INVESTMENT REPORT 2024/25

INNOVATION INTEGRATION AND SIMPLIFICATION IN EUROPE

European Investment Bank | Group

Chapter 3

Enablers and constraints for firms' investment

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

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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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Published by the European Investment Bank.

Printed on FSC® Paper.

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Download the complete report:
https://www.eib.org/en/publications/20240354-investment-report-2024

Available as:

pdf: ISBN 978-92-861-5902-2 ISSN: 2599-8277

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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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Acknowledgements

Ambra Boilini for research assistance.

Chapter 3

Enablers and constraints for firms' investment

Investment by firms recovered relatively quickly from the pandemic and the energy shock, but it has stalled in the last year and a half – putting at risk the substantial capital spending needed for the green and digital transition. After Europe's sovereign debt crisis in 2011-2012, real corporate investment took five years to return to pre-crisis levels. After the pandemic and the energy shock, it took less than two years, as supportive public and monetary policies allowed firms to invest in digitalisation and energy efficiency while preparing to transition away from fossil fuels. More recently, however, firms' real investment has flagged as the economy has lost steam. Policy support has become much more targeted, even though financing conditions are still tight in historical terms. The current environment of weak overall demand, a lack of skilled labour, elevated uncertainty regarding geopolitical risks, and looming tariff hikes and sanctions, is causing firms to hold back some of their investment. The peak of the energy crisis may have passed, but energy prices remain well above pre-crisis levels and are dampening the production and the long-term prospects of the most energy-intensive sectors. Overall, EU firms are investing less than US firms.

Firms' expectation that financial conditions will improve may support investment, but lower profits and high uncertainty could hinder it. In the euro area and in non-euro area countries, monetary policy has begun to loosen. The costs of bank borrowing and corporate bond yields have started to decline from the highs recorded at the beginning of 2024. Firms are taking out loans again as credit conditions ease. These developments bode well for investment going forward, especially as policy support withdraws and firms have less profits to invest. Geopolitical uncertainty, however, remains a drag.

However, the EU financial system remains ill-suited to adequately finance the economic transformation required to push through the green and digital transition. The EU financial system depends heavily on banking, and this focus continues to constrain specific investment as firms do not have many alternative funding sources that will support risky investments. Analysis based on the EIB Investment Survey (EIBIS) indicates that capital spending on intangible assets, innovation and digitalisation is hampered by the underdevelopment of specific types of finance, such as private equity, venture capital or listed equity. Moreover, fast-growing European companies have difficulty finding the funds they need to scale up.

Reducing investment impediments could bolster corporate investment. The EIBIS, however, suggests that little progress has been made in this regard. A large share of firms still report that uncertainty, a lack of skilled labour and heavy regulations limit their capital expenditure. Europe needs to create a more business-friendly environment. The fragmentation of the EU single market also blocks firms' development and limits their potential.

There is a limit to how much public support can buoy investment. To meet its goals, Europe must channel public funds towards the financial instruments that can best catalyse private investment. In recent years, targeted financial support has helped firms to innovate and green their production, and has enabled small companies to grow. Higher public indebtedness and more stringent fiscal discipline mean that many EU members cannot continue to provide this level of support, and they must focus on measures that are targeted and cost-effective. These kinds of policy interventions are more effective when they are designed at the EU level and benefit fully from EU integration, and target a specific policy objective. Getting the most out of EU-wide policies, however, also requires better integration of Europe's financial markets.

Introduction

This chapter focuses on non-financial firms, looking at their resilience, their capacity to invest and remain competitive while embarking on the twin green and digital transition, and their ability to face new geopolitical challenges. Monetary policy has successfully tamed inflation without triggering a recession, and government policies protected firms from the effects of the COVID-19 and energy crises. That support allowed firms to continue to adopt digital technologies, shore up their supply chains and invest in climate change mitigation and adaptation measures. However, investment stalled in the first half of 2024, weighed down by lower corporate profits, high borrowing costs and geopolitical uncertainty. To reignite investment, Europe needs to focus on targeted financial incentives that use limited public means in the most effective manner. It must remove or lower barriers to investment and push forward on EU integration, which would strengthen the single market and provide EU firms with opportunities to grow and compete more effectively in a global marketplace.

This chapter is divided into three sections and four boxes. The first section gives an overview of recent developments in corporate investment and profits. It reviews the impact of the energy shock, analyses the strengths and weaknesses of EU firms and elaborates on the investment outlook. It includes a box focusing on energy costs, the energy market transformation and firms' competitiveness

The second section talks about possible sources of funding for investment, such as bank finance, specific finance segments for small and medium-sized enterprises (SMEs), private equity, venture capital and scale-up finance, and equity finance in general. It includes a box summarising the main results of the EIF Venture Capital Survey.

The third section discusses investment barriers and analyses the impact of public support on investment. First, it shows the need to remove structural impediments to unlock investment. Second, it assesses the effectiveness of financial instruments and grants in supporting innovation and the green transition. It also includes two boxes. The first estimates how allotment of subsidies coordinated at the European Union level can lower the risk of resource misallocation. The second box elaborates on the effectiveness of financial products offered by the European Investment Bank.

Investment remains weak, and is only expected to pick up slightly

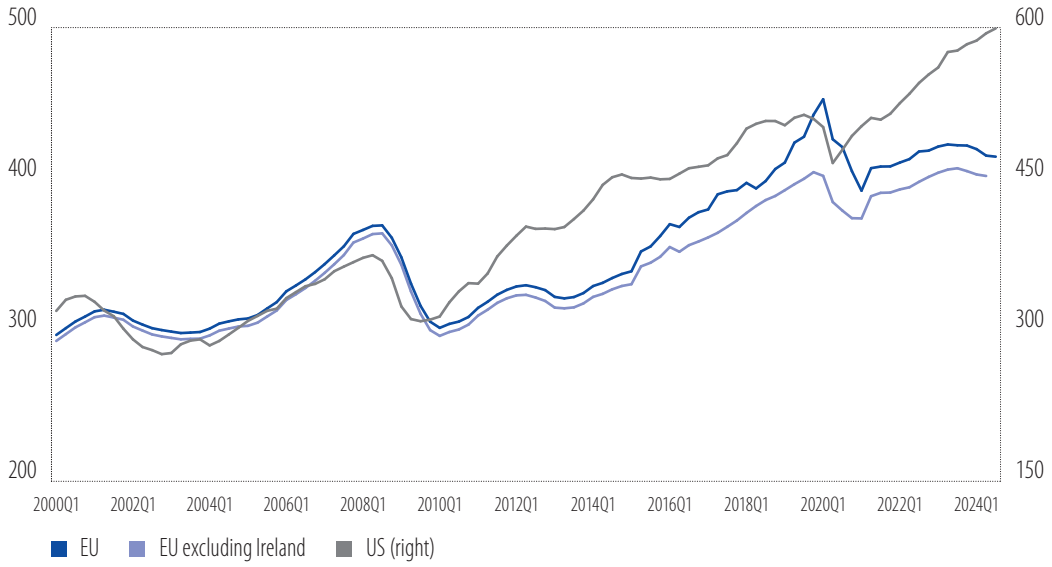
Corporate investment performed relatively well throughout the pandemic recovery as well as during the energy crisis and monetary policy tightening designed to tame inflation. However, corporate investment has stalled since the end of 2023, as credit became harder to obtain, heady profits earned from built-up demand caused by COVID-19 restrictions began to abate and economic growth started to soften. At the same time, persistently high energy costs made it difficult for some manufacturers to compete internationally. Data from the EIB Investment Survey (EIBIS) does not point to a substantial acceleration in investment.

Investment remains almost flat

Corporate investment had already started to wane in the last quarter of 2023. Figure 1 reports developments in firms' real investments since the beginning of 2000, comparing the European Union to the United States. If anything, EU corporate investment performed better than expected during the energy crisis and tighter monetary policy. Real investment was stronger than what might have been expected in such an adverse environment (European Investment Bank (EIB), 2024b). More recently,

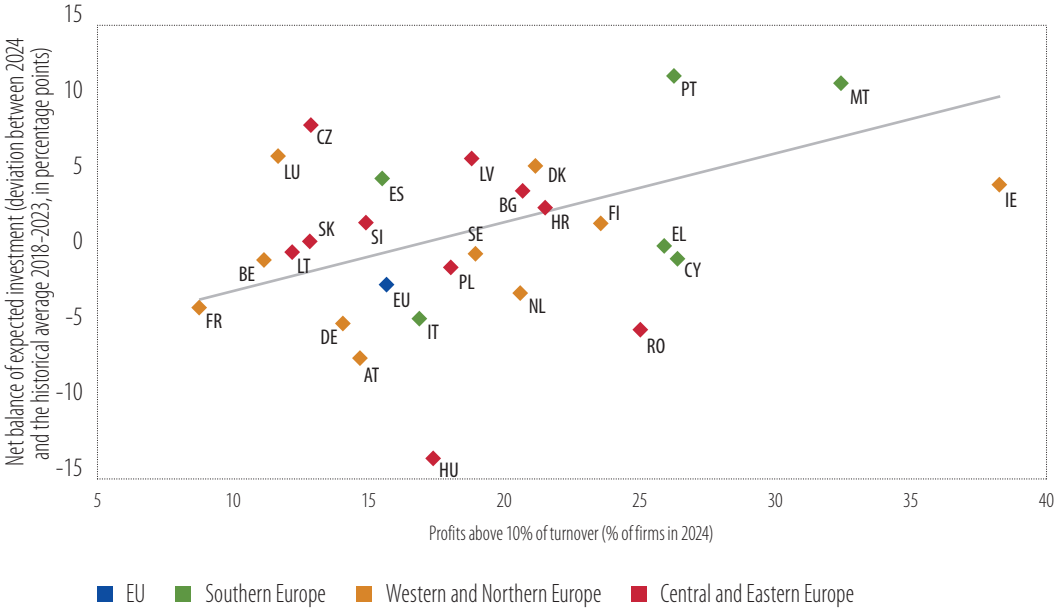
investment has remained flat. Also, investment's relatively strong performance after the pandemic and energy shock hides a substantial gap created with the United States. As shown in Figure 1, by mid-2024 real corporate investment was just 1 percentage point higher than the level before the COVID-19 crisis in the European Union, while it was 12% higher in the United States.

Figure 1
Real corporate investment (left axis: EUR billion; right axis: USD billion)**, adjusted to 2015 prices**



Source: *EIB staff calculations based on Eurostat and Federal Reserve Economic Data (FRED).*
Note: *Four-quarter moving average. The latest figures available are for the third quarter of 2024.*

Figure 2
Investment intensity and profits over time



Source: *EIB staff calculations based on EIBIS 2018-2023.*

The nature of firms' investment also differs between the European Union and the United States. In the latest EIBIS, the share of EU firms investing in expansion is 6 percentage points lower than the share of US firms (26% vs. 32%, respectively). Looking ahead, EU firms generally expect to invest in replacing capacity rather than expanding it. This contrasts sharply with US firms. In the United States, 47% of firms say they will expand capacity in the next three years, compared with 26% in the European Union.

The more profitable companies are, the more they invest. For each EU country, Figure 2 plots the share of companies reporting elevated profits (of more than 10% of turnover) together with the net balance of firms expecting to raise rather than lower investments, comparing the investment results with the deviation from the historical average. In 2024, 16% of European firms reported profits above 10% of turnover. Regarding the investment plans, in 2024 the share of EU firms expecting to lower investment rather than to increase it is below the historical average, pointing to a relatively cloudy outlook. However, the signals received from both indicators vary widely across countries. The figure suggests an increasing relationship between profits and investment plans, illustrated by the trend line. In general, the more profitable companies are, the more they invest. This applies to the country level as well. Generally, the more elevated the profit ratio, the more firms plan to invest.

Higher energy costs weigh on energy-intensive industries

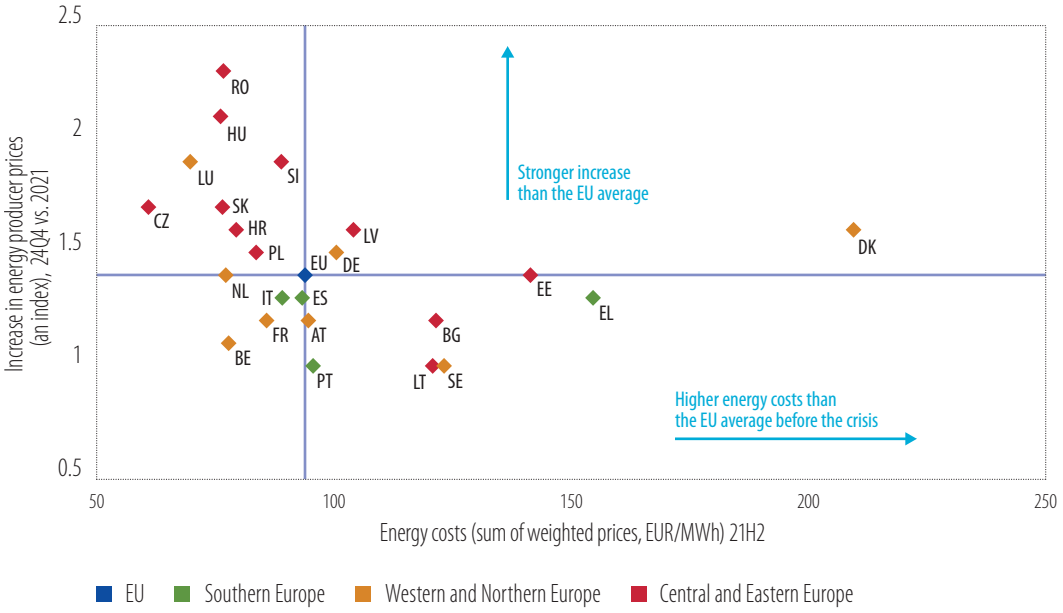
Energy costs have receded, but they remain above pre-crisis levels. Figure 3 plots the change in energy prices compared with the second half of 2021, before the start of the energy crisis. In the last quarter of 2024, the international prices of oil, coal and gas had roughly returned to 2021 levels. International prices influence energy costs paid by businesses, but other factors, such as taxes and distribution costs, also matter. In the third quarter of 2024, the energy prices paid by EU firms were 40% above the 2021 level, before the energy crisis began. Firms in most EU countries saw a similar increase, with only Lithuania, Portugal and Sweden recording stable or slightly declining energy costs over the period.

International prices for coal, gas and oil have affected prices paid by firms very differently across EU economies. This variety is partly explained by differences in the energy mix, but it is also due to other factors like settlement contracts, taxes, regulation, transportation costs, local margins and whatever policy exists in the country. Looking across regions, the increase was clearly more pronounced in Central and Eastern Europe. As Figure 3 shows, energy prices have more than doubled in Hungary and Romania.

Higher energy costs are a drag on activity in energy-intensive industries. Figure 4 puts fluctuating energy costs into perspective by plotting the change in production in energy-intensive industries. In most countries, the production of energy-intensive sectors is lower than before the energy crisis began in the second half of 2021. For the European Union as a whole, production declined 5%. Production has only increased in Greece and Lithuania, and it remained fairly stable in France and Spain. As indicated by the downward-sloping grey line in Figure 4, the higher the rise in energy cost, the larger the decline in the production of energy-intensive sectors. It is 3% lower in Europe as a whole, where prices rose by 40%. Across countries, the decline in production is close to 20% in Hungary, where energy prices more than doubled. It reaches 7% in Germany, where prices increased by 50%. Thus, energy-intensive industries continue to face energy costs above those of major competitors.

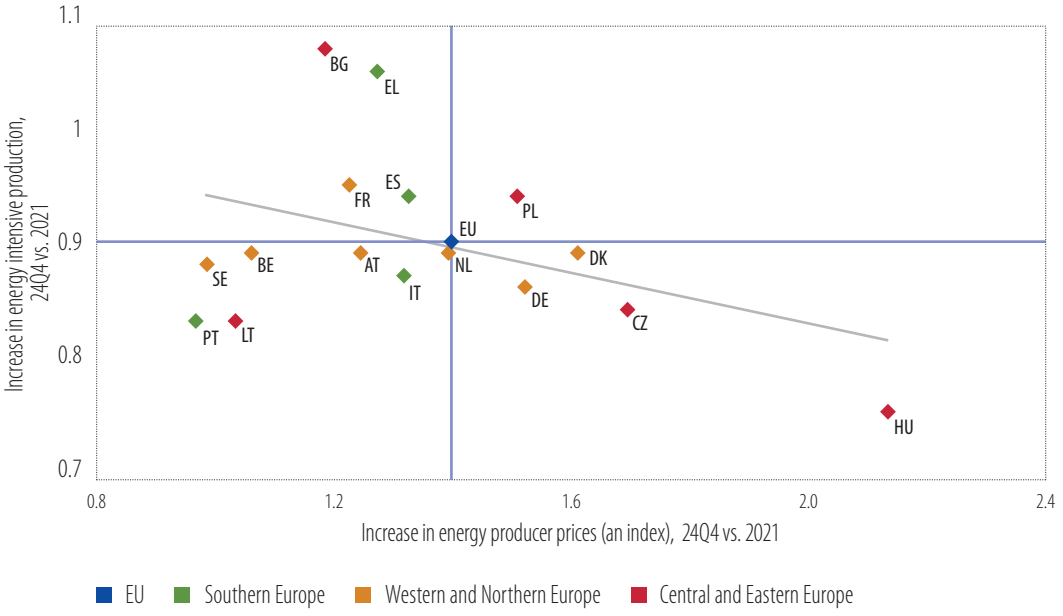
High energy costs are more than a short-term worry. They also threaten EU competitiveness in the medium term. The EU energy market is being transformed, but it will take more than a decade for renewable energy to replace the role of fossil fuels in setting electricity prices. Box A discusses the need to transform the EU energy market, and how energy prices are weighing on industrial competitiveness.

Figure 3
Energy prices paid by firms before the crisis and the change



Source: *EIB staff calculations based on Eurostat and the European Commission.*
Note: *The latest figures available are from August 2024. The x-axis is measured as the sum of weighted electricity and gas prices for the second half of 2021. The y-axis is the energy total output price index (2021=100) for the fourth quarter of 2024 compared with 2021.*

Figure 4
Change in energy costs and in the production of energy-intensive sectors



Source: *EIB staff calculations based on Eurostat.*
Note: *The latest figures available are from August, 2024. The y-axis represents the share of energy-intensive production in manufacturing in the fourth quarter of 2024 vs. 2021. The x-axis is the energy total output price index (2021=100) for the fourth quarter of 2024 compared with 2021.*

Box A

Short- and medium-term impact of energy costs on EU competitiveness

The energy sector is of key importance in shaping Europe's competitiveness, sustainability and resilience. Several recommendations, such as the Draghi (2024) and Letta (2024) reports, address the pressing energy challenges faced by the European Union, while also positioning it to lead the global transition to clean energy.

If ambitious EU climate targets are accompanied by a cohesive plan to achieve them, decarbonisation could be an opportunity for Europe. A failure to coordinate policies, however, could damage competitiveness – and the steps made to decarbonise the EU economy could be delayed or even outright rejected. Affordable energy is central to the competitiveness of EU industry. Ensuring a secure and adequate supply of clean energy at globally competitive prices is necessary for the European Union to fully exploit its industrial strengths and seize the opportunities of the green transition.

To succeed, Europe needs a joint decarbonisation and competitiveness plan that aligns all policies with EU objectives. Priority areas include bringing down energy costs for end users by transferring the benefits of decarbonisation and doing everything to keep down costs while accelerating the decarbonisation of the energy sector. The second priority is capturing the industrial opportunities presented by the green transition – from remaining at the forefront of cleantech innovation, to manufacturing cleantech at scale, to leveraging the opportunities created by the circular economy. The third is levelling the playing field in sectors that are more exposed to unfair competition from abroad or face more exacting decarbonisation targets than those faced by international competitors.

Energy costs and investments

High and volatile energy prices put EU firms at a significant disadvantage compared with companies in major trading partners, like the United States and China. Energy prices have historically been higher in the European Union than in the United States, but the 2022 energy crisis widened this gap even further.

Wholesale and retail prices for gas are currently three to five times higher in Europe than in the United States, and they are two to three time higher than their historical average. Wholesale and retail prices for electricity (with a focus on industrial sectors) are currently two to three times higher than US prices, and up to 80% higher than the historical average.

High prices are driven by delays in installing new clean energy capacity and rapidly depleting domestic resources for fossil fuels, as well as the European Union's limited collective bargaining power despite it being the world's largest buyer of natural gas. This is largely because purchases are made by public and private groups within EU countries, without leveraging EU market power. As a major net importer of fossil fuels, the European Union is particularly vulnerable to sharp rises in fossil fuel prices. Reducing its dependency on imported fossil fuels would thus have clear socioeconomic benefits, increasing Europe's resilience and autonomy.

High energy costs are also driven by higher carbon prices and taxation, and by the incomplete state of the energy union, which results in wide differences in prices across EU members.

As natural gas will remain an important part of Europe's energy mix in the medium term, the European Union should seek to reduce the volatility of natural gas prices – for example, by increasing joint procurement to leverage its market power and by establishing long-term partnerships for

reliable and diversified trade. Europe should also reduce its exposure to the volatile spot market prices for energy, by moving away from sources that are linked to spot pricing. It could also reduce volatility in EU gas markets by limiting speculation.

With renewables set to supply an increasing share of Europe's energy, the European Union must ensure that the lower costs of these energy sources are transferred to the energy bills of consumers and businesses. It should create an environment with more stable long-term prices, using tools like power purchase agreements and two-way contracts for difference, which will also help roll out renewables faster. Finally, it should focus on the flexibility of renewable power sources, like ways to respond to fluctuations in demand and storage, to integrate clean energy into the electricity system efficiently.

The European Union needs to fully unlock the potential of clean energy by focusing on investments in electricity grids to improve transmission and distribution. Effective grid planning by the European Union and member countries is key, as is the ability to accelerate permit processes, mobilise public and private financing, overcome equipment supply issues and innovate in grid designs and processes. Being able to assure a steady supply of energy at affordable prices requires massive investment in renewables, technological development, flexibility and expanded grid capacity. The energy sector needs projected investment of EUR 642 billion over the next decade.

Europe needs a comprehensive strategy on investment – one that reflects the rising cost of decarbonising the economy in an increasingly capital-intensive energy sector. To marshal the investment needed, the European Union should craft a multifaceted approach that encourages collaboration between the public and private sectors, deploys innovative financing mechanisms and creates supportive policy frameworks. The massive investment needs cannot be met by public funds alone. To bridge the gap, the European Union must unlock its vast pool of private capital available and use policies and financial instruments to help channel funds into remaking the energy sector.

