



# EUROPEAN INVESTMENT BANK INVESTMENT REPORT 2021/2022

# **KEY FINDINGS**

# Recovery as a springboard for change



## Investment Report 2021/2022: Recovery as a springboard for change — Key Findings

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#### **About the Report**

The EIB annual report on Investment and Investment Finance is a product of the EIB Economics Department. It provides a comprehensive overview of the developments and drivers of investment and its finance in the European Union. The report combines an analysis and understanding of key market trends and developments with a more in-depth thematic focus, which this year is devoted to Europe's progress towards a digital and green future in the post-COVID-19 era. The report draws extensively on the results of the annual EIB Investment Survey (EIBIS) and the EIB Municipality Survey. It complements internal EIB analysis with contributions from leading experts in the field.

#### About the Economics Department of the EIB

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 director of Economics Department, Debora Revoltella, heads a team of 40 economists.

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#### **Key Findings**

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## Introduction

Less than two years after the pandemic hit Europe, EU real gross domestic product (GDP) is back to precrisis levels, with the third quarter of 2021 marking a return to the level seen in the fourth quarter of 2019. Thanks to a rapid, large-scale and comprehensive policy response, the crisis seems to have left fewer scars than originally feared. At the microeconomic level, policy intervention prevented major disruption, but the resilience of firms and jobs to a full phasing out of support has yet to be tested, and further scarring may yet become apparent.

At the macroeconomic level, uncertainty remains about the effect of new waves of the pandemic and the eventual phasing out of emergency economic measures across Europe, as well as the design of the new policy normal. Looking forward, the risk of a recovery that is asymmetric for individuals, firms and countries remains. Meanwhile, the challenges of the climate transition and digitalisation have become more urgent than ever, and the recovery offers an opportunity to address them.

This report looks back at the impact of the pandemic on individuals, firms and countries within the European Union. It also looks forward, at how to use the recovery as a springboard for transformation. Keeping an eye on investment, it looks at the effectiveness of policy support and assesses evidence of post-pandemic scars. It examines how European firms are using the pandemic and the recovery as an opportunity to prepare themselves for a changing world. It also discusses the role of public support in ensuring a just recovery, preventing rising inequalities.

While the swift policy action implemented so far prevented an economic depression, the recovery requires further coordinated efforts across Member States. To prevent an asymmetric recovery and raise long-term growth prospects, the following priorities are key:

- Maintain the momentum on high-quality public investment, assuring the implementation and maximum impact of the Recovery and Resilience Facility, while avoiding abrupt fiscal adjustments that may hinder the recovery.
- Catalyse private investment through risk-sharing instruments to mitigate ongoing macroeconomic
  uncertainty, including a shift from generalised support for firms to targeted incentives for transformation,
  particularly for digitalisation and the climate transition.
- Create the conditions for an acceleration of the digital transformation of the EU economy, with supportive
  infrastructure, information security and data governance, an acceleration of digitalisation in the public
  sector and an intensified focus on training and skills.
- Reinforce climate policy guidance and implement regulatory proposals to close the remaining gaps in the European Union's decarbonisation strategy, including plans for the energy transition and the further integration of the EU energy markets, and provide the right incentives to capitalise on EU leadership in climate-related innovation.

# This time was different: A massive shock to the European economy mitigated by a bold policy response

## The pandemic's immediate economic impact was unprecedented

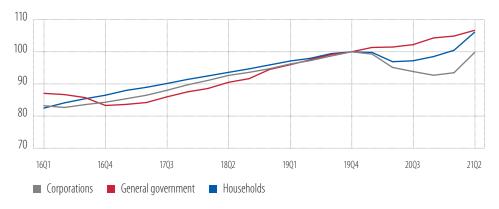
The pandemic caused the steepest drop in output in Europe's post-war history. By mid-2020, EU real GDP had fallen 14% relative to a year earlier, while the primary income of households had declined by 7.3% over the same period. Corporate turnover hit a trough in May 2020, with manufacturing revenue falling as much as 30% since the start of the year. Since then, as public health measures have become more selective, the European economy has begun to recover. However, new waves of the virus have hit countries in different ways, making the recovery more uneven and uncertain. Asymmetries are now emerging among sectors and between larger and smaller firms, and therefore across regions.

Throughout Europe, real gross fixed capital formation — a measure of investment — declined substantially, but less than predicted. Moreover, it took only two years for investment to recover from the pandemic shock, compared to more than a decade after the global financial crisis. By the end of the second quarter of 2020, real investment in the European Union fell by a dizzying 14.6% relative to the fourth quarter of 2019.¹ It quickly rebounded, however, and returned to its 2019 level by the second quarter of 2021. Government investment rose steadily, with 2020 seeing an increase of 7% on 2019 in Southern and Central and Eastern Europe, and 1% in Western and Northern Europe. Household investment (mostly in dwellings) declined, but rallied quickly, supported by government action that protected jobs and disposable income, as well as by housing price developments. Corporate investment declined most strongly. At the end of the second quarter of 2021, corporate investment was still 0.22% below its level at the end of 2019, and 6.9% below its 2013-2019 trend. By asset type, investment in machinery and equipment declined the most severely, and recovered more slowly.

Some asymmetries in the shock and the recovery are becoming apparent. While the initial shock of the COVID-19 crisis was largely indiscriminate and all countries in the European Union were hit, the impact has now become more uneven with investment recovering at different speeds. By the second quarter of 2021, real gross fixed capital formation was above pre-pandemic levels (compared to the fourth quarter of 2019) in 20 EU members, and below pre-crisis level in seven countries.

## The pandemic triggered a sharp drop in investment, particularly by firms

Nominal gross fixed capital formation in the European Union (2019Q4=100), by institutional sector



Source: Eurostat, EIB calculations. Note: Data exclude Ireland.

<sup>1</sup> Excluding Ireland, an outlier with a 76% fall in statistically recorded gross fixed capital formation.

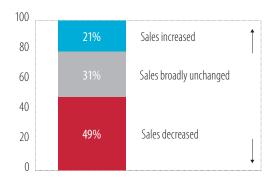
## Sales fell dramatically at many European firms, triggering cuts to investment

Data from the European Investment Bank's Investment Survey (EIBIS)<sup>2</sup> reveal the often uneven effects of the crisis on firms. Some 49% of EU firms suffered a drop in sales due to the pandemic, compared to 21% that showed an increase. Low (pre-crisis) productivity proved to be a strong predictor of lost sales, and more digital firms showed slightly more resilience. Sales at small firms declined considerably (at least 25%), and more often than at medium-sized and large firms. Sharp differences emerge among sectors. Losses at firms were concentrated in areas such as transport, in addition to hotels and restaurants. Breaking the data down by country shows that the share of firms recording a sales decline ranged from less than 40% in Denmark and Sweden to 60% in Malta.

