



INVESTMENT REPORT  
2020/2021



# Building a smart and green Europe in the COVID-19 era

## Chapter 3

### Financing corporate investment

EUROPEAN INVESTMENT BANK INVESTMENT REPORT  
2020/2021

# Building a smart and green Europe in the COVID-19 era

**Part I** Investment and investment finance

## Chapter 3 **Financing corporate investment**

## **Investment report 2020/2021: Building a smart and green Europe in the COVID-19 era**

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The EIB annual report on Investment and Investment Finance is a product of the EIB Economics Department, providing a comprehensive overview of the developments and drivers of investment and its finance in the European Union. It combines an analysis and understanding of key market trends and developments with a more in-depth thematic focus, which this year is devoted to European progress towards a smart and green future in a post-COVID-19 world. 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.

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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, a team of 40 economists, is headed by Debora Revoltella, Director of Economics.

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# Chapter 3

## Financing corporate investment



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## Chapter 3

### Financing corporate investment

**Firms entered the COVID-19 crisis on a stronger footing.** During the previous economic upturn, firms strengthened their balance sheets and reduced liquidity risk and debt, while increasing capital and building up cash buffers. Increased profits, along with a rise in demand and a very accommodative monetary policy environment, facilitated this favourable evolution. While financial constraints tightened compared to 2019, those constraints remained below their historical peak.

**The policy response to the crisis has been strong and managed to maintain the flow of credit to the economy.** During the first lockdown in March-May 2020, firms faced a slump in revenues. Because it takes time to reduce costs following a decline in demand, firms' cash positions declined as well as their ability to finance their capital expenditure. National policies helped limit this decline by alleviating labour and tax obligations and supporting credit to businesses through guarantee programmes. At the EU level, central banks and the European Commission also launched programmes to restore confidence. These policies successfully "froze" the economy during the first lockdown. They must be maintained – and possibly recalibrated – through waves of infection and resulting lockdowns.

**In addition to the short-term effects of the crisis, investment capacity will be damaged.** According to the EIB Investment Survey (EIBIS), some 45% of EU firms are investing less because of the pandemic. Reduced cash positions and lower net revenues have put the trade-off between debt and investment into sharper focus. Our analysis of different scenarios points to the time to return to normal conditions to operate economic activity as being key. It suggests that in the first year of the crisis, corporate investment is likely to fall by 25% to 50% compared to pre-pandemic levels. Subsequently, uncertainty is also likely to further weigh on investment.

**Investment was already relatively muted during the upturn, and Europe has not strengthened its competitive position in promising sectors.** Firms should invest more to adequately address their environmental and digital needs and prepare for future shocks. The decline in investment is likely to take the biggest toll on R&D and intangible investments, which are not easy to collateralise and must be financed internally.

**Future policy measures should be rolled out over time, particularly as an intense second coronavirus wave increased the risk of a long period of uncertainty, before the return to normal.** At the onset of the crisis, government policies focused on providing liquidity and maintaining the flow of credit from banks by backing up loans with guarantees. Looking forward, policies should focus on enhancing the financing options available to firms and supporting financial products that use equity instead of debt. This change in focus will help to offset the rising risks and support Europe's goals of improving resilience, greening and digitalising.

## Introduction

The chapter reviews the major developments in EU corporate investment and financing since the second half of 2019. Special attention is paid to the impact of the COVID-19 crisis on the European corporate ecosystem and the resulting outlook for investment and investment finance in a more challenging post-coronavirus environment. The source of corporate resilience, the economic implications of the crisis and the likely consequences for firms' decisions are analysed in detail. The rest of the chapter consists of four sections described below and ends with concluding remarks and policy implications.

The first section elaborates on firms' strong position before the crisis. After years of adjustment and deleveraging, and under very accommodative financing conditions, EU corporates by and large entered the crisis on a stronger footing. However, fragile pockets of a more structural nature remained, with underinvestment in some specific assets such as R&D, intangibles and digitalisation equipment as well as some characteristics of the financial system that hampered investment. In this section, a box considers the three main corporate surveys now available – the EIBIS, produced by the European Investment Bank (EIB), the survey on the access to finance of enterprises (SAFE) by the European Central Bank (ECB) and the European Commission, and the Enterprise Survey by the European Bank for Reconstruction and Development (EBRD), the EIB and World Bank – and shows that the data related to finance for EU corporates are very consistent.

The second section shows that a swift policy response helped maintain the flow of credit in the early stages of the pandemic. However, firms' ability to finance their activities internally will decline substantially, for at least the first year of the crisis. The decline in internal finance will likely affect overall corporate investment – unless firms increase their debt levels further than they already have to cover liquidity needs.

The third section shows that young and small and medium-sized enterprises (SMEs) face an even more adverse environment. The slump in demand is more pronounced in sectors where smaller firms tend to be overrepresented, their cost structure is less flexible and their access to finance tighter. Survey indicators suggest that various sources of finance specific to young enterprises and SMEs – such as private equity, venture capital and business angels – may well dry up. This should cause concern as these sources of finance were already not sufficiently developed in Europe prior to the crisis.

The fourth section warns of larger risk to specific assets and elaborates on the nature of the policy measures aimed at limiting the drop in corporate spending. In the future, policy measures should tilt towards supporting much needed green, digital, intangible and R&D investment. Prior to the crisis, Europe had recorded a relatively muted cyclical rebound in investment, and some much-needed investments, in digital, R&D and intangibles in general, had lagged behind. It is important to seize the opportunities presented by the COVID-19 crisis to reshape the European economy. The European Union needs to avoid following the same path as it did during the financial and debt crises more than a decade ago.

## Corporates entered the crisis on a stronger footing

**Mostly net savers since the global financial crisis, European firms bolstered their financial position and entered the COVID-19 crisis on a stronger footing.** Firms improved their balance sheets by reducing indebtedness and accumulating liquid financial assets. Firms also recorded higher profits and improved their financial coverage ratio, a measure of a company's ability to service its debt and meet its financial obligations. These favourable developments were accompanied by a softening of financing conditions and a decline in the proportion of finance-constrained firms.

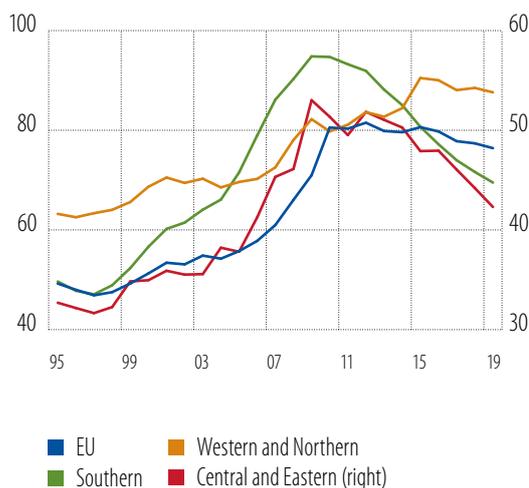
### Stronger balance sheets

**The indebtedness of European firms continued to decline in 2019.** As shown in Figure 1, since peaking at 82% of gross domestic product (GDP) in 2012, the decline in corporate indebtedness has been relatively

modest overall at about 7 percentage points. However, the evolution in Europe has been very diverse. Corporate debt ratios continued to increase in Northern and Western Europe, by 5 percentage points, while they declined by 26 percentage points in Southern Europe and 13 percentage points in Central and Eastern Europe. In these two regions, the indebtedness ratio in 2019 was lower than in 2007. Moreover, empirical evidence suggests that most indebted firms deleveraged more (EIB, 2019).

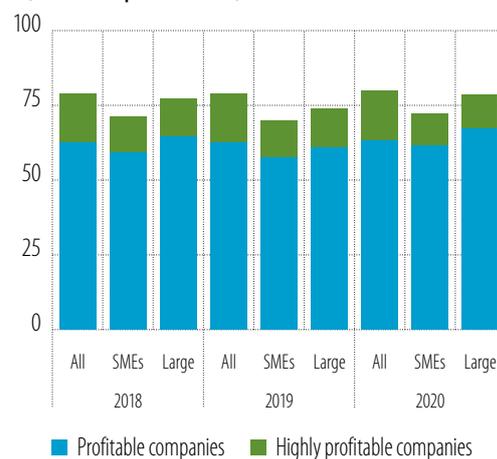
**In the EIBIS 2020, 80% of EU firms surveyed reported profits, 17% of which said profits were high.<sup>1</sup>** Figure 2 reports the share of firms having recorded profits over the last three years. It defines highly profitable companies as those whose profits were more than 10% of revenue. During the economic upturn, the acceleration in corporate sales remained moderate. The shares of profitable and highly profitable firms have remained relatively stable since the first EIBIS survey in 2016, at around 63% for profitable firms and 16% for highly profitable firms. The indicators remained almost unchanged in 2020, despite the slowdown in the EU economy that started in 2019. However, from 2016 to 2020, the share of SMEs reporting profits is about 6 percentage points lower than that of large enterprises.