Profits are returning to normal levels

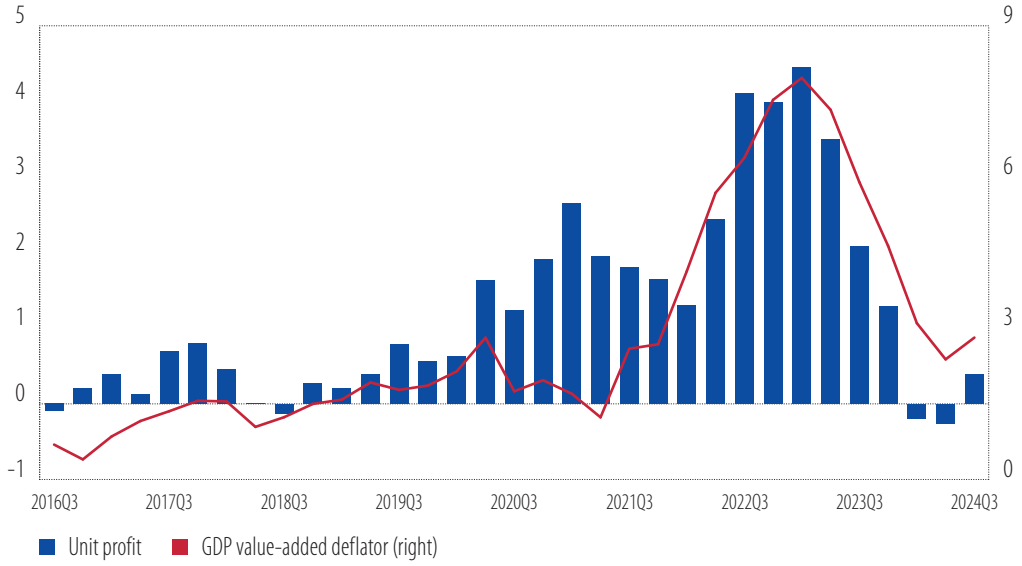
Profits are falling back to Earth as inflation eases. Figure 5 plots the evolution of prices (captured by the value-added deflator) together with a proxy for the contribution of profits to prices, which is represented by unit margins.[1] When energy prices rose sharply, firms raised their own sales prices to offset the impact and increase profits, which enabled them to continue investing. However, since inflation peaked in late 2022, profits have abated. In the middle of 2024, profit margins receded, thereby deflating price pressures.

As profits normalise, they are growing below the historical average in most sectors. In the EIBIS 2024, 80% of firms said they were profitable – including 16% that were highly profitable (profits above 10% of turnover). This is similar to rates recorded in 2023, when 80% of firms were profitable and 17% were highly profitable. Figure 6 shows the share of companies with profits above 10% of turnover (elevated profits) for 12 sectors. Most sectors are below the 45-degree line, with profits tending to fall short of their normal development. In a few sectors however, profits in 2024 were above their historical average, for example in trade, transportation, computers, electronics and electrical equipment and tourism

1 The gross domestic product (GDP) deflator reflects the evolution of the price of one unit of goods consumed domestically. It results from changes in unit labour costs (compensation of employees per unit of real GDP), unit taxes (which reflect taxes on production net of subsidies per unit of real GDP) and unit profits (gross operating surplus per unit of real GDP).

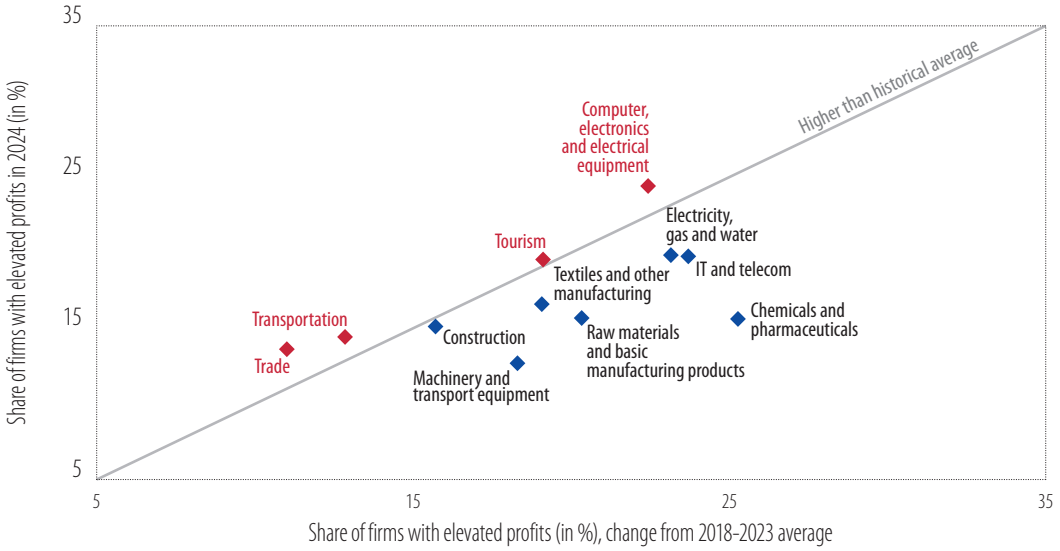
(which are well above the 45-degree line). One explanation may be that these sectors, which were most affected by the COVID-19 crisis, rebounded strongly. Another is that firms in these sectors were not hit by the energy crisis at first, but by a more general increase in prices. This enabled them to continue attracting workers and investing.

Figure 5
Profit margins and GDP deflator (in %)



Source: *EIB staff calculations based on Eurostat.*
Note: *The latest figures available are from the third quarter of 2024.*

Figure 6
Share of firms with elevated profits vs. the historical average



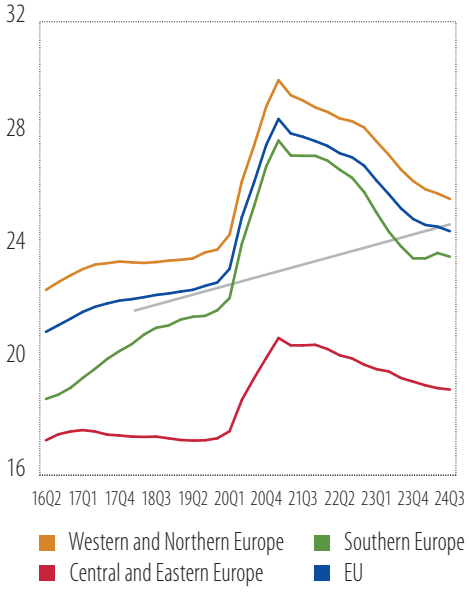
Source: *EIB staff calculations based on EIBIS 2018-2024.*
Note: *The figures use averages for 2018-2023 and the latest data from 2024.*

Firms reduced debt, but weak demand is making them vulnerable

Cash holdings are back to levels seen before the COVID-19 pandemic. Figure 7 shows the evolution of firm holdings of cash and liquid assets as a percentage of gross domestic product (GDP) for the European Union and three regions. These positions have increased faster than GDP since the beginning of 2016 because low interest rates gave firms little reason to use these funds for investment. During the COVID-19 crisis, firms took on debt (often guaranteed by government programmes), and their liquid asset ratio rose by more than 5 percentage points in Western and Northern Europe, in Southern Europe and for the European Union as a whole, and by almost 4 percentage points in Central and Eastern Europe. However, in the beginning of 2024, firms largely depleted these cash buffers to reimburse the debt contracted, and cash holdings returned to pre-pandemic trends.

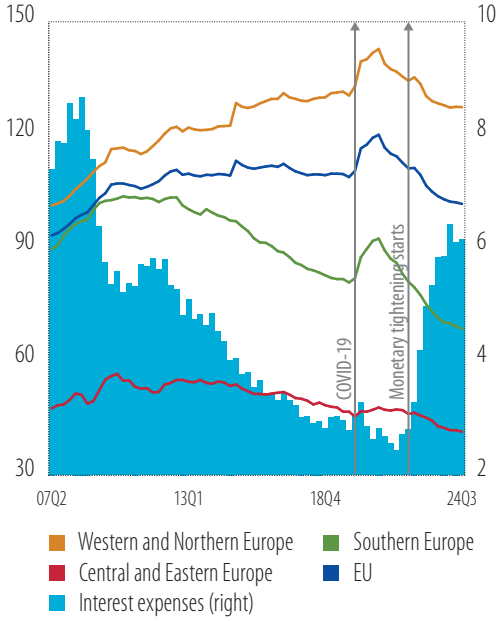
Firms repaid their COVID-19 debt and continued to deleverage, but interest payments on remaining debt continue to rise. Figure 8 shows the evolution of the indebtedness ratio as a share of GDP for the European Union as a whole and for the three main regions. During the COVID-19 crisis, firms used government guarantee programmes and raised debt in a very uncertain environment. The increase in the debt ratio is clearly visible for the European Union, for Western and Northern Europe and for Southern Europe. Four years later, firms have repaid COVID-19 debt and continued to deleverage, so that in the middle of 2024 debt ratios were below pre-crisis levels. Still, firms in Western and Northern Europe are much more indebted than before the crisis, while those in Central and Eastern Europe are much less indebted. The gap between indebtedness in Southern Europe and in Western and Northern Europe has also widened. Figure 8 indicates that monetary policy tightening has kicked in, increasing interest expenses despite the deleveraging.

Figure 7
Cash and liquid deposits of EU firms (% GDP)



Source: *EIB staff calculations based on Eurostat.*
Note: *Non-financial firms only. The latest available figures are for the third quarter of 2024.*

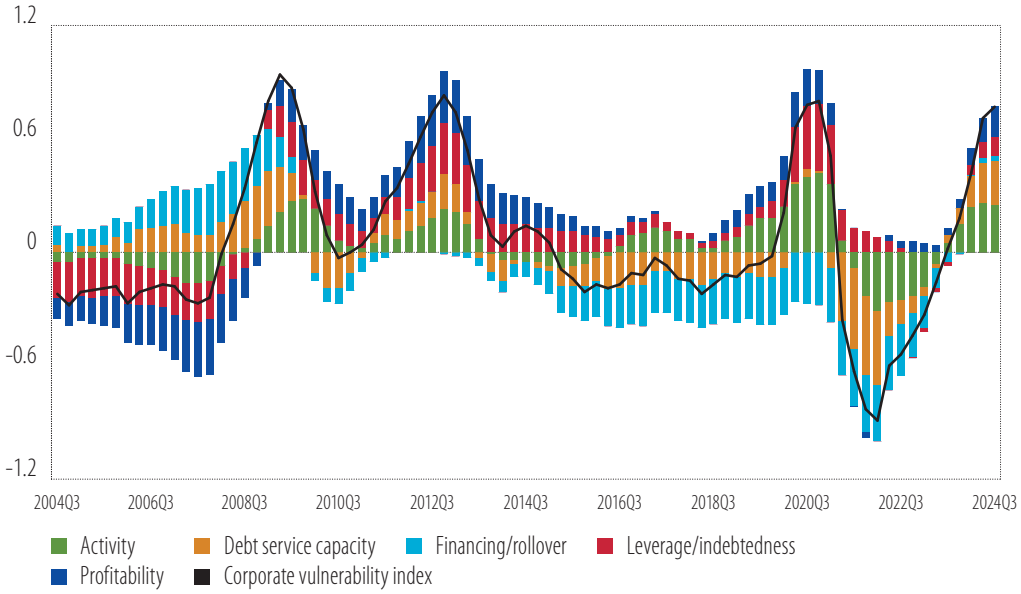
Figure 8
Debt ratio and interest expenses of EU firms (% GDP and/or gross value-added)



Source: *EIB staff calculations based on Eurostat.*
Note: *Non-financial firms only. Debt includes loans and bonds. Quarterly data is used to calculate paid interest expenses. The latest available figures are for the third quarter of 2024. Four-quarter moving averages.*

Corporate vulnerability is rising as overall activity remains subdued. Figure 9 plots the Corporate Vulnerability Index, a synthetic aggregate based on 24 series of data reported by various sectors. As shown in the figure, the series assembles components related to activity, profitability, financing and debt rollover, and debt servicing and leverage (EIB, 2022). The indicator rose in the beginning of 2022, in step with the removal of policy support deployed during the COVID-19 crisis, the start of the energy crisis and tighter monetary policy (EIB, 2024b). In the first half of 2024, the index is above the historical average since 2003. The indicator points to more vulnerabilities than usual. It is halfway to the historical peaks seen during the global financial crisis in 2008, the sovereign debt crisis in 2010-2012, and the onset of the COVID-19 crisis in the first half of 2020. Weaker company balance sheets do not bode well for investment.

Figure 9
Corporate vulnerability index, by components



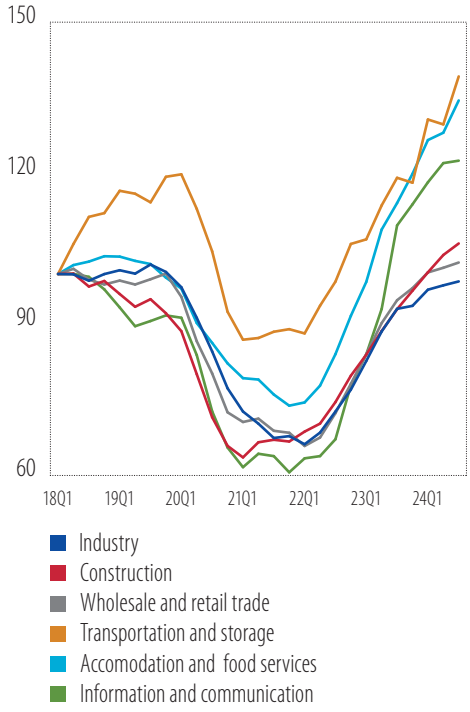
Source: *EIB staff calculations based on Eurostat and the European Central Bank (ECB).*
Notes: *The corporate vulnerability indicator is a weighted average of more than 20 variables related to EU firms' performance and balance sheet structure. See Harasztosi (forthcoming). The latest available figures are for the third quarter of 2024. Positive values indicate an increase in vulnerability.*

The number of firms declaring bankruptcy is generally on the rise. As vulnerabilities increase, bankruptcies follow. As shown in Figure 10, the number of firms ceasing to operate continues to grow in most sectors. Bankruptcy figures remain below pre-pandemic levels in some of the sectors, but they are well above them in others, such as transportation and storage, accommodation and food services and information and communication. The recent rise in bankruptcy rates across sectors suggests that, after rebounding from historic lows during the pandemic, companies are now going bankrupt again in reaction to weak economic activity and tighter financing conditions.

EIBIS results do not signal a major upturn in firms' investment, as improved financial conditions are counterbalanced by reduced profits. Several firm characteristics affect the investment outlook. We use probit models to estimate the impact of financial indicators on investment plans, after controlling for several factors. Estimates from the models can be used to compare signals from the EIBIS in 2023 with those recorded this year. The results are reported in Figure 11. Profitable firms are more likely to increase investment. Firms with profits above 10% of turnover are up to 8 percentage points more likely to increase investment. The impact of improved business prospects and better access to external finance and internal finance are all positive and of a similar magnitude: around 8 percentage points. The effects,

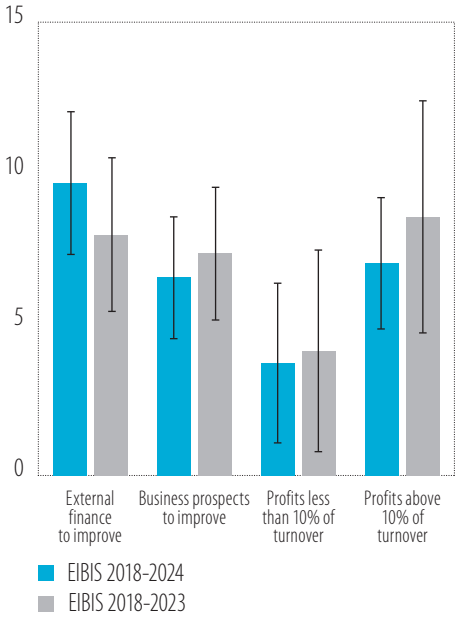
which are significant, confirm the major relevance of the availability of internal and external finance for investment decisions. Looking ahead, firms' ability to finance investment internally will be diminished, while external finance will be more available and less costly. Still, none of these dynamics is significant enough to trigger a major change in the investment outlook compared with 2023.

Figure 10
Firms ceasing to operate (an index, 18Q1=100)



Source: *EIB staff calculations based on Eurostat.*
Note: *Four-quarter moving average. The latest available figures are for the third quarter of 2024.*

Figure 11
The impact expectations of firm profits have on the probability of accelerating investment (in percentage points)



Source: *EIB staff calculations based on EIBIS 2018-2024.*
Note: *A probit model is used to estimate the likelihood of investing the following year or over the next three years. Country, size and sector dummies are used as controls. The data is for EU firms. The black lines represent 95% confidence intervals*

A gradual improvement in external finance for investment – but gaps remain in funding for innovation

This section reviews the latest developments in external finance, showing that financial conditions have started to loosen since the middle of last year. For bank finance, the cost of borrowing has declined and credit standards have softened. The improvement in external finance bodes well, as firms turn to external sources to finance capital expenditure. However, the improvement in external finance depends on further loosening of monetary policy.

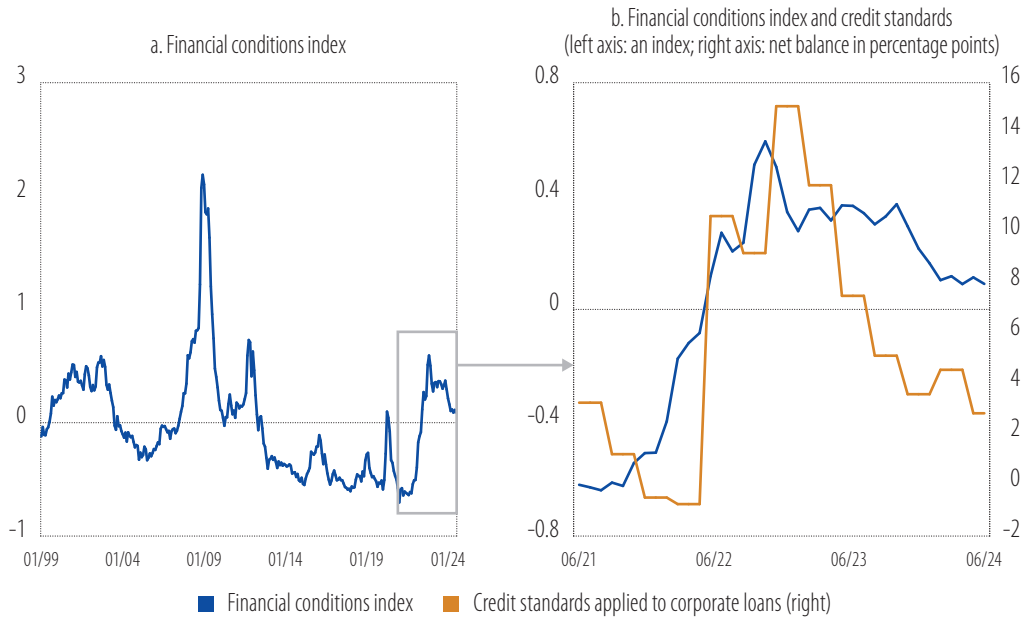
EIBIS 2024 shows that an increasing share of firms are finance constrained. Strategic segments of the EU financial system are underdeveloped and show no signs of catching up, making it difficult for firms to find the funds required for transformative investments. Promising firms need more diverse funding sources, such as private equity, venture capital, scale-up finance and funding from public exchanges, including both initial public offerings (IPOs) and secondary offerings.

Loosening financial conditions for investment

The EU financial conditions index and credit standards are slowly improving. Financing conditions started to improve in the middle of 2023, in line with an expected loosening of monetary policy. However, as shown in Figure 12, the financial conditions index continued to reflect a difficult environment in the summer of 2024. In parallel, credit standards began to soften by the beginning of 2023. In the third quarter of 2024, euro area banks reported a net tightening of credit standards for loans and credit lines, bringing numbers back up to levels seen in the first quarter of 2022. Although the monetary tightening in the euro area had not yet started at that time, banks were already pricing in higher rates. The EIB's Central, Eastern and South-Eastern Europe (CESEE) Bank Lending Survey shows that credit demand remained strong, driven by the retail business, and credit supply improved after contracting for four semesters. However, the banks surveyed indicate that demand and supply are expected to soften in the near term (EIB, 2024a).

The outlook for external finance is improving. Since internal and external financing conditions have a bearing on investment, they must be considered together to assess the investment outlook. Drawing from the EIBIS, Figure 13 plots an indicator of the outlook for internal finance together with an indicator of the external finance outlook for firms in each EU country. Except for Romania, where both internal and external finance are reported to have deteriorated, all EU countries report improvement of at least one of the indicators. The 45-degree line shows which countries saw more improvement in internal financing conditions (below the line) or in external ones (above the line). As most countries are plotted above the line, the reported improvement is generally more pronounced for external finance.

Figure 12
EU financial conditions index (de-meaned) **and credit standards**



Source: *EIB staff calculations based on Andersson et al. (2021).*
Note: *The values are de-meaned over the 1999-2023 period. Panel b shows the credit standards applied to corporate loans. An increase in each indicator reflects a tightening. The latest figures available are for July 2024.*

Figure 13
Outlook for the availability of internal and external finance (change in net balance, in %), **2024 vs. 2023**

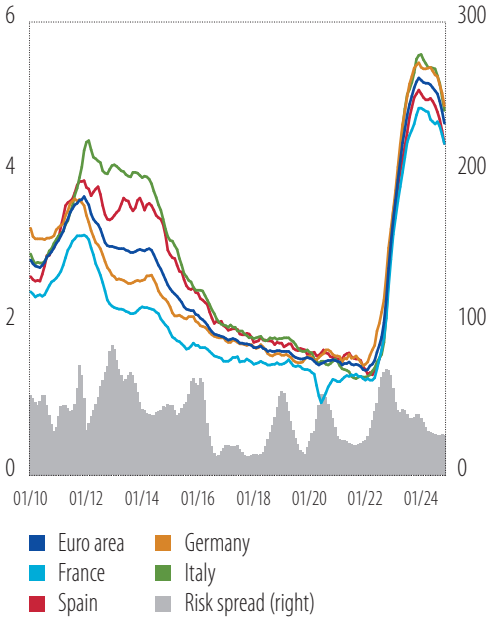
Source: *EIB staff calculations based on EIBIS 2019-2024.*

Bank financing has recovered slightly

Firms' bank borrowing costs are edging down, and risk premiums remain contained. Figure 14 reports the composite cost of bank borrowing for companies in the major euro area economies. From the start of the monetary policy tightening in June 2022, until its end in September 2023, rates rose by 450 basis points, and bank borrowing costs by around 400 basis points. As markets began to expect central banks to loosen monetary policy shortly after rates peaked, higher interest rates did not have time to fully pass through to bank rates, but the historical relationship was still maintained. Since the start of 2024, bank borrowing costs have been declining in step with monetary policy loosening. The decline has been shared across the major euro area economies. In parallel, Figure 14 also shows that credit risk remains contained, although bankruptcies are on the rise amid higher cost of financing (see Figure 10).

