. There are exceptions to this pattern, however. Countries experiencing a relatively contained price shock but that have an uneven income distribution — like Greece or Italy — could potentially have a large increase in the number of people at risk of poverty.

Inflation also lowers the wealth of poor households more because they have not benefited from the increase in real estate prices. The net wealth of richer individuals rose from 2019 to 2021, but for the poorest wealth decile it declined (Figure 6). Over the past two years, the composition of financial assets has had relatively little influence on the cumulative real return of households' portfolio (Figure 7). The real value of equity shares, which comprise a much smaller share of poorer households' portfolios, did not resist inflation better than bank deposits because the pandemic and the energy shock lowered corporate earnings. However, poorer households are less likely to own residential property, for which prices have increased rapidly since the start of the pandemic. Of the poorest one-fifth of households, only 7.2% own any real assets, compared with 94% of the richest one-fifth.⁹ Households in the middle of the wealth distribution, which tend to have more debt than poorer households, may ultimately benefit from the declining real value of their mortgages.

Low competition for bank deposits means that poorer households are unlikely to benefit immediately from higher central bank policy rates. By mid-2022, all EU central banks had increased their policy rates to fight inflation — some by over 5 percentage points (see Chapter 1). All households benefit from lower inflation, in particular poor households, for the reasons discussed in this section. However, the transmission of monetary policy to deposit rates has been much slower than to lending rates (see Figure 8 for the euro area; the effect is more pronounced in some non-euro EU countries whose central banks increased interest rates more). Loan rates are rising rapidly, which puts pressure also on households in the middle of the wealth distribution whose mortgage payments become more expensive.

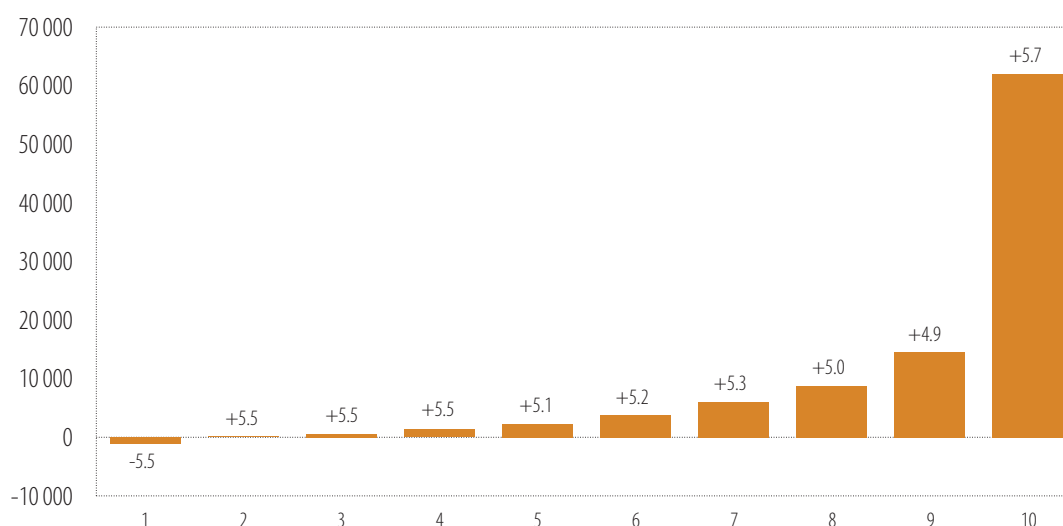
Households whose financial situation is deteriorating are less confident about their ability to withstand inflation. Households facing financial difficulties have less resources to deal with higher prices (Figure 9). One reason is that poorer households, by definition, have smaller financial buffers. Another reason is that poorer households often have fewer options for adapting their spending, which is more focused on necessities. Already in 2017, regular expenses were eating up more or all of the income of three-quarters of households in the bottom wealth quintile, where median annual gross income was EUR 17 900. People in households already stumbling from higher prices caused by the Ukraine war reported more frequently that they were feeling uncertain and helpless.¹⁰

9 Real assets consist of real estate, vehicles and, for the self-employed, businesses. For the average household, by far the largest share of real assets is in real estate.

10 European Commission (2022), Question 10.

Figure 6

Net personal wealth per adult in the European Union (in EUR, purchasing power parity), by wealth deciles

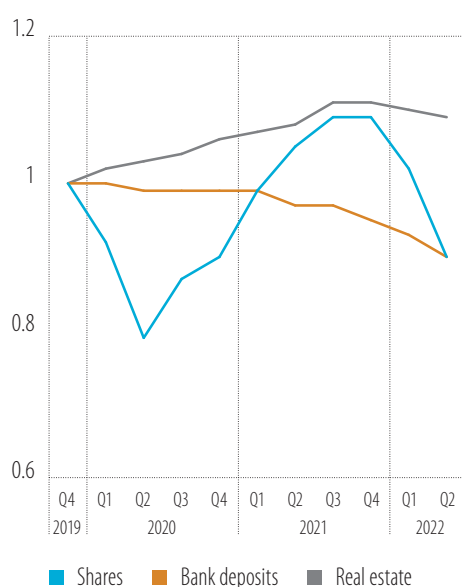


Source: World Inequality Database.

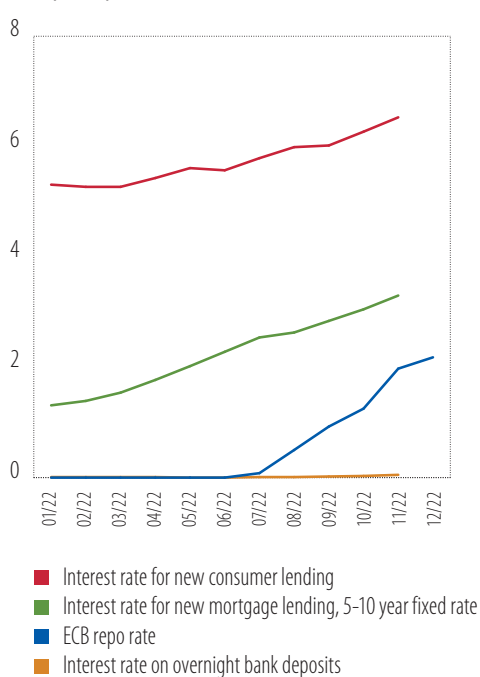
Note: The height of the columns shows the absolute growth in net wealth. The numbers over the bars indicate the change. Household wealth is defined as the sum of financial assets (such as deposits, stocks, bonds, equity) and non-financial assets (such as housing, business), net of debts, owned by individuals. The purchasing power parity is based on 2021 prices.

Figure 7

Real value of shares, bank deposits, and residential property, euro area (2019Q4=1)

**Figure 8**

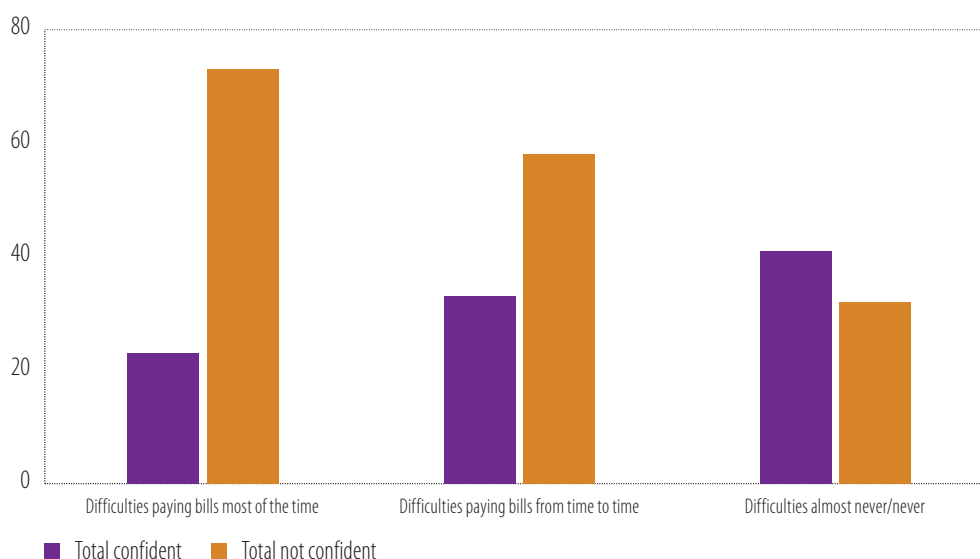
European Central Bank policy rate and selected euro area bank interest rates (in %)



Source: EIB staff estimates based on European Central Bank (ECB) data.