**Figure 1**  
Corporate indebtedness (% GDP)



Source: Eurostat and EIB Economics Department calculations.  
Note: Latest observation 2019. Indebtedness includes loans and debt securities.

**Figure 2**  
Share of profitable companies (% of respondents)



Source: EIB Investment Survey (EIBIS) 2018, 2019 and 2020.  
Note: Highly profitable companies report a profit margin above 10%.

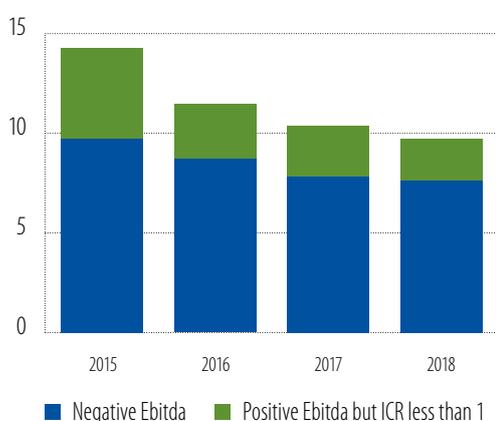
**Reduced indebtedness together with a lower cost of finance have helped to increase firms' ability to resist shocks by raising interest coverage ratios.** Figure 3 shows that the share of net revenues<sup>2</sup> dedicated to the payment of interest expenses has fallen continuously since at least 2015, reaching historically low levels in 2018. This drop reflects the increase in net revenues and the declines in debt and interest rates. Particularly low interest rates also support corporate income. As shown in Figure 9, borrowing costs on corporate loans have declined by more than 210 basis points since the beginning of 2012.<sup>3</sup> Monetary policy has remained very accommodative in most EU economies since the sovereign debt crisis.<sup>4</sup>

1 This question from the EIBIS 2020 refers to fiscal year 2019.  
2 Net revenues are similar to gross profit. They are a measure of sales revenues from which the main cost components are deducted except amortisation and taxes.  
3 In the European Union, the share of gross interest payments over GDP has been decreasing since the middle of 2012. At the beginning of 2019, firms' debt payments were well below their average since the beginning of 2003, especially in the South and Centre and East.  
4 See Chapter 1 for more details.

## Financing conditions were already tightening before the COVID-19 crisis

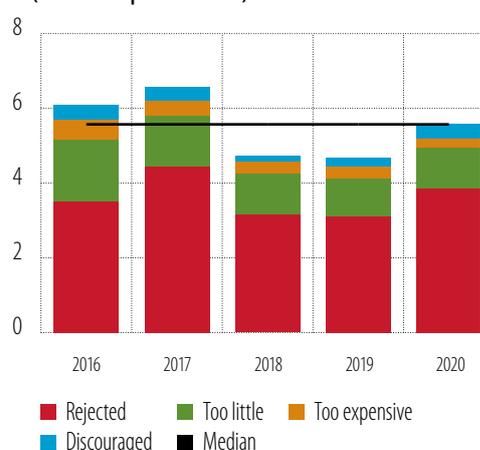
In the EIBIS 2020 that preceded the pandemic, 5.6% of firms said they were finance constrained, almost 1 percentage point above the level in 2019. Figure 4 shows the proportion of firms that report finance constraints.<sup>5</sup> After declining in 2018 to 4.7% from 6.6%, and after no change in 2019, the percentage rose to 5.6% in 2020. The tightening of finance came as economic activity slowed and uncertainty over trade tensions and Brexit rose. The rise in firms reporting finance constraints was contained, however, remaining below the peak of 6.6% recorded in 2017. The pandemic is likely to substantially push up the percentage of firms that report finance constraints.

**Figure 3**  
Interest rate coverage ratio (% Ebitda)



Source: ORBIS and EIB Economics Department calculations. Ebitda stands for earnings before interest, taxes, depreciation and amortisation.

**Figure 4**  
Finance-constrained firms  
(% of respondents)



Source: EIBIS 2016-2020.  
Note: See footnote 5.

**Finance-constrained firms are twice as likely to report an investment gap.** Figure 5 plots the investment gap for finance-constrained and those that are not finance constrained. It clearly shows that the gap is higher for finance-constrained firms – 12 percentage points in 2020 compared to non-finance-constrained firms. In the EIBIS 2020, 15% of firms without financial constraints report an investment gap. The number rises to 27% for finance-constrained firms. The difference between firms facing constraints and those that are not is relatively stable over time and across EU regions, ranging from 12 to 14 percentage points.

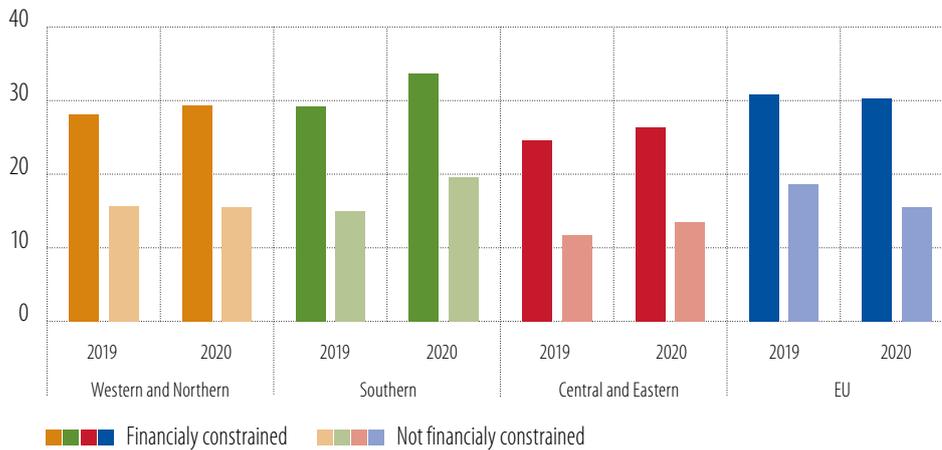
**Investment gaps are distributed unevenly across regions.** Investment gaps materialise when companies perceive that their investment is lower than optimal levels. In 2020, the investment gap is higher in Northern and Western Europe. In Northern Europe it is 7 percentage points above levels in Southern Europe, while in Central and Eastern Europe it is 4 percentage points higher. In 2020, the share of firms reporting investment gaps increased in Northern and Western Europe while it declined on the rest of the continent.

**A lack of finance is not the main impediment to investment.** Lack of finance comes well after uncertainty, lack of skilled staff, and regulation (see Chapter 2). Firms throughout the European Union cite uncertainty as an obstacle, a situation that was exacerbated by the COVID-19 crisis. Firms reporting labour market regulation as a major impediment to investment also tend to see business regulation as a problem. Across economies, there is a clear correlation between a lack of investment and labour market and business regulations. In addition, regulation is clearly more of a concern in Southern Europe than in Northern

5 Financial constraint indicator includes: firms dissatisfied with the amount of finance obtained (too little), firms that sought external finance but did not receive it (rejected), and those that did not seek external finance because they thought borrowing costs would be too high (too expensive) or they would be turned down (discouraged).

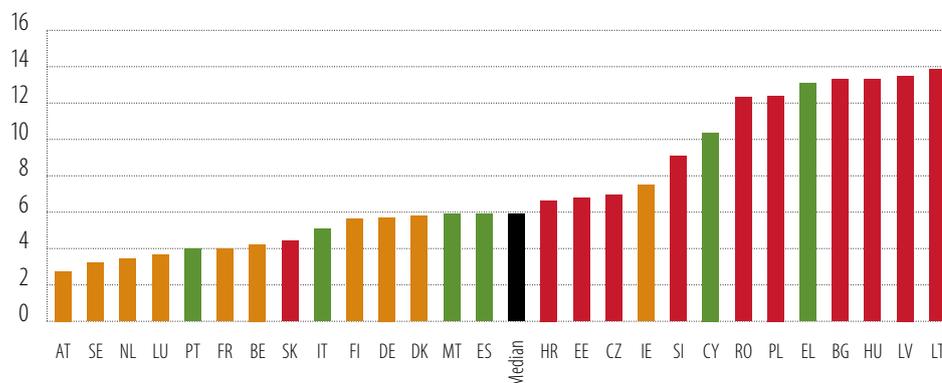
and Western or in Central and Eastern Europe. In some parts of Europe, administrative burdens and an antiquated regulatory environment may prevent a strong post COVID-19 economic rebound.

**Figure 5**  
**Finance constraints and investment gaps (%)**



Source: EIBIS 2019 and 2020.

**Figure 6**  
**Share of finance-constrained firms by country (%)**



Source: EIBIS 2020.