Many affected firms also delayed investment. The share of firms reporting investment activities in the previous year declined from 86% in the EIBIS 2020 survey to 79% in 2021. Faced with falling sales, 23% of firms revised down their investment plans, with only 3% expecting to invest more. The greater the loss of sales in 2020, the lower the likelihood that the firm planned to invest.

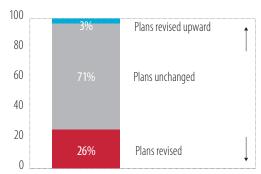
Nearly half of EU firms have suffered a drop in sales since early 2020 due to the pandemic

Share of firms



One-quarter of EU firms revised down investment plans as a reaction to the pandemic

Share of firms



Source: EIBIS 2021.

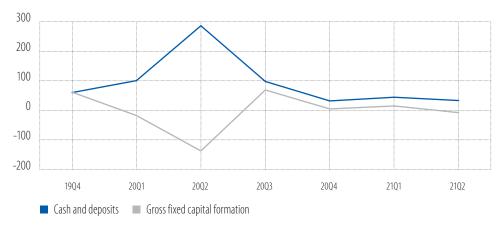
## The policy response was effective, ensuring business continuity

The European Union's timely response enabled its governments to absorb most of the income lost by households because of the pandemic, and to prevent companies from going out of business. With interest rates already ultra-low, three key measures taken at EU level enabled Member States to implement an effective response. The first was the suspension of the Stability and Growth Pact's deficit and debt rules, enabling coordinated national fiscal responses. The second involved grants and subsidised lending facilities offered to firms and individuals at the national level and complemented by the SURE job protection facility, the European Guarantee Fund and the European Stability Mechanism's crisis response. The third consisted of the European Central Bank's large-scale purchases of euro area government bonds. As a result of these purchases, sovereign funding costs remained low or even declined, despite increasing debt levels. Firms responded to the first phase of the pandemic by cutting investment and issuing debt, enabling them to build up cash buffers, which also facilitated a fast rebound in investment in the second half of 2020.

<sup>2</sup> EIBIS is a survey of 12 000 firms in the European Union, with representative comparator samples of 800 firms in the United States and 600 in the United Kingdom, administered by the EIB Economics Department. In addition, the EIBIS 2021 add-on module covers SMEs in manufacturing and services to gain further insights into the COVID-19 impact, digitalisation and climate-related investment, barriers to investment and policy support. Unless otherwise stated, data are from the EIBIS main module.

## Firms responded to the pandemic by cutting investment and issuing debt to build up cash buffers

Change in cash holdings and investment vs. the previous quarter (EUR billion)



Source: Eurostat, EIB calculations. Gross fixed capital formation is seasonally adjusted.

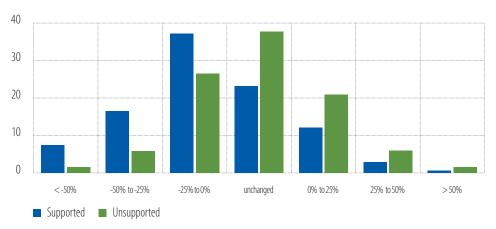
Public support compensated for the loss of primary income for households and helped to sustain demand. While households' primary income declined by 7.3% in the second quarter of 2020 vs. a year earlier, their secondary income (from social security benefits and other transfers) rose on aggregate by 6.5% of gross income over the same period, largely offsetting the shortfall. Job retention schemes avoided the costs of job search and rehiring later on, while also protecting job-specific knowledge. With income stabilised and opportunities for spending reduced, households built up large savings in highly liquid assets, which supported a buoyant recovery of consumer demand as soon as lockdown measures were eased. In mid-2021, the gross saving rate was still 18% of gross disposable income in the European Union, above its pre-pandemic norm of 11-13%.

As opposed to the financial and the sovereign debt crises, financing conditions did not deteriorate for smaller firms and riskier borrowers. Fragmentation also did not increase across the European Union. Borrowing costs for small loans, a good proxy for lending to small and medium-sized enterprises (SMEs), fell to record lows in the first half of 2020, and interest rate spreads between large and small loans have remained compressed ever since. In contrast to the sovereign debt crisis, the spread has not increased between the cost of finance for firms in more vulnerable economies (where public indebtedness is higher) and firms in other economies, demonstrating that the policy response succeeded in averting the refragmentation of EU financial markets. Risk spreads also remained stable across asset classes, with the exception of the very first months of the crisis. The share of finance-constrained firms has remained low as a result (6.1% of SMEs and 3.2% of large firms, compared with 5.8% and 3.9% in 2019). However, differences among Member States persist. While the EU average for the share of finance-constrained firms was 4.7%, in Central and Eastern Europe it rose to 8.6%.

**Support for firms was life-saving, and not indiscriminate.** In the EU economy as a whole, some 56% of firms received some kind of policy support in the form of guaranteed credit, support for social security contributions or deferred payments. The support was tilted towards firms facing greater declines in revenue, and therefore successfully reached the firms that were in greater need. According to the more detailed add-on module to the EIBIS, up to 35% of European SMEs in manufacturing and services say they would have faced an existential threat had they not received the support they did.

## Policy support was skewed towards firms whose sales declined more because of COVID-19

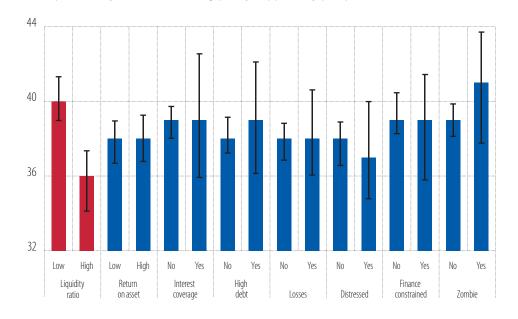
Distribution of supported and unsupported firms (in %), by the pandemic's impact on sales



Source: EIBIS 2021, EIB calculations.

Support targeted the short-term liquidity needs created by the crisis, rather than "zombie" firms that were already financially weak. Firms with low cash buffers were significantly more likely to receive policy support. However, indicators of long-standing financial weakness, such as excessive debt, low interest coverage or low returns on assets, had no significant effect on whether a firm received assistance. In fact, many schemes were designed specifically to support firms that were in sound financial health going into the pandemic, rather than firms that were already in difficulty.

## Support targeted short-term liquidity needs, not firms that were already financially weak Predicted probability of firms receiving policy support, by pre-pandemic characteristics (in %)



Source: EIBIS 2021, EIB calculations based on the preliminary matched database.