Figure 9

Individuals' confidence that the Ukraine conflict will not affect them personally (in %), by financial situation



Source: European Commission 2022, EIB staff estimates.

Note: Interviews for the special Spring Eurobarometer commissioned by the European Parliament took place in April and May 2022.

Question: Thinking about the war in Ukraine and its potential consequences on your life, how confident do you feel that your life will continue unchanged?

Governments provided massive support to soften the impact of the energy price shock. For most EU countries, governments announced measures for households and firms worth 2% to 5% of GDP from September 2021 to October 2022 (see Chapter 1). The support is equal to about half of the support that EU countries provided for the pandemic from January 2020 to October 2021.¹¹

The support measures aimed to quickly help those most in need while encouraging energy savings. Meeting both objectives simultaneously proved difficult, in part because of the time it takes to develop well-designed policies and because of technical constraints, such as the availability of data on household wealth. Instead, most governments initiated a range of support measures, some of which were available quickly, while others were more targeted and took longer to implement or retained more of an incentive to save energy. As of November 2022, all EU countries lowered retail prices of energy by reducing taxes, regulating prices, or instructing state-owned energy companies to lower their prices. Depending on the design, richer and poorer households benefited. Most countries supplemented these measures with transfers to vulnerable groups like poorer households and families (Sgaravatti et al., 2021).

The future financial situation of poorer households also depends on how the energy crisis affects the labour market. At the time of writing, labour markets have proved resilient to the energy price shock. In the third quarter of 2022, 3.2% of jobs in the European Union were vacant, more than during the same quarter in 2019. In that quarter, average EU vacancy rates were higher in all sectors than before the pandemic, and were particularly high in accommodation and food services, as well as construction. More detailed information is available for some EU members. In Germany, for example, low-skilled jobs that were filled in November 2022 had been open for an average of 161 days — more than a month longer than a year earlier, and not far below the time it took to fill vacancies for professionals (175 days). Nevertheless, some national labour markets appeared to cool, and the risk of bankruptcies was rising (see Chapter 3).

11 IMF (2021) estimated in November 2021 that the value of “above the line measures” by EU countries and the European Union was 11.4% of EU GDP.

The war in Ukraine endangers regional cohesion, with Central and Eastern Europe most at risk

The invasion of Ukraine has sent shockwaves throughout the European Union, but its effects appear concentrated in Central and Eastern Europe. This section discusses three main ways in which the war in Ukraine could hamper regional cohesion in Europe. First, geopolitical uncertainty could shift investments away from regions close to the conflict area. Second, immigration from Ukraine is likely to contribute more to the growth of richer regions where employment prospects are better. Third, the energy crisis, which is accelerating the green transition, will burden regions that were already struggling with the transition.

Geopolitical risks facing Central and Eastern Europe could slow cohesion

Geopolitical crises are a source of uncertainty, and uncertainty depresses economic activity. The war in Ukraine creates uncertainty around energy security and raises the risk of violent conflicts in Europe. It is well known that uncertainty hampers economic activity (Chapters 1–3). Hoping for uncertainty to be resolved over time, firms tend to postpone investment decisions and to hire less (Caldara et al., 2022). Moreover, households delay spending on larger items or on consumer durable goods (Coibion et al., 2021). As geopolitical uncertainty adds to other sources of uncertainty, it depresses economic growth. This section tries to identify the impact geopolitical uncertainty has on investment. It finds clear signs that geopolitical uncertainty has increased, and that it is affecting public investment. There is also some tentative evidence that corporate investment is responding as well.

Russia's invasion of Eastern Ukraine amplified geopolitical risks — particularly in Eastern Europe, where it triggered higher military spending. News reports related to the geopolitical risks became more frequent around the Russian invasion (see for example Caldara et al., 2022). For many European countries, this surge of concern and commentary is the highest increase in decades. People in countries further east in the European Union are more likely to believe that the invasion in February 2022 poses a threat to their country's security (Figure 10). However, concerns about geopolitical risk pre-date the Ukraine invasion and have prompted countries to invest in their military capacities. Since the Russian invasion of Crimea in 2014, the easternmost NATO countries in the European Union have increased military spending by more than those further west (Figure 11).

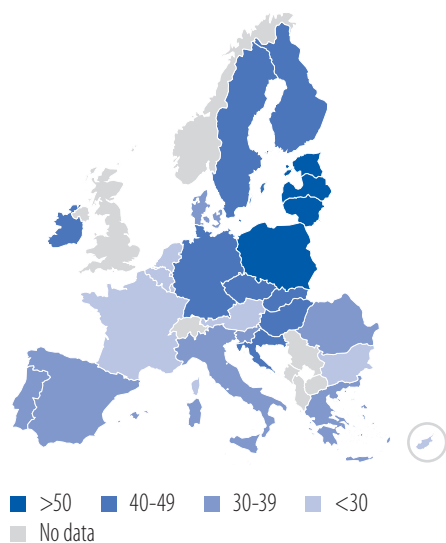
If higher geopolitical uncertainty in Eastern Europe depresses investment, it could slow cohesion. Regions further east in the European Union tend to have lower GDP per capita compared to the EU average and to the country in which they are located. Most of the regions are cohesion regions, which tend to be less developed and have per-capita income that is below 75% of the EU average.

We compare the geographical pattern of geopolitical uncertainty with that of corporate investment to see whether uncertainty might have caused investment to decline. We compare the evolution of two variables across EU regions since February 2022: the importance of uncertainty as an obstacle to corporate investment, and the number of merger and acquisition (M&A) announcements. We observe that uncertainty obstructed investment more in Central and Eastern Europe, and that the number of M&A announcements with targets further east fell by more than those with targets in the rest of the European Union, and tentatively attribute this to geopolitical uncertainty.

Uncertainty appears to be hindering investment further east in Central and Eastern Europe, but the role of geopolitical risk is unclear. The EIB Investment Survey (EIBIS) measures the importance of uncertainty about the future as an obstacle to corporate investment — without, however, specifically identifying the sources of uncertainty. The answers collected in the second quarter of 2022 show that uncertainty increased since 2021, and that it is a bigger investment obstacle for countries in Central and Eastern Europe, plus Finland (Figure 12). These results are obtained when controlling for firm-specific characteristics (sector, size, age, sales growth, profitability and activity in trade) and the importance of other investment obstacles (lack of demand, lack of skilled staff, high energy costs, inadequate digital

or transport infrastructure, labour or business regulations, and access to finance). However, the results only indicate the impact of geopolitical uncertainty on investment, because not all uncertainty can be attributed to the geopolitical crisis.

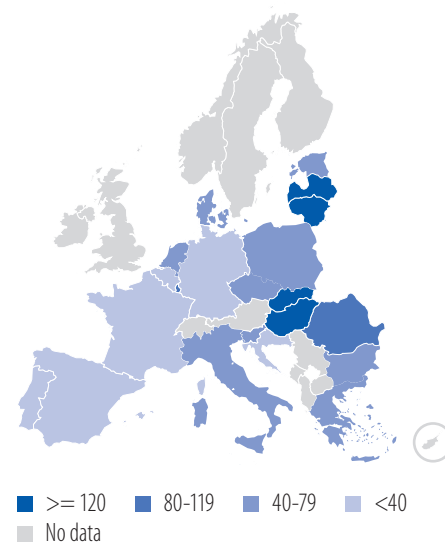
Figure 10
Share of respondents (in %) who believe the Ukraine war is a threat to their country's security



Source: European Commission 2022.

Question: Please tell to what extent you agree or disagree with each of the following statement: "The invasion in Ukraine is a threat to the security of our country." The map shows the share of respondents who "totally agree" with the statement. (The other options were "Tend to agree," "Tend to disagree," and "Totally disagree").