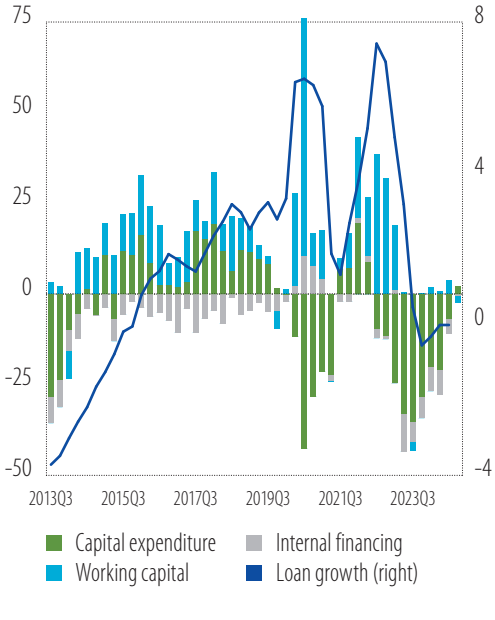
Firms' demand for loans has started to recover very slowly and is largely driven by the need to finance operations. Figure 15 plots annual growth in corporate loans together with the factors driving loan demand. From the middle of 2022 until the end of 2023, demand for corporate loans slowed from the very brisk pace recorded during the COVID-19 crisis. Demand even declined slightly further from the end of 2023 until the middle of 2024, mostly owing to weak economic activity and tight financial conditions. Loan demand started to recover slightly as financial conditions eased, but the recovery remains unclear. Moreover, it is fuelled by the need to finance operational expenses, and not yet investment. Loan demand for capital expenses remains below the historical average, dragging down overall corporate loans.

Figure 14
Corporate bank borrowing costs and risk premium (left axis: in %; right axis: basis points)



Source: *EIB staff calculations based on the ECB, Refinitiv Eikon and Eurostat.*
Note: *Borrowing costs are a three-month moving average. Risk premiums are the difference in the spreads of A and BBB-rated EU corporate bonds. The latest available figures are for November 2024.*

Figure 15
Annual growth in corporate loans and the factors driving loan demand (net balances, left axis: in percentage points; right axis: in %)



Source: *EIB staff calculations based on the ECB and Refinitiv Eikon.*
Note: *Uncertainty is calculated as the weighted average of bond and stock volatility and the ECB indicator for composite risk. The latest available figures are for the second quarter of 2024.*

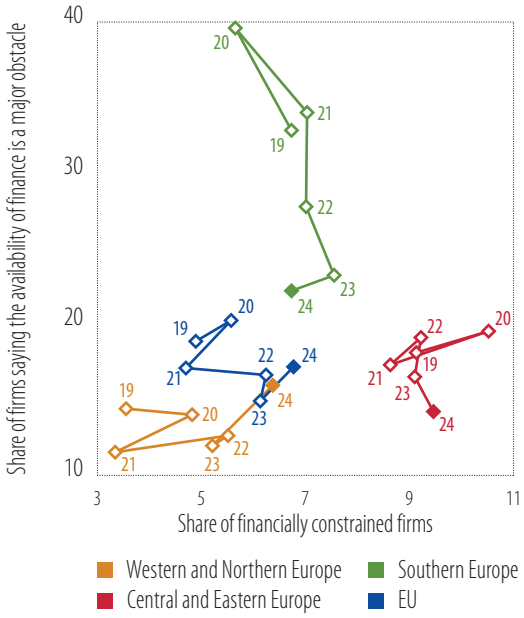
As central banks remove excess liquidity, a smoothly functioning market for securitised assets may be a source of funding

The share of firms that are financially constrained remains structurally high and is still growing. Figure 16 shows the evolution across several waves of the EIBIS in the share of financially constrained firms and of firms that report finance as an investment barrier for the European Union as a whole and for the three main regions. In the European Union and in Western and Northern Europe, the share of financially constrained firms stands at the highest level since 2019, 2 full percentage points higher than before the COVID-19 crisis. In Figure 16, a move up and to the right suggests that conditions for external finance are weighing more heavily on investment. As there is no clear upward move in Figure 16, firms are not reporting financing as a barrier to investment more frequently. However, access to external finance remains more problematic for certain types of firms, such as small businesses and fast-growing firms.

A smoothy functioning securitisation market could fill in gaps in bank credit. Securitisation allows financial institutions to transfer credit risk from their loan portfolios to investors with a higher risk appetite. This frees up bank capital and bank funding, which banks can then leverage to unlock finance. Securitisation also provides a more diversified loan portfolio for investors, allowing them to reduce risk across multiple borrowers and sectors. Moreover, when banks originate loans that are later securitised, they free capital or funds for borrowers like small firms, which are typically finance-constrained. However, securitisation activity in Europe is well below that of the United States. Since 2019, it has represented an average of just 0.1% of total bank assets in Europe – five times less than in the United States.[2]

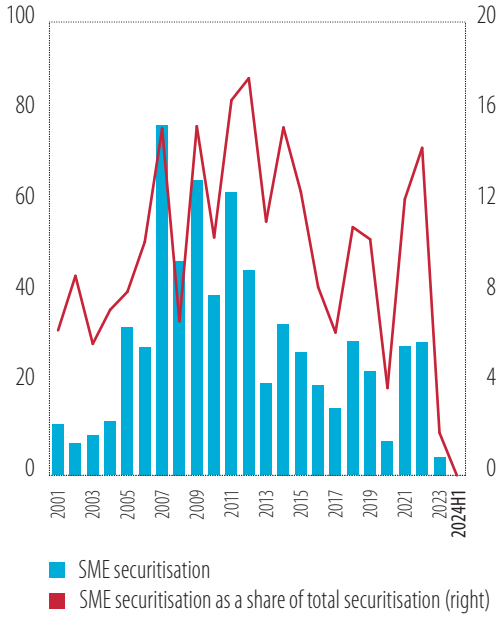
2 Agencies such as Freddie Mac and Fanny Mae are not taken into account in this computation.

Figure 16
Share of finance-constrained firms and firms that report finance as an investment barrier
(in %)



Source: *EIB staff calculations based on EIBIS 2019-2024.*

Figure 17
Issuance of SME securities in Europe
(left axis: volume in EUR billion; right axis: % of total securitisation)



Source: *The EIF's European Small Business Finance Outlook based on data from Invest Europe and Botsari et al. (2024).*
Note: *Data is for firms located in Europe only.*

European activity for securitisation of small business loans remains subdued. While SME securitisation reached EUR 29.3 billion in 2022, close to 2021 levels (EUR 28.4 billion), SME securities issuance remained particularly weak throughout 2023 and into 2024. As shown in Figure 17, SME securitisation activity stalled completely during the first three quarters of 2023, with only a modest EUR 4 billion recorded in the fourth quarter.[3] This level of issuance is far below historical trends. The drop-off continued in the first quarter of 2024, with no SME securitisation activity registered. The recent drop in issuance might be explained by an increase in the cost of capital and perceived higher risk, caused by a volatile economic environment, which has led to a decline in the demand of such products. However, even before the COVID-19 outbreak, SME securities issuance in Europe had been hit by several factors, such as the stigma of the asset class following the global financial crisis, new regulation and excess liquidity provided by the European Central Bank (ECB).

As the ECB removes excess liquidity, asset-backed securities are likely to become more relevant as a funding source. Until very recently, euro-area banks were retaining asset-backed securities on their balance sheets to post them as collateral, as the ECB was operating under full liquidity allotment (Schnabel, 2024), a system under which the central bank provides unlimited liquidity at a fixed rate against eligible collateral. As the ECB removes excess liquidity, asset-backed securities are likely to become more relevant as alternative funding sources are needed. Ongoing discussions about Europe's capital markets union should focus on creating a supportive regulatory environment for SME securitisation. It would help financial firms better support growing companies.

3 It is important to highlight that the rise in synthetic SME transactions, such as unrated bilateral deals, is not captured in these statistics. These synthetic deals have become a significant alternative financing source, especially as true sale transactions are largely absent. This shift in the market suggests that while traditional SME securitisation remains subdued, alternative forms of securitisation continue to play a role in supporting SME financing.

Private equity, venture capital and scale-up finance are underdeveloped

High-growth, innovative companies face more financial constraints than the average firm. Their business models make traditional financing less accessible, as their lack of financial track-records and stable revenue makes banks more reluctant to lend to them. They also face higher technological, regulatory and demand risks, which increases financing costs. Additionally, it can be harder for them to use assets as collateral, as intangible assets are difficult to value. In Europe, unlike in the United States, using patents as collateral is limited or non-existent. Consequently, securing financing – especially equity – is a big challenge for these companies, even if they are backed by venture capital (European Investment Fund (EIF), 2024a). We analyse private equity and venture capital investment in Europe compared with other advanced economies, such as the United States, and its role in finance that enables firms to scale up.

Venture capital and private equity finance is strikingly underdeveloped in Europe. As shown in Figure 18, the European Union consistently records lower venture capital and private equity investment in non-financial firms as a share of GDP when compared to the United States and the United Kingdom. From 2013 to 2023, the average share of venture capital investment in non-financial companies in Western and Northern Europe was only one-third of that in the United States and United Kingdom. The gap is even wider in Southern Europe and in Central and Eastern Europe, with venture capital investments at roughly one-tenth of the US level. Private equity investment levels in Western and Northern Europe and in Southern Europe are about half the US level and in Central and Eastern Europe they are one-seventh the US level.

Venture capital and private equity are crucial financing sources for innovation and fast-growing firms, and the structural underdevelopment of these segments does not bode well for Europe's growth. Large institutional investors, such as pension funds, provide a much smaller share of funds for venture capital and private equity. Pension funds account for only 4% of capital raised by venture capital funds,[4] and just 0.02% of EU pension fund assets under management were invested in European venture capital in 2022. Corporate venturing[5] has grown in the last decade, especially in the high-tech, aerospace and energy sectors (see Siota et al., 2020). However, European venture corporates, or companies that provide venture capital directly to growing businesses, are more likely to invest abroad (see Gavigan et al., 2024). Overall, corporate investors accounted for 11% of venture capital funds committed in 2023 (Invest Europe, 2024a).

Since 2022, tightened financial conditions have been a drag on venture capital and private equity activity. As shown in Figure 19, the European venture capital and private equity markets recovered quickly from the initial shock of the COVID-19 pandemic, and fundraising activity reached record highs in 2022. However, private equity investment declined by 18% in 2023 compared with 2022, to EUR 96 billion. Venture capital followed a similar trend, reaching EUR 13 billion in 2023. The latest data for 2024 show signs of stabilisation in European venture capital and private equity markets, as private equity fundraising and venture capital investments recorded a moderate increase (see also Invest Europe, 2024b). The overall lower activity levels of the last two years contrasts with almost 15 years of continuous growth.

The latest waves of the EIF venture capital and private equity mid-market surveys confirm the bleak picture. Box B summarises the main finding of the most recent results of the EIF Venture Capital Survey (EIF, 2024a).[6] In 2024 market sentiment deteriorated further, according to fund managers' assessment of the situation. Geopolitical and macroeconomic uncertainties continue to weigh on EU private equity

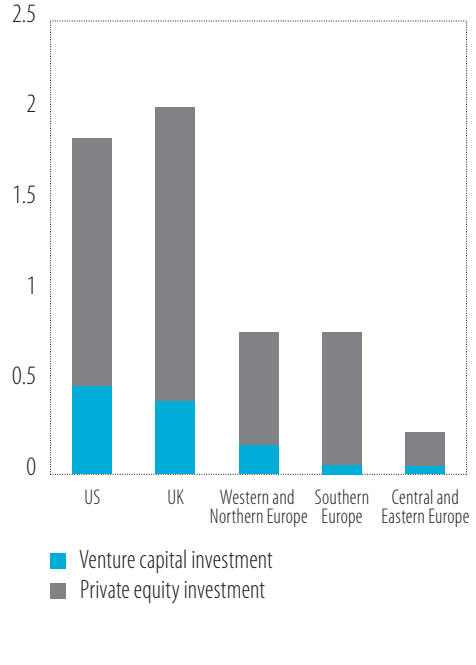
4 Invest Europe (2024a). Average of 2013-2023.

5 Corporate venturing consists of venture capital investments by specific financial companies, and venture corporates refers to firms that directly provide venture capital for other firms.

6 The EIF Private Equity Mid-Market Survey 2024 was performed together with the EIF Venture Capital Survey 2024. For more details, see EIF (2024b).

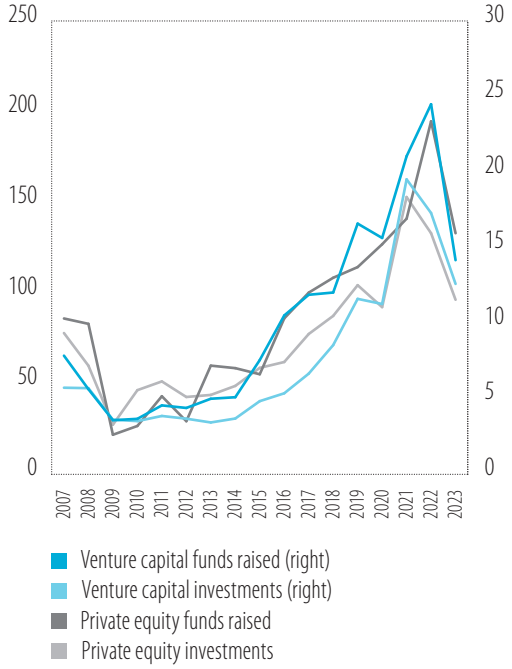
and venture capital markets. However, the EIF survey results also suggest that the bottom may already have been reached, and a moderate upturn may follow, as reflected in respondents' expectations for the 12 months following the summer 2024 survey.

Figure 18
Venture capital and private equity investments (% GDP)**, average 2013-2023**



Source: *EIB staff calculations based on Bloomberg data for venture capital and private equity investment and GDP data from the International Monetary Fund (IMF).*
Note: *Includes only venture capital and private equity investment in non-financial firms.*

Figure 19
Activity in private equity and venture capital (left axis: private equity in EUR billion; right axis: venture capital in EUR billion)



Source: *Botsari et al. (2024), based on Invest Europe data.*

In Europe, 261 firms emerged from 2013 to 2023 as having a strong likelihood of being able to effectively scale up their operations.[7] This represents a small fraction of the 32 million companies registered in Europe. These scale-up firms are mostly active in information and communications technologies (34%), but also in finance (10%) and manufacturing (17%). Scale-up firms are very important for EU economic competitiveness. They are strategic for Europe to remain at the forefront of technology. As detailed in Chapters 1 and 5, the European Union increasingly lags behind the United States in productivity growth and spending on research and development (R&D).

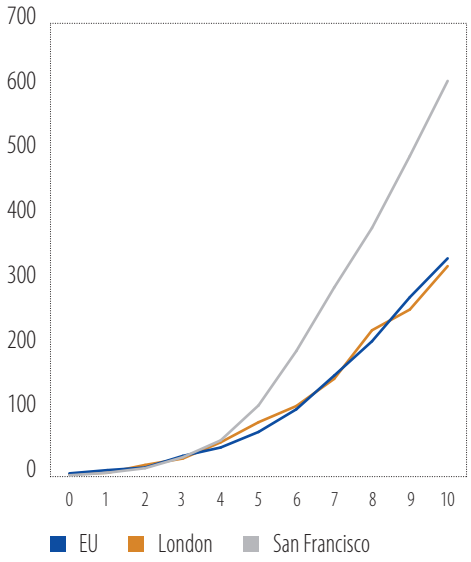
As firms grow, they have an increasingly hard time finding finance. Ten years after they are founded, EU scale-ups have raised, on average, 50% less capital than their US counterparts. Figure 20 follows cohorts of scale-ups in San Francisco, London and the European Union, where scale-ups are diffuse in several locations. The initial average amount raised is similar. However, San Francisco scale-ups raise capital much faster than EU scale-ups, and raise more of it with fewer financing rounds. EU companies

7 For this report, we define scale-up firms as companies that have successfully concluded a deal with a post-money valuation between $500 million and $10 billion. While market valuation makes the definition vulnerable to fluctuations in companies' market value, similar definitions are widely accepted in the literature. For example, unicorns are defined as companies with a market valuation above $1 billion (see Fratto et al., 2024).

face increasingly severe funding constraints in the scale-up phase. 82% of scale-up deals in the European Union involved a foreign lead or sole investor, compared with only 14% in San Francisco (see Fratto et al., 2024).

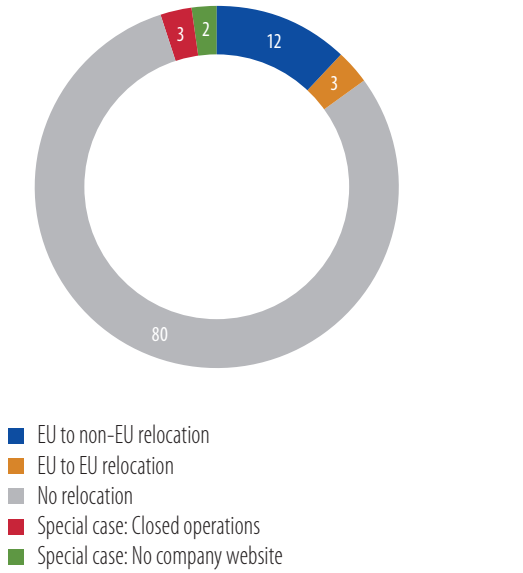
EU policies must figure out how to ensure a robust pipeline of innovative companies capable of delivering breakthrough technologies. While these innovative firms make up only a small fraction of smaller firms – with just 0.2% of EU small and medium firms receiving venture capital, private equity or angel financing[8] – they are a major source of growth. Ensuring that these companies thrive has exponential benefits for economic dynamism. From 1995 to 2019, half of publicly traded firms in the United States received venture capital financing at some point in their life (Lerner and Nanda, 2020).

Figure 20
Cumulative capital raised by scale-ups during their first ten years of business (USD million, current prices)



Source: *EIB staff calculations based PitchBook Data, Inc.*
Note: *The sample consists of a strongly balanced panel of companies that completed at least one deal of USD 500 million to USD 10 billion from 2013 to 2023. The nationality of the general partner is determined after the company reached a market valuation of USD 500 million. For further details, see Fratto et al. (2024). For all charts using PichBook data, the data have not been reviewed by PitchBook analysts and may be inconsistent with PitchBook methodology.*

Figure 21
Scale-up firms that relocated for better business and growth opportunities (% of firms)



Source: *EIB staff calculations are based on PitchBook Data, Inc.*
Note: *The sample consists of companies that completed at least one deal from 2013 to 2023 and that have a market valuation of USD 500 million to USD 10 billion. The country is based on the location of the company's headquarters. (see Fratto et al. (2024)).*

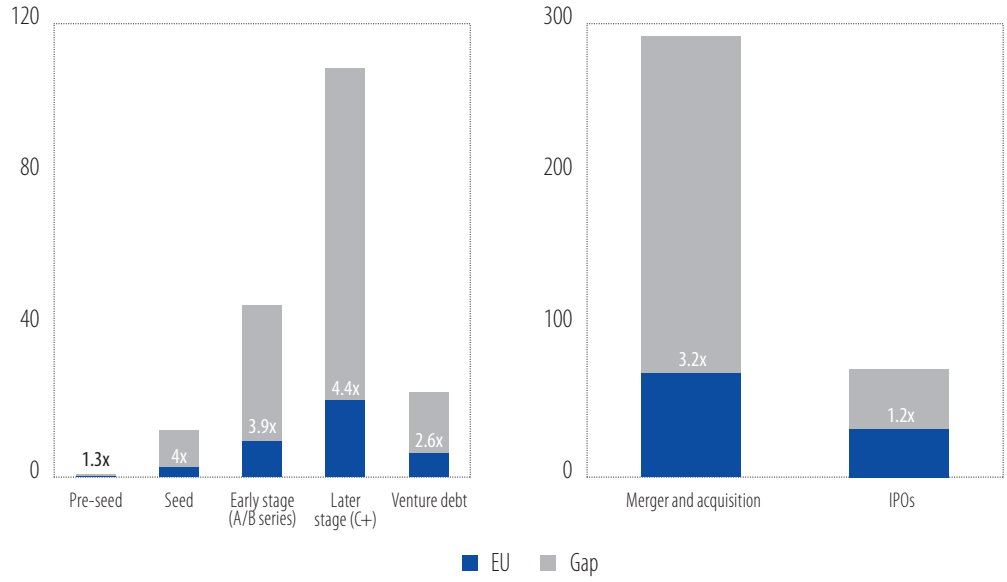
As a result of barriers to growth, European scale-ups are more likely to relocate abroad (Figure 21). EU scale-ups are more likely to relocate than peers in San Francisco (15%), and they mostly go to the United States. Relocations tend to occur right after a funding round, particularly during earlier stages like Series A/B, often as a condition for investment (Fratto et al., 2024). Europe is losing its best companies. EU companies that relocate are more likely to provide investors with an exit, whether via an IPO or an acquisition, than those that decide to stay. These relocations have economic costs, such as an entrepreneurial brain drain and missed opportunities for the country of origin. Successful EU companies

8 EIB staff calculations based on PitchBook and the European Commission's Joint Research Centre (2023).

that relocate or expand abroad but maintain a presence in the country of origin may continue to help build markets in that country, but perhaps with lower impact.