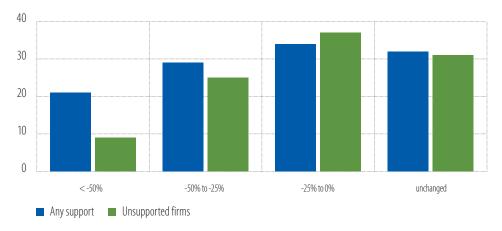
Note: Red indicates the cases where the difference is significant. Predicted probabilities are conditional on sales loss. Policy support refers to subsidies or any other type of financial support, including labour support.

Policy support weakened the link between the impact of the crisis and future investment. For firms that

received policy support, the link between lost revenue and reduced investment plans was significantly weaker. Firms that received support were more likely to preserve their investment programmes and therefore accelerate their transformation.

## Policy support weakened the link between the impact of the crisis and future investment

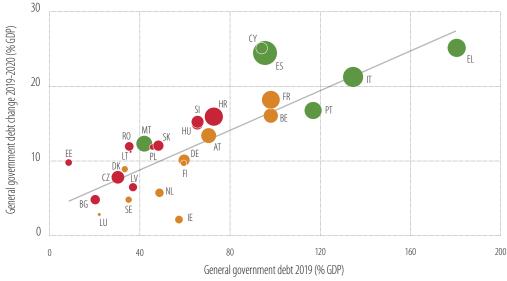
Firms (in %) planning to increase investment, by the pandemic's impact on sales



Source: EIBIS 2021, EIB calculations.

This massive and successful government intervention came at the cost of rising public debt, which poses potential risks for the future, particularly in EU members that were already more indebted. The decline in output combined with increased current expenditure triggered a marked increase in government debt. Since 2014, EU debt had been declining thanks to fiscal consolidation, but these gains were erased in 2020-2021, and debt throughout the bloc has now surpassed 2014 levels. Moreover, GDP happened to undergo a sharper decline in the more indebted Member States, so the increase in debt to GDP is greater. Although borrowing costs are not currently under pressure, high sovereign debt levels are a concern in view of the eventual reinstatement of the EU fiscal framework and the normalisation of monetary policy.

## Countries with high levels of debt had to borrow more during the pandemic



Source: Eurostat, EIB calculations.

Note:

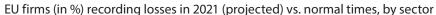
Colours indicate EU regions (Western and Northern in orange, Eastern in red, and Southern Europe in green). The size of the circles reflects the size of the decline in GDP in 2020.

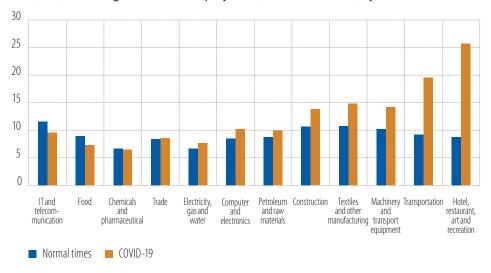
# Europe's economy has avoided much scarring, but risks remain for some firms, regions and workers

# Most firms have remained resilient, but pockets of vulnerability have developed

The impact of the pandemic has been uneven on firms, with strong differences across sectors. EIBIS data reveal significant differences in the share of firms recording a loss of sales, even when controlling for the varying severity of how countries have been affected. We have matched EIBIS data with monthly turnover statistics broken down by sector, and estimated how much firms were able to cut costs in response to revenue declines. On this basis, we have calculated initial estimates of the proportion of firms losing money during the pandemic. We find that the crisis has affected sectors differently, with the number of firms losing money in the hotels, restaurants, arts and recreation industries almost tripling (to around 25%) compared to normal times. Transport was also strongly affected. Many other sectors only saw minor effects. In the telecommunications, food and pharmaceutical sectors, the percentage of firms reporting losses has actually fallen relative to normal times.

## The impact of the pandemic on firms' profits has been highly concentrated in some sectors





Source: EIB estimates based on the EIBIS-ORBIS historical matched database and Eurostat turnover statistics.

Note: The COVID-19 period runs from 2020 to 2021.

**Size was also a determining factor, with smaller firms more likely to have suffered.** Even after controlling for country and sector effects, size appears to be another factor determining whether firms lost sales during the pandemic, with small and micro firms some percentage points more likely to suffer losses than large and medium-sized firms.

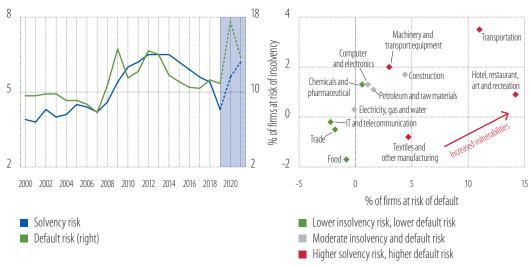
The share of firms at risk of default or insolvency has also increased, and this vulnerability is more concentrated in certain sectors. Linking estimated changes in profits to balance sheet characteristics makes it possible to estimate two indicators: firms at risk of default (when net revenues fail to cover financial costs) and firms at risk of insolvency (when losses exceed equity). The estimated share of firms at risk of default spiked early in the pandemic and has since eased, thanks to the substantial liquidity support packages made available by national authorities and EU institutions. The estimated share of firms at risk of insolvency, by contrast, has climbed steadily, suggesting that solvency support measures

should be considered. In mid-2021, both indicators were at levels comparable with the peaks of the global financial and sovereign debt crises. Breaking down these estimates by sector shows that this vulnerability is concentrated in the worst hit sectors.

## The share of firms at risk of default or insolvency has increased (in %)

## Default and insolvency risks are concentrated in some sectors

Deviation in 2021 from pre-crisis average (in percentage points)



Source: EIB estimate based on EIBIS-ORBIS matched database.

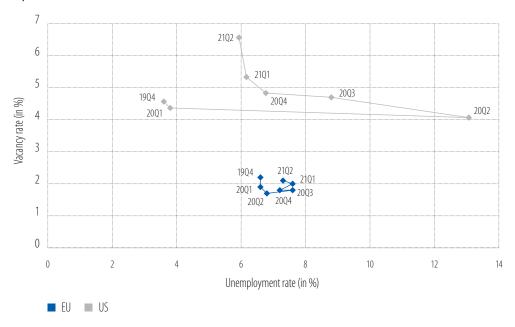
Corporate bankruptcies have been surprisingly low, but might still rise, despite the recovery. The data suggest that the number of vulnerable firms has increased, while bankruptcy filings have declined, partly owing to debt moratoriums. A backlog of effectively insolvent firms may therefore have built up. A corresponding risk is that increases in non-performing loans might lead to a tightening of credit conditions. While there seems to be a consensus that policy intervention averted a massive crisis in asset quality, the extent to which vulnerabilities will cluster, and possibly become systemic in certain specific contexts, remains unclear.