### Finance constraints remain asymmetric across countries and type of investment

**The overall improvement in the finance conditions masks wide disparities across EU regions and economies.** Figure 6 plots the proportion of finance-constrained firms across countries. The figure ranges from below 3% in Austria to 13% in Lithuania, Latvia, Hungary, Bulgaria and Greece. Firms in Northern and Western Europe tend to be less financially constrained, with the exception of Ireland, where the share of finance-constrained firms is above the EU median. Apart from firms in Greece and Cyprus, firms in Southern Europe now tend to be less finance-constrained than the EU median. The countries in Central and Eastern Europe, except in Slovakia, report a percentage of finance-constrained firms above the EU median.

**Other surveys confirm the finance constraints signalled by the EIBIS.** Box A presents two other major corporate surveys: the ECB's SAFE survey of European corporates and the Enterprise Survey conducted

by the EIB, World Bank and the EBRD in 43 countries, including some European economies. Comparing the survey results across firms in the same countries, the box shows that the EIBIS data are relatively robust. Across surveys, the share of firms reporting finance as a major impediment to investment shows a 55% to 80% correlation, while the share of finance-constrained firms shows a 42% to 56% correlation.

### Box A

#### Measuring access to finance with European firm surveys

The EIB is currently engaged in two major efforts to collect firm-level data in Europe and beyond. In addition to the EIBIS, which it has conducted every year since 2016, the EIB has joined forces with the World Bank and EBRD to carry out Enterprise Surveys in 43 countries across Asia, North Africa and Europe, including 13 Central and Eastern European countries plus Greece, Italy, Spain and Portugal. With support from the European Commission, the coverage of the Enterprise Survey will be extended to all 27 EU Member States by 2021. Together with the Survey on the Access to Finance of Enterprises (SAFE) implemented by the European Central Bank and the European Commission, three sources of internationally comparable firm-level survey data are now available for Europe. This box introduces the surveys and illustrates some results on firms' access to finance.

#### Description of the surveys

The EIBIS is an annual EU-wide survey that gathers qualitative and quantitative information on firms' investment activities, their financing requirements and the difficulties they face. The survey was conducted for the first time in 2016 and covers approximately 12 500 firms across the EU27 and the United Kingdom, and slightly more than 800 firms in the United States. The survey is administered by phone. The EIBIS collects panel data; some of the firms that have responded to one survey wave are contacted again the following year.

The Enterprise Survey covers a broad range of business environment topics including access to finance, corruption, infrastructure, crime, competition, and firm performance. The World Bank has been implementing the survey based on a globally comparable methodology since 2005. The survey provides a representative sample of the formal private sector. The EIB participated in the survey for the first time in 2014. So far, more than 164 000 interviews have taken place in 144 countries. The Enterprise Survey is based on face-to-face interviews and has a panel component. In most countries, repeat surveys take place at four to seven-year intervals.

The SAFE provides information on the latest developments in the financial situation of enterprises, and documents trends in the need for and availability of external financing. The survey is conducted twice a year: once by the ECB covering euro area countries and once in cooperation with the European Commission covering all EU countries plus some neighbouring countries. The SAFE is a telephone survey and has a panel component. The typical euro area sample has some 11 000 observations, the extended sample approximately 18 000.

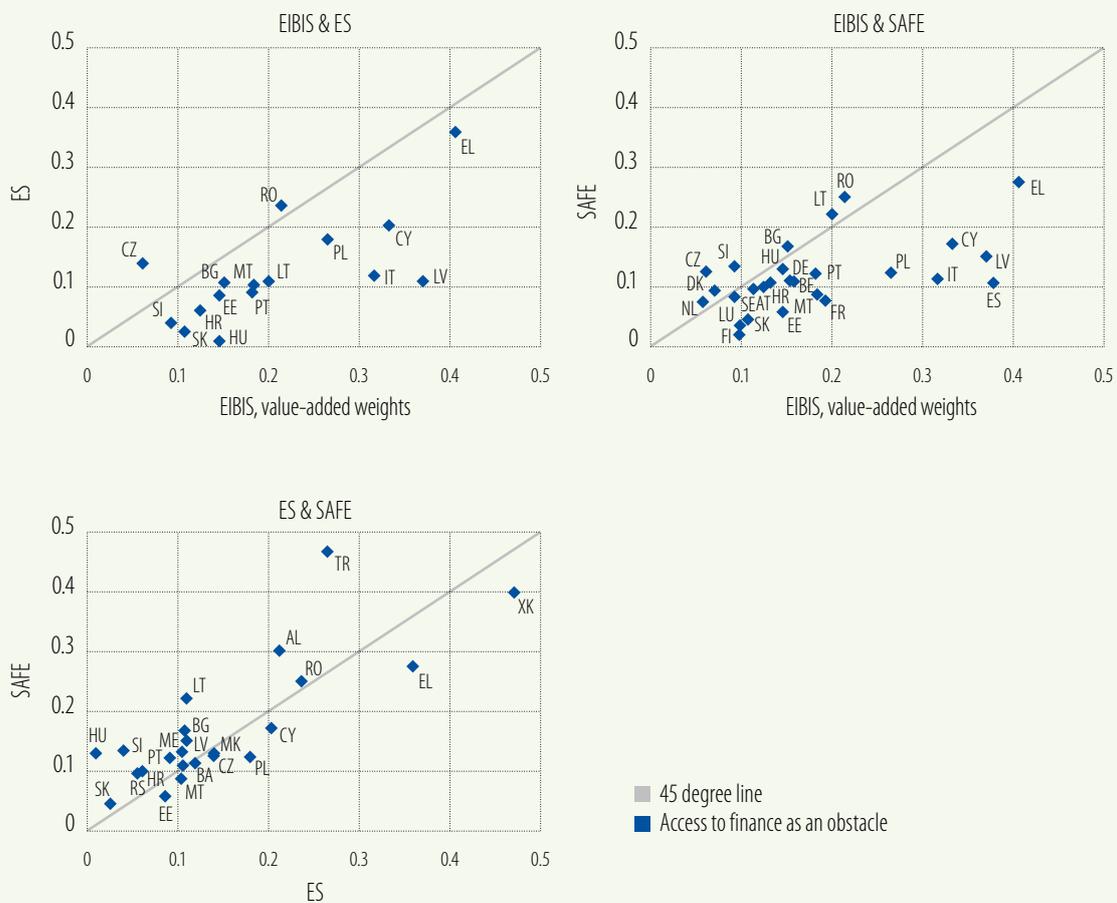
Despite the overlap in geographic coverage, there are important differences between the surveys. The SAFE, run by the ECB, is geared towards representing cyclical developments. Moreover, the survey focuses clearly on the liability side of firms' balance sheets. The EIBIS, on the other hand, focuses on investment and deals with firms' liabilities only to the extent that it helps with understanding investment. The EIBIS covers both cyclical and structural aspects of the business environment. The Enterprise Survey is the most wide-ranging of the three surveys with the topics it covers. In line with the low frequency of waves, the surveys focus on slow-moving, structural aspects of the business environment.

### Access to finance

The surveys measure access to finance in different ways. These include financial access as an obstacle to the firm, measures of supply of and demand for finance, the purpose of external financing, and the properties of loans that firms have obtained. This box focuses on two concepts that are present in the three surveys: firstly, the extent to which respondents consider access to finance as an obstacle to the firm; secondly, the extent to which firms that need a loan are able to obtain one. The latter indicates the prevalence of credit constraints.

**Figure A.1**

### Firm perceptions of access to finance as an obstacle



Source: EIBIS, SAFE, Enterprise Surveys (ES), EIB calculations.