Companies have more appealing exit options outside of Europe. Venture capital fund managers have said that it is important to improve the ability of EU companies to sell shares through an IPO (EIF, 2024b). On average, EU scale-ups reach the exit stage nine years after being established. One-third of EU scale-ups exited through IPOs on US stock exchanges, while over 50% of acquisitions of these scale-ups involved a foreign buyer, usually from the United States (compared to 13% for San Francisco scale-ups). Moreover, the decision to relocate influences the probability of success, as relocations are associated with a higher likelihood of being bought out, merging with another firm or undergoing an IPO. EU companies listed abroad see their market valuations increase more after an IPO, despite generally raising less capital. Private equity buyout deals (the largest exit strategy) are around 2.5 times larger in the United States than in the European Union. The presence of foreign investors in earlier funding rounds often means a higher likelihood of being acquired by foreign buyers, especially in the absence of a European lead (private or public) investor.

Figure 22
Capital invested and the gap with the United States (EUR billion)**, by instrument type**



Source: EIB staff calculations based on PitchBook Data, Inc.

The European venture capital market has developed significantly in the last 20 years, but gaps remain, particularly at the later stages. Across all stages, the EU venture capital market is about EUR 150 billion smaller than the US one (including venture debt; see Figure 22). The gap is particularly large in the later stage financing (C+), both in relative terms (US financing is 4.4 times EU levels) and in absolute values (a difference of EUR 88 billion). In a typical year, investments from the EIB Group and the European Innovation Council account for 3.5% of all venture capital and venture debt investment.

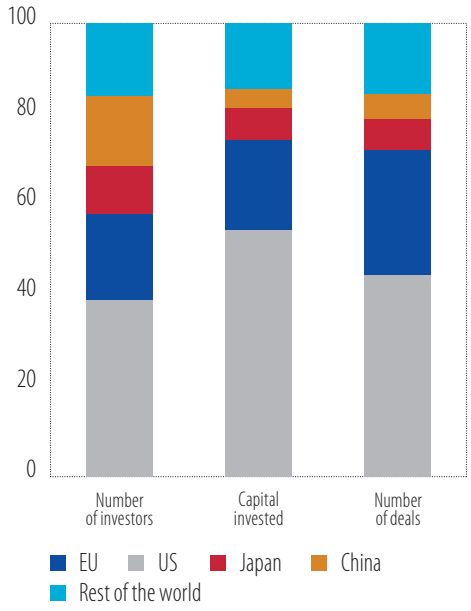
To develop innovation finance, Europe needs a plan to mobilise institutional investors and advance key reforms. The lack of scale and shallow depth of European venture capital markets reduce financing opportunities for innovative companies, increase their financing costs and affect investors' returns. Europe needs larger venture capital funds capable of providing large investments for scale-ups, and investors with technical expertise[9] who can serve as lead/co-lead investors and draw in other, more

9 Including specialised venture capital funds, public direct equity co-investors and corporate investors.

general investors. Mobilising institutional investors and others by providing de-risking tools, public capital with a long-term horizon (equity and debt) and a diversified source of financing through public support could strengthen the EU funding environment. To bring more limited partners[10] into the market, Europe needs to address regulatory barriers and different risk appetites, and promote first-time investments. Advancing the capital markets union and pursuing a fully unified market for European IPOs would improve access to financing for all companies and provide better exit options for venture capital-backed companies.

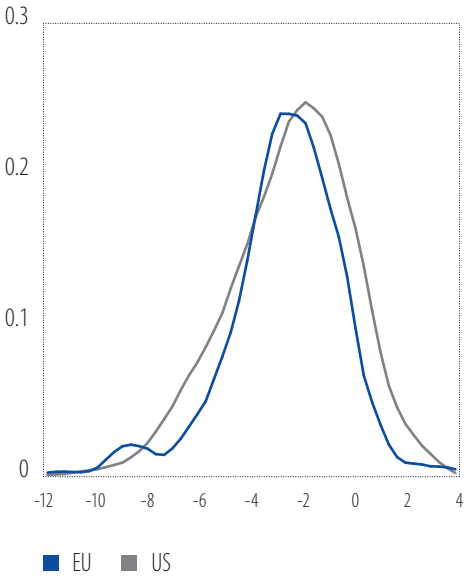
EU companies can provide exit opportunities for venture capital investors. The poor exit options for EU startups are seen as a main reason for the slow development of venture capital. Europe trails the larger entrepreneurial hubs in the United States, particularly at the scale-up phase, when it becomes pressing to identify exit opportunities for the initial investors. Being acquired by an incumbent is one of the predominant exit options. We therefore look at the behaviour of EU firms as potential acquirers of existing startups, with a particular focus on the world's top innovators (Joint Research Centre, 2023).[11]

Figure 23
M&A activity by top global innovators (in %), **2016-2022**



Source: *EIB staff calculations based on PitchBook Data, Inc.*
Note: *The region refers to the location of the investor's headquarters. The sample include all companies featured in the JRC R&D Scoreboard (2023) that completed merger and acquisition (M&A) deals from 2016 to 2022. PitchBook analysts have not reviewed the information presented.*

Figure 24
Distribution of capital invested per innovator (2016-2022), **rescaled by market capitalisation**



Source: *EIB staff calculations based on PitchBook Data, Inc.*
Note: *The x-axis shows the capital that companies listed on the JRC R&D Scoreboard (2023) invested to acquire startups. The formula is ln(capital invested from 2016 to 2022) – ln(market capitalisation in 2022). PitchBook analysts have not reviewed the information presented.*

EU companies are not providing an exit option. US investors represent 40% of investment in top innovators, in terms of R&D spending and mergers and acquisition activity between 2016 and 2022, while EU investors make up only 19%. However, from 2016 to 2022, US investors accounted for a larger

10 For example, domestic mutual funds, pension funds, insurance companies, corporates, sovereign wealth funds and other patient capital investors.
11 Top innovators are defined as companies that invest the most in R&D in the world, as identified by the JRC R&D Scoreboard.

share of capital invested for mergers and acquisitions (54%) and deals completed (44%), compared with 20% of capital invested and 27% of deals completed by EU investors (Figure 23). US firms tend to attract larger investments than companies in other regions of the world, including the European Union. The amount of capital invested by innovative US companies from 2016 to 2022 is generally larger than for EU counterparts. This is partly attributable to the difference in market capitalisation between US investors and EU investors. Rescaling the amount invested over the period by the market capitalisation of each company, it appears that EU innovators invest as much as US innovators (Figure 24). However, EU innovators generally acquire companies abroad, so just 2% of the capital invested by the top EU innovators goes to acquire EU startups – 43% is invested in US startups, 11% in UK startups and 44% in the rest of the world (Fratto et al., 2024).

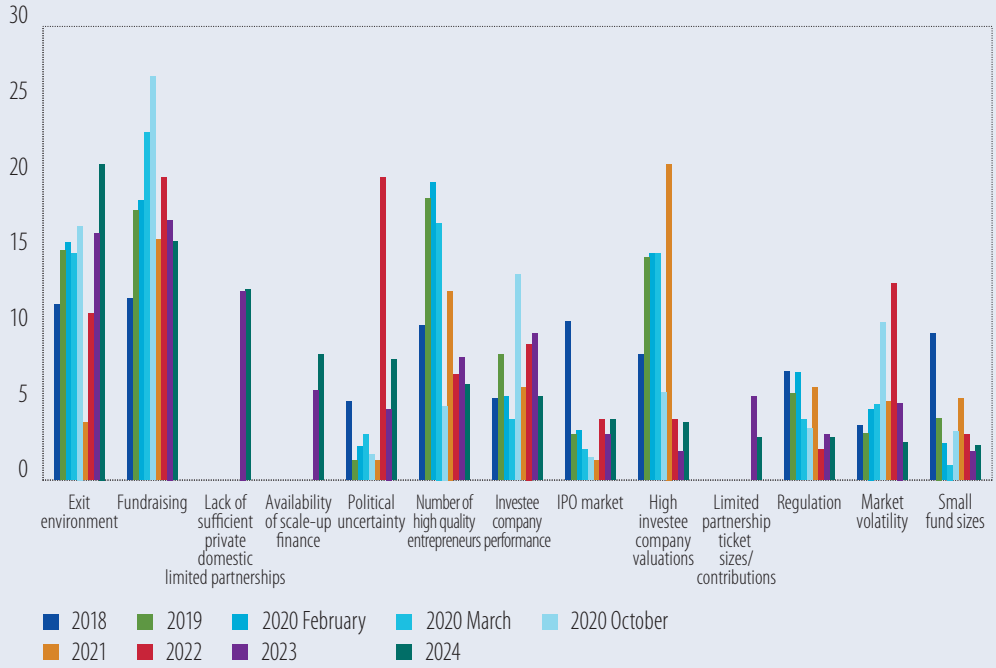
Box B

The venture capital market environment remained challenging in 2024

The findings of the EIF Venture Capital Survey 2024 show how current economic challenges are affecting the sentiment of venture capital fund managers. Although market conditions have improved slightly from a year ago, they are still perceived as difficult, and the environment is very negative for fundraising and exit strategies. However, when interviewed in the summer of 2024, fund managers said they were more optimistic about the next 12 months.

Figure B.1

Major challenges facing the development of venture capital (% of respondents)



Source: *EIF (2024a).*

Note: *Since 2022, the category "political uncertainty" was broadened to include "geopolitical uncertainty and related consequences." In 2023, the category "investee company performance" was changed to "portfolio company performance" while the categories "availability of scale-up finance for venture-backed companies," "lack of sufficient private domestic limited partnerships" and "limited partnership ticket sizes/contributions" were introduced for the first time.*

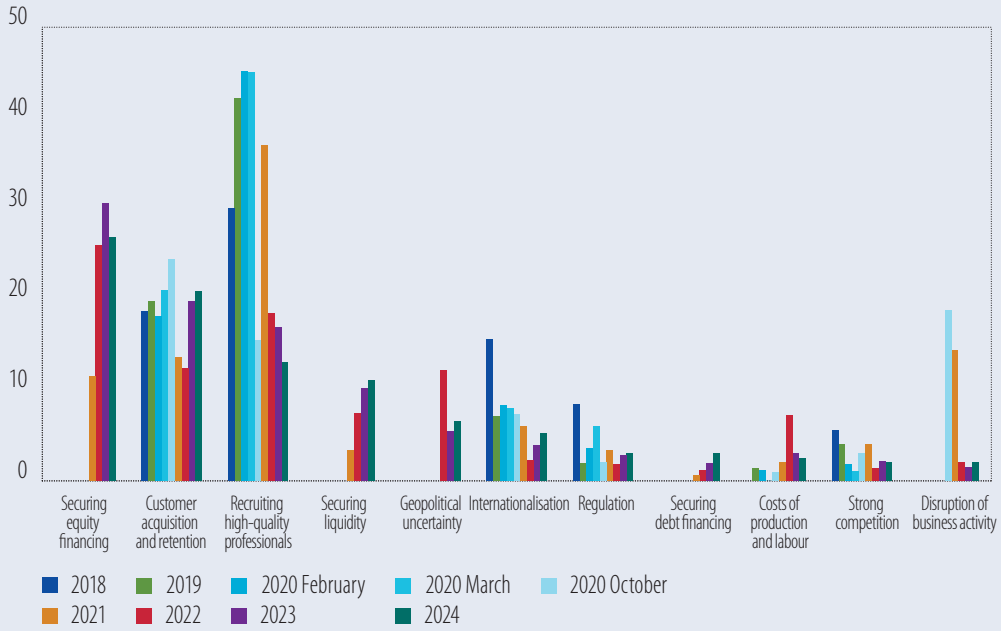
Question: *"Please select the biggest challenge you currently see in your venture capital business." This question allowed respondents to choose multiple answers. The chart shows the answers that respondents marked as their first and most important challenge. Categories selected by 1% of respondents or less are not shown.*

Figure B1 shows that in 2024, the exit environment surpassed fundraising as the primary concern for fund managers. This is also reflected by increasing insolvencies among portfolio companies. At the same time, insufficient liquidity in the IPO market and a thin market for mergers and acquisitions are complicating the exit environment.

Firms within venture capital portfolios still say that their main challenges are recruiting skilled professionals and securing finance (Figure B2), particularly during the scale-up phase. The lack of private domestic partners and large institutional investors contributes to these issues.

Despite a challenging market, fund managers are optimistic about future investment activity and portfolio development. A large share of managers report having companies in artificial intelligence, deep tech and cleantech in their portfolio, and they expect these types of investments to remain important in the future. Artificial intelligence, biotech and energy/climate are also seen as the most promising sectors for investment in the next three to five years.

Figure B.2
Major challenges faced by venture capital portfolio companies



Source: *EIF (2024a).*
Note: *Some categories were not available in all years. For example, the category "geopolitical uncertainty" has only been available since 2022. The category "disruption of business activity" read "disruption of business activity or changes to how the business operates (such as to export restrictions)" in the 2024 survey questionnaire.*
Question: *"Please select the biggest challenges you see for your portfolio companies over time." This question allowed respondents to choose multiple answers. The chart shows the answers that respondents marked as their first and most important challenge. Categories selected by 1% of respondents or less are not shown.*

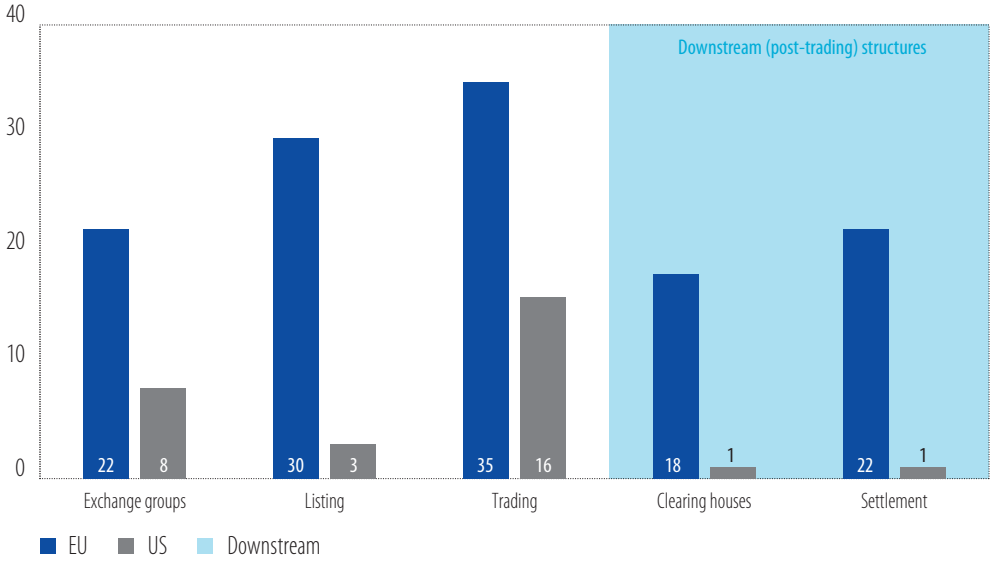
A need for broader access to external equity

Beyond the disparities in private markets, significant gaps between the European Union and the United States also exist in public equity markets. Despite a stock market capitalisation that is four times higher than in the European Union (see Section 3.3 of Chapter 1), the US equity market maintains a simpler, more integrated market structure – especially in the post-trade infrastructure (see Figure 25).

By contrast, the EU post-trade infrastructure is fragmented, with around 20 times as many post-trade providers. This complexity may help explain the smaller, less developed stock markets, and why the EU share of global stock market capitalisation and IPO activity is lower than its share of global GDP. As almost every EU member has its own stock exchange, stock trading and post-trade activities take place on many markets. This fragmentation raises costs and hampers liquidity.

Figure 25

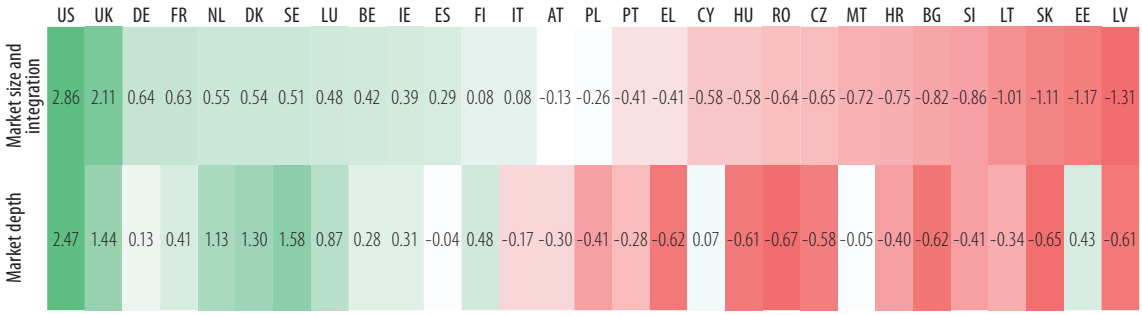
Comparison of the integration of US and EU financial markets, various indicators



Source: *EIB staff calculations based on New Financial (2021).*
Note: *Clearing houses include LCH Clearnet (owned by the LESG group), which after Brexit was authorised to provide service to all EU members until 30 June 2025.*

Figure 26

Differences in the size, integration and depth of capital markets across countries

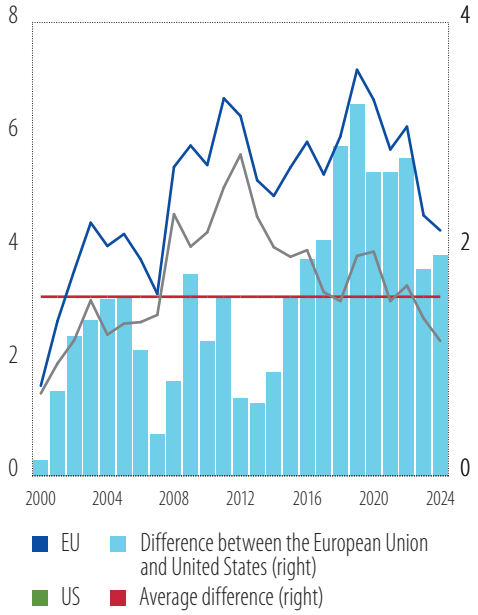


Source: *EIB staff calculations based on data from Bloomberg, CapitalIQ, Eurostat, the IMF, the European Commission's Directorate-General for Financial Stability, the Financial Services and Capital Markets Union and the Association for Financial Markets in Europe.*
Note: *In the figure, all indicators are standardised with mean 0 and standard deviation of 1. Market size and integration includes total market capitalisation (log scale) and a composite indicator of rest of the world integration.*[12]

12 The composite indicator of rest of the world includes cross-border M&A transactions, equity and bond issuance, private equity, foreign exchange trading, interest rate derivatives and portfolio holdings. Market depth includes public market financing (market capitalisation relative to GDP) and capital raised through IPOs relative to GDP, as well as pre-IPO risk capital (venture capital investment relative to GDP). The pool of investors includes household holdings of listed equities, bonds and investment fund shares, and institutional investors (pension funds and insurance firms), relative to GDP. Average 2016-2023.

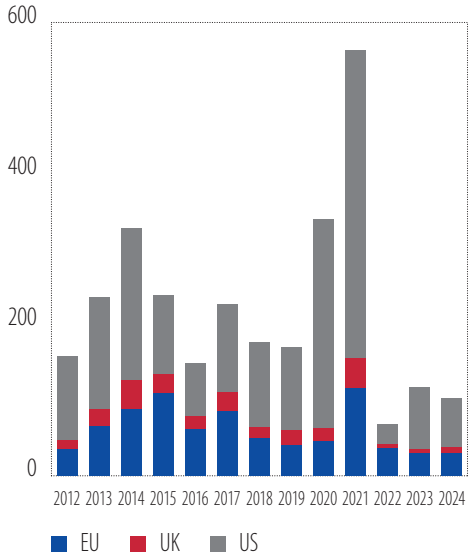
Public equity markets are less developed in Europe, with wide variation in size and depth across EU countries. Our composite indicators, standardised with a mean of 0 and a standard deviation of 1, reveal substantial heterogeneity across countries (see Figure 26). The United States leads in market size and integration with an indicator of 2.86, followed by the United Kingdom at 2.11 – both markets far exceed Germany and France by more than one standard deviation. Most Central and Eastern European countries have negative indicators, showing below-average market size and integration. For market depth, which includes public equity market financing (market capitalisation and IPO activities relative to GDP), pre-IPO risk capital (venture capital/private equity investment relative to GDP), and the pool of investors (retail and institutional), Sweden and Denmark are one standard deviation above average, close to the United Kingdom and the United States.[13] Estonia stands out in Central and Eastern Europe, surpassing Italy and Austria, primarily because of recent increases in venture capital/private equity investment.[14]

Figure 27
Differences in equity and risk premiums
(left axis; in %; right axis: percentage points)



Source: *EIB staff calculations based on Refinitiv Eikon.*
Note: *The latest available figures are for August 2024.*

Figure 28
Public market issuance activities
(USD billion)**, by region**



Source: *EIB staff calculations based on Bloomberg and the IMF.*
Note: *The latest available figures are for August 2024. Public market issuances include IPO and secondary offerings of non-financial firms, excluding private placements.*

The equity risk premium in Europe exceeds that in the United States. The equity risk premium represents the excess return investors require for holding equity compared with holding a safe asset. It has a bearing on corporate investment. A lower equity risk premium results in a lower cost of capital for equity, thereby improving corporate access to external equity. The equity risk premium is structurally higher in the European Union than in the United States, by a range of 150-200 basis points (Figure 27).[15]

13 Sweden's average market depth slightly exceeded that of the United Kingdom for the 2016-2023 period.

14 In fact, according to the latest data from the European Commission's Directorate-General for Financial Stability, Financial Services and Capital Markets Union (DG-FISMA, 2024), annual venture capital and private equity investment in Estonia averaged 0.18% and 1% of GDP from 2016 to 2023, among the highest rates among EU members. For more details on data collection and methodologies, see DG-FISMA (2021).

15 Unlike the readily observable costs of bank borrowing or debt, the equity risk premium is not directly observable, and must be estimated. The most common tool for this is dividend discount models, which are well known in the financial industry. For further details, see Box A in EIB (2018) and Geis et al. (2018).