## Support helped preserve human capital, but it could not prevent a widening of social inequalities and a loss of investment in education and training

In the European Union, policy was successful at preserving jobs and preventing a significant rise in unemployment, and therefore averted the friction involved in rehiring workers during the recovery. In Europe, furlough and short-time work schemes kept workers employed, while firm bankruptcy filing obligations were relaxed, also allowing workers to remain in their jobs. By contrast, the United States relied on direct transfers and loans to support households and firms, independent of whether existing employment continued. Therefore, while the United States and European Union witnessed declines of about 15% in aggregate hours worked, the increase in unemployment was much larger in the United States. So far, Europe is enjoying a smoother course of adjustment in the labour market, largely avoiding the mismatch experienced by the United States during the recovery. However, going forward, the digital and green transition will likely demand structural changes to the economy and the reallocation of jobs among sectors. While successful, the intervention in the EU labour market might ultimately slow down this reallocation process.

## EU policy mitigated effects on employment, averting some labour market friction during the recovery

Evolution of unemployment and vacancy rates in the European Union and United States during the pandemic



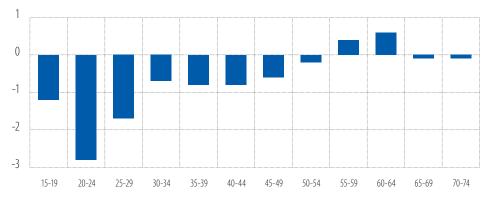
Source: Bureau of Labor Statistics, Eurostat, EIB calculations.

Note: Private sector vacancies in the United States; non-farm vacancies in the European Union.

Labour market conditions deteriorated for the young and those with less education. Adverse employment effects, although limited overall, were concentrated among the under-30s and those with lower levels of education. This reflects differences in the two groups' exposure to economic sectors, differences in contractual arrangements and the adverse effect the pandemic had on many young people finding jobs, particularly for the young.

## **Employment fell most for the young**

Year-on-year change in EU employment rate, first quarter of 2021 (in percentage points)



Source: Eurostat, EIB calculations.

In addition, school closures are likely to have accentuated social disparities, with a greater impact on children who were already at a disadvantage. Regression analysis using educational survey data suggests that factors such as parents' educational background, family wealth and immigration status are likely to have influenced the effectiveness of distance learning. Those factors influence the quality of working conditions and the learning environment at home, as well as the degree of digitalisation in the schools attended.

The share of firms investing in training fell, despite policy measures to allow employees to remain in their jobs. Although the decline was not substantial, it exacerbated existing structural weaknesses. A lack of skills is the barrier to investment most often reported by firms.

The recovery should be seized as an opportunity for retraining and improving skills, but it has not been so far. With nearly 80% of European firms reporting a scarcity of workers with the required skills as an impediment to investment, and with the digital and green transformation of the economy creating new skill and retraining needs, the acceleration of workplace training and adult education is essential. Lockdowns, teleworking and the furloughing of workers, however, made training more difficult, and elevated uncertainty deterred investment in skills. Retraining suffered from the general reduction of investment activity, particularly in small firms.

# The asymmetric effects of the crisis pose risks to convergence and cohesion

The pandemic has the potential to widen economic disparities across the European Union because many of the most exposed economies also have less fiscal space to respond. Member States with a relatively high proportion of the workforce employed in personal services are particularly vulnerable to the effect of lockdowns, and they include most of the EU members whose government debt ratios stood at 100% of GDP or higher before the pandemic. Spreads between the funding costs of different EU members started to widen on the eve of the ECB's Pandemic Emergency Purchase Programme (PEPP), raising the spectre of fragmentation once the programme expires.

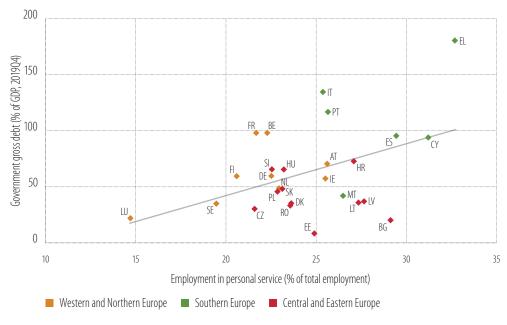
However, policy intervention brought funding costs down for almost all EU members, with heavily indebted countries benefiting the most. Between the beginning and end of 2020, funding costs declined for nearly all Member States, with the more indebted countries seeing the greatest reduction in interest rate spreads. In particular, the announcements of the PEPP and the Recovery and Resilience Facility had an immediate impact.

Nonetheless, the short-term economic effects varied strongly across the European Union, and lasting effects could set in because the worst hit countries are recovering more slowly. The importance of different industries and the varying severity of the public health measures resulted in major disparities in the decline in output, with GDP falling by 18% or more in France, Italy, Portugal and Spain by mid-2020. Moreover, the scale of the initial decline in GDP is strongly correlated with the continuing gap in GDP. GDP for these same countries was still lower in mid-2021 than in 2019.

**Firms in lower-income regions are more likely to expect the pandemic to cause a lasting reduction in employment.** While about 13% of firms in Europe as a whole expect a reduction, the figure rises to 19% in less developed regions. Concerns about accelerated digitalisation and automation after the COVID-19 crisis may be at play here. More firms in these regions expect to lose jobs to automation, and fewer invest in training. Spending on active labour market polices also tends to be lower in some of the countries where many low-income regions are located.

## More exposed economies entered the pandemic with greater public debt...

Government debt in 2019 vs. employment in personal services

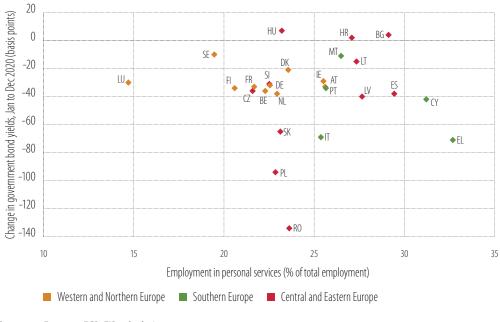


Sources: Eurostat, EIB calculations.

Note: Personal services are NACE codes G to I (statistical classification of economic activities).

## ... but their financing costs remained broadly stable or even declined

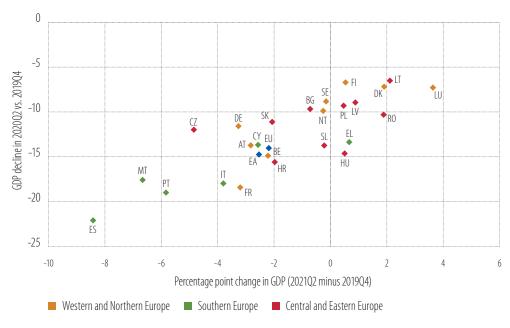
Change in government bond yields during 2020 vs. employment in personal services



Sources: Eurostat, ECB, EIB calculations.