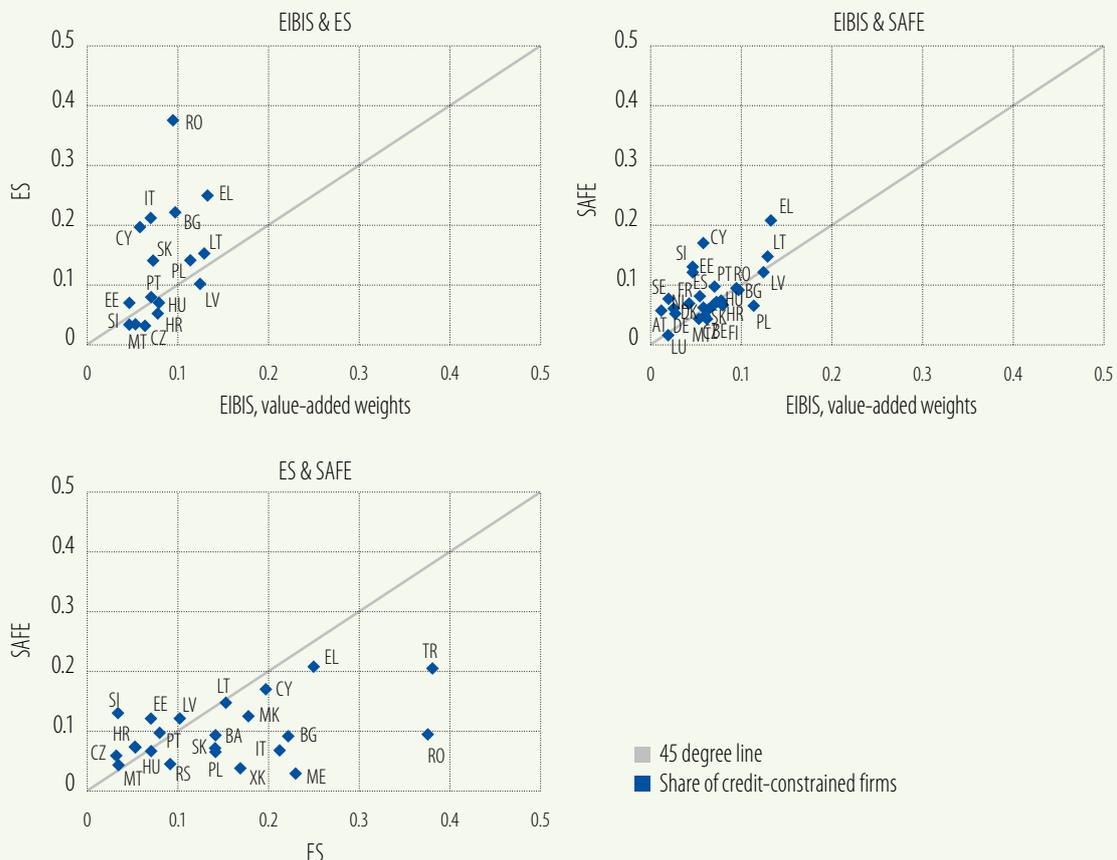
The surveys adopt a similar wording to elicit perceptions of access to finance as an obstacle. The question in the EIBIS (Q38) reads: “Thinking about your investment activities in [ADD COUNTRY OF INTERVIEW], to what extent is each of the following an obstacle? Is it a major obstacle, a minor obstacle or not an obstacle at all?” The question covers several potential obstacles, including “Availability of Finance” (Q38\_H).<sup>6</sup> The main difference between surveys is the response scale. Enterprise Survey respondents answer on a five point scale, ranging from “no obstacle” to “very severe obstacle”; SAFE respondents on

<sup>6</sup> The wording in the Enterprise Surveys (question K30) reads, “To what degree is Access to Finance an obstacle to the current operations of this establishment?” The SAFE question Q0B reads “How important have the following problems been for your enterprise in the past six months? Please answer on a scale of 1-10, where 1 means it is not at all important and 10 means it is extremely important.” Item Q03b\_3 deals with “Access to finance.”

a scale from 1 to 10. For the purposes of this box, responses are converted into a binary variable equal to one for EIBIS respondents who consider access to finance a major obstacle, for Enterprise Survey respondents who consider access to finance a major or very severe obstacle, and for SAFE respondents that rate access to finance 9 or higher.

The three surveys yield similar results on access to finance as an obstacle. Figure 1 provides pairwise scatterplots of country averages. The plots include all countries for which at least two surveys are available, which explains why the number of countries differs across plots. Correlation coefficients are high, ranging from 0.55 for EIBIS and SAFE and over 0.68 for EIBIS to 0.8 for the Enterprise Survey and SAFE.<sup>7</sup> The level of country averages differs across surveys, but this is likely to reflect the different response scales. Perhaps the correlation coefficient between the Enterprise Survey and SAFE is higher than that between EIBIS and the Enterprise Survey because it is easier to map a five point scale into a ten point scale than it is to map a three point scale into a either a five or ten point scale.

**Figure A.2**  
**Share of credit-constrained firms**



Source: EIBIS, SAFE, Enterprise Surveys, EIB calculations.

The approach to measuring credit constraints differs to a certain degree across the surveys. Measuring credit constraints is complex, and the three surveys employ a sequence of questions to determine whether a company is credit-constrained. Detailing the sequence and the wording of these questions

<sup>7</sup> SAFE and the Enterprise Survey both cover the following non-EU countries: Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, Serbia, Turkey

exceeds the scope of this box. It is important to note, however, that the measurement approaches differ to a certain extent across the surveys. For instance, unlike EIBIS and the Enterprise Survey, the SAFE first asks respondents whether bank loans are a relevant source of finance. Only if the firm answers positively does the survey follow up with the sequence of credit constraint questions. The Enterprise Survey includes items that are more attuned to a developing country or emerging market context, such as discouragement due to strict collateral requirements or procedural hurdles.

The average share of credit-constrained firms is correlated across countries but to a lesser extent than the perception-based measure. As Figure 2 shows, correlation coefficients range from 0.42 for SAFE and the Enterprise Survey and over 0.46 for EIBIS and the Enterprise Survey, to 0.56 for EIBIS and SAFE. That said, the Enterprise Survey yields on average a higher share of credit-constrained firms than either the EIBIS or the SAFE.<sup>8</sup> For example, for the 16 countries covered by both the EIBIS and Enterprise Survey, the country average is 14% in the Enterprise Survey compared to 8% for EIBIS. For some countries, such as Romania, the difference is substantial.

The differences in survey results reflect several factors. First, the wording and sequencing of questions differs, with the Enterprise Survey taking a wider view of credit constraints. Second, the weighting philosophy differs. The published EIBIS results are based on value-added weights, which assign a higher weight to large firms. Large firms, in turn, tend to have easier access to finance. The Enterprise Survey, on the other hand, employs inverse probability weights. The weighting philosophy of the EIBIS is useful for tracking macroeconomic aggregates whereas that of the Enterprise Survey represents the experience of the “typical” firm. Third, the sectoral composition differs across surveys. The EIBIS, for instance, includes utility companies, which are excluded from the Enterprise Survey.

<sup>8</sup> To facilitate the comparison across surveys, this box presents the share of credit-constrained firms in the Enterprise Surveys relative to the population. Alternatively, one may show the prevalence of credit-constrained firms among firms needing a loan.

## The COVID-19 crisis

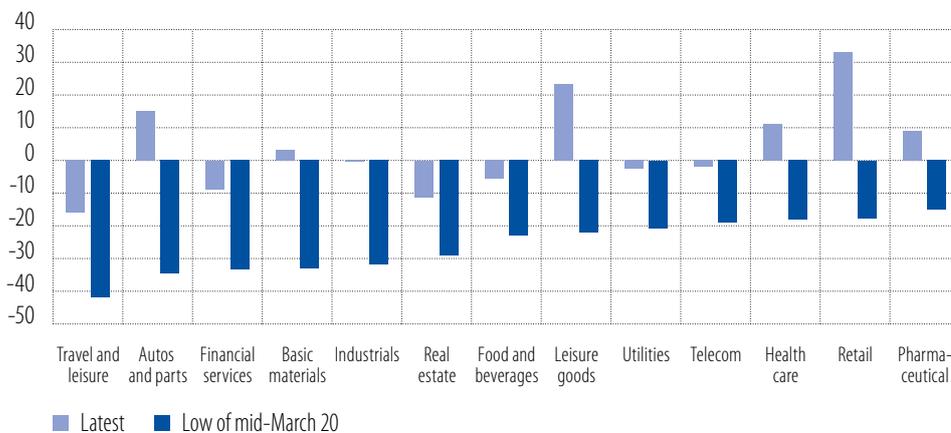
**The COVID-19 crisis was so incomparable to a standard cyclical downturn that even EU firms’ stronger resilience didn’t meet the challenge.** In the first half of 2020, the slump in GDP was more pronounced than that of the global financial crisis, which at that time was already thought to be exceptional. The second infection wave and the renewed need to implement lockdown policies mean that the crisis will last until a vaccine is widely distributed. Beyond the cyclical impact following each wave, the crisis will have structural implications as firms need to accelerate their digitalisation efforts and increase their resilience. The acceleration of those efforts will increase investment needs for years to come.

### The crisis affected firms unevenly

**European stock markets have rallied after a 40% collapse at the beginning of the COVID-19 crisis in March.** Worldwide stock prices plunged as countries across the globe began locking down. In the European Union, stock prices hit bottom mid-March – falling 30% from the beginning of 2020, according to Refinitiv. From then, the stock prices of non-financial firms rose almost continuously until September, recovering much of the losses incurred during the crisis. This evolution contrasts with banks’ stock prices. Bank stocks are still around 30% to 40% lower than they were before the crisis. Many analysts consider valuations to be on the high side given weak earnings expectations, which is a possible side effect of the ample liquidity provided by central banks.