While the US cost of equity has declined since 2016, approaching levels seen in the 2000s, it remains elevated in the European Union. Consequently, the EU-US gap has widened, from approximately 100 basis points during 2000-2015 to over 200 basis points during 2016-2024. Factors like lower growth expectations, more costly and less liquid exchanges, lower financial literacy and higher overall aversion to risk all contribute to the underdevelopment of EU equity markets and the equity risk premium difference with the United States.[16]

A higher equity risk premium reduces public market issuances. This can be seen in the structurally lower level of amounts raised by IPOs and secondary offerings in the European Union compared to the United States in past decades (Figure 28). Public issuances are partly cyclical, declining in downturns and increasing in upturns – a pattern observed in the European Union, United States and United Kingdom.[17] However, this cyclicality is less pronounced in the European Union, for which public issuance was approximately two times lower than the United States for 2012-2024.

As IPO activity is strongly correlated with market depth, differences in market size tend to widen over time. Market depth, as proxied by the ratio of total market capitalisation to GDP, has shown a significant correlation with IPO activities in past decades, with considerable differences across regions (Figure 29). The United States, the United Kingdom, Switzerland, and several Western and Northern European countries, including Sweden, Norway, Denmark and the Netherlands, are positioned higher up and more to the right than the vast majority of EU countries, indicating both high market capitalisation and an active IPO landscape. Conversely, most other EU countries, particularly those in the Central and Eastern Europe, are clustered around the lower left-hand corner or the 0-axis, reflecting low levels of IPOs and shallow market capitalisation. This disparity suggests that deeper capital markets, supported by better infrastructure and a larger pool of investors, facilitate more IPOs, which in turn increase market capitalisation and attract further investment – widening gaps over time.

Market size, including integration with the global market, and market depth significantly affect firms' access to external equity markets. Analysing the determinants of external equity issuance (public and private) at the firm level, it emerges that one standard deviation increase in market size and integration increases the probability of external equity issuance by 15 basis points, while one standard deviation increase in market depth increases it by about 22 basis points (Figure 30). Given that less than 1% of EU firms use equity financing,[18] each change would result in a 20-30% increase in the share of equity-issuing firms, and 50-55% when cumulated.

Firms located in larger, deeper and more integrated markets are more likely to issue new equity to finance their investments. This further emphasises the significance of the EU single market and the need to better integrate capital markets across EU countries. As shown in Chapter 1, better market integration enhances resource allocation, promotes diversification and improves risk-sharing. Integration makes fragmented markets larger, more liquid and more accessible, reducing capital costs, improving funding availability, and lowering margins and volatility. It also fosters innovation and risk management, leading to more portfolio diversification and resilience to local shocks. Ultimately, this helps narrow the equity risk premium gap between the European Union and the United States and brings equity issuance costs down.

Access to equity finance is especially important for young firms that cannot yet finance their operations and investments internally. The results highlighted in Figure 31 show that external equity is more frequently used by firms that share certain characteristics. To start with, firms that are not yet profitable are more likely to raise equity. This is consistent with the trade-off theory of capital structure

16 In general, equity risk premiums are influenced by overall economic health and predictability. Stable inflation, interest rates and economic growth reduce premiums, whereas volatility and uncertainty in these factors increase them (Damodaran, 2022). Illiquidity and higher risk aversion also raise premiums. Bekhtiar et al. (2019) find that EU private investors exhibit greater risk aversion than US households.

17 Firms are more likely to issue equity when there are favourable market conditions and ample liquidity, reflecting the market's capacity to absorb new shares, as evidenced by Hanselaar et al. (2019).

18 Based on data from EIBIS 2016-2024, weighted by firms' value added.

(Kraus and Litzenberger, 1973), which suggests that firms balance the tax benefits of interest payments against bankruptcy costs. For firms losing money, the interest tax shield has no value, and they may be closer to bankruptcy. The pecking order theory of capital structure (Myers and Majluf, 1984) posits that firms prefer internal financing, then debt, and finally equity. Debt ranks higher than equity in the hierarchy of claims because it is less information-intensive and requires a lower return. As firms that are losing money are unable to finance investments internally and may not be able to obtain bank loans or other forms of credit, equity finance remains the only financing option.

Figure 29
Market depth and IPO activities

Source: *EIB staff calculations based on the IMF, Bloomberg and Capital IQ. IPO data is restricted to approved and closed deals.*

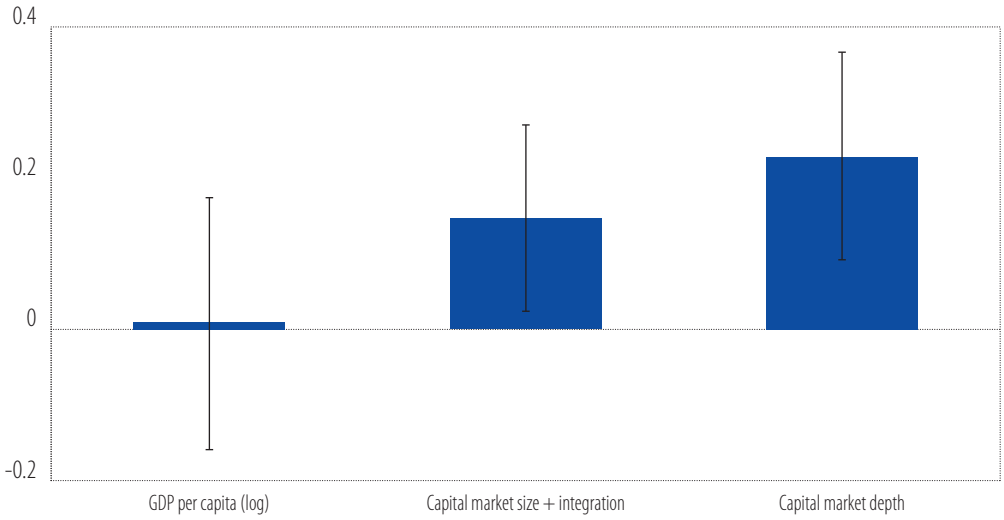
High-growth and high-tech firms, which are crucial for Europe's future competitiveness, are more likely to issue equity. Figure 31 shows that young firms, both large and small, are more likely to issue equity. Young firms do not have a credit history, making them hard for lenders to appraise. Though equity is more information-intensive, equity holders have a claim on future earnings that can compensate for the higher risk of that claim, making equity attractive for high-growth firms. Firms operating within the high-tech sector are twice as likely to issue equity than those in the mid-tech and other sectors.[19] Given the greater R&D intensity and higher propensity for intangible investment among high-tech firms, it is unsurprising that they are more likely to utilise equity financing. However, EIBIS data show that US firms are over three times more likely to use equity financing than their EU counterparts. This discrepancy can be attributed, at least in part, to the higher share of high-growth, high-tech and R&D-intensive firms in the United States,[20] leading to a greater share of firms using equity. The remainder can be attributed to generally easier access to external equity in the United States across all industries, reflecting the systemic and environmental components of larger, deeper and more integrated capital markets, as previously discussed.

19 The tech classification follows Fuest et al. (2024), with the categories "high-tech" (aerospace, alternative energy, biotech, software, etc.); "mid-tech" (automobiles, chemicals, telecoms, etc.) and "others" (banks, construction, media, other services, utilities, etc.).

20 Fuest et al. (2024) attribute US business enterprise expenditure on R&D to the United States' larger share of high-tech industries and its overall higher R&D intensity. Additionally, data from EIBIS 2016-2023 show that US firms had a higher average three-year annualised employment growth than their EU counterparts.

Figure 30

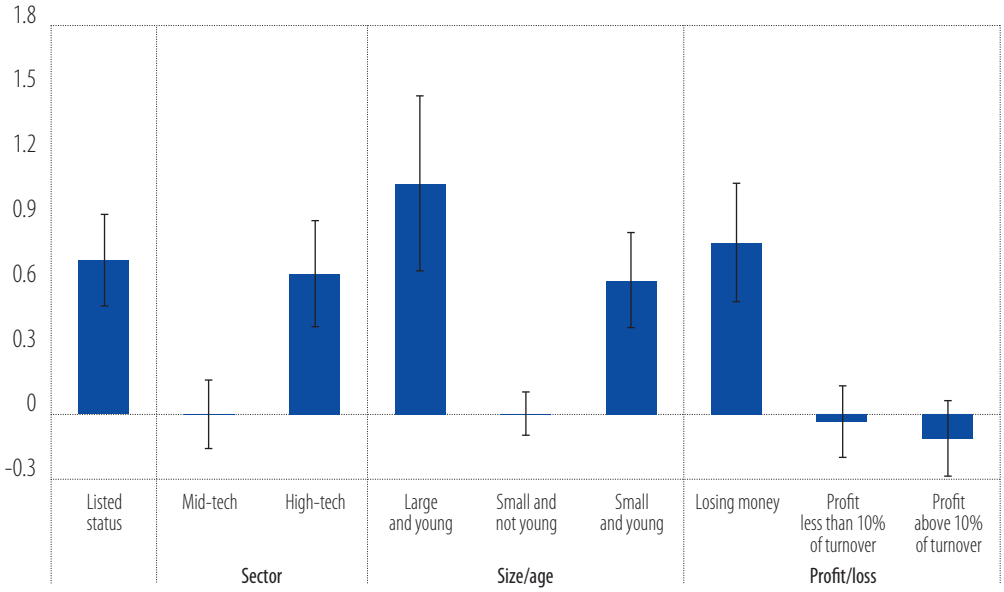
Estimated impact of macroeconomic factors on the probability that firms will issue equity (in percentage points)



Source: *EIBIS-Orbis 2016-2023 sample based on Betz et al. (forthcoming).*
Note: *For an explanation of indicators for capital market size and capital market depth, see footnote 12. The black lines indicate 90% confidence intervals.*

Figure 31

Firm characteristics influence equity issuance (in percentage points)

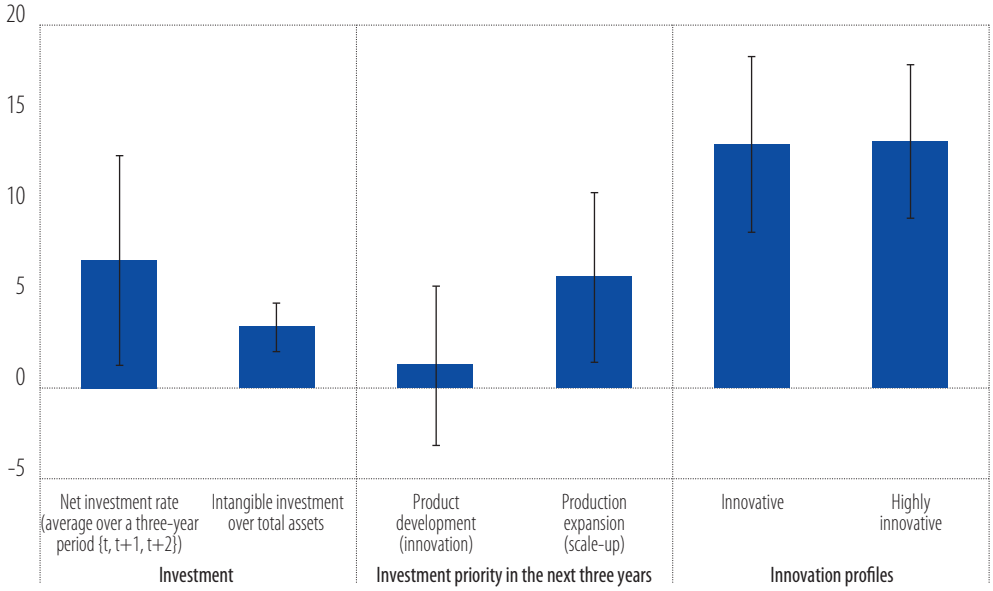


Source: *EIBIS-Orbis 2016-2023 sample based on Betz et al. (forthcoming).*
Note: *The tech classifications follow Fuest et al. (2024): High-tech (such as aerospace, alternative energy, biotech and software); mid-tech (such as automobiles, chemicals and telecoms) and others (such as banks, construction, media, other services and utilities). The black lines indicate 90% confidence intervals.*

Equity financing is shown to have a significant impact on firms' innovation and overall investment (see Figure 32). Using propensity score matching to compare firms that issue equity with a control group of similar firms, equity-financed firms show an investment growth rate that is 7 percentage points

higher (as proxied by net fixed asset growth) during the period following the issuance of equity and the two subsequent periods. They also show higher investment in intangible assets (3.4 percentage points, or almost 70% higher). Equity-financed firms are also 13 percentage points more likely than the control group to develop innovative products new to the country or world, and 6 percentage points (or 18%) more likely to prioritise production expansion or scaling up in the next three years. These findings are also consistent with those of Didier and Cusolito (2024), indicating that financially constrained firms, particularly those with high R&D levels, benefit the most from capital market financing. Equity issuance, rather than bonds, drives rapid expansion in R&D-reliant firms, highlighting its effectiveness for innovation. This underscores the importance of developed equity markets for innovation and suggests that limited equity access can distort investment and hinder growth. Additionally, Haskel and Westlake (2018) note the growing importance of intangible assets like patents, trademarks and software, which are harder to use as collateral. Equity issuance is thus associated with more rapid production expansion at high R&D firms, especially for intangible assets (Didier and Cusolito, 2024).

Figure 32
Estimated impact of equity issuance on firm performance (in percentage points)



Source: *EIBIS-Orbis 2016-2023 sample based on Betz et al. (forthcoming).*
Note: *Highly innovative firms are those with new products/services within a country or globally and investing in R&D. The investment growth rate is calculated as the growth rate of net fixed assets. The black lines indicate 90% confidence intervals.*

In summary, our results indicate that the size and global integration of capital markets, as well as their depth, significantly influence firms' access to external equity. A one standard deviation increase in these factors raises the probability of equity issuance by 15 basis points (for market size and integration) and 22 basis points (for market depth). Cumulating the two effects would result in a doubling of the share of equity-issuing firms.[21] Firms that issue equity, compared to a control group with similar characteristics, are more likely to be innovative, introducing products that are new to the world or the country, and are also more likely to invest in intangible assets. They have an investment growth rate that is 7 percentage points higher during the issuance year and the following two years. Additionally, these firms are more likely to prioritise expanding production or scaling up over the next three years. This highlights the importance of deepening capital markets and advancing the capital markets union to increase market size and integration. This is particularly relevant as the European Union suffers from a dearth of scale-up financing compared to the United States, with EU firms raising significantly less capital, which hampers their growth and global competitiveness.

21 By comparison, EIBIS 2016-2023 data indicate that US firms are over five times more likely to issue equity than their EU counterparts.

Accelerating investment by delivering targeted policy support and removing barriers

The current weakness of corporate investment is at odds with the huge investment needed for the green and digital transition. According to Draghi (2024), additional investments of EUR 750 billion to EUR 800 billion a year are needed to ensure Europe is competitive in the future. Most of the additional funding would need to come from the private sector, which historically has financed around 80% of productive investment in Europe. But Draghi (2024) also argues that the private sector will need public support. The public sector can help the private sector in two ways. First, it can create a business environment that is conducive to private investment, and second, it can design supporting policies to align incentives across firms, contain uncertainty and possibly support investments with targeted financial incentives.

We analyse policy actions to support corporate investment in general, and for specific types of assets. We first analyse the role of investment barriers and show that removing them also improves growth, especially in investment-intensive sectors. Creating an effective business environment remains the best stimulus for investment, and the EIBIS has repeatedly shown that policymakers have room to manoeuvre to reduce investment barriers. We then analyse the impact of targeted financial incentives used by the public sector to support firms' investment across EU countries. As the capacity of the public sector to provide these financial incentives is diminishing, it is all the more important to analyse their effectiveness. We provide evidence that targeted support has a positive impact, especially on transformative investments. The impact can be optimised when the interventions are designed and coordinated at the EU level. This section also contains a box summarising a study on the effectiveness of EIB instruments.

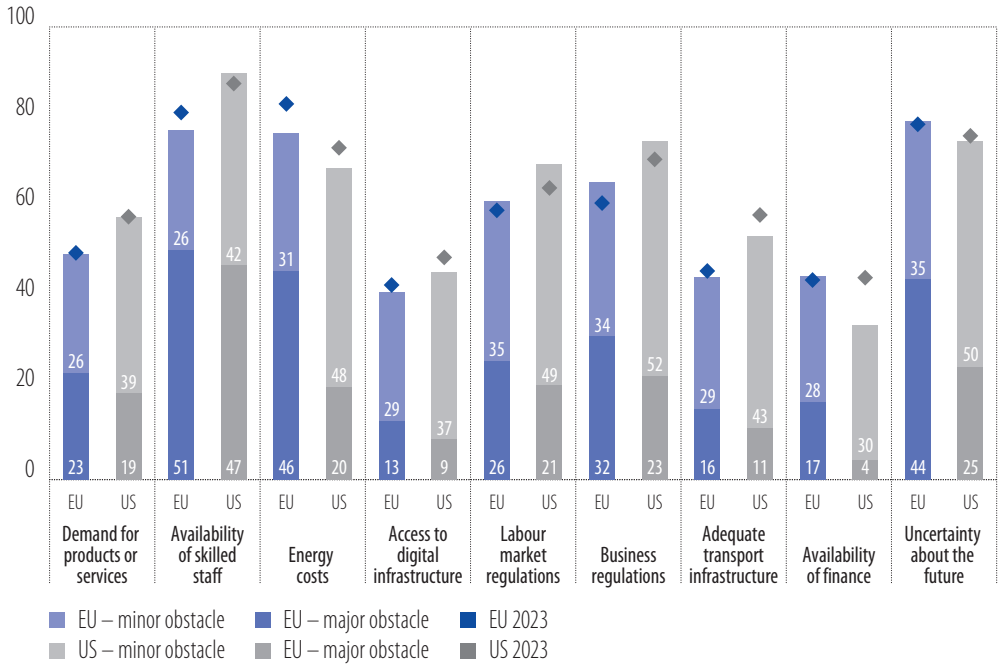
Lowering barriers to raise firms' investment

EU firms cite the availability of skills, the cost of energy and uncertainty about the future as the biggest obstacles to investment. Since its inception, the EIBIS has asked respondents to expound on the investment barriers they see. Figure 33 compares the responses of firms in the European Union to those in the United States. In Europe, the shortage of staff with the right skills is the most frequently cited major obstacle to investment, reported by 51% of EU firms. This is followed by energy costs (46%) and uncertainty about the future (44%). In the United States, the shortage of skills is also the most frequently cited major investment obstacle (47%), but less than 25% of US firms view any of the other items as major obstacles. Figure 34 also shows that the survey responses for 2024 are similar to those for 2023 – suggesting that the EIBIS captures structural aspects of the business environment. The cost of these investment barriers, in terms of investment lost, is analysed below.

Countries with fewer investment barriers have higher rates of investment. Figure 34 provides descriptive evidence of the link between the investment environment as measured by the EIBIS, aggregate investment as proxied by gross fixed capital formation,[22] and GDP per capita. The horizontal axis on the left panel plots the average number of major investment obstacles reported by firms. The vertical axis plots gross fixed capital formation minus investment in construction, scaled by GDP. It turns out that countries with a better investment environment also have higher investment rates. Figure 34 also highlights countries' positions relative to one another, and shows that firms in Denmark, Finland and Sweden report the lowest number of major investment obstacles, on average.

22 Gross fixed capital formation from the construction sector is excluded.

Figure 33
Barriers to investment in Europe and the United States



Source: *EIBIS 2023-2024.*

Countries with higher investment rates also have higher GDP per capita. The horizontal axis on the right panel of Figure 34 plots log GDP per capita. Unsurprisingly, wealthier countries have higher investment rates on average, if only to maintain their larger capital stocks. Figure 34 is consistent with the view that a better investment environment supports higher investment which, in turn, leads to higher GDP per capita. However, countries differ in myriad ways that are impossible to control for. Therefore, Figure 34 does not offer conclusive evidence, but instead points at what to analyse more closely.

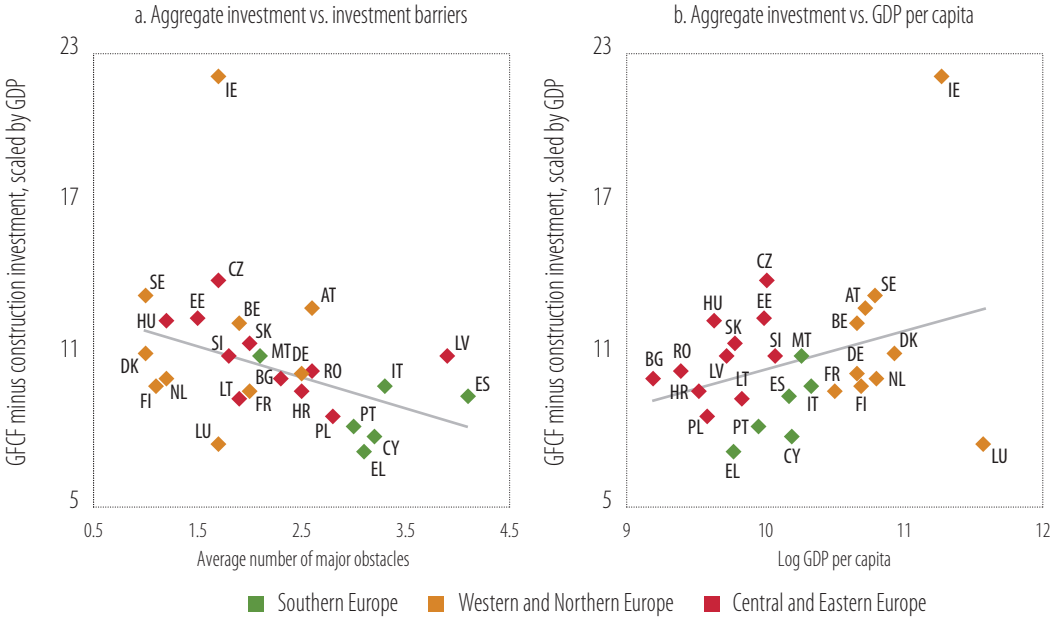
We analyse the relationship between investment barriers and investment in different industries. Industries that are technologically more dependent on investment should grow faster in a better investment environment.[23] The approach used here exploits variations between industries in specific countries, and is therefore less prone to the omitted variable concerns that plague cross-country analyses. The dependent variable is value-added growth from 2015 to 2019. Investment is cyclical, and limiting the analysis to this time period avoids picking up the effects of the pandemic and the energy shock. The explanatory variable of interest is the interaction between industry-level investment intensity and the average number of major investment obstacles at country level, as reported in the 2016 EIBIS (the actual survey was done in 2015). The investment environment is measured at the outset of the four-year period captured by the dependent variable. It is important to note that the investment environment as measured by the EIBIS is stable over time, such that the results likely also apply during other times, provided there are no major shocks.