Note: The y-axis is the difference between mean ten-year government bond yields in December and January 2020.

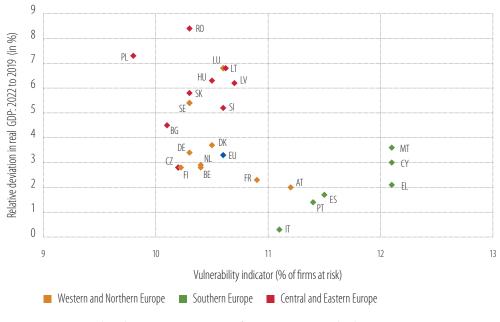
## Countries that lost the most GDP during the pandemic are not catching up



Source: Eurostat, EIB calculations.

Note: On the x-axis, the change in GDP by the second quarter of 2021 is given in percentage points, where the fourth quarter of 2019=100.

## Countries with the slowest recoveries have the strongest concentration of vulnerable firms



Source: EIB estimates based on European Commission forecasts, EIBIS-ORBIS database.

Note: The vulnerability indicator is the average of the estimated default and insolvency risks.

# Many European firms are using the recovery as a springboard for structural change

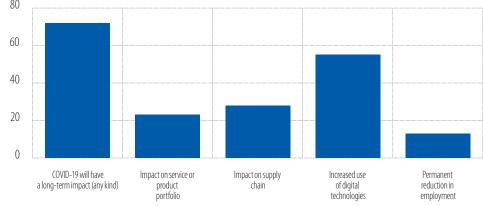
Looking forward, the pandemic has accelerated structural shifts, and Europe's firms increasingly see a need to act on digitalisation and climate

The pandemic has accelerated structural shifts in the economy. The majority of European firms have survived the pandemic relatively unscathed so far, but they now have to adjust to new conditions, not least in the demand for their products and issues with their supply chains. Just over a quarter of EU firms believe the pandemic will have a lasting effect on their supply chains, and 23% see a future effect on the product mix they need to offer, underlining the need for innovation. Another indicator that the cyclical rebound in activity is exacerbating supply-side constraints comes from firms' views on obstacles to investment. The recovery has brought a marked uptick in firms seeing the availability of skills, energy costs and transport infrastructure as constraints, while the uncertainty has eased.

**Meanwhile, digitalisation has become even more important.** Some 55% of firms see a greater need for digitalisation as a long-term result of the pandemic, and the number of firms seeing digital infrastructure as a constraint to investment decisions has edged upwards to 45%.

Most EU firms expect the pandemic to have a lasting impact on their operations

Long-term effects of COVID-19 expected by European firms (% of firms)

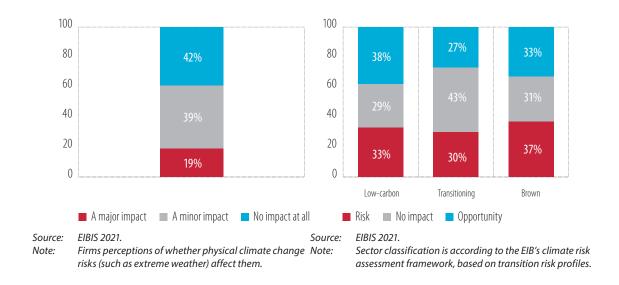


Source: EIBIS 2021.

Firms are also incorporating the need to take action on climate into their strategies. Around 58% of EU firms say they are affected by the physical risks of climate change. More do so in regions that have experienced weather extremes. EU firms are also starting to internalise the risks associated with the transition to a net-zero carbon economy. This is particularly the case in "brown" sectors (where risks are mostly seen on the downside) and in "green" sectors (where firms are more likely to perceive opportunities). Firms are likely to respond even more strongly to climate transition risks as obligations grow for them to report on emissions, and for the financial sector to report on portfolio risk exposure. Size makes a difference, with smaller firms less aware of the challenges ahead.



## European firms' perceptions of the climate transition depends on their sector



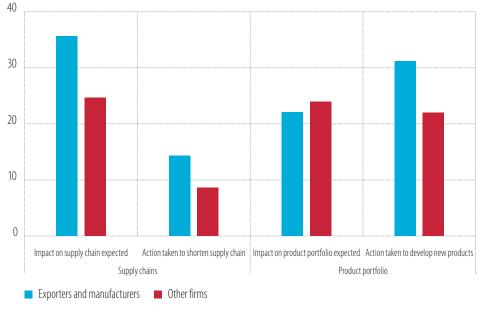
# The pandemic has prompted many firms to accelerate their transformation

Many firms have stepped up their efforts to transform, particularly for digitalisation. According to the EIBIS add-on module, 27% of European SMEs in manufacturing and services say they have used the crisis as an opportunity to accelerate their transformation plans. Some 46% of EU firms say they have become more digital, and of the firms that do not use advanced digital technologies yet, 34% used the crisis as an opportunity to start their digitalisation journey. What is clear, however, is that firms have begun the easy part of the digitalisation process during the pandemic. The uptake of advanced digital technologies did not progress overall in 2020-2021, remaining constant at around 61% of EU firms.

**European firms are also restructuring their supply chains in response to global pressures.** Aggregate data already show some evidence of supply chain changes, such as enhanced diversification and the reduced geographical concentration of suppliers. EIBIS data suggest that more than 30% of exporting and manufacturing firms have been developing new products, services or processes as a response to the pandemic, and nearly 15% have taken steps to shorten supply chains.

Firms' efforts to address the climate transition picked up again in 2021, with EU leadership on climate showing signs of paying off. Although the share of firms investing to deal with climate change stalled, the share of firms planning climate-related investment has now risen from 41% to 47%, after softening in 2020. In the United States, however, only 28% of firms have already invested and only 40% are planning climate investments. The regulatory push for accountability on carbon emissions and exposure to climate risk appears to be having an impact, with 46% of EU firms adopting monitoring targets for carbon emissions and energy consumption, a factor that is associated with investment. Firms are more likely to invest when they see the climate transition as an opportunity. By contrast, exposure to negative transition risks does not appear to be fully internalised or priced in yet.





Source: EIBIS 2021.

## So far so good, but risks of asymmetry are emerging

The divide between faster digitalising firms and those going more slowly seems to be growing, with an effect on jobs

**EU firms have been digitalising as a response to the COVID-19 crisis, but less so than US firms.** Some 46% of EU firms have responded to the pandemic by becoming more digital, vs. 58% in the United States. The share of US firms that have already adopted advanced digital technologies is also higher: 66% vs. 61% in the European Union.