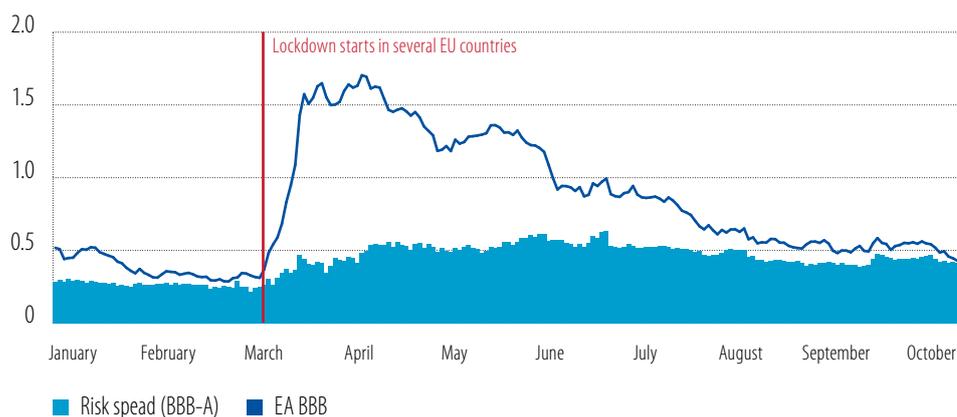
**Economic sectors have been affected unevenly by the crisis.** While equity valuations are relatively high, differences between sectors are also historically high. Stock markets have priced in a larger decline (since the beginning of 2020) for industrial goods, automobiles, and travel and leisure than for any other sectors. By comparison, pharmaceuticals, retail, telecom and healthcare services have not only rebounded from the lows in mid-March but are close to or above December 2019 levels (Figure 7). The crisis has hit some sectors harder than others. Transport or recreational activities have suffered, while IT or health firms have fared well (Ebeke, 2020). Preliminary evidence suggests that investors require significantly lower returns from more pandemic-resilient firms (Pagano et al., 2020).

**Figure 7**  
Changes in stock prices, by sector (%)



Source: Refinitiv and EIB Economics Department calculations.  
Note: Latest observation 10 October 2020, world indices.

**Figure 8**  
Corporate bond yields and risk spread (% per year, euro area, five-year bonds)



Source: Refinitiv and EIB Economics Department calculations.  
Note: Latest observation 12 October 2020.

**Corporations have learned lessons from the COVID-19 crisis.** While investment plans are mostly frozen in the short term, owing to extreme uncertainty, investment needs are greater than ever before. According to the EIBIS 2020, 40% of firms believe that the coronavirus pandemic will require them to adapt their product and services portfolio, 40% expect it to affect their supply chain and more than 50% said more digitalisation will be necessary. The crisis has accelerated the adoption of digital technologies, as the lockdown moved activities like events, learning, and, in some cases, even doctor's appointments online.

The lockdown has affected companies unable to make teleworking available to their staff. In some cases, the nature of the activity requires a physical presence. In other cases, such as in business-to-business services, teleworking can be an option but requires substantial spending on equipment. As the crisis continues, the need to improve teleworking infrastructure will become more pressing.

## Access to funding has been maintained, and firms have frontloaded liquidity needs

**After peaking in late March, corporate bond yields have trended downward and were back to pre-crisis levels in October 2020 – despite the second wave of the virus.** Figure 8 plots the corporate bond yield for five-year BBB euro area issuances for non-financial firms, together with an indication of the risk spread, the difference between BBB and A-rated bonds with five-year maturities. At the beginning of the crisis, corporate bond yields increased substantially – from 40 to 160 basis points in late March for BBB-rated bonds. The rise was shared across rating categories and therefore not associated with a large widening of risk spreads.<sup>9</sup> The bond yields of non-financial firms gradually fell back after the initial peak, and by September had settled back to levels before the crisis. Since then, those bond yields have moved in a narrow range. While the risk pricing returned to pre-crisis levels, many corporations are facing ratings downgrades (see Figure 35).

**The cost of bank borrowing has remained broadly unchanged since the start of the COVID-19 crisis.** Figure 9 shows the evolution of the composite nominal cost of bank financing for firms in the European Union and the four larger economies. Given the prominent role of bank finance, this cost has a profound impact on the price of external finance. The cost of bank borrowing – which declined by about 200 basis points since peaking during the sovereign debt crisis – has remained almost unchanged since the start of the COVID-19 crisis.

**The ECB's intervention protected firms at the very start of the coronavirus crisis.** The ECB reacted quickly and boldly to the crisis, effectively maintaining the flow of credit (Altavilla et al., 2020). Firstly, risk premiums did not substantially increase, primarily because the bold policy intervention maintained confidence. Secondly, the spread between the cost of finance for firms in the more vulnerable economies, those with higher levels of public indebtedness, and firms in other economies has not increased during the COVID-19 crisis. The developments contrast with the sovereign debt crisis and show how successful policy intervention has been this time.<sup>10</sup>

**Since the beginning of the coronavirus crisis, firms have tapped low-cost liquidity. Bank loans have picked up strongly, partly backed by guarantee programmes.** Euro area firms took on a record EUR 189 billion of bank loans in February and March. Lending to firms was 6.6% higher year-on-year in April, up from 5.5% in March (Figure 10). According to the latest euro area bank lending survey, the main reasons firms took on loans in the first quarter of 2020 were to pay for inventories and working capital. Loans for fixed investment declined in net terms. Because the financing was mostly related to liquidity needs, the rise in lending was noticeably stronger for short-term loans than for long-term loans.

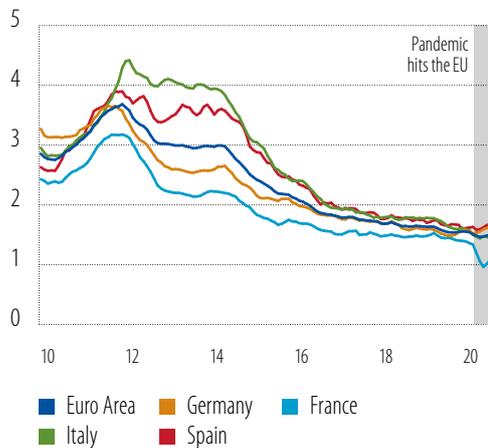
**From the start of the crisis, corporate borrowing differed greatly across countries.** Loan issuance in Slovenia and France doubled in the second quarter of 2020, whereas in Belgium, banks actually issued fewer new loans compared to the same quarter one year earlier.<sup>11</sup> The already high levels of corporate borrowing in the second quarter of 2019 could possibly explain this evolution. In addition, Spain (+45%), Italy (+28%), Slovakia (+43%) and Portugal (+48%) recorded increases in corporate lending activity well above the euro area average (+19%). Germany, on the other hand, registered no significant increase.

9 The spread between five-year BBB-rated and A-rated bonds increased from 30 basis points in late February to 60 basis points in June and stood at around 45 basis points at the beginning of October 2020. Collateralised loan obligation structures are more affected, however (Aramonte et al., 2020).

10 At the peak of the sovereign debt crisis, the interquartile range of 10-year sovereign bond yields in the euro area reached 400 basis points.

11 The numbers reflect the evolution of new business volumes of loans other than revolving loans and overdrafts, convenience and extended credit card debt, summed over all maturities, to non-financial firms.

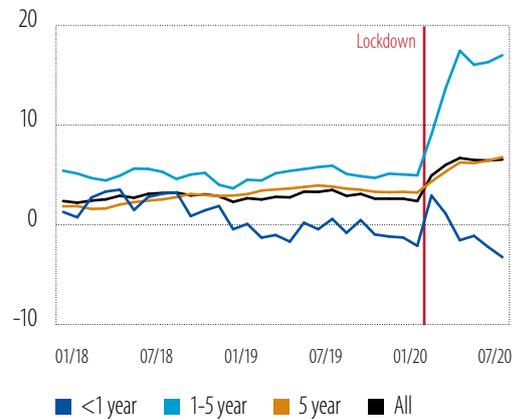
**Figure 9**  
**Cost of bank borrowing**  
(%, three-month moving average)



Source: Refinitiv and EIB Economics Department calculations.

Note: Euro area, five-year bonds, % per year. Latest observation August 2020.

**Figure 10**  
**Annual change in corporate bank loans (%)**



Source: ECB and EIB Economics Department calculations.

Note: Latest observation August 2020.

Since the start of the crisis, corporate debt issuance has been buoyant, supported by the ECB programmes: the Asset Purchase Programme (APP) and the Pandemic Emergency Purchase Programme (PEPP). From Figure 11, it is clear that since the start of the COVID-19 crisis, issuance activity has risen substantially compared to the past. Issuance activity has been far above previous levels in 2019 or 2018 and the deviation was well beyond the bounds of historical volatility. In August 2020, cumulated net issuance was double that of recent activity. To some extent, this strong activity partly reflects the impact of the Corporate Bond Purchase Programmes and the Short Term European Paper Programme (STEP)<sup>12</sup> conducted by the ECB.<sup>13</sup>

**The strong recent activity comes on top of an increase in corporate bond issuance triggered by the sovereign debt crisis.** Andersson et al. (2020) show that during the sovereign debt crisis, financial conditions weighed on investment. However, the resulting constraints on bank lending – illustrated by lower loans and higher spreads – were to some extent alleviated by strengthened corporate debt issuance. Part of the protracted increase in debt-to-loan ratios since the crisis reflects bottlenecks in bank credit supply. However, tightened bank lending has hurt small firms without market access more. While firms are diversifying their sources of funding, policy actions are needed to improve small firms' ability to access public markets for funds.