Figure 11
Increase in military expenditure from 2014 to 2022 for EU NATO members (in %), inflation adjusted



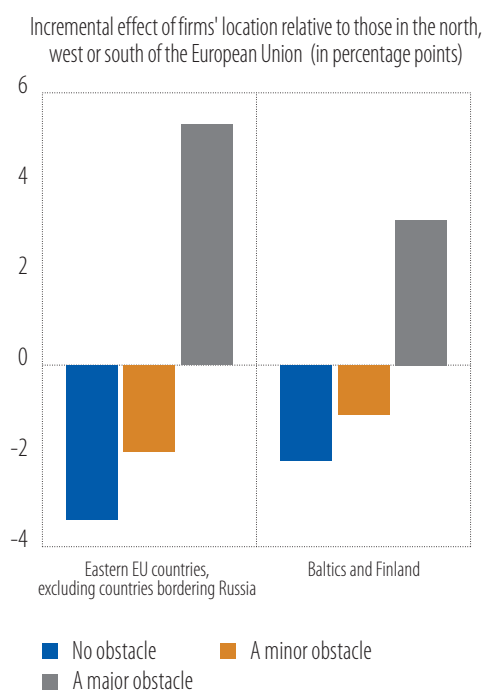
Source: NATO 2022.

Note: Figures for 2022 are estimates.

There are some early signs that geopolitical risk may dampen cross-border investment in Central and Eastern Europe. Cross-border M&A activity typically responds to political uncertainty in developing and emerging markets (Cezar et al., 2020). M&A announcements with targets in Ukraine collapsed after the country was invaded, compared to the same period in 2021.¹² To see whether the war might already have influenced the location of M&A targets in the European Union, we regress the region in which cross-border M&A targets are located on factors that might determine the location of the acquiring firm's investment. We look at whether the transaction was announced after the war broke out (24 February 2022 to 11 December 2022) or during the corresponding period in 2021; the sector in which the target firm is operating; and, as a proxy of the acquirer's funding costs, whether at least one of the acquiring firms is located in the euro area. The marginal effects of the time of announcement are small but significant (Figure 13). The likelihood that the target firm is located in EU countries bordering Russia was 1.4 percentage points lower from 24 February 2022 to 11 December 2022, compared to the same period a year earlier. For target firms located in Western and Northern Europe or in Southern Europe, the likelihood is 1.7 percentage points higher.

¹² According to the Bureau Van Dijk's ORBIS database, five M&A announcements were made from 24 February 2022 to 11 December 2022, compared with 73 announcements concerning minority stakes, capital increases or acquisitions during the same period in 2021.

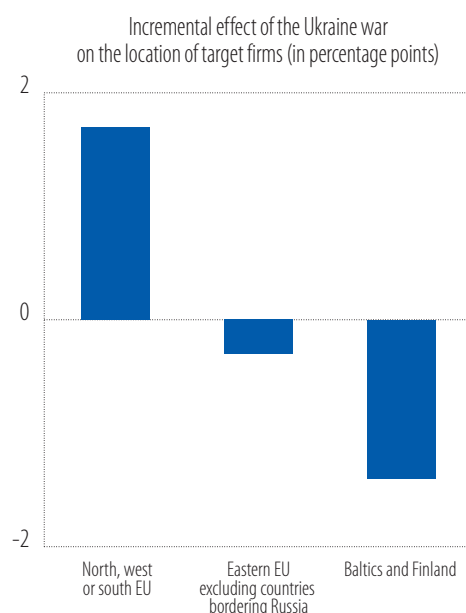
Figure 12
Likelihood that uncertainty is an obstacle to investment, by firm location



Source: EIBIS 2022, EIB staff estimates.

Note: The bars show how a firm's location influences the likelihood that it will report uncertainty is an obstacle to investment. For example, in the EU countries bordering Russia, the likelihood that a firm reports uncertainty is a major obstacle to its investment is 3.2 percentage points higher than for firms in northern, western and southern EU countries. Estimates are derived from an ordered logit regression that takes the importance of uncertainty as an investment obstacle as a dependent variable. Controls are described in the main text.

Figure 13
Likelihood of merger and acquisition announcements, by target location



Source: ORBIS M&A 2022, EIB staff estimates.

Note: The bars show how the date when a cross-border M&A transaction is announced influences where the target firm is located. For example, the likelihood that the target firm is located in the EU countries bordering Russia was 1.4 percentage points lower from 24 February 2022 to 11 December 2022 than during the corresponding period a year earlier. Estimates are derived from a multinomial logit regression that takes the location of the target firm as a dependent variable. Controls are described in the main text.

So far, the estimated impact of geopolitical uncertainty on investment appears to be small, and it remains tentative. Geopolitical uncertainty is only one determinant for investment decisions, alongside skills and labour costs, government subsidies, infrastructure, good governance and a predictable regulatory environment. Also, cross-border mergers and acquisitions can take many months, if not years, to prepare. While announcements are timely signals of M&A activity, they may not yet have responded to the increase in geopolitical risk.

Migration from Ukraine is alleviating labour shortages in Central and Eastern Europe, while weighing on some municipalities' social infrastructure

The invasion of Ukraine triggered the largest displacement of people in Europe since World War II. The conflict displaced about one-third of Ukraine's population of over 40 million, most within Ukraine (United Nations High Commissioner for Refugees (UNHCR), 2022a). As of early December 2022, about 7.9 million Ukrainians had resettled across Europe, with almost 4.8 million registered for the European

Union's "Temporary Protection" or similar schemes (see below and UNHCR, 2022b). Most Ukrainians sought refuge in Central and Eastern Europe. Poland, Slovakia, Hungary, Romania and Germany received the largest number of refugees (UNHCR, 2022a). Refugees appear to have headed mostly for more densely populated, richer areas where employment prospects are better (Mulvik and Siarova, 2022).¹³

Regions that successfully integrate refugees into their labour market will benefit more from their arrival. The existing evidence suggests that migrants can help to ease labour shortages, moving to industries and occupations where their labour is most needed. Their impact on wages is relatively small (Kahanec and Zimmermann, 2016; Kahanec and Guzi, 2017; Kahanec and Pytlikova, 2016). Broadly speaking, however, refugees find it more difficult to enter the labour market compared to other migrants (Organisation for Economic Co-operation and Development (OECD), 2016). Health, language skills and social networks present particular challenges for the integration of refugees. Constructing policies that take these challenges into account may therefore help ease the integration of refugees into the workforce and society as a whole (Brell et al., 2020).

Some EU countries have benefited substantially from earlier immigration from Ukraine. Here, Poland stands out for the size of its Ukrainian immigration since Russia's occupation of Crimea in 2014. In 2021 alone, Poland issued around 325 000 work permits for immigrants from Ukraine.¹⁴ In contrast to earlier years, when most migrants from Ukraine sought employment as temporary workers in the agricultural sector, immigrants since 2014 predominantly settled in cities and sought work across a broad spectrum of economic sectors (Strzelecki et al., 2020). Strzelecki et al. estimate that this immigration increased Polish GDP by about 0.5% per year, accounting for over one-tenth of Polish GDP growth from 2013 to 2018.

Ongoing immigration from Ukraine is likely to increase the labour supply significantly in the Czech Republic, Poland and Estonia, and throughout the EU primarily in the services sector. Based on the size of the refugee population relative to their host countries, as well as the historical activity and historical employment rates for refugees, the OECD (2022) estimates that refugees from Ukraine are likely to increase the EU labour supply by 0.5% by the end of 2022, with larger increases expected in Poland (+2.1%), the Czech Republic (+2.2%) and Estonia (+1.9%). Most adult refugees are women. Refugees are highly qualified. According to UNHCR (2022b), which surveyed 4 900 refugees between mid-May and mid-June 2022, half are university-educated (vs. 29.5% of adults in the European Union), and an additional one-quarter of refugees have technical or vocational education. Three-quarters were working before they left Ukraine, primarily in education, trade and healthcare.

Refugees are providing a welcome injection of new workers into the labour market. In several European countries close to the conflict area, labour markets were very tight when the conflict erupted. Throughout much of the region, unemployment was extremely low. For example, only 2.4% of people aged 15 to 74 were unemployed in the Czech Republic, 2.9% in Germany and 3% in Poland. In Slovakia, migrants are filling jobs in trade and services that would otherwise have remained unoccupied (National Bank of Slovakia, 2022). In Poland, one-fifth of refugees were already working in April/May 2022, and another 10% had been offered employment (National Bank of Poland, 2022). In Germany, where Ukrainian refugees tend to encounter higher language barriers than in Eastern European countries, many refugees have joined language and integration courses. In the early autumn 2022, 17% of working-age Ukrainian refugees were already employed (Institute for Employment Research (IAB), 2022).