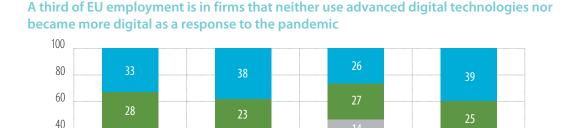
In the European Union, firms that had already implemented advanced digital technologies were more likely to digitalise further as a result of the pandemic — making it even harder for slow adopters to catch up. While close to half of firms that had already implemented advanced digital technologies said they increased their digitalisation as a response to the pandemic, only a third of less digitally advanced firms said the same. In Europe, 26% of firms fall into the "neither" category. They are neither digitally advanced nor on the way to becoming more digital as a response to the pandemic. This compares unfavourably to 18% of similar firms in the United States.

20

()

26

EU



■ Neither - No advanced tech., no more digital since COVID-19
■ Advanced - Has advanced tech., no more digital since COVID-19
■ Basic - No advanced tech., more digital since COVID-19
■ Both - Has advanced tech., more digital since COVID-19

33

EU

% of employment

Source: EIBIS 2021, Eurostat and OECD Structural Business Statistics, and US Census Bureau.

% of firms

20

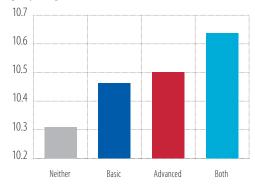
US

Firms that are not advancing on digitalisation tend to be less transformative in many respects. The digitalisation profile of firms is strongly linked to their size, with 41% of European small and micro firms falling into the "neither" category. They are less likely to see the pandemic as a reason to develop their product portfolios, and they are less likely to plan any investment in the next three years. They also tend to be less innovative (with proportionately less investment in R&D), less productive, pay lower wages and are less likely to have created jobs since the start of 2020. These firms seem to fail to understand the need for digital transformation and innovation.

The growing digital divide poses risks for the labour market. In Europe, 33% of jobs are associated with firms that are doing nothing in the digital sphere, compared with some 20% in the United States. These "sleepwalking firms" are also likely to pay lower wages and are less likely to create new jobs. During the pandemic, they were also less likely to train their workers.

# Firms that neither use advanced digital technologies nor became more digital tend to pay less

Median wage per employee by digital uptake category (log scale)

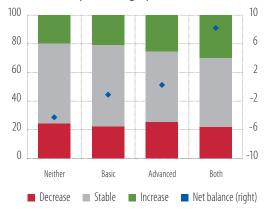


Advanced digital firms that became more digital created jobs, despite the pandemic

20

US

Impact on employment by digital uptake category (left axis: % of firms; right axis: net balance in percentage points)



Source: EIBIS 2021.

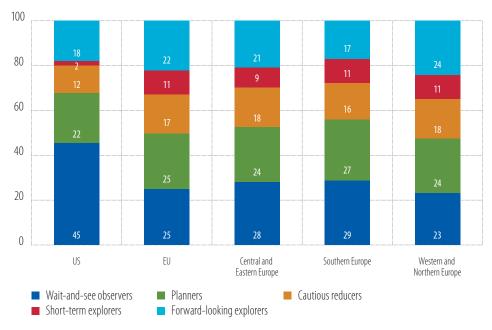
Source: EIBIS 2021.

## Many firms are moving slowly into the climate transition

With regard to the climate transition, firms can similarly be broken down into those that have already invested, those planning to take (further) action, and those that "wait-and-see." The 25% of firms that do not invest, plan or set targets are more likely to be small businesses than large companies. Differences between countries are also notable. However, Europe has much fewer "wait-and-see" firms than the United States, where the figure is 45%.

A quarter of EU firms are content to "wait-and-see" on the climate transition, a lower share than in the United States





Source: EIBIS 2021.

Perceptions of the risks and opportunities associated with climate change and the green transition drive firms' climate actions. Regression analysis suggests that firms' perception and awareness of the impact of climate change and the transition on their business are the strongest determinants of investment. Firms that see such an opportunity are almost twice as likely to implement climate-related investment as those that see no impact (60% vs. 31%). The perception that the transition poses a risk is a weaker driver of investment. Overcoming information barriers seems to be important for climate investment, with firms much more likely to invest when they have dedicated climate staff, set climate-related targets or conduct energy audits.

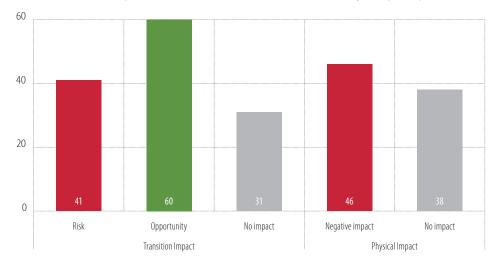
A large share of firms in transition sectors, namely sectors that are neither "green" nor "brown," do not expect the net-zero transition to affect their activities. Unsurprisingly, firms in "green" or "brown" sectors, which are likely to be most directly impacted by the climate transition, are more likely to see the transition as positive or negative. Firms in other sectors may be less affected overall, or might just be incapable of assessing the impact. Without efforts to assess the need for climate-related investments, many firms may find themselves drifting into a difficult situation as the climate transition accelerates. Firms in transition sectors are also less likely to have set up managerial capabilities associated with the green transition.

A lack of climate action by firms is likely to be correlated with a weak capacity to transform. "Waitand-see" firms are less likely to be innovative or exporters, or to employ more advanced management

practices. They are slightly less likely to be profitable and slightly more likely to face financial constraints. Although those correlations play a role overall, our analysis also shows that awareness and perception of climate risks, as well as information, help determine whether firms pursue climate investments.

#### Awareness of risks and opportunities influences climate-related investment

Firms (in %) that have implemented climate-related investments, by risk perception



Source: EIBIS 2021.

## Non-transforming firms may hinder convergence across Europe

The concentration of firms that have not taken action on digitalisation, the climate or both is uneven throughout Europe. Comparing data for cohesion regions ("less developed" and "transition" regions) and more developed regions shows that the digital and climate transitions could potentially hinder European convergence, with firms in lower-income regions being less prepared to adapt and seize the available opportunities.

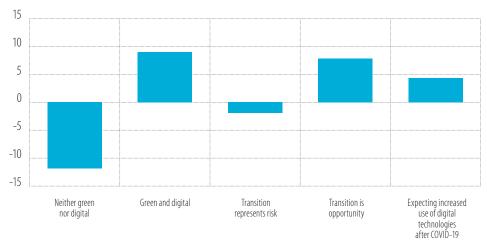
Firms in lower-income countries and regions are less likely to become more digital, and less likely to innovate in response to the pandemic. Becoming more digital was one of the main ways firms reacted to the pandemic, but this response was weaker in less developed and transition regions. Similar evidence exists for innovation.

Firms in lower-income regions are lagging behind in green innovation and are less optimistic about taking advantage of the opportunities offered by the climate transition. The registration of green patents has so far been dominated by firms in Western and Northern Europe. At the same time, firms in cohesion regions with less capacity to tackle climate change (measured as the employment of dedicated climate staff, use of climate targets and energy audits) and greater scepticism about transition opportunities are more likely to view the climate transition as a risk.