A better investment environment is conducive to higher output growth, especially for investment-intensive industries. Figure 35 shows that output growth is higher in countries that report fewer

23 The empirical strategy that arrived at this conclusion was pioneered by an influential paper on the link between finance and growth: Rajan and Zingales (1998).

investment obstacles.[24] Firms in a country that is in the 25th percentile of the distribution of the obstacle in question report an average of 1.5 major obstacles to investment, while firms in the country in the 75th percentile of the obstacle distribution report an average of 2.4 major obstacles. The regression suggests that reducing investment barriers to shift a country from the 75th to the 25th percentile of the obstacle distribution increases output by 3.3 percentage points over the four-year period. In addition, it can be shown that the sensitivity of output growth to the investment environment is higher for industries that require more investment in technology.

Figure 34
Investment barriers, investment and GDP per capita

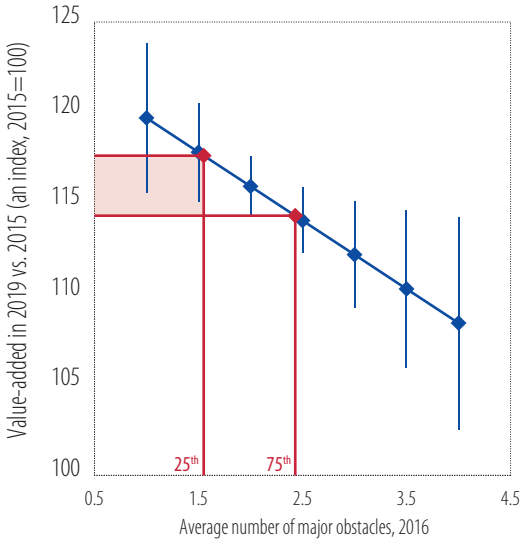


Source: EIB staff calculations based on EIBIS 2016-2023 and Eurostat.

Firms with good investment opportunities may benefit the most from a better business environment. The previous edition of the investment report (EIB, 2024a) examined the link between investment and the investment obstacles for individual firms. Within a single industry and country, evidence exists of a two-way causality between the investment obstacles perceived by firms and their rates of investment. Investment barriers reduce investment and, at the same time, firms with greater investment opportunities are more likely to encounter obstacles. Growing firms may therefore be more likely to report obstacles. While at first glance, the results may appear inconsistent with the evidence presented above, a combined reading suggests that a better business environment supports growth and investment. At the level of the individual firm, within a given sector and country of operation, the most dynamic, fast-growing firms are the ones that encounter barriers. At the aggregate level, however, an operating environment characterised by fewer investment obstacles supports higher levels of investment.

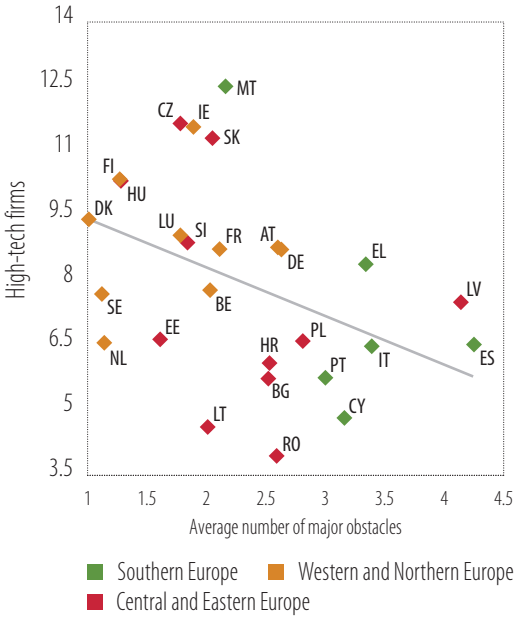
24 The figure reports the fitted values from a regression of value-added growth from 2019 relative to 2015 at the Nomenclature of Economic Activities (NACE) two-digit level on the share of industry value added, and the interaction between industry-level investment intensity, the average number of major investment obstacles at country level (as reported in the 2016 wave of the EIBIS), and country- and industry-level fixed effects. Investment intensity is measured as gross fixed capital formation scaled by value added and aggregated across all countries with the available data. The NACE classification of economic activities in the European Community is used for a wide variety of European statistics in the economic, social, environmental and agricultural domains.

Figure 35
Investment obstacles and value-added growth



Source: *EIBIS 2016, Eurostat, EIB staff calculations.*
Note: *Fitted values from a regression of value-added growth from 2019 relative to 2015. Industry-level figures for value-added follow the NACE two-digit level classification system.*

Figure 36
Share of firms (in %) **in high-tech sectors and obstacles encountered in different EU countries**



Source: *EIBIS 2016-2023, Eurostat, EIB staff calculations.*
Note: *High-tech industries include pharmaceuticals, ICT, aerospace and defence, and R&D in biotech and natural sciences and engineering, based on Fuest et al. (2024).*

Countries with fewer investment obstacles have better chances of escaping the middle-technology trap. Figure 36 provides insight into why this is the case. Countries with a better investment environment have a greater share of firms that operate in high-tech sectors. Fuest et al. (2024) argue that a strong presence in these industries is critical to escape what they call the "middle-technology trap," a situation in which economies focus their innovation efforts on mid-tech sectors rather than high-tech sectors, with less ability to develop high-tech sectors.

Supporting intangible investments

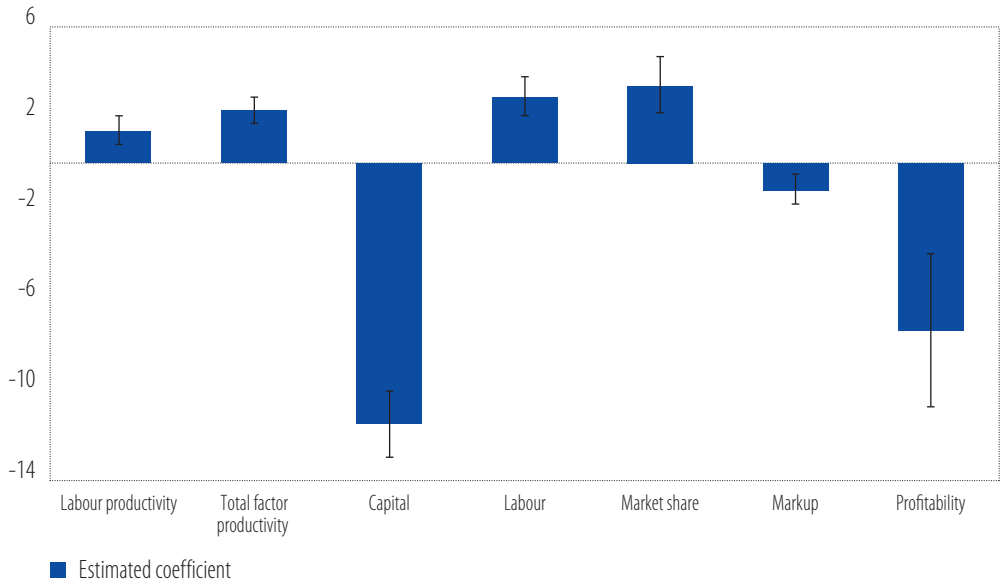
Over the past 40 years, developed economies have seen a significant increase in the importance of intangible capital. This implies a shift in production towards a more intensive use of assets in information technology, R&D and organisational capital, and a growing need for investment in skills and workforce training. This trend has significant implications for firms as well as the overall economy. Intangible assets can be deployed simultaneously across multiple locations and production processes, which improves the potential for economies of scale and scope (Crouzet et al., 2022). A more intensive use of intangible assets may also affect businesses' ability to enter and compete with different industries (De Ridder, 2024). It is therefore crucial, alongside these theoretical insights, to empirically verify the relationship between intangible investment, productivity and other firm-level outcomes.

Firms with high intangible investments perform better and are more likely to be leaders. As shown in Figure 37, high-intangible firms are more productive and have higher market share but lower

profitability.[25] This may indicate that high-intangible firms are more likely to be fast-growing firms that are performing well, and that are at a relatively early stage of their life, when the priority is to expand market share (at the cost of lower profitability).[26] In line with their higher productivity, high-intangible investors are also more likely to be leaders in their sector and country (falling in the 90th percentile of the labour or total factor productivity distribution).

High-intangible firms are more likely to report financial constraints and skill shortages, but financial support can help.[27] The constraints and shortages may reflect the firms' strong demand for financial and labour resources due to their fast growth and increasing market share. Figure 38 shows that high-intangible investors are more likely to be financially constrained, and that financial support is more likely to be allocated to financially constrained firms. When high-intangible firms receive financial support, the probability of facing financial constraints decreases by 14%, or around 2 percentage points. These results are in line with previous research revealing that R&D spending is more sensitive to credit constraints, especially during crises (see Aghion et al., 2012). During the COVID-19 crisis, however, investment in intangibles declined less than in tangible assets, as swift policy support prevented a sharp increase in the number of financially constrained firms, thus mitigating the adverse effect of the crisis on investment, and especially on investment in intangible assets (see Bauer et al., 2024).

Figure 37
Characteristics and performance of firms that invest heavily in intangible assets (average annual growth over three years, in %)



Source: *EIBIS 2016-2023 based on Caggese, et al. (forthcoming).*
Note: *Estimated coefficient of linear regression by controlling for lagged total assets; age; and country, sector and year fixed effects.*[28] *The black lines indicate the 95% confidence interval based on robust standard errors.*

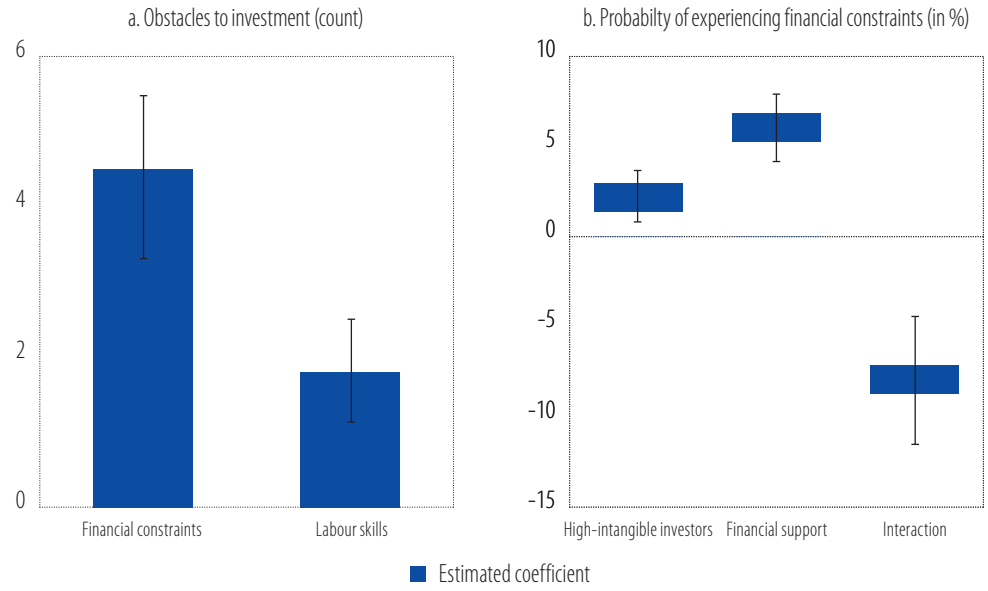
25 "High-intangible investors" are firms with a ratio of intangible investment (R&D, software, data, IT networks and website activities, employee training, improving organisation and business processes, etc.) over fixed assets that is in the top 25% percentile of the whole distribution. Total factor productivity and the associated markups are calculated at the two-digit industry level (pooling observations across countries) and based on a translog production function (Caggese et al., forthcoming).

26 Nevertheless, more in-depth analysis shows that for both old and young high-intangible investors, productivity is higher than for low-intangible investors. Old and young investors differ in their focus on market share and profitability, as older firms are relatively more consolidated and profitable. For a more detailed analysis, see Caggese et al. (forthcoming).

27 Financial support refers to grants and loans with favourable conditions. The EIBIS provides details on forms of external investment financing accessed by firms. Grants are provided for each survey wave from 2016 to 2024, while details on loans with favourable conditions are provided for 2022 and 2024.

28 Variables are defined as $\ln(Y_t) - \ln(Y_{t-3})$ for log variables, and as the ratio of three years' change to the base year for profit ratio (return on assets), with a total sample of 100 000 to 150 000 observations, depending on the variable. Labour productivity is defined as production over the number of employees (y/l). Total factor productivity (TFP_{TL}) and the associated markups are estimated based on translog (TL) production functions (PF). Capital refers to tangible capital intensity, defined as the ratio of fixed assets over total assets.

Figure 38
Obstacles and enablers of high-intangible investors (in %)



Source: *EIBIS-Orbis 2016-2023 sample based on Caggese et al. (forthcoming).*
Note: *Estimated coefficient of linear regression by controlling for lagged total assets; age; and country, sector and year fixed effects. The black lines indicate the 95% confidence interval based on robust standard errors.*

High-intangible firms are more likely to receive financial support when they operate in high-tech sectors, according to an analysis of financial support provided across sectors. In other sectors, the allotment of financial support is not related to the amount of investment in intangible assets (Caggese et al., forthcoming). The absence of correlation is at odds with the observation that, even in non-high-tech sectors, high-intangible firms tend to be more financially constrained.

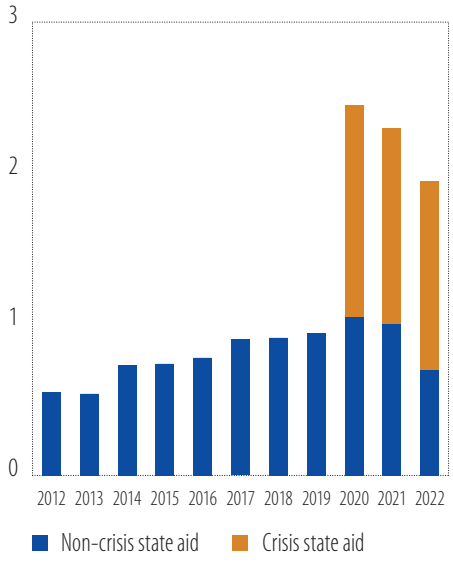
Young high-intangible firms need specific public policies that enable entrants to grow and compete effectively. Academic literature finds evidence of a shift towards increasing concentration, firm size, markups and aggregate profit as production technology leans towards intangibility. This evolution might affect the efficient use of resources (see De Ridder (2024), De Loecker et al. (2020) and De Loecker and Mongey (2021)). Our empirical findings highlight that large firms tend to increase markups, while young high-intangible firms expand employment and market share more than older firms that use more intangible assets, charge lower markups and earn less. In some cases, targeted support may be justified for young high-intangible firms, which suffer more from financing bottlenecks. However, the best policy remains developing a proper regulatory framework to provide a level playing field and allow new entrants to grow, thereby fostering competition.

The effect of state aid to firms

State aid encompasses all forms of government-controlled financial resources that may be transferred or granted to undertakings, companies and industries on a discretionary basis. The criteria for a public measure to constitute state aid are laid down in the Treaty on the Functioning of the European Union (TFEU). These criteria refer to an intervention by the state, or through state resources, that give the recipient a selective advantage that actually or potentially distorts competition and affects trade between EU countries. State aid is generally prohibited, but it may be used under certain specific conditions (see the Data Annex for more details).

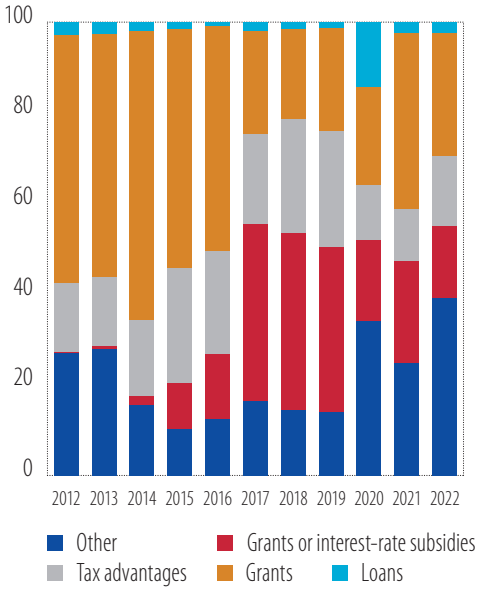
Government support can ease financial constraints and encourage firms to make investments they might otherwise avoid. This support can be particularly valuable for innovative projects, environmental initiatives and infrastructure development in poorer or structurally disadvantaged regions. However, government support also carries risks. It can distort competition, favouring specific firms or sectors and leading to resource misallocation.

Figure 39
EU governments' spending on state aid
(% GDP)



Source: *EIB staff calculations based on the European Commission (2024), State Aid Scoreboard.*

Figure 40
Financial composition of state aid
(% of total)



Source: *EIB staff calculations based on the European Commission (2024), State Aid Scoreboard.*
Note: *The depicted instrument categories are distinct. There are cases where grants or interest rate subsidies cannot be separately allocated to projects due to deficiencies in data reporting. These cases are reported under the joint category of grants or interest rate subsidies. The category "other" combines instruments like guarantees, equity intervention and subsidised services, etc.*

Within the European Union, state aid averaged 0.8% of GDP from 2012 to 2019. Figure 39 shows the estimated evolution of state aid as a share of EU GDP from 2012 to 2022 (the latest data available). State aid accounted for about the same share of output from 2012 to 2019 but increased drastically during the COVID-19 and energy crises, under relaxed EU rules. Figure 40 shows the wide range of instruments policymakers have used to deploy state aid, including grants, tax breaks, guarantees and other instruments.

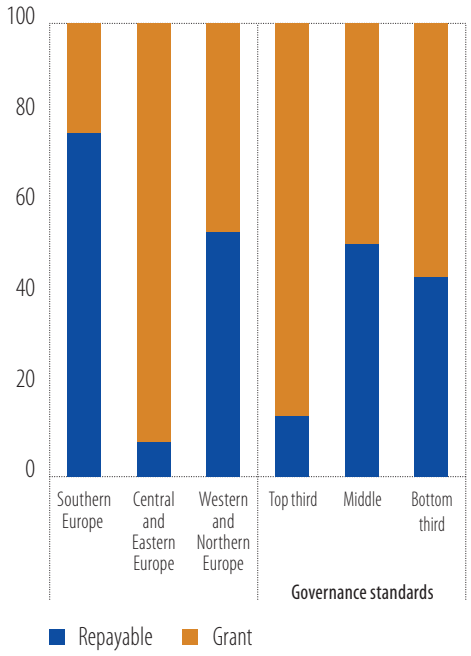
Understanding how state aid influences investment under normal conditions provides critical insight into its effectiveness as an industry policy tool. Our analysis focuses on state aid approvals from 2017 to 2018, a period during which Europe was not in crisis. It draws on the public EU registry of state aid approvals, which details recipients, objectives and instruments for aid exceeding EUR 500 000.[29]

29 Since then, the threshold for reporting the receipt of state aid has been lowered.

The type of instrument used – whether loans (to be repaid) or grants (not to be repaid) – depends on the objectives pursued and the recipient's sector and location. In Figure 41, we investigate the marginal influences of the objective of state aid and the location of the recipient firm on the instrument used.[30] Holding everything else constant, grants are especially prevalent for sectoral development (agriculture, for example) in Central and Eastern Europe, while loans are more common in Southern Europe.

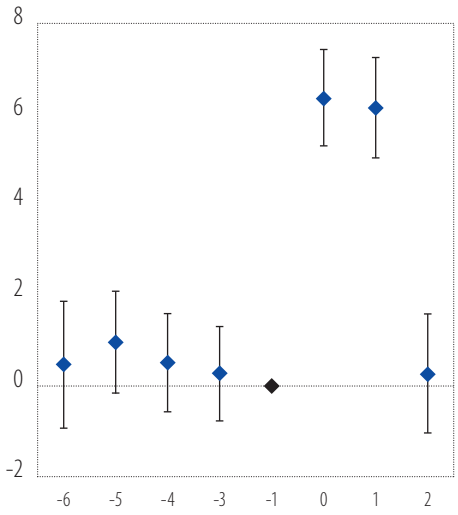
Firms that received state aid spent 6% more on investment than other firms for two years after receiving the aid.[31] The calculation controls for firm characteristics and changes in the macroeconomic environment that affect all firms similarly. Investment by firms receiving state aid is compared to their estimated investment without it. The counterfactual assumes that these firms' investments would have evolved like those of peers that did not receive state aid. While local authorities are required to report receiving more than EUR 500 000 in state aid, they may not always do this. In this case, the true impact of state aid would exceed this estimate.

Figure 41
Use of loans vs. grants for state aid (% change in investment)



Source: *EIB staff calculations.*
Note: *The figure shows the marginal influence of the objectives and locations of state aid on the instrument used to provide that aid. Calculated for state aid above EUR 500 000 provided during 2017-2018.*

Figure 42
Impact of state aid on the growth of firms' investment (investment rate, winsorised), **by years before and after receiving the aid**



Source: *EIB staff calculations.*
Note: *The figure shows the estimates and the confidence intervals of the impact of state aid received in 2017-2018 on the growth of investment in fixed assets.*

30 The marginal influence reported is the estimated change in the probability of using a type of instrument, conditioned on the factors shown and further characteristics of state aid and of the recipients.

31 The investment growth rate is calculated as net fixed asset growth using balance sheet statements from Bureau van Dijk's Orbis database. The treatment effect of the approval of aid is estimated using a generalised difference-in-differences approach. The control group contains all firms in the Orbis database for which no information about the receipt of state aid could be found. Results appear robust when weighting the control group to increase its similarity to the treated (propensity score matching, 1:1 nearest neighbour) before treatment.

The impact is significantly positive in the year in which state aid is approved and the following year (Figure 42). As the difference in investment rates is not significant for years preceding the receipt of state aid (labelled -4 to -1), the results shown in Figure 42 provide some confidence that state aid not only coincided with, but actually caused, higher investment. These results are in line with part of the academic literature (for example, Canzian et al. (2024)).

The positive effects of receiving state aid need to be balanced against the cost of such aid, and the potential negative effect it can have on competitors. For example, we find that state aid awarded to publicly listed firms has a negligible impact on their investment. This confirms recent evidence by Marques and Toprak (2024). Moreover, the authors suggest that state aid awarded to large, publicly listed firms affected their competitors negatively. Taken together, these findings imply that while state aid can effectively promote investment by credit-constrained firms, its overall efficacy depends on the context and must be balanced against potential distortions of competition.