**Prior to the crisis, low rates and an uncertain environment led companies to accumulate liquid financial assets, mostly cash and deposits.** Figure 12 clearly shows the upward trend in cash and deposits as a percentage of GDP in the European Union, a rise that was shared across the three regions. The ratio increased from 14% in 2005 to 23% in 2019, while GDP increased by 9%. Despite evolving constantly over the long term, the ratio shifted by about 2% of GDP during the global financial crisis. The coronavirus pandemic is likely to spur another downward shift. Companies are unlikely to recover their pre-crisis liquidity buffer for some time.

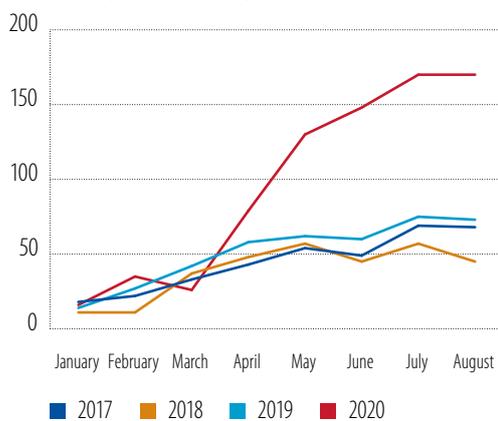
**Prior to the crisis, firms' cash positions cushioned them from adverse shocks.** Prior to the COVID-19 crisis, analysts debated the effect the larger cash positions were having on investment. Garrido and Maurin (2020) use a granular dataset of European non-financial firms to show that uncertainty pushes

<sup>12</sup> See ECB (2020).

<sup>13</sup> See EIB (2018), Box C, "Corporate bond market stimulus and access to finance for bank-dependent firms."

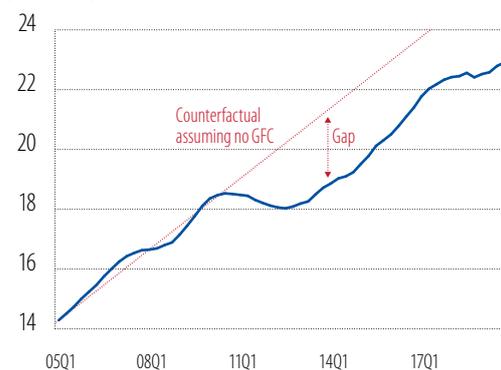
investment down while hoarding cash pushes it up. However, investment becomes more sensitive to cash, demand or income indicators as uncertainty rises. For a given level of cash, an increase in uncertainty therefore pushes down investment – a decline that is stronger for less cash-rich firms. As a result, the higher the uncertainty, the stronger the cash increase required to maintain investment, all other things being equal. In the EIBIS 2020, uncertainty is reported as a major impediment to investment with cash buffers dwindling because of the crisis. This combination does not bode well for investment, and indeed around 45% of firms expect to scale back their investment plans.

**Figure 11**  
**Cumulated net issuance of corporate debt**  
(Year-to-date, EUR billion)



Source: ECB and EIB Economics Department calculations.  
Note: Latest observation August 2020.

**Figure 12**  
**Cash and liquid assets of corporates**  
(% GDP)



Source: Eurostat and EIB Economics Department calculations.  
Note: Four-quarter moving average.

**The public policies implemented have maintained confidence and averted a liquidity crisis, but at the cost of higher debt levels.** Despite waves of corporate downgrades, firms have benefitted from their ability to issue debt to cover their higher liquidity needs. Credit has flowed to the corporate sector and liquidity issues have been mostly circumvented. However, this has come with a rise in corporate debt. As the second infection wave hits the economy, the recovery will be slower and accompanied by further rises in indebtedness.

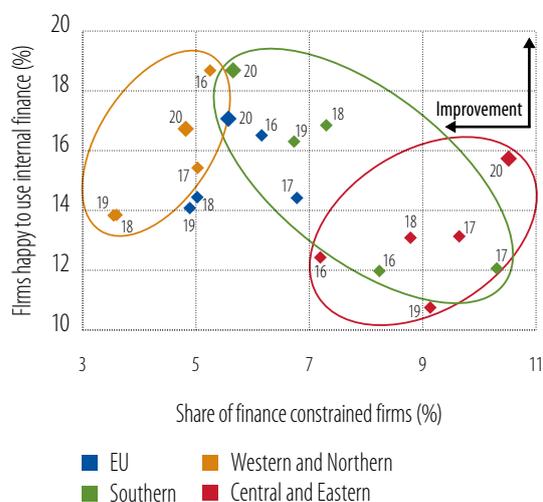
**A liquidity freeze would have had a devastating effect on trade credit, resulting in a cascade of defaults.** When the crisis hit, the vulnerabilities of longer and more geographically extended trade credit came to the fore, especially those related to international trade. While these risks can be mitigated by financial intermediaries, the bulk of the exposures associated with supply chains is borne by the participating firms themselves, through inter-firm credit. Given the prevalence of the US dollar in trade financing, measures such as central bank swap lines – which ease the conditions of dollar-based credit – cushioned the pandemic’s impact on global value chains (Boissay et al., 2020).

### The crisis will drastically reduce firms’ net revenues

**Overall, the coronavirus crisis unfolded very differently from the global financial crisis and the sovereign debt crisis.** During the sovereign debt crisis, the flow of credit dried up as banks’ funding tightened along with the European sovereign bond market. As the cost of external finance increased and access to finance was tightened, companies were forced to deleverage under harsh conditions. Many firms were forced to reduce their capital expenditure. During the COVID-19 crisis, firms first shored up their liquidity and stockpiled cash, at the cost of higher indebtedness. The low cost of debt made this stockpiling sustainable in the short term. However, the lockdown drastically reduced profits and therefore the capacity to pay back debt or to invest.

The very large decline in demand will hurt revenues and the damage is likely to be greater for firms that rely more on internal finance and face tighter conditions for external finance. In Figure 13, we correlate two results from the EIBIS: one indicator measuring finance constraints and another that looks at the willingness to rely on internal finance. Financial constraints hamper investment less when the desire to access external funds is weaker. On the figure, investment financing conditions improve as we move upwards or to the left. Two features emerge: Central and Eastern Europe are in the weakest position and, conversely, Northern and Western Europe are in the most favourable position. Southern Europe, however, has moved from an adverse environment, similar to that of Central and Eastern Europe, to a more benign one, closer to that of Northern and Western Europe. This swing took place from 2017 to 2018, and little change was recorded in 2019.

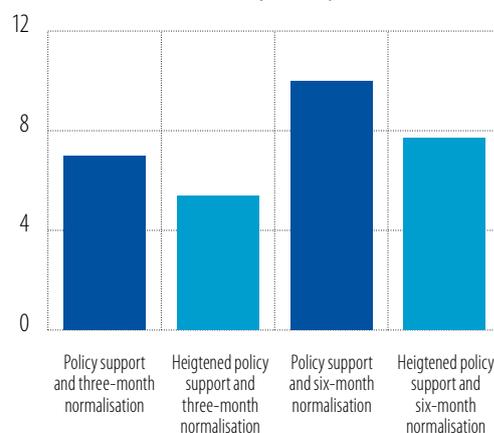
**Figure 13**  
Finance constraints vs. willingness to use internal finance



Source: EIBIS 2016-2020.

Note: See footnote 5. The dark blue, orange, green and red dots respectively refer to the European Union, Northern and Western, Southern, Central and Eastern Europe. The numbers indicate the year.

**Figure 14**  
Net revenue reduction according to various scenarios (mean, % of total assets)



Source: ORBIS and EIB Calculations.

Note: See Maurin and Pal (2020). Net revenues correspond to profits before amortisation and taxes.

**Firm revenues fell drastically during the lockdown, and are still being affected.** For firms, the COVID-19 crisis materialised in several steps. Firstly, liquidity buffers were depleted when closures stopped or radically reduced business activity. This period was followed by a fairly long period of normalisation with reduced internal funding capacity. To illustrate the magnitude of the net revenue loss, we analyse a scenario based on 1.4 million firms, stressing revenues and costs. The sales contraction during the lockdown is commensurate with the decline in turnover and economic confidence indicators recorded during the worst of the crisis in April 2020, or 35%.