EU rules on working and residence permits make it easier for Ukrainian refugees to integrate into the labour market. Unlike in previous periods in which many refugees arrived in Europe (fleeing conflict in Syria, for example), Ukrainian refugees can apply for temporary protection in an EU country of their choice.¹⁵ The measure provides migrants with a residence permit for at least a year, a work permit and access to housing, education, welfare and medical care. The residence permit provides a degree of stability — not only for the refugees, but also for potential employers wishing to absorb hiring costs. The ability to choose the host

¹³ See also European Observation Network for Territorial Development and Cohesion (ESPON) (2019) for evidence on earlier migrations.

¹⁴ Department of Labour Market, Ministry of Family and Social Policy, Poland.

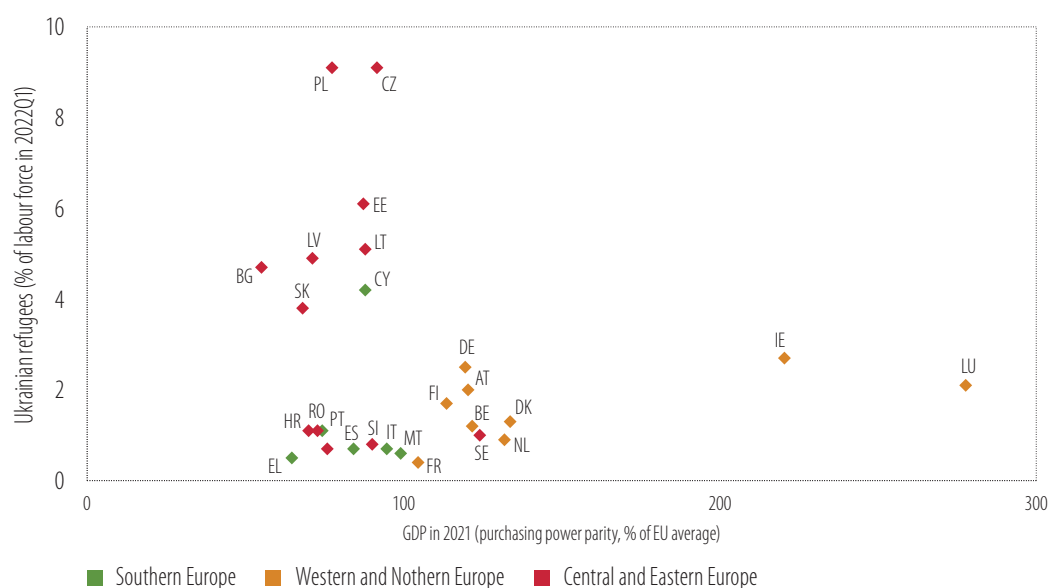
¹⁵ EU members have activated the Temporary Protection Directive, a legal instrument put in place in 2001, for the first time for Ukrainian refugees. See European Commission / DG Home for further information.

country should facilitate the matching of job-seeking refugees with jobs: Next to safety and family ties, employment prospects were the key reason refugees selected a particular host country (UNHCR, 2022b).

That said, refugees will need additional support to better integrate into local labour markets. Language courses and swift recognition of qualifications could further improve refugees' labour market prospects and enable them to move to more productive and better-paid employment. While high education levels could facilitate their integration into the labour market, the fact that many refugees from Ukraine are women with children suggests that additional investments in social infrastructure, in particular childcare and afternoon school facilities, might be needed to allow more refugees with young children to enter the labour market successfully (see for example Hauptmann et al., 2022). Ultimately, this support will benefit the host regions.

While the integration of refugees is likely to spur growth, whether it will benefit regional cohesion is less clear. On the one hand, refugee inflows are large relative to the labour force in countries whose GDP per capita is below the EU average (Figure 14).¹⁶ In that sense, integrating refugees would appear to benefit cohesion. However, within a given country, refugees are likely to move to the economically stronger regions with better employment prospects. These regions can be much wealthier than the EU average. For example, adjusting for purchasing power, the GDP per capita of the region including Warsaw is two-thirds higher than the EU average.

Figure 14
Ukrainian refugees with temporary protection status and GDP per capita, by host country



Source: Eurostat, UNHCR, EIB staff estimates.

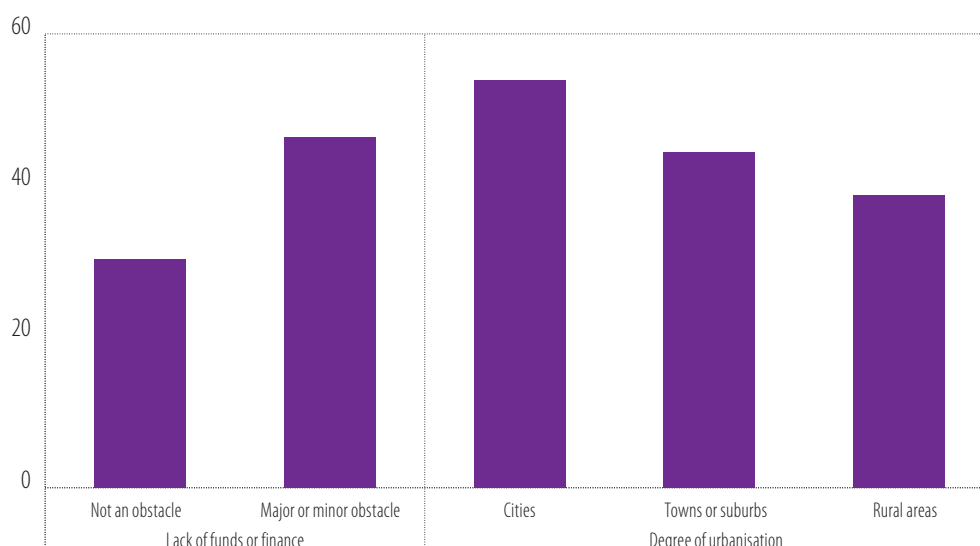
Note: Temporary protection is a legal status afforded refugees in the European Union.

In the short run, migration is putting pressure on the social infrastructure of some municipalities. As refugees arrive, municipalities need to provide schools, medical treatment, education and housing. Municipalities that reported being more challenged by the migration are more likely to report that financial constraints present an obstacle to their investments (Figure 15). Rural areas are less likely to report challenges than more densely populated areas. Presumably, this is because these areas have received fewer refugees relative to their population.

¹⁶ The likely increase in the labour force would be much smaller, mainly because of the large share of children in the refugee population, according to the estimates in the OECD (2022) publication quoted above.

Figure 15

Factors determining the probability that a municipality reports crisis-related migration as a challenge (probability in %)



Source: EIB staff estimates based on EIBIS Municipality Survey 2022, Eurostat and UNHCR 2022.

Note: The bars represent the probability of reporting crisis-related migration as a challenge, estimated from logistic regressions. The regressions control for municipality size, cohesion status, purchasing power of the region, number of doctors and hospital beds in the region, unemployment in the region, number of refugees in the country, healthcare, and education spending of the country.