Firms that invested in climate and digitalisation are more likely to see the low availability of skills as an obstacle to investment, and were more likely to increase investment in training during the pandemic. Although the low availability of skills is often reported as an obstacle by all types of firms, it seems to be innovative, digital and climate-focused firms that encounter this obstacle most. Again, firms' perceptions seem to drive transformative investment. The share of green and digital firms (firms that invested in climate and digitalisation) that also invested in training increased during the pandemic by 9 percentage points while the share of non-green, non-digital firms investing in training fell by 12 percentage points. Seeing opportunities in the climate transition and expecting the pandemic to lead to the increased use of digital technologies is also correlated with more frequent investment in training.

## Firms that see opportunities in the green and digital transitions invest in training more often

The share of firms investing in training compared to the EU average (difference in percentage points), by firm characteristics

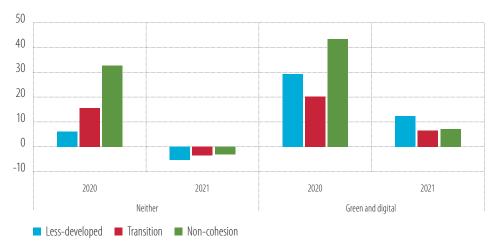


Source: EIBIS 2021.

Transformative action by firms has already affected regional employment during the pandemic. Firms that invested in climate and digitalisation tended to increase employment, on balance, during the pandemic, while those that did not invest in climate and digitalisation were more likely to see a loss of jobs. This effect holds true for all regional groups.

## Digital and green firms tended to increase employment during the pandemic, particularly in less developed regions

Share of firms that increased employment minus the share that decreased it (in percentage points)



Source: EIBIS 2020, 2021.

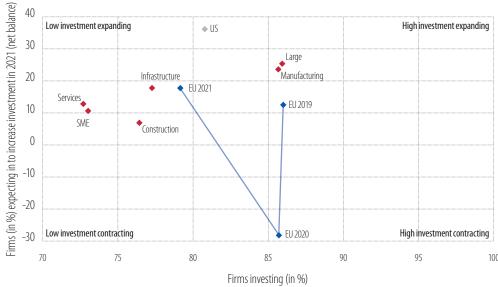
# Going forward, Europe needs to maintain and expand the momentum for transformation

# Europe's policy response has lifted expectations and supported the recovery

With the recovery faster than initially expected, and market conditions easing, European firms expect to increase investment this year. By the second quarter of 2021, real investment across most EU members had returned to the pre-pandemic levels of 2019. EIBIS data confirm this trend: the proportion of firms investing in the past year was relatively low (79%), but a net balance of +18% of firms expected to increase investment in 2021, a sharp turnaround from the previous year (-28%). On balance, firms are also optimistic about investment conditions in the coming year, with EIBIS sentiment indicators for the economic climate and availability of internal finance switching back to positive as the recovery takes hold.

However, current business optimism and the recovery in investment rests partly on growth expectations underpinned by the EU policy response as well as the willingness of EU members to act together to face the pandemic. With the pandemic far from over, macroeconomic and policy uncertainty remains high, and 73% of firms still say this is an obstacle to investment. Moreover, the withdrawal of some crisis support measures and the implementation of the post-crisis policy framework may test firms' resilience. Risks of scarring in some sectors and regions of the European economy, as well as the difficulty many firms face in adapting to structural changes, emphasise the need for a strategy to phase out the support while ensuring the recovery continues.

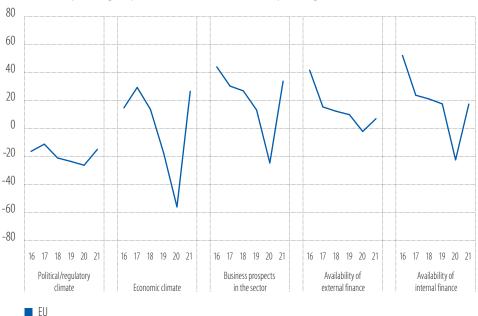
## European firms expect to increase investment



Source: EIBIS 2021.

#### Firms are also optimistic about investment conditions in the coming year

EU firms (in %) expecting improvement minus those expecting deterioration in the next 12 months



Source: EIBIS 2021.

# Managing the policy shift from emergency support measures to an environment that fosters structural transformation is essential

Continued fiscal coordination across the European Union will be critical to the recovery and the success of structural transformation. After the general escape clause of the Stability and Growth Pact<sup>3</sup> was invoked, Member States were able to adopt measures to limit the immediate impact of the pandemic. However, simply deactivating the general escape clause and reinstating the pact as it stands would require fiscal adjustments that are barely feasible. These adjustments could also jeopardise the recovery and weigh on public investment in climate adaptation and mitigation, and in digitalisation. This is particularly true for the Member States more affected by the pandemic and whose debt ratios increased more significantly.

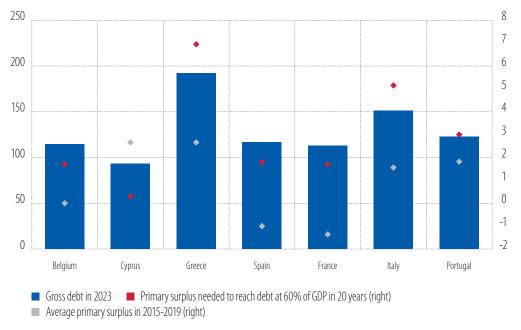
The successful implementation of the Recovery and Resilience Facility will help to protect high-quality public investment in the coming years, providing critical support for the structural transformation of the EU economy while limiting the impact on public debt. The facility stands out among the European Union's support programmes for its size and for its ambition to target structurally needed investments. It requests that Member States allocate at least 37% of their investments to green and 20% to digital domains.

The facility could have a significant impact on economic convergence across the European Union. Estimates using the Rhomolo-EIB macroeconomic model suggest that the facility is likely to result in GDP being about 2% higher in 2030, and 1.3% higher in 2040, relative to the baseline scenario. The estimated impact on GDP is highest in Southern Europe, where structural improvements are estimated to raise GDP levels by as much as 5% by 2030, with the effect falling to 2.5% by 2040. The impact is still sizeable and significant in Central and Eastern Europe. In Western and Northern Europe, the effect is likely to be slightly below 1%, and cross-border spillover effects from the rest of Europe account for half of the predicted impact.