**Costs adjust asymmetrically and imperfectly to sales in the short-to-medium run, but some components have been financed by public policies.** Some of the costs remain fixed, while some can be adjusted or benefit from policy intervention. Sales and costs are not independent of each other, however. When firms face a change in activity, they adjust their production. When activity goes down, firms reduce their expenditure mainly by reducing their consumption of intermediate products. They also lay off some of their employees. Finally, they can reduce other charges such as rent (by reducing the physical space they occupy) energy consumption or insurance contracts. The various policy interventions such as forbearance<sup>14</sup>, tax exemptions or temporary unemployment schemes have helped to alleviate some of the additional costs compared to a non-crisis period.

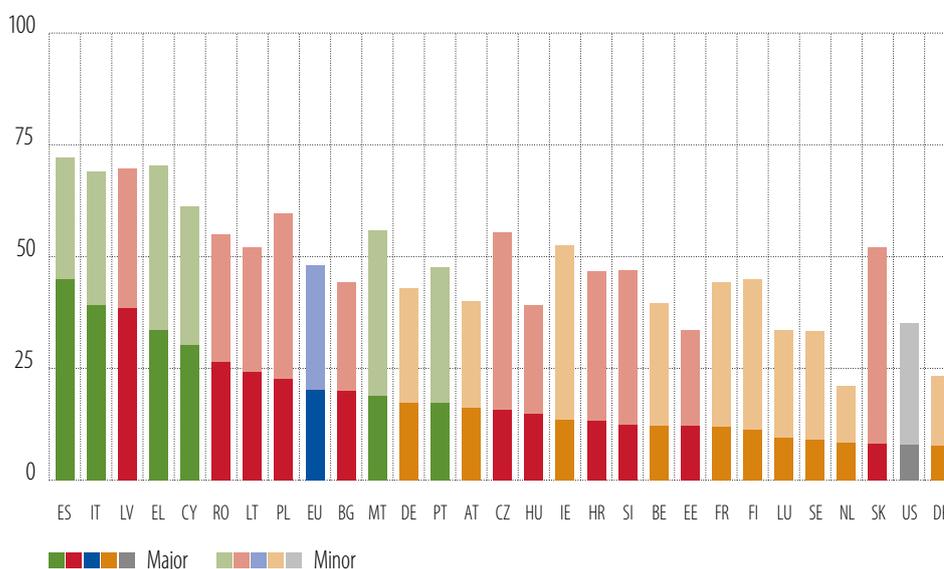
<sup>14</sup> A special agreement between the lender and the borrower to delay the payments of debt obligations.

**We estimate the loss in net revenues resulting from the lockdown and the normalisation period using a simplified accounting identity of net revenues.** Using a dataset comprising 1.4 million firms, we estimate the cost elasticity to sales and calibrate the policy support.<sup>15</sup> We then develop four scenarios to account for the possible impact of the crisis. The scenarios are based on views on (1) the strength of the policy support, for which we consider two cases; and (2) the length of the normalisation period, which can either be three or six months. As infection waves are likely to continue until a vaccine is widely distributed, the analysis emphasises the key role of the length of the normalisation process.

**Estimates suggest that firms could face declines in net revenues of 5.4% to 10% of total assets as a result of the crisis.** As shown in Figure 14, the unweighted mean reduction in net revenues could range from 5.4% to 10% of total assets across the four scenarios combining the length of the normalisation period, from three to six months, and the size of the policy support. A longer normalisation process would be more adverse, adding a further decline of around 1.5% of total assets when the period is extended by three months. Compared to the normal policy support, heightened policy support would further limit the reduction in net revenues by 3 percentage points for a long normalisation period and 1.7 percentage points for a shorter period.

**Access to finance remains a major long-term impediment to investment in several EU economies.** Internal finance is deteriorating quickly, more than external finance, which has been supported by policy intervention. However, for structural reasons, a lack of access to finance remains a long-term barrier to investment in several European economies, mostly located in Central, Eastern and Southern Europe. Figure 15 shows that the proportion of firms that consider a lack of access to finance to be a major impediment to investment ranges from 45% in Spain to 8% in Denmark. Denmark is the only European economy where the percentage of firms considering a lack of access to finance to be a major issue is lower than in the United States.

**Figure 15**  
**Post-pandemic – lack of finance a major impediment**



Source: EIBIS 2020.

Note: Orange bars represent Northern and Western Europe, while green stands for Southern Europe and red represents Central and Eastern Europe. Grey represents the United States.

<sup>15</sup> A simple relation relates the change in net revenues to the change in sales minus the change in costs:  $\Delta \text{Net revenues} = \Delta \text{Sales} - \Delta \text{Costs}$ . We then break down costs into the four main items: employee costs (compensation and social contributions), material costs (intermediate consumption of material assembled or used in the production process), financial costs and other costs (such as rent, administrative costs, insurance, energy consumption – these do not include depreciation):  $\Delta \text{Costs} = -\Delta \text{Employee Costs} + \Delta \text{Fin. Costs} + \Delta \text{Adm. Costs} + \Delta \text{Material Costs}$ . Sales and costs are not independent of each other, however. However, for various reasons, costs do not fully react to sales in the short-to-medium term – their elasticity is below one and varies across cost components:  $\Delta \text{Costs} = \alpha \cdot \Delta \text{Sales}$ , with  $0 < \alpha < 1$ . As a result, profits are pro-cyclical. The policy support is a subsidy illustrated by an increase in cost elasticity. See Maurin and Pal (2020) for technical details.

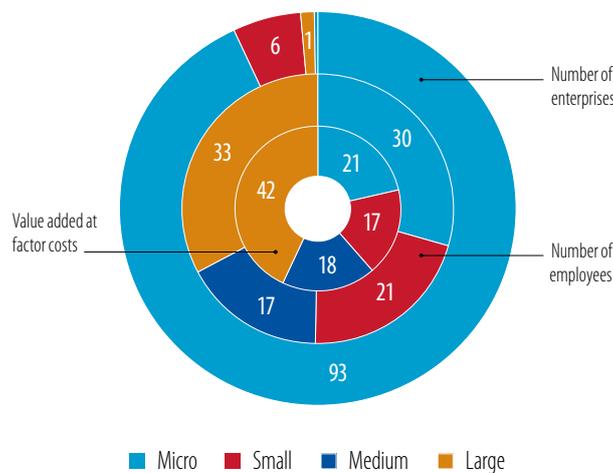
**Government loan guarantees helped to keep credit accessible for firms, but looming rises in non-performing loans may lead to tightened credit.** According to the ECB July 2020 Bank Lending Survey (BLS), so far, credit conditions have remained favourable for corporate loans, which are supported by guarantee programmes. However, banks expect a considerable tightening of credit conditions for corporate lending. The expected end of state guarantee programmes in some large euro area countries will have an impact, as will continued high levels of uncertainty caused by the pandemic. Banks also reported that since the start of the coronavirus crisis, non-performing loans had been causing credit tightening and had affected the terms and conditions for all loan categories in the first half of 2020. Prior to the COVID-19 shock, non-performing loan ratios were trending downward in most countries, and had reached 3.4% of total loans in the euro area at the end of 2019.

## The specific environment of small businesses<sup>16</sup>

**Small businesses contribute significantly to European job creation and economic growth** (Figure 16). In 2018, 25 million SMEs in the European Union made up 99.8% of all non-financial enterprises, employed around 95 million people (66.6% of total employment) and generated over EUR 4.35 trillion, or 56.4% of European added value.

**Figure 16**

**Employment and value added by SMEs in the European Union, 2018**



Source: ESBFO (Kraemer-Eis et al., 2020), based on European Commission (2019).

**While SMEs are relevant across the EU corporate ecosystem, their importance differs across regions.** In the case of employment, SMEs in Greece and Cyprus accounted for more than 80% of total employment, while in France, Germany, Denmark and the Netherlands the SME employment share was less than 65%, and in the United Kingdom the share came in just shy of 55% (European Commission, 2019).

**The economic outlook is particularly bleak for SMEs.** European SMEs' confidence is at the lowest level ever documented, decreasing 25% from the end of 2019 (SME United, 2020). This strongly negative result, clearly due to the effects of the COVID-19 crisis on the European economy, is even well below the historic low of the financial crisis in 2009. Nearly all European SMEs (90%) reported having lost revenue as a result

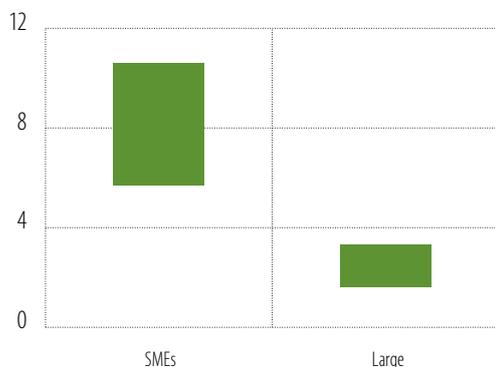
<sup>16</sup> Large parts of this section are based on Kraemer-Eis et al. (2020), and the latest issue of European Investment Fund's European Small Business Finance Outlook (ESBFO). The ESBFO is published annually (typically in September) by the Research and Market Analysis division of the European Investment Fund (EIF) and provides an overview of SME financing in Europe.

of the lockdown, with about two in ten SMEs having lost 100% of their revenue for several consecutive weeks (SME United, 2020). With most liquidity support measures being debt-focused, SME insolvency risks could increase dramatically.