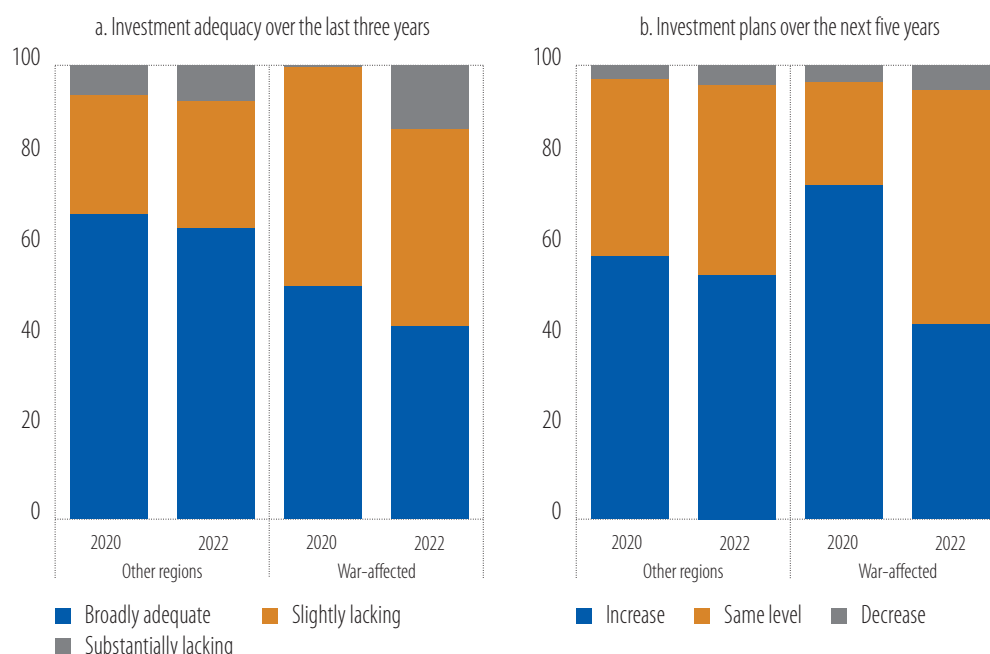
Municipalities bordering Ukraine or Belarus report more often than elsewhere that their investment in social infrastructure is inadequate. To some extent, this difference already existed in 2020, but a lower share of municipalities bordering on Ukraine and Belarus reported adequate investment in 2022 than previously (Figure 16a). This pattern also holds in Hungary, Romania, Slovakia and Poland, where the share of municipalities disclosing a substantial lack of social infrastructure investments rose from 4% to 15% from 2020 to 2022.

Nevertheless, these concerns do not seem to translate into plans to increase investment in social infrastructure (Figure 16b). One reason might be funding, which these regions report as a barrier to investment more frequently than other regions. Another might be that these regions are more than twice as likely to receive transfers from the central government. Less local autonomy could make it more difficult to rapidly increase investment. Finally, investment might be crowded out by the need to increase spending on other immediate needs, such as energy and refugee expenses.

A variety of EU programmes are available to fund the reception and integration of refugees from Ukraine. Local and regional authorities report that access to funding is a key challenge when receiving refugees and helping them to integrate (Dobiás and Homem, 2022). Various EU-level funding programmes are available for support. In particular, EU members can use cohesion funding from the previous budget period (2014–2020) to meet the basic needs of people fleeing the Russian invasion of Ukraine, to enhance the administrative capacity of EU members to cater for refugees' needs and to develop tailor-made solutions for their long-term integration. These resources complement support from the Asylum, Migration and Integration Fund, and other funding sources.

Figure 16

Adequacy of municipalities' investment in social infrastructure (% of respondents), by survey wave and proximity to Ukraine/Belarus border



Source: EIB Municipality Survey 2020/2022 and EIB staff estimates.
Question: In the last three years, would you say that within your municipality or city the level of investment in infrastructure projects was broadly adequate, slightly lacking or substantially lacking in each of the following areas?

Source: EIB Municipality Survey 2020/2022 and EIB staff estimates.

Question: For each of the following areas, if you compare the average annual infrastructure investment you are planning for the next five years vs. the average annual infrastructure investment recorded in the last three years, does your municipality or city expect to increase, decrease, or have around the same level of spending on infrastructure investment?

The energy crisis is putting particular pressure on Central and Eastern Europe

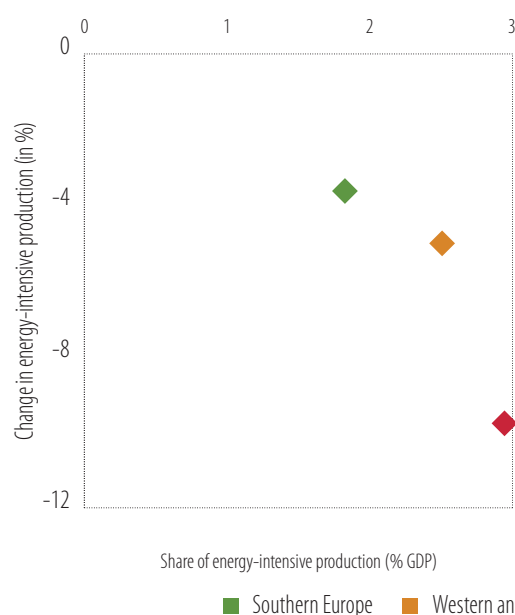
The energy crisis is rapidly accelerating the green transition for energy-intensive firms. These firms already faced intense global competition from non-EU countries that have lower energy prices and environmental standards. Skyrocketing energy prices prompted energy-intensive firms¹⁷ in the European Union to scale back production by 5% from January to September 2022, while overall manufacturing output increased by 3%.

Like geopolitical uncertainty and migration, the energy shock tends to affect Central and Eastern Europe more than other EU regions. The amount of energy used relative to GDP tends to be higher in Central and Eastern Europe. For example, the energy intensity of the Czech Republic's output was twice that of Germany in 2019, and Bulgaria's was more than four times that of Italy. In part, this reflects the region's specialisation in energy-intensive production. In addition, production and buildings in these areas are less energy efficient.¹⁸ Energy-intensive industrial production declined by more in Central and Eastern Europe from January to September 2022 than in the rest of the European Union (Figure 17).

¹⁷ Energy-intensive sectors are defined in this section as paper, coke and refineries, chemicals, non-metallic minerals and basic metals.

¹⁸ European Commission (2022b).

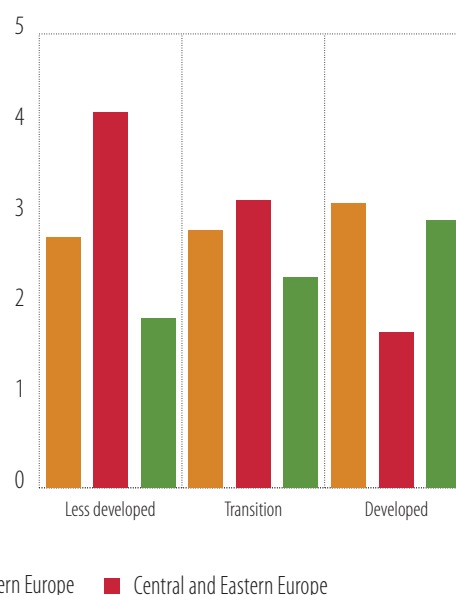
Figure 17
Decline in production of energy-intensive sectors from January to September 2022 and share of energy-intensive production in GDP, by region



Source: Eurostat.

Note: Changes in energy-intensive production are aggregated by country using as weights the value added of energy-intensive sectors. The chart shows for each region simple averages of the country aggregates. Data on the share of energy-intensive production in GDP is from 2019.

Figure 18
Employment in energy-intensive sectors (% of private sector employment), by region and development status



Source: Eurostat, EIB staff estimates.

Note: Data is from 2019. Shown are simple averages of the NUTS2-level data.

Within Central and Eastern Europe, the energy shock poses a risk not only to growth, but also to cohesion. Energy-intensive production is clustered throughout the European Union, in richer and poorer regions alike. Some energy-intensive clusters lie in regions that are rich and well diversified, such as southwest Germany. Other clusters, however, are located in less developed or transition regions that face convergence and transition challenges, such as ending coal mining or coal-based energy production. In Central and Eastern Europe, employment in energy-intensive sectors is greater in less developed regions (Figure 18), where just over 4% of employees work in those sectors.¹⁹ The opposite holds true in Southern Europe, where the share of employment in energy-intensive industries tends to be higher in more developed regions.