State aid should be coordinated across EU members and be part of an overall EU policy framework. As most state aid comes directly from EU countries, it carries a high risk of distorting the single market, which is a core EU asset. Draghi (2024) notes that the small, fragmented EU budget (just over 1% of GDP that is distributed across nearly 50 programmes) limits investment in large pan-European projects – compared to EU member government budgets of nearly 50% of GDP. For public research and innovation, for example, EU governments spend a similar share of GDP to the United States, but only one-tenth of this occurs at the EU level, which contrasts with the high level of federal spending in the United States. Hodge et al. (2024) highlight the need for coordinated EU state aid, noting that properly targeted industrial policy in the European Union and internationally can correct market failures, enhance efficiency and prevent production distortions, while increasing gains from specialisation and mitigating adverse trade effects. Altomonte and Presidente (2024) also note significant efficiency costs when state aid and subsidies are not coordinated on the EU level.

Box C

Quantifying the impact of uncoordinated subsidies on the allocation of resources and productivity in the European Union

Grants and subsidies are known to address market failures, but they can also create wide differences in producers' marginal costs, reinforcing resource misallocation and therefore reducing productivity (see Restuccia and Rogerson (2008), and Hsieh and Klenow (2009)). Policy design must therefore ensure that market failures are addressed while minimising costs to productivity.

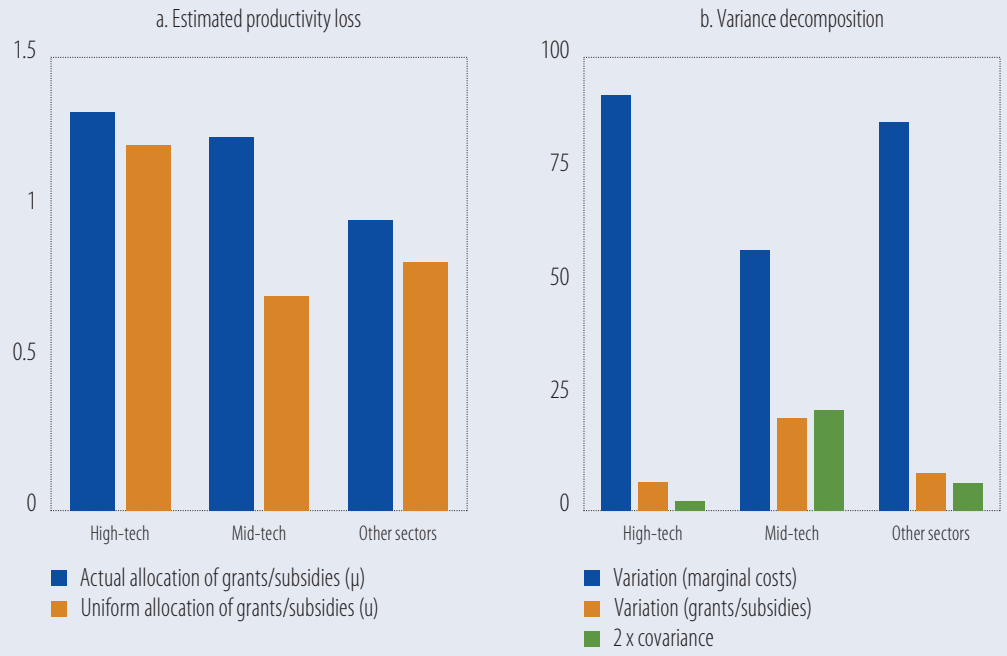
EU countries provide an interesting case for evaluating subsidy policies. Market failures that cause societal or environmental harm, such as investments in carbon-intensive projects, affect the entire European Union, but investment subsidies are typically set by national governments through state aid policies. The EU treaties require national state aid to be authorised by the European Commission (Article 107(3)(b) of the TFEU), ensuring they are appropriate, necessary and proportionate, in that they remedy a "serious economic disturbance." In practice, however, these evaluations are often case-specific, leading to significant variation in subsidy amounts and scope across EU countries. This raises the important question of how these differences contribute to resource misallocation across the European Union.

Altomonte and Presidente (2024) examine green subsidies in the electricity sector before the pandemic. This box replicates their analysis to measure the misallocation of grants and subsidies in sectors C to J from 2021 to 2023 using EIBIS data – which includes firm-level information on

the amount of grants and subsidies received.[32] That period covers the EU State Aid Temporary Framework implemented after the COVID-19 outbreak. All EU members had rolled out some kind of state aid, accounting for almost 1 000 national measures that provided a total of EUR 3.2 trillion in subsidies.

The key finding is that varying levels of subsidies significantly contributed to a misallocation of resources in certain EU industries. The remaining misallocation is driven by differences in producers' marginal costs (especially in wages) compared to a uniform single market benchmark. There is substantial variation across sectors. In manufacturing, where the goods produced are mostly tradable, firms' marginal costs tend to be more homogeneous across countries. Manufacturing, which tends to receive more subsidies, would benefit the most from coordinated EU policy action.

Figure C.1
Approximation of misallocation due to uncoordinated grants and subsidies



Source: *Authors' calculations based on EU KLEMS data and EIBIS 2021-2023.*
Note: *This figure presents the estimated productivity loss due to misallocation at the EU level (left panel) and the contribution to misallocation of dispersion in marginal costs, subsidy rates and their covariance (right panel). Calculations are based on the model in Hsieh and Klenow (2009) following the approach of Altomonte and Presidente (2024). The key assumptions are a common and constant interest rate equal to 5% and a cross-country elasticity of substitution equal to 3, as in Hsieh and Klenow (2009). The capital elasticity is the simple average of the sector-specific elasticities in various EIBIS sectors – manufacturing (NACE C), services (NACE G/I), construction (NACE F) and other (NACE D/E/H/J) – which are estimated based on a Cobb-Douglas production function using EU KLEMS data. Country-sector nominal wages and investment subsidy data are taken from EIBIS 2021-2023.*

Figure C.1 presents the analysis based on the industry classification of Fuest et al. (2024). The left panel shows the estimated productivity loss in high-tech, mid-tech and other industries. The blue bars depict the estimated productivity loss that accrues with the current situation of different costs and subsidies, relative to a benchmark scenario of an ideal single market with fully equalised

32 Sectors C to J account for approximately 47% of the real value added to the total EU economy from 2011 to 2020, according to data from EU KLEMS, a growth and productivity research project that looks at various industries. We use sector C-J to align with the EIBIS sample, which is based on a representative sample of non-financial corporations across sectors C to J. All results are weighted by value-added.

marginal costs and no subsidies. The orange bars represent the estimated loss that would have occurred with varying costs, but a uniform subsidy rate across EU countries, with respect to the same ideal benchmark.

In high-tech and mid-tech industries, misallocation is responsible for around 1.2% of productivity losses across the European Union. Lost productivity stemming from the actual allocation of subsidies vs. a possible uniform allocation is similar in high-tech industries and other industries, including services (the orange and blue bars are close). However, in mid-tech industries, subsidy dispersion accounts for almost half of the productivity loss. Thus, policy coordination would result in the largest productivity gains in the most important EU industries (Fuest et al., 2024).

The right panel explains the different behaviour, by decomposing these effects further. It presents how differences in marginal costs contribute to misallocation (blue bar), subsidy rates (orange bar) and their covariance across countries (green bar). The figure confirms the negligible contribution of varying subsidy rates in the high-tech and other industries, where marginal costs (national differences in technology and wages) account for the majority of misallocation. In mid-tech, however, the lack of a coordinated subsidy policy accounts for a whopping 20% of sectoral misallocation. The figure also shows that the positive covariance between marginal costs and subsidy rates contributes an extra 20% to sectoral misallocation in mid-tech. This is because, on average, producers with high marginal costs receive more subsidies, exacerbating dispersion.

Financial support is more effective when it is targeted

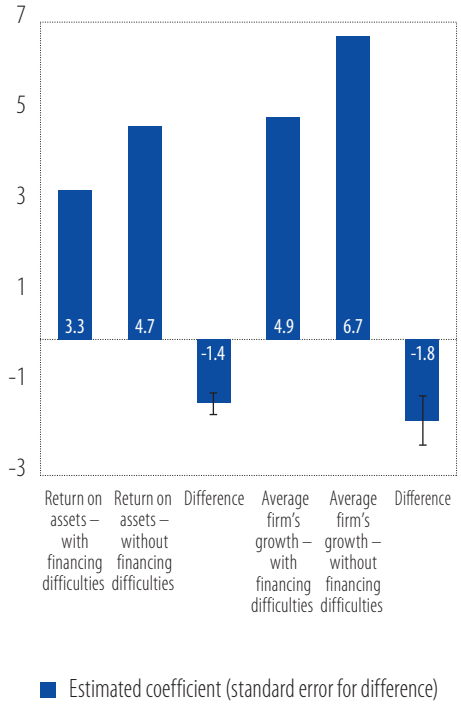
Throughout the pandemic and energy crisis, policy support has been widely used to encourage investment and avoid long-term damage. However, as the economic situation stabilises, this support must become much more targeted. Market failures – such as information asymmetries, imperfect competition, and challenges facing green and innovative sectors – can prevent projects from obtaining funding. For example, projects that do not necessarily generate returns but help societies in one way or another, such as innovative but weakly profitable projects for firms that generate and diffuse knowledge, are underfunded from private sources despite being beneficial from a social perspective. Moreover, firms with high-intangible investments, like R&D-intensive companies, often lack the collateral or track record needed to secure loans, especially if they are not yet profitable or are relatively young. Public financial support can help address market failures and ease the financial constraints for these firms. However, if such support is not carefully designed and targeted, it distorts markets, crowds out private investment, encourages inefficient risk-taking, or primarily benefits incumbent firms rather than disruptive ones.[33] Financial products offered by the EIB are designed to address market failures and improve social welfare. Their effectiveness is analysed in Box D.

We examine the impact of funding difficulties on firms' performance, measured by various indicators, during normal periods and periods of external shocks. We combine structural barriers to external financing and the cyclical deterioration of that financing in times of trouble, while controlling for other major investment barriers. Figure 43 shows that it is significantly harder for firms that have previously struggled to secure external finance to generate cash internally in order to fund investments in the subsequent two years (captured by a profitability ratio, the return on assets). These businesses record an average annual growth rate that is 1.8 percentage points lower than firms that have not struggled. More in-depth research reveals that the losses are even higher when those firms have signalled investment gaps in the past (Ferrando and Pál, 2024).[34]

33 For a review of literature on the effectiveness of public policies on firms' access to finance, see De Haas and González-Uribe (2024).

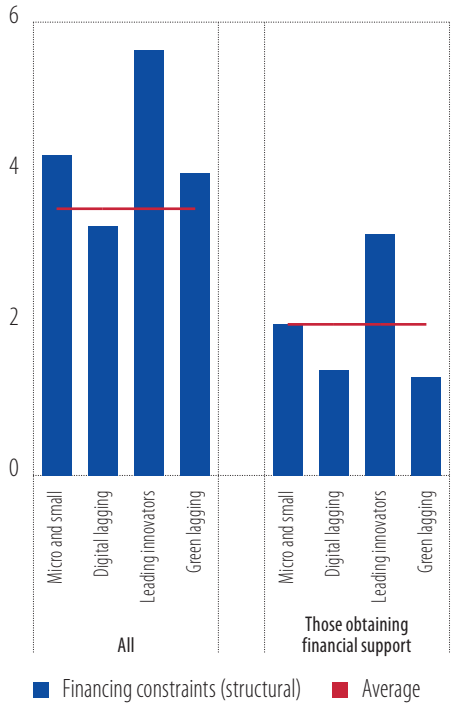
34 To ensure that financing difficulties are not related to a firm's financial viability, we exclude firms that report losses or zero profit for three consecutive years.

Figure 43
The impact financing difficulties have on firm profitability and growth (in %)



Source: *EIBIS-Orbis 2016-2023, based on Ferrando and Pál (2024).*
Note: *Results from propensity score matching.[35] Return on assets and growth in firms' total assets are averaged over two years after facing the financing difficulties. The treated and control group are matched based on country; sectors; a year dummy for the COVID-19 crisis; firm characteristics (size, age, cash flow, equity share, financial leverage, cash holdings and innovativeness) and major investment barriers (uncertainty, skilled labour, demand and digital infrastructure).*

Figure 44
External funding difficulties (% of firms), **by firm type**



Source: *EIBIS-Orbis 2016-2024, based on Ferrando and Pál (2024).*
Note: *The sample includes firms using any form of external finance for their investments. Digital lagging firms are those that have not implemented any digital technology, green lagging firms are those that have not invested and do not plan to invest in green projects. Leading innovators are firms with R&D and new products in the country or globally. Micro and small firms are those with 5 to 50 employees. Financial support includes grants and loans with favourable conditions.*

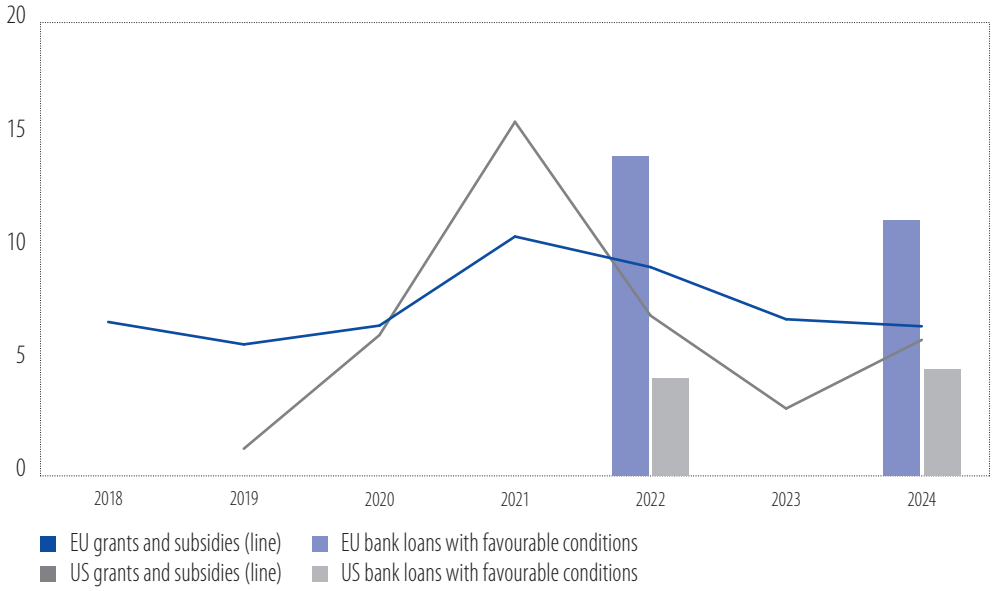
Policy support in the form of grants or loans with favourable conditions makes financing easier, indirectly improving firms' performance. Empirical evidence shows that micro and small firms, as well as leading innovators, are particularly vulnerable to deteriorating funding conditions. Moreover, firms that lag in digitalisation and green investment, even if financially viable, face a structural (rather than cyclical) financing hurdle (Ferrando and Pál, 2024).[36] Figure 44 reveals that financial support can effectively reduce funding difficulties for firms in these particular categories and enable them to transform. These results indicate that targeted financial support directed at structurally constrained firms and those that are having difficulty transforming their business can effectively promote investment and improve performance. However, such targeted support must be directly connected to a specific outcome, and certain financial health requirements should be met, to avoid supporting unviable firms and misallocating resources.

35 The treated and control group are matched based on country; sectors; a year dummy for the COVID-19 crisis; firm characteristics (size, age, cash flow, equity share, financial leverage, cash holdings and innovativeness) and major investment barriers (uncertainty, skilled labour, demand and digital infrastructure). The k-nearest neighbour matching algorithm is applied and identifies k=3 matched (control) observations from the sample of firms that did not report external funding difficulties (untreated firms) for each treatment observation.

36 Structural barriers to firms' access to finance are captured by supply-side aspects of the financing. We focus on viable firms that need loans, but were discouraged or rejected (fully constrained), or received less than they needed (quantity-constrained), or found the loan too expensive (price-constrained). To ensure that access to external finance is not due to the financial health of the firm, we exclude firms that report losses or zero profit for three consecutive years.

In the European Union, the share of firms receiving financial support has declined from its peak in 2021, during the pandemic. Using EIBIS data, Figure 45 shows that in 2024 an average of 6.6% of EU firms reported receiving grants or subsidies – marginally down from the 6.9% recorded in 2023, and well below the peak of 10.6% in 2021. A similar pattern is observed in the United States, where 6% of firms received grants or subsidies in 2024, down from 15.6% in 2021. The share of EU firms receiving loans with favourable conditions also decreased to 11.3% in 2024, compared with 14.1% in 2022, but remains higher than the 4-5% in the United States. Government efforts to stave off long-term economic damage drove up financial support during the pandemic, and the post-crisis decline reflects the normalisation of economic conditions. As fiscal space is narrowing, future support must be more targeted.

Figure 45
Share of firms receiving financial support (in %)



Source: EIB staff calculations based on EIBIS 2018-2024, weighted by firms' value added.

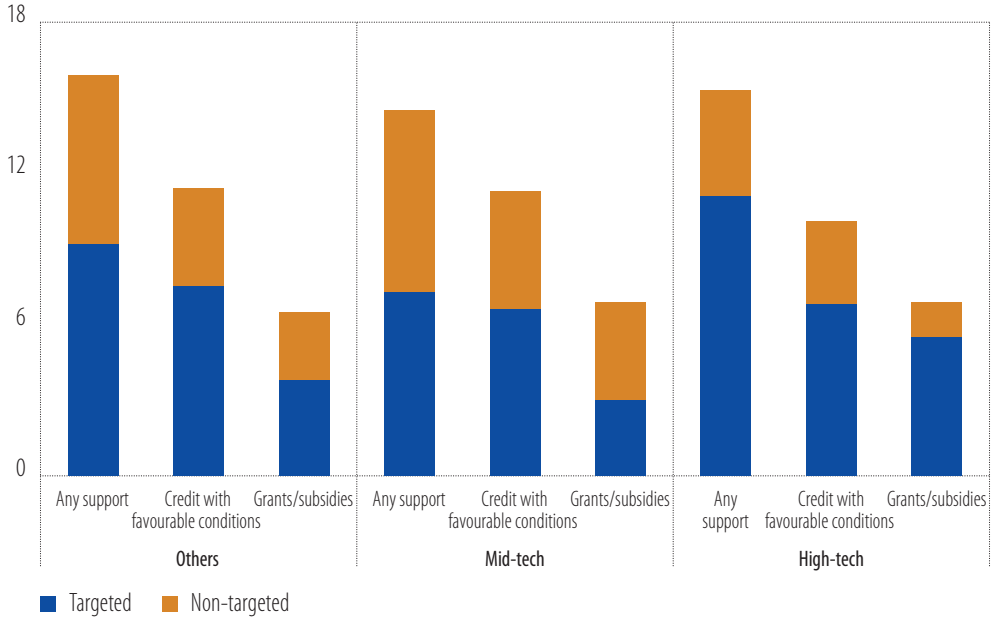
EIBIS 2024 allows a snapshot of policy support – including grants/subsidies and finance with favourable conditions – and whether these types of support target certain objectives. Overall, 15.6% of European firms that were investing received some form of policy support. Specifically, 11.2% of firms received grants and subsidies, 6.6% received finance with favourable conditions, while a subset of around 2.2% received both. The allocation of policy support varies by region and sector. Across regions, the share of firms receiving at least some form of financial support is similar in Southern Europe and Central and Eastern Europe at approximately 20% for EIBIS 2024, while it is lower in Western and Northern Europe at 13%. Across sectors, the share of firms receiving grants or finance with favourable conditions is relatively similar. However, when we distinguish between targeted policy focus intervention and non-targeted intervention, it is clear that – particularly for grants – high-tech firms tend to receive a larger share of targeted rather than untargeted support (see Figure 46). The areas most likely to receive both types of support are innovation/digitalisation and green/climate action.

In high-tech and mid-tech sectors, startups are the most likely to obtain grants. In other sectors, larger and more mature firms are more likely to get help. A deeper analysis of the joint probability of grant allocation by tech group and age or size reveals that the most likely firms to receive grants are high-tech startups that are categorised as small and young (Figure 48).[37] Startups in high- and mid-

37 See footnote 19 for the classification of activities by tech intensity.

tech sectors have predictive margins for receiving grants that are higher, by 12.3 percentage points (high-tech) and 7.5 percentage points (mid-tech), than startups in sectors like services and construction. Conversely, in sectors other than high-tech and mid-tech, larger and more mature firms are the most likely to receive grants, with a predictive margin 2.5 percentage points higher than their smaller and younger counterparts.

Figure 46
Types of financial support and targeted areas (% of firms)



Source: EIB staff calculations based on EIBIS 2024, weighted by firms' value-added.

In sectors outside of high-tech, larger and more mature companies account for the majority of firms receiving policy support. This is no surprise, given that most firms (around 80% in the EIBIS sample, as measured by value added) operate outside the high- and mid-tech sectors. Looking at the composition of policy support recipients, Figure 47 shows that 63% of recipients of grants and subsidies and around 66% of recipients of credit with favourable conditions are older, established firms in industries outside of high-tech.