<sup>3</sup> For more information about the general escape clause, please see https://www.europarl.europa.eu/thinktank/en/document/EPRS\_BRI(2020)649351

## Reintroducing the debt rule as it stands would entail a dramatic fiscal correction for the most indebted Member States

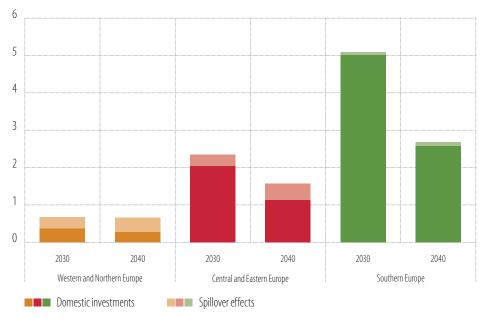
Government debt, primary surpluses and surpluses needed to comply with the debt rule (left axis: government debt, % GDP; right axis: primary surplus, % GDP)



Source: The European Commission's AMECO database, EIB calculations.

## Rhomolo-EIB model estimations of impact of Recovery and Resilience Facility on macro-regional GDP

The Recovery and Resilience Facility is expected to affect Southern Europe's GDP the most (GDP increase compared to scenario without the facility, in %)



Source: Et

e: European Commission, EIB calculations.

The light-coloured part of each bar shows the estimated impact on GDP of investments in other EU regions (spillovers).

Public investment has an essential role to play in the digital and green transitions, not least as a catalyst to accelerate private sector investment and transformation. The rollout of digital infrastructure is still well below what is needed in many regions, as the pandemic revealed. Firms were more likely to take action to become more digital during the pandemic if better quality internet access was available to facilitate the use of digital tools and new working practices. The current strains on Europe's energy system, including energy price rises, is an indicator of the urgent need to invest in both renewable energy generation and Europe-wide transmission networks during a critical decade in the climate transition.

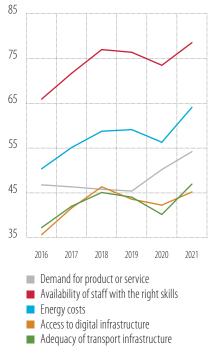
**Implementation is crucial.** The design and approval of programmes has been an impressive step. Implementation capacity in individual countries is essential at this stage, with the disbursement of resources now made conditional on the effective implementation of reforms and proposed investment programmes.

# The focus needs to shift to targeted, risk-sharing interventions to mitigate uncertainty, while creating a conducive environment for action

Keeping a focus on non-financial barriers to transformative investment is critical, with skills and core infrastructure proving to be key obstacles. The scarce availability of workers with the right skills is cited as a barrier to long-term investment by 79% of European firms. Infrastructure also matters. Access to digital and transport infrastructure, as well as energy costs, are all rising as constraints on investment in Europe in the current recovery.

The availability of skills persists as a top barrier to long-term investment, while energy costs and infrastructure are also growing concerns

Obstacles to long-term investment (% of EU firms citing the obstacle as major or minor)





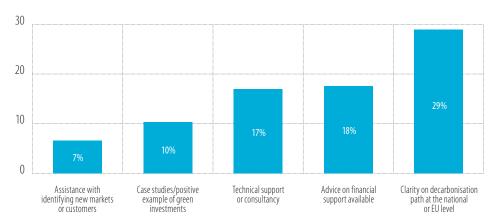
Source: EIBIS 2021.

For climate-related investment, uncertainty about the regulatory environment and taxation is a key obstacle. Firms say that setting a clear decarbonisation pathway, advice on the financial support available and technical support would help most in advancing climate-related investment.

The main barriers to investment in digital technologies are the cost of investment activities and the availability of staff with the right skills to identify and implement that investment. Firms name technical support, advice on funding and regulatory consistency across Europe as the most helpful support for digitalisation.

## Policy clarity is needed to encourage climate-related investment

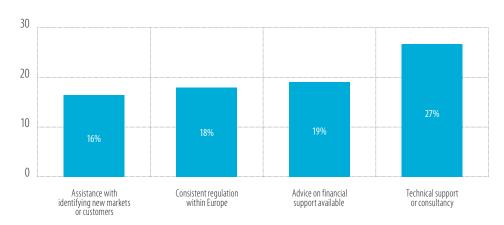
Most helpful forms of support (% of firms)



Source: EIBIS 2021 add-on module — sample of EU SMEs in manufacturing and services.

## Technical support is needed to encourage investment in digital technologies

Most helpful forms of support (% of firms)

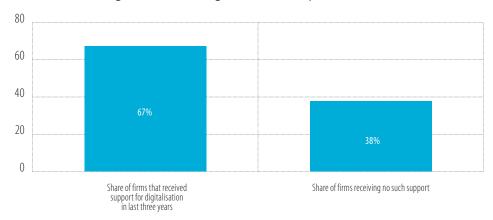


Source: EIBIS 2021 add-on module — sample of EU SMEs in manufacturing and services.

For SMEs, targeted financial support has proved effective in increasing their readiness to undertake transformative investment, including in response to the pandemic. European SMEs that received incentives for digitalisation in the last three years were almost twice as likely to invest more in digitalisation as a response to the pandemic, suggesting that such incentives help to overcome the inertia of many firms. Targeted financial support for climate investments has also been effective, but only 6-7% of firms in Southern, Central and Eastern Europe received it, compared with 16% in Western and Northern Europe. Only 5% of firms in Central and Eastern Europe received incentives for digitalisation, compared to 16-17% elsewhere.

Firms that previously received targeted incentives for digitalisation were more likely to invest more in digitalisation in response to the pandemic

Share of firms increasing investment in digitalisation in response to COVID-19



Source: EIBIS 2021 add-on module — sample of EU SMEs in manufacturing and services.

Financial incentives should be accompanied with support for developing technical capacity at firms, municipalities and in individual countries. The implementation of the European Fund for Strategic Investments (EFSI), the European Union's recovery plan following the sovereign debt crisis, demonstrated how financial support needed to be provided in tandem with strong capacity to identify, prepare and implement high-quality projects. Generating an ample pipeline of high-quality projects is critical for ensuring that public support crowds private investment in, not out. Technical barriers and a lack of information also make it more difficult for firms to take action.

Improving skills and retraining need to be key policy targets to tackle the looming problem of reallocation in the labour market, avoiding a scenario where workers become trapped, on a large scale, in declining industries and failing firms. The risk is that many workers will remain in firms that are failing to innovate and adapt to the new normal — and that also fail to invest in training. At the same time, the availability of skilled workers could further constrain the investment activities of transformative firms with high growth potential. Improving skills and retraining are essential policy goals to ensure a just transition in which no one is left behind.

With the recovery firmly underway, and an increasing number of firms taking action on climate change and digitalisation, policymakers can be hopeful. Uncertainty remains high, however, and is holding back many firms from taking action. The asymmetric effects of the pandemic on the European economy, moreover, have increased risks for firms, governments and workers. The pandemic offers an opportunity to accelerate change in Europe. Making the most of this opportunity is crucial.



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