The energy shock amplifies the challenges posed by the green transition, particularly in regions with substantial coal activities. As energy-intensive firms are scaling down production far sooner than planned, the energy shock is accelerating the industrial changes required for the green transition. This transition tends to be particularly difficult in regions with extensive mining activities and coal-based electricity generation. Coal has historically been used to power energy-intensive industrial activities.²⁰ As a result, regions in which a large number of people are employed in coal-related activities also tend to also have high employment in energy-intensive industries. This is particularly true in less developed regions in Central and Eastern Europe, making cohesion particularly vulnerable to the energy crisis (Figure 19). Experience shows that employees in coal activities cannot easily find alternative employment because

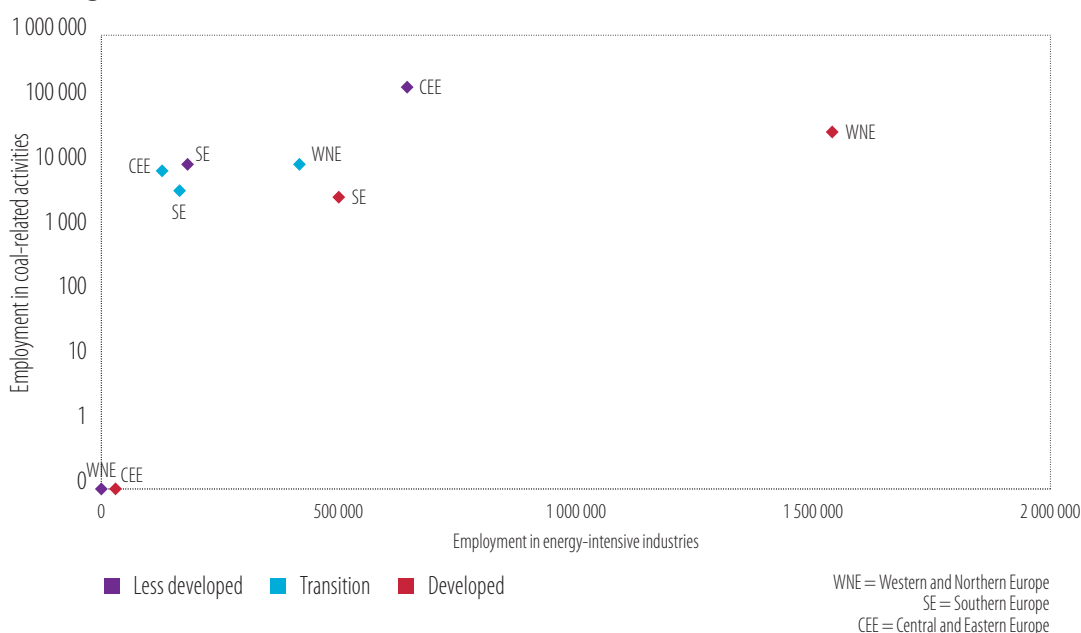
¹⁹ Simple average across countries.

²⁰ Regions such as Silesia, the Ruhr area in Germany or Asturias in Spain are examples.

they lack the required skills or because of a lack of suitable jobs in their home regions. Studies using labour-accounting methodologies find no sizeable change in unemployment, but instead document an increase in emigration and in the number of economically inactive people in coal regions (see for example Beatty and Fothergill, 1996; and Fieldhouse and Hollywood, 1999).

Figure 19

Employment in coal-related activities and in energy-intensive industries, by development and region



Source: Alves Dias et al. (2018), Eurostat, EIB staff estimates.

Note: Changes in energy-intensive production are aggregated by country using as weights the value added of the energy-intensive sectors. The graph shows for each region simple averages of the country aggregates. Shares of energy-intensive production in GDP are from 2019. Employment in coal-related activities was available from 2018 (see Alves Dias et al. (2018), Annex 5).

The green transition has created new jobs, but less so in cohesion regions. Firms that are implementing digital technologies are more likely to add jobs compared to their non-digital peers (EIB, 2022). Similarly, firms investing in the green transformation have been more likely to add jobs and, in the process, have invested more in training (Figure 20). However, it appears that while green and digital firms in cohesion regions do increase employment, they do so to a lesser extent than firms in developed regions.

To offset the negative impact of the energy crisis on cohesion, governments in poorer regions need to improve the business environment and lower well-known barriers to investment. Barriers to investment tend to be higher in cohesion regions than elsewhere. For example, in the EIB Investment Survey, a larger share of firms in cohesion regions than in developed regions reports that finance, regulations and energy cost are major obstacles to investment (Figure 21). Access to finance is particularly a problem for small and medium-sized enterprises (SMEs) in cohesion regions (30% of small and medium firms in less developed regions cite the availability of finance as a major obstacle, compared with 17% of such businesses in more developed regions). Addressing this barrier can help firms in cohesion regions to grow and add new local jobs (Box C).²¹ There is also evidence that the quality of government is lower in cohesion regions (Figure 22). Corruption is also known to reduce growth and increase inequality. Corruption distorts incentives, acts as an inefficient tax on business and reduces the quality of investments (Mauro, 1995).

²¹ Perhaps surprisingly, poor digital infrastructure and a lack of skilled staff appear to be less of an issue in cohesion regions. However, this difference is likely to reflect the current level of development, rather than more availability of skilled staff and better digital infrastructure in absolute terms. Firms in cohesion regions tend to direct a smaller share of their investment to training than those in developed regions (EIBIS, 2020–22).

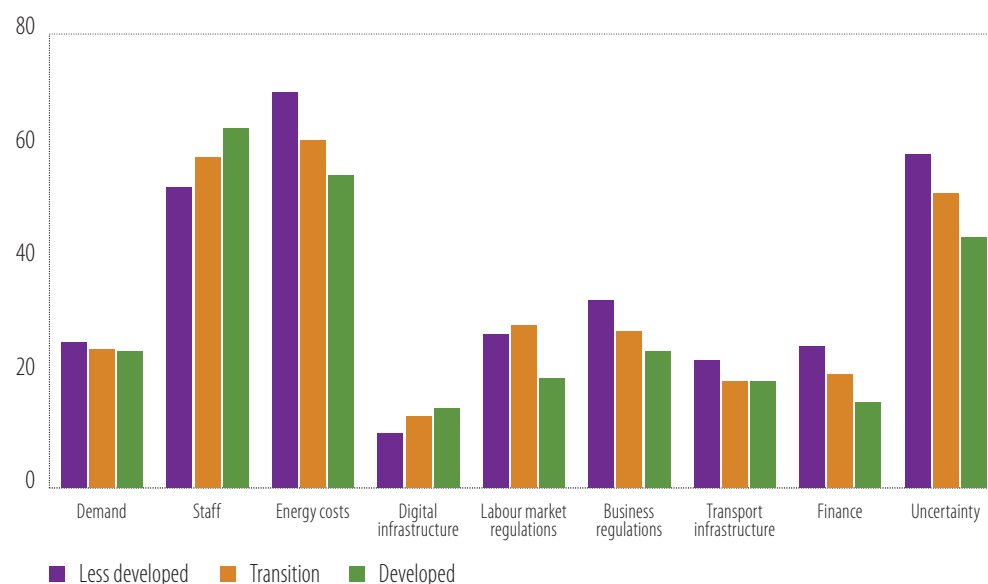
Figure 20
Net job creation and firms investing in training, by level of regional development



Source: EIBIS 2022.

Note: Net balance refers to share of firms that increased employment minus share of firms that decreased employment. Share of firms investing in training shows the percentage of firms that spend more than EUR 50 per employee for training.

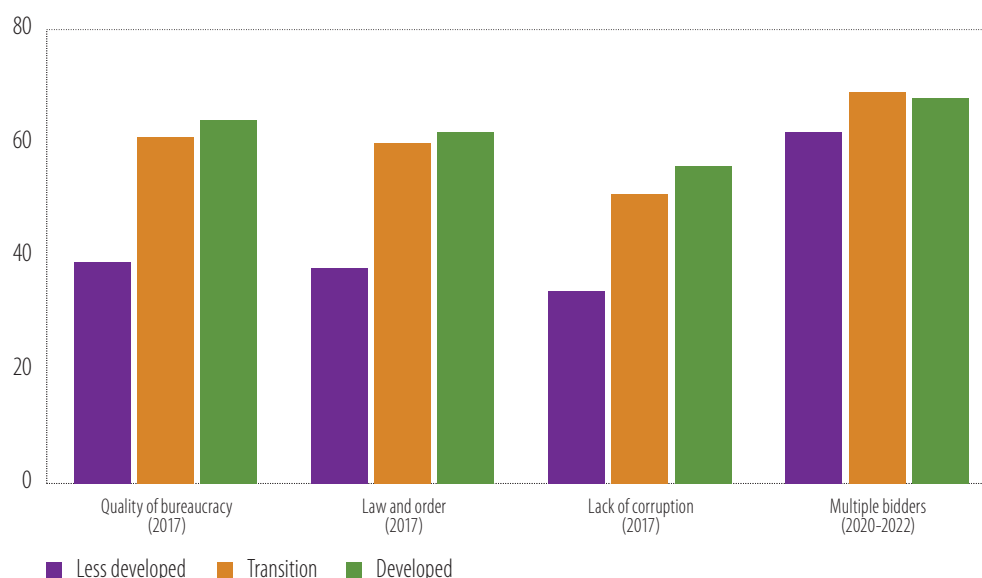
Figure 21
Major investment obstacles (% of firms), by regional development



Source: EIBIS 2022.