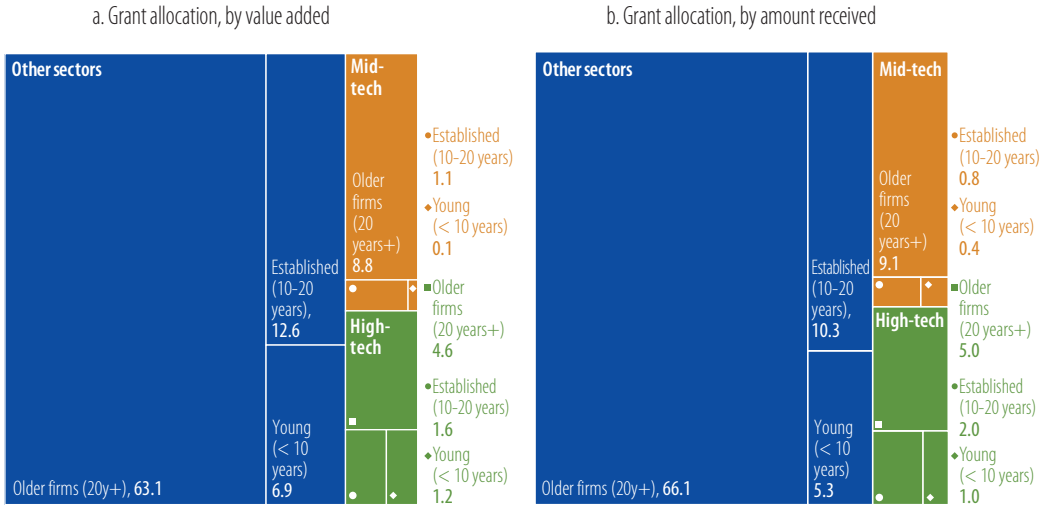
Estimates suggest that policy intervention, in the form of grants and subsidies, spur investment, with mixed results for productivity. The estimated impact of grants on productivity is debated in the literature. On the one hand, Muraközy and Telegdy (2023) find that EU-funded grants in Hungary boost labour productivity at small firms by 0.2-0.6 percentage points, but do not affect total factor productivity.[38] Alexandre et al. (2022) find that a grant significantly enhances labour productivity, especially in small firms.[39] Other studies do not find a significant impact on productivity (Cerqua and Pellegrini (2014); Criscuolo et al., (2019)). Marques and Toprak (2024) find that state aid (mainly in the form of grants) has small, temporary effects on employment and turnover, but no impact on investment or productivity in very large, listed firms.[40]

38 Some findings indicate that a second round of grants often has a greater impact. Muraközy and Telegdy (2023) also show that firms receiving multiple grants grow faster than those receiving only one, suggesting that a plan should precede the allotment of financial support.

39 The authors' rationale is that micro and small firms face tighter financial constraints, and investment grants can reduce these and help the firms make efficient investments, improve technology and grow.

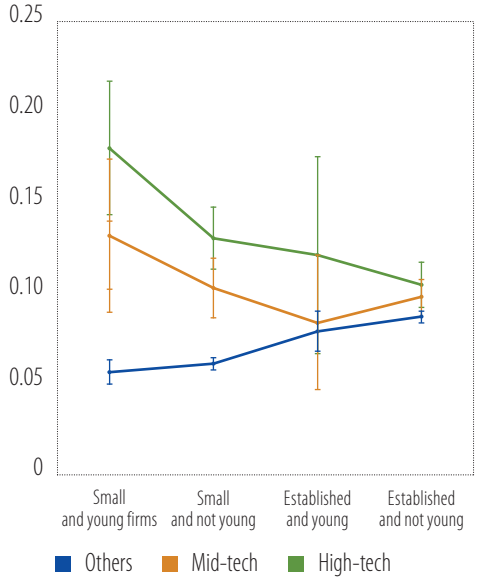
40 The authors use a sample focused on listed firms (less than 1% of all firms) with an average of 10 000 employees, which is not comparable to the EIBIS-Orbis sample. In the EIBIS-Orbis sample, large firms are those with over 250 employees.

Figure 47
Grant allocation, by sector and firm type



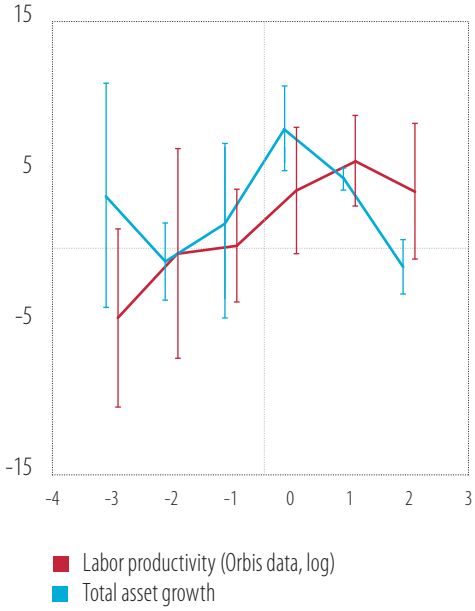
Source: *EIB staff calculations based on EIBIS-Orbis matched data for 2022-2023.*
Note: *A sample of EU firms only. Tech classification follows Fuest et al (2024): High-tech (aerospace, alternative energy, biotech, software, etc.); mid-tech (automobiles, chemicals, telecoms, etc.) and other sectors (banks, construction, media, other services, utilities, etc.). Questions about the total amount of grants received were only asked in the 2022 and 2023 surveys.*

Figure 48
Firms' likelihood of receiving grants
(in percentage points)



Source: *EIB staff calculations based on EIBIS-Orbis matched data for 2016-2024.*
Note: *A sample of EU firms only. Predictive margins with black lines indicating 90% confidence intervals.*

Figure 49
Impact of obtaining grants on firm performance (in percentage points)

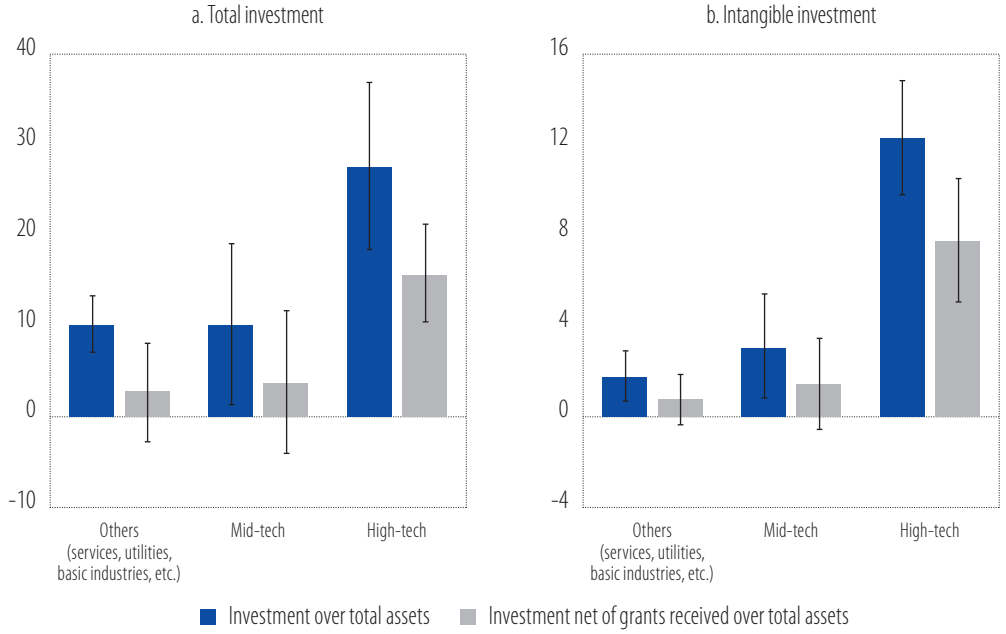


Source: *EIB staff calculations based on EIBIS-Orbis matched data for 2016-2024.*
Note: *A matched sample was constructed for the treated and control groups (three-nearest neighbours) using propensity score matching. The figure shows the estimated impact of grants on firm performance. The black lines indicate 90% confidence intervals.*

Taking data from the EIBIS and Bureau Van Dijk's Orbis database, we use propensity score matching to compare firms receiving grants with similar firms that did not. The analysis shows that total asset growth shifts up during and after the grant, and returns to its original growth path thereafter (Figure 49).[41] There is some evidence that labour productivity rises in the one- and two-year periods after the firms receive grants, compared to the control group, although part of this result might be driven by some pre-existing attributes of firms receiving grants. As a side effect, grants and subsidies might generate some resource misallocation, hampering productivity, especially in mid-tech industries (see Box C).

In high-tech sectors, policy support has a significant effect on crowding-in additional investment (+125 percentage points), more than in other sectors. Using propensity score matching to compare grant recipients with non-recipients, we find that investment over total assets is approximately 10 percentage points higher for recipients in mid-tech and other sectors, and around 27 percentage points higher for recipients in high-tech sectors, for the 2022-2023 sample (see Figure 50). When we deduct the amount of grants received to estimate additional investment, the coefficients for mid-tech and other sectors remain positive but are no longer significant at a 90% confidence interval. In contrast, high-tech firms still show a 15 percentage point increase in additional investment compared to the control sample of non-recipients. A similar trend is observed for intangible investment, where one unit of grants crowds in almost two units of additional intangible investment in high-tech firms, while the figures for mid-tech and other sectors are positive but not significant.

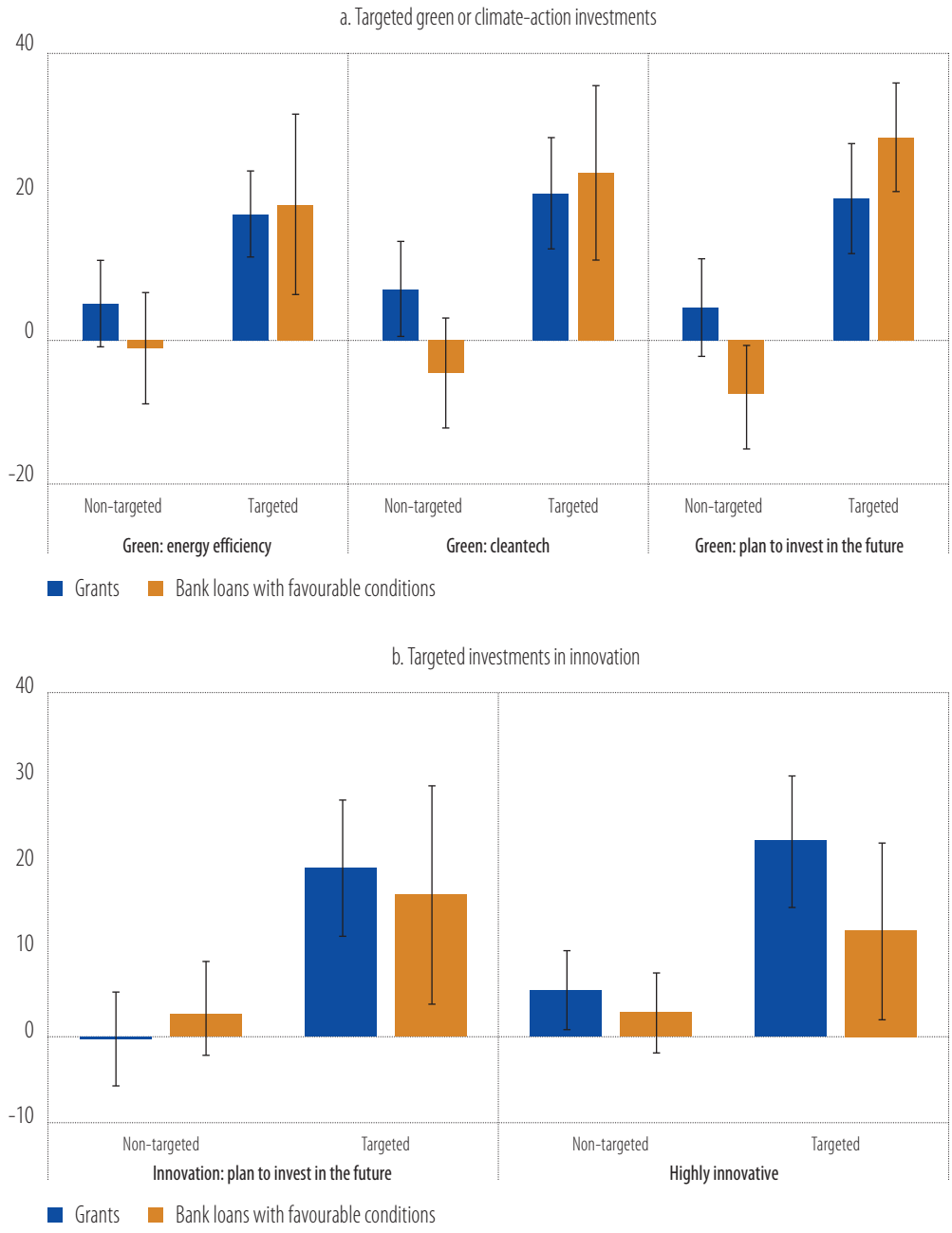
Figure 50
Firms' likelihood of crowding in additional investment (in percentage points)



Source: *EIB staff calculations based on EIBIS-Orbis matched data for 2022-2023.*
Note: *A sample of EU firms only. A matched sample was constructed for the treated and control groups (three-nearest neighbours) using propensity score matching. The estimated impact of obtaining grants on total investment and intangible investment is net of the amount of grants received. The black lines indicated 90% confidence intervals. Tech classification follows Fuest et al (2024): High-tech (aerospace, alternative energy, biotech, software, etc.); mid-tech (automobiles, chemicals, telecoms, etc.) and other sectors (banks, construction, media, other services, utilities, etc.). Questions about the total amount of grants received as a share of total investment were only asked in the 2022 and 2023 surveys. Investment and intangible data are from the EIBIS, while total assets are from Orbis (lag of one year).*

41 Similar results are observed for the total and net investment growth rates.

Figure 51
Impact of targeted and non-targeted financial support on green and innovation investments
(in percentage points)



Source: *EIB staff calculations based on EIBIS 2024.*
Note: *A matched sample was constructed for the treated and control groups (three-nearest neighbours) using propensity score matching. Estimated impact of receiving non-targeted vs. targeted grants and bank loans with favourable conditions on the probability of investing in transformative investments and R&D intensity. The black lines indicated 90% confidence intervals.*

Targeted policy support is more effective in spurring climate action. Our analysis shows that targeted grants and loans with favourable conditions significantly influence green and innovative activities, resulting in a stronger impact than non-targeted support. Specifically, as illustrated in Figure 51(a), firms receiving grants or finance with favourable conditions targeting green investment or climate action are

significantly more likely to invest in energy efficiency than firms without grants and without finance with favourable conditions. The effect for untargeted grants and finance with favourable conditions is not significant. Similarly, targeted grants and finance with favourable conditions significantly push up investments in cleantech and future climate change initiatives, while the effect of non-targeted intervention is not significant.

Targeted policy support also has a bigger impact on innovation. Firms receiving grants or finance with favourable conditions focusing on innovation or digitalisation are significantly more likely to invest in innovation over the next three years or to be innovative. By the same token, the results do not show a significant effect on the probability of firms investing in innovation when grants are not targeted (see Figure 51(b)).

Box D

Effectiveness of EIB instruments

Market failures affecting Europe's smaller businesses come at a high cost. A non-negligible share of businesses faces challenges in accessing financing, and these challenges are typically more pronounced for smaller firms. Yet small and mid-size firms are key drivers of employment and growth.

These firms account for more than half the value added by non-financial firms, and close to two-thirds of total employment in Europe. Hampering their ability to finance investment weighs on the economy, through slower job creation, innovation and productivity growth. Additionally, smaller businesses are at a particular disadvantage during downturns, when credit becomes scarce.

The EIB Group provides a wide range of instruments that address specific market failures and financing gaps. For example, it provides access to affordable credit lines and guarantee programmes that enable smaller firms to invest, expand and manage liquidity shocks, particularly during economic downturns. It issues guarantees to reduce risks to investors, encourage private-sector participation and direct investment towards projects of strategic importance for EU policies and priorities. It also undertakes equity and quasi-equity investments in young and high-risk businesses, such as startups and high-growth enterprises in need of patient capital that supports innovation.

The EIB provides significant support to businesses. It supports more than 400 000 small and medium-sized firms and mid-caps every year, providing EUR 31.1 billion in finance to businesses in 2023 alone. Almost half of that, EUR 14.9 billion, came from the European Investment Fund (EIF). Support for businesses makes up around 43% of EIB Group activity by volume, and pursues strategic EU objectives like sustainability, digitalisation and competitiveness. Different EIB Group instruments target specific market failures and firm types, including multibeneficiary intermediated loans, credit guarantee schemes, portfolio guarantees and venture investments.

EIB support has had a positive impact on beneficiaries. The EIB Group has conducted several impact studies, comparing the performance of firms that receive EIB Group support with comparable firms. These studies are based on unique firm-level datasets that link EIB Group support to external information on firms, investors and the macroeconomic setting. The effect of the financing is positive and significant, proving that EIB Group support for small and medium-sized firms, mid-caps and innovative businesses makes a real difference.

Supporting businesses through intermediated lending and guarantees positively affects firm growth and employment. For example, two EIB Group studies show the positive impact of key EIB Group instruments: intermediated lending and guarantees. By linking EIB loan-level data to firms' financial results, the first study carries out a counterfactual analysis that compared EIB

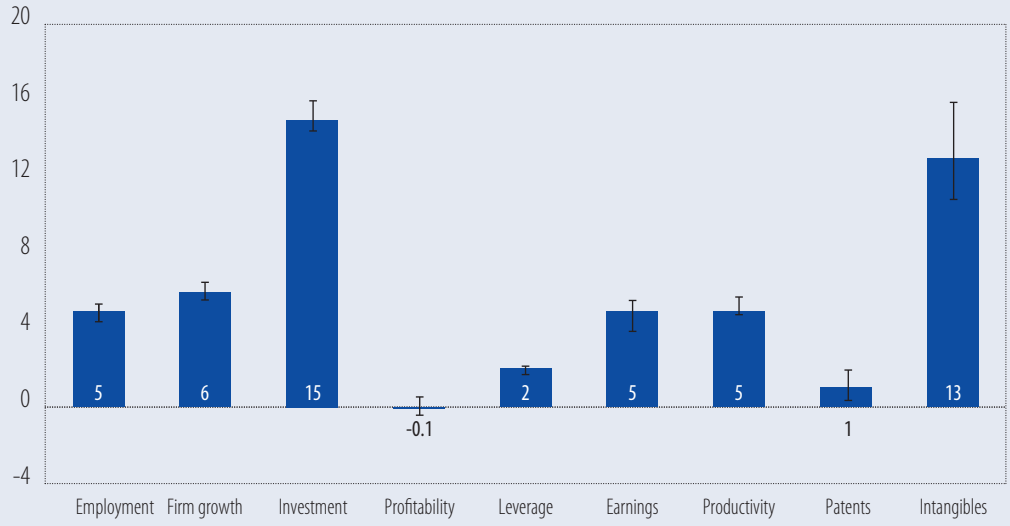
beneficiaries to a control group. The analysis used a quasi-experimental design to show the positive impact on a wide range of outcome variables, including investments and employment (Figure D1).

Table D.1
How EIB Group instruments address market failures

Market failures and investment needs		Standard/established firms SMEs and mid-caps	Startups: Early/later-stage and scale-ups
Structural	• Asymmetric information • Screening costs • Discrimination	• Multibeneficiary intermediated loans (MBILs) • Guarantees (such as risk sharing, securitisation)	Venture investments: • Venture capital and private equity for mid-market firms • EIC Fund (the venture investment arm of the European Innovation Council) • Venture debt (such as first-of-a-kind, scale-up) • Co-investments (such as under the European Tech Champions Initiative)
Cyclical	• Credit rationing • Capital constraints • Flight from risk		
Strategic goals	• Innovation/digitalisation • Sustainability	• Thematic MBILs • Thematic guarantees	
Market development	• Nascent markets • Strategic industries • Establishing market scale		

Source: Sinnott, et al. (2024).

Figure D.1
Estimated impact of EIB intermediated loans (% increase over the counterfactual)



Source: Sinnott, et al. (2024).
Note: The blue bars represent the estimated effect for EIB beneficiaries compared to a control group in the three years after the loan. The black lines indicate 95% confidence intervals.

A second study from the EIF analysed around 360 000 guaranteed loans by the EIF to small and medium-sized firms across 19 EU countries from 2002 to 2016. It relies on similar quasi-experimental statistical methodologies to show that firms receiving EIF-guaranteed loans had lower bankruptcy rates, about one-third lower – with the rate falling to about half in some regions.

As young EU firms struggle to find the right financing for innovation, EIB and EIF support through venture capital and venture debt has also proven crucial. Analysis of EIF-supported indirect venture capital investments, comparing firms that received venture capital with similar firms exploring new technologies without such financing, shows that these interventions had a positive impact on the growth of the financed startups. Over five years, firms achieved higher capitalisation and assets, as well as significantly higher revenue and employment growth. In addition, direct EIB investments (including venture debt) help fill the financing gap faced by high-growth, innovation-focused companies that are scaling up production.

An EIB study assessing the role of EIB venture debt for innovative firms shows striking results. Not only do EIB venture debt recipients grow faster than their peers, but they also enjoy much better arrangements when they go on to find funding on the market, as receiving EIB venture capital is perceived to be a stamp of quality. These findings play a key role in the design of public policy aiming to respond to market failures and close financing gaps.

Conclusion and policy implications

The investment outlook has improved slightly but remains uncertain overall. Monetary policy is loosening, improving the financial environment for investment. Indicators from the EIBIS and the larger macroeconomy suggest that conditions will improve slightly, especially for external financing, which will benefit from falling costs and easier credit conditions. However, the expected improvement is moderate, and comes after a year of flat investment, which is bad news considering the massive spending needed to carry the digital and green transition.

Structural changes are not behind the slight expected improvement. The European Union suffers from weakness in key segments of a well-developed financial system: venture capital, private equity and scale-up finance, as well as the securitisation and public equity markets. These segments typically support the type of firms Europe needs (young, innovative and fast-growing), and the type of corporate investment it needs (intangible assets).

A more balanced and better integrated financial system would help. The European Union needs a deeper capital markets union, as emphasised in the Draghi (2024) and Letta (2024) reports. Changes in regulation would help tap a well of private long-term investment and maintain investment levels during downturns and periods of tighter monetary policy. Regulatory changes would also help unlock the expansion of specific markets.

Tighter fiscal budgets and more difficult economic conditions mean that policy support must be far more targeted than it was during the pandemic. Well-designed, targeted support can help firms, particularly young and innovative ones, to invest, and the EIB is playing a role. Public support should also focus on overcoming structural market weaknesses. However, given countries' inability to ramp up spending, public support needs to be used effectively to draw in private capital. When countries act unilaterally to support investment, the European Union does not reap the full impact of regional, country or industry spillover effects. Policy support designed at the national level can generate market distortions and create inefficiency. However, these negative effects can be mitigated with European coordination. EIB support has proven to be highly effective. Beyond pioneering green finance, the EIB has helped muster financing for EU firms that are scaling up, and it has also improved the ability of venture capital investors to exit companies. This support is crucial for a thriving and resilient venture capital system, which is needed to nurture the tech champions of tomorrow.

Investment still requires business opportunities and a conducive operating environment. The analysis on investment barriers recalls how important it is for policymakers to create a business environment that encourages investment. Reducing investment barriers and expanding the EU single market remains a priority. This would support widespread economic growth and, most importantly, would create a large and deep market for Europe's most dynamic businesses.

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