Question: Thinking about your investment activities, to what extent is each of the following a major obstacle?

Figure 22
Indicators for quality of government (index), by regional development



Source: University of Gothenburg (Quality of Government Institute), EIB staff estimates.

Note: The first three indicators are aggregated using NUTS2-level regional data in Charron et al (2020). They are the components of their overall quality score and date from 2017. As a partial update of the work of Charron et al, the “multiple bidders” indicator is based on European public procurement contracts (<https://ted.europa.eu/TED/main/HomePage.do>) awarded January 2020 to June 2022. For this indicator, the bars show the marginal effect of the development of the region in which the awarding authority is located in a regression explaining whether only one bidder submitted a bid for the awarded contract. A large share of single-bidder auctions is typically interpreted as a warning sign for corruption. The other explanatory variables in the regression are the type of good, service, or work procured, a dummy for EU-funded contracts, the type of awarding authority, and whether the authority acted as a central purchasing authority.

Box C

Impact of EIB intermediated lending across cohesion regions²²

A number of studies have shown that the European structural and investment funds had a positive and significant effect on regional economic growth (see for example Dall’erba (2005); Esposti and Bussoletti (2008), Becker et al. (2012), Pellegrini et al. (2013), Cerqua and Pellegrini (2018), Coelho (2019) and Barbero et al. (2023)). Some studies, however, found more conditional support for the effectiveness of these funds, depending on regional development (Cappelen et al., 2003), institutional quality (Ederveen et al., 2006; Arbolino et al., 2020) and human capital (Becker et al., 2013; San Juan Mesonada and Sunyer Manteiga, 2021). It appears that studies focusing on more recent years find a larger impact made by the funds, suggesting that the way of allocating and using them has become more efficient over time (Dall’erba and Fang, 2017).

Firm-level evidence, including from EIB lending, supports these results. Micro-studies have found that support from EU cohesion policy promotes firms’ growth, employment and productivity (Benkovskis et al., 2019; Bachtrögler et al., 2020). Furthermore, recent evidence culled from impact studies of EIB-intermediated lending to small businesses and mid-size firms, or mid-caps, shows that the added impact of the loans is significantly larger for companies in less developed regions.²³

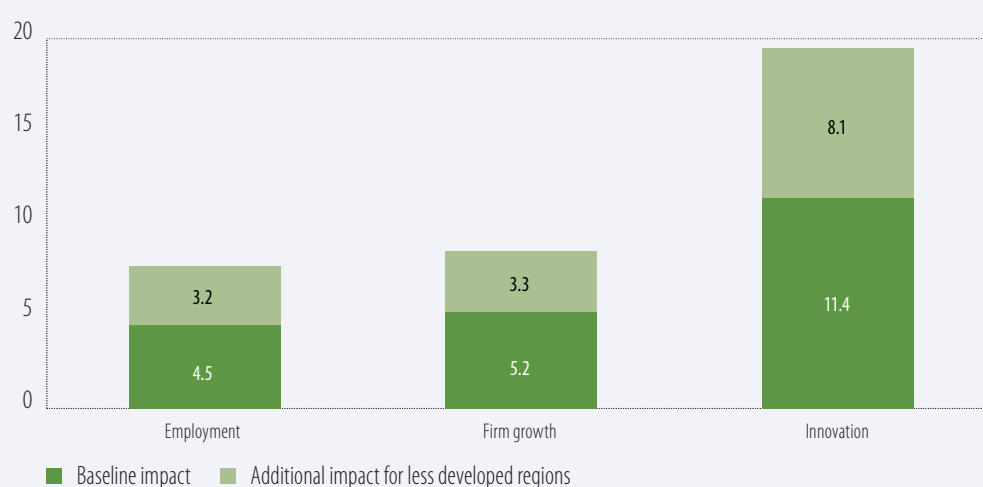
²² Based on EIB (2023).

²³ EIB, “Impact Assessment of EIB intermediated lending,” Economics – Impact Studies Series (forthcoming).

Figure C.1 shows the average impact for EIB beneficiaries in the three years after receiving the loan, using the 2021-2027 Cohesion Policy classification of EU regions. Whereas the baseline analysis finds an overall increase in employment, firm growth and innovativeness for EIB beneficiaries relative to their peers, the results also show a significantly larger effect in less developed regions relative to developed ones. The impact on firms' employment and asset growth in the three years following the loan is approximately 3% higher in less developed regions. Similarly, less developed regions see an 8% higher impact on firms' innovation. Both results support the idea that the loans result in added benefits to less developed regions, which meet the EIB's goals of economic and social cohesion.

Figure C.1

Impact of EIB intermediated lending (in %)



Source: EIB staff estimates based on allocations of EIB Multiple Beneficiary Intermediated Loans over 2008-2017 linked to firms' financial figures reflected in the Bureau van Dijk's ORBIS database.

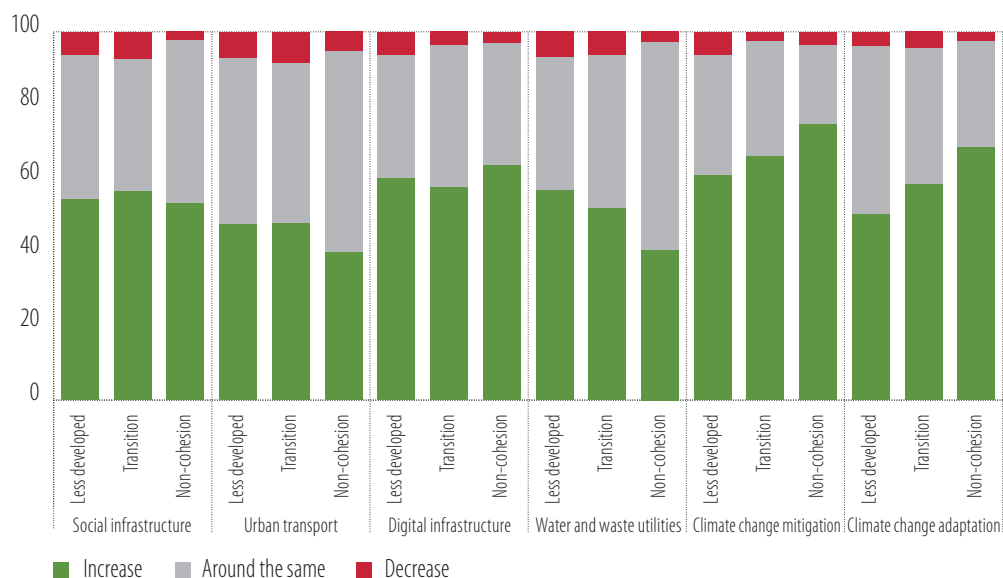
Note: Firm growth is measured by the percentage change in firms' total assets. Innovativeness is measured by the percentage change in firms' intangible fixed assets.

Municipalities can play a role in reducing these obstacles, including through investments in local infrastructure. Municipalities conduct around one-third of all public investment in economic activity in the European Union.²⁴ According to the 2022 EIB Municipality Survey, municipalities are planning to increase investment in the digital and green transformations (Figure 23). However, the share of municipalities planning to increase investment is lower in less developed regions, perhaps because they first need to fill gaps in public infrastructure. In general, a larger share of municipalities in less developed regions report that insufficient finance and access to skills hold back their investment.

EU cohesion policy should continue to help municipalities build the administrative capabilities they need to design and implement investment plans. Municipalities in less developed regions tend to lack the skills needed to implement green projects than more developed regions (Figure 24, green bars). The lack of these capacities can act as a break on investment plans, which could further hinder municipalities' ability to receive financial support from the European Union. However, municipalities in less developed regions typically have ambitious investment plans — plans that would push their green transition to the same level as developed regions (Figure 24, blue diamonds). A big obstacle to delivering those investment plans, however, is access to the expert knowledge needed to implement green projects. This tends to be more prevalent for municipalities in less developed regions (Figure 25). A range of EU programmes are available to support regions' ability to build the skills and technical expertise required to design and implement investment plans, including programmes managed by the European Investment Bank.

²⁴ From Eurostat, general government expenditure by function, 2020. For a detailed discussion of local investment in infrastructure, see EIB (2020).

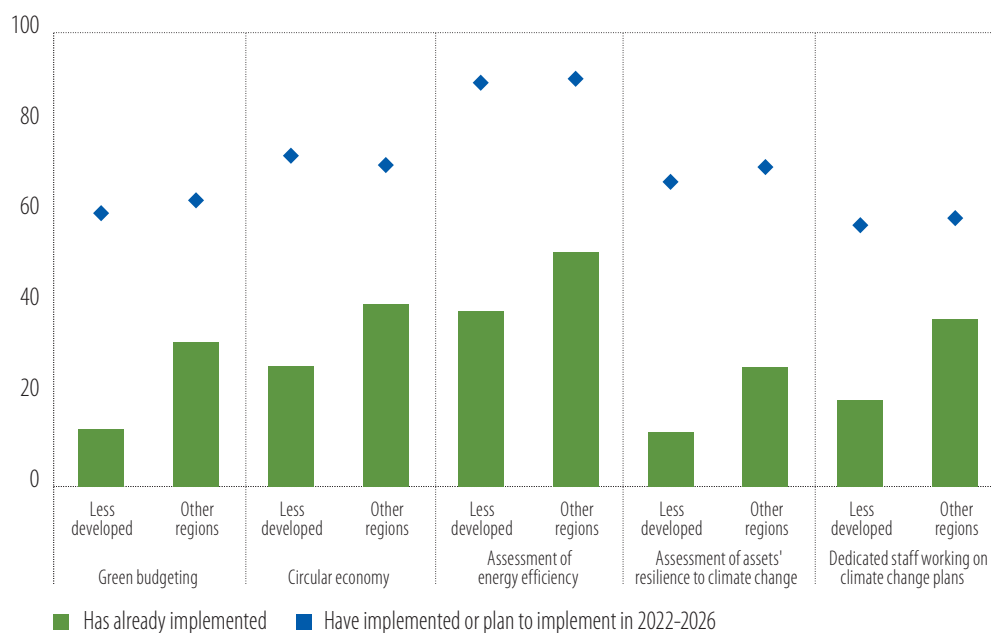
Figure 23
Municipal investment plans (in %), by regional development



Source: EIB Municipality Survey 2022.

Question: For each of the following areas, if you compare the average annual infrastructure investment you are planning for the 2022-2026 period vs. the average annual infrastructure investment recorded in 2019-2021, does your municipality expect to increase, decrease, or have around the same level of spending on infrastructure investment?

Figure 24
Municipalities' green capacities and sophistication (% of respondents), by regional development

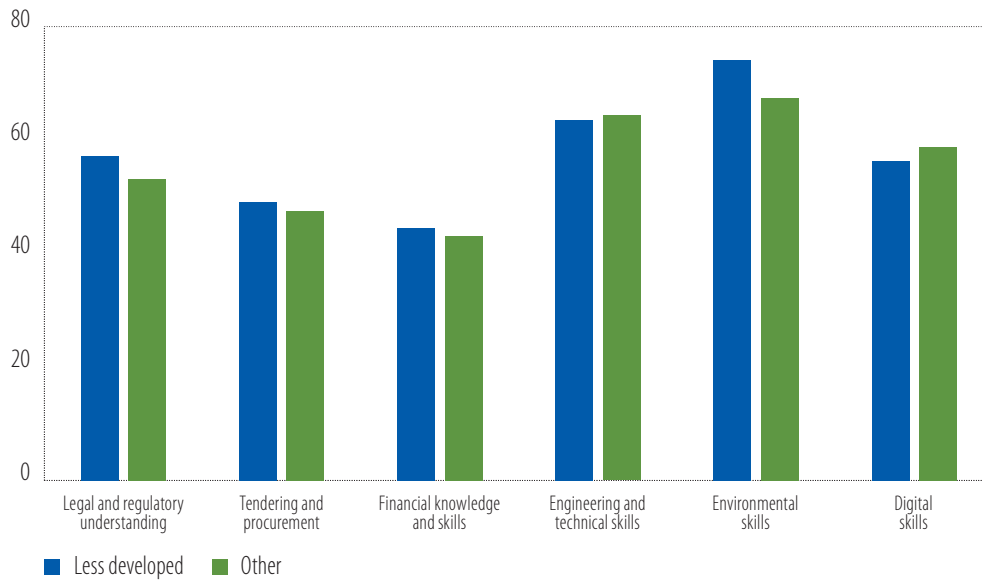


Source: EIBIS Municipality Survey 2022.

Question: Thinking about climate change and environment sustainability. For each of the following please tell me whether your municipality has already implemented, has plans to implement in the 2022-2026 period or has no plans to implement in the 2022-2026 period?

Figure 25

Share of municipalities reporting that insufficient access to experts is an obstacle to investment (in %), by regional development



Source: EIB Municipality Survey 2022.

Question: For each of the following areas, if you compare the average annual infrastructure investment you are planning for the 2022-2026 period vs. the average annual infrastructure investment recorded in 2019-2021, does your municipality expect to increase, decrease, or have around the same level of spending on infrastructure investment?

Conclusion and policy recommendations

The war in Ukraine risks exacerbating the cohesion challenges Europe already faced across social groups and regions. The energy crisis triggered by the war has further worsened the financial situation of all households — arguably to an even greater degree for poorer and older households. Regional cohesion is likely to suffer from geopolitical uncertainty, the arrival of refugees and the energy shock.

Efforts must be made to strengthen social and regional cohesion, regardless of the Ukraine war. All regions will need to transform in the coming decades to reach EU climate goals. Without this broad-based transformation, Europe will not be able to reduce its dependence on fossil fuels (particularly from Russia) in the medium term, or to reach carbon neutrality in the longer term. The pandemic and the surge in energy prices show that shocks can accelerate economic shifts. Fast transformation requires flexibility, new ideas and investment by public and private stakeholders.

Social and regional funding is available through the EU Cohesion Fund and the Recovery and Resilience Facility. For the 2021–2027 budget period, the EU plans to contribute EUR 244 billion to support cohesion through the Cohesion Fund. In addition, out of the investments to be funded by the Recovery and Resilience Facility from 2021 to 2026, EUR 193 billion will contribute to social and territorial cohesion. Relative to GDP, most of the funds will flow to Central and Eastern Europe.²⁵

Public policy needs to combine public investments with reducing administrative and regulatory investment barriers, which will encourage firms to invest and innovate. As with any economic transformation, corporate investment and innovation are necessary for the green and digital transformation. Investment and innovation can only flourish if they are fostered by an appropriate regulatory environment, sufficient public capital and high-quality public services. Programmes intended to encourage growth and transform the EU economy, such as the Juncker Plan in 2014 and NextGenerationEU in 2020, effectively combined public investments with regulatory and policy reforms.

To promote cohesion, public investment should boost social, transport, green and digital infrastructure and continue to improve workers' skills. Public investment in social infrastructure and mobility, such as affordable housing and transport, facilitates social cohesion, and it is especially needed in regions that are accommodating a large number of refugees. Investments in energy-efficient, affordable housing and clean transport would help integrate refugees while simultaneously advancing the green transition. Policy should also continue to address the shortage of skilled labour, which consistently tops the list of investment barriers reported by firms throughout the European Union.

Policy support should focus on the most severely affected groups and regions. Fiscal support for the energy crisis should focus on transfers to the most vulnerable groups while keeping incentives to save energy intact. This means avoiding policies that reduce the price of energy for all groups.

²⁵ For 2021–2027, the EU Cohesion Fund allocates an average of 12.7% of 2021 GDP to countries in Central and Eastern Europe, versus 0.4% for countries in Western and Northern Europe and 6.4% for countries in Southern Europe.

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