**Several factors explain why SMEs are relatively more affected by the current crisis.** On the supply side, their small-scale business models and limited workforce make dealing with absenteeism more challenging, for example, if their workers are subjected to obligatory quarantine measures. They typically also have less diversified supply channels, increasing their vulnerability to supply chain disruptions. SMEs are also ill-equipped to deal with social distancing regulations. A recent survey on teleworking practices, for example, brought to light a significant gap in the prevalence of teleworking between SMEs (10% to 20%) and large firms (48%), with the most important reason cited being a lack of appropriate digital infrastructure (Organisation for Economic Co-operation and Development (OECD), 2020). On the demand side, SMEs represent a disproportionate share of companies in sectors hit most severely by the crisis, such as the recreational, hospitality and construction sectors.

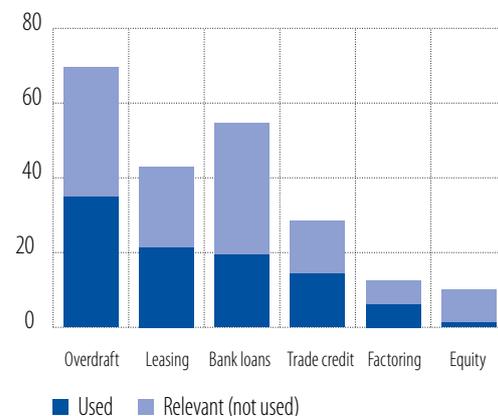
**Firm estimates suggest that the net revenue decline resulting from the crisis is more pronounced for SMEs (Gourinchas et al., 2020).** We reproduce the estimate conducted in Figure 14 and find that the computations based on the unweighted mean of the whole sample mask important differences across firms' sizes. By grouping the four scenarios considered earlier, SMEs (companies with less than 250 employees) would suffer a reduction in net revenues of 5.7% to 10.6% of assets (Figure 17).<sup>17</sup> Larger firms (with more than 250 employees) would only lose about 1.6% to 3.3%.

**Figure 17**  
**Interval of net revenue reduction by firm size (mean, % of total assets)**



Source: ORBIS and EIB calculations.  
Note: See Maurin et Pal (2020).

**Figure 18**  
**Preferred sources of external financing for euro area SMEs (second half of 2019)**



Source: European Investment Fund's European Small Business Finance Outlook - ESBFO (Kraemer-Eis et al., 2020), based on ECB SAFE (ECB, 2020).

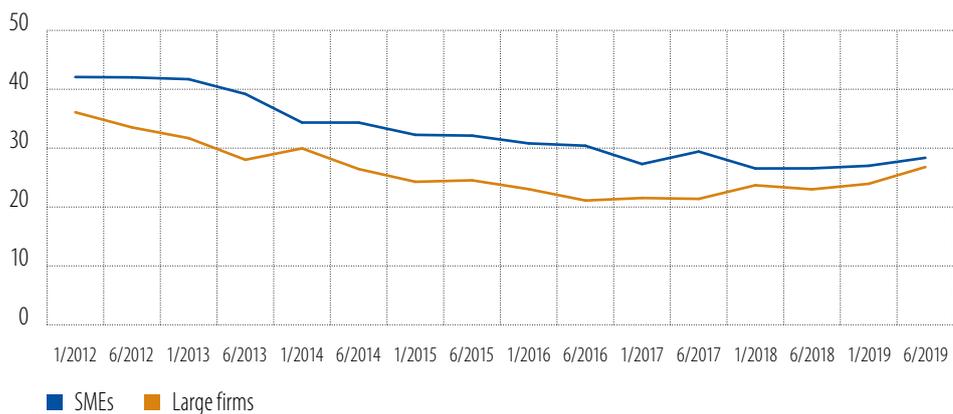
## Small businesses' access to finance

**Bank products (loans and overdrafts) are by far the most popular financing instruments, followed by leasing and hire-purchase (instalment plans).** Equity and factoring make up just a small fraction of overall SMEs' external financing needs (Figure 18). In general, the composition of SME financing does not vary widely over time, although we did observe a decrease in the use of overdrafts, together with a minor decrease in the use of bank loans and trade credit during the second half of 2018. Unfortunately, the SAFE survey (the basis for Figure 18) does not report alternative financing instruments such as crowdfunding, even though they have gained popularity in SMEs' financing mix in recent years.

<sup>17</sup> Within the SME group, the differences between micro (fewer than ten employees), small (between 10 and 49 employees) and medium enterprises (between 50 and 250 employees) are much more contained, with impacts ranging between a low of 5.4% to 6.3% and a high of 10.2% to 11.7%.

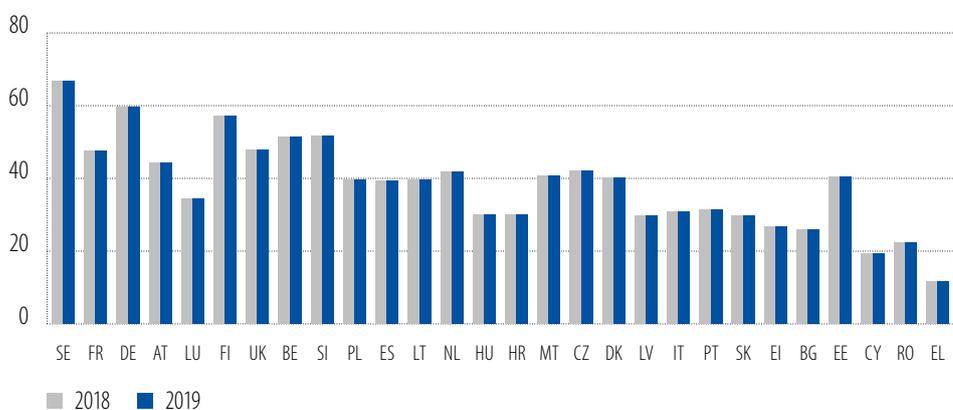
**Compared to large firms, SMEs are perceived as riskier investments.** Several factors are behind this. Firstly, they are young, small, less transparent and, in many cases, family-run and owned by a single individual. Secondly, their financial structure is more rigid than that of large companies as they are more dependent on banks, and their capacity to substitute external financing sources is more limited. They have a higher exposure to idiosyncratic shocks and tend to have less collateral. Moreover, estimating their creditworthiness is more challenging, as they are younger and subject to fewer reporting obligations.

**Figure 19**  
**Euro area firms ranking access to finance as a highly important issue (% of respondents)<sup>18</sup>**



Source: ESBFO (Kraemer-Eis et al., 2020), based on the ECB.

**Figure 20**  
**The EIF SME Access to Finance Index**



Source: Torfs (2020).

**The lockdown measures introduced in the wake of the initial coronavirus outbreak had a severe impact on European SMEs' liquidity needs.** As revenues dried up, about four in ten SMEs reported experiencing liquidity issues as a direct consequence of the economic lockdown. This increases to five in ten for the most affected parts of the economy, such as hospitality and the retail and construction sectors (SME United, 2020). Even with extensive policy support measures, it is estimated that over half of EU firms faced urgent liquidity needs after a three month lockdown period, adding up to a total minimum liquidity shortfall of close to EUR 100 billion, which affected SMEs more significantly (Maurin et al., 2020). The dramatic rise in liquidity needs occurred in the context of worsening finance conditions in 2019 (Figure 19), as the

<sup>18</sup> The SAFE wave, referred to as HY2/2020, was in part run in early 2020 and asked respondents about their experiences in the previous six months. It therefore does not include the impact of the COVID-19 crisis.

share of euro area SMEs that consider a lack of finance to be a critical problem<sup>19</sup> increased slightly during the second half of 2019, to 27%. This aggregate percentage hides vast country-level differences within Europe, which range from as low as 13% for Finland, to as much as 43% for Greece.

**The external financing market for EU small businesses is characterised by strong disparities among countries.** To synthesise the various sources of information related to SME access to finance, we use the EIF SME Access to Finance (ESAF) Index.<sup>20</sup> The ESAF Index is a composite indicator that summarises SME access to finance for all 27 EU Member States and the United Kingdom. It provides a convenient benchmark for the overall SME financing market in the EU Member States, as well as instrument-specific sub-segments. The index contains four sub-indices, three of which are related to different financing instruments (loans, equity, credit and leasing), while the fourth covers the general macroeconomic environment. The 2019 ESAF ranking is headed by Sweden, with France and Germany completing the top three. Compared to 2018, Sweden retains the top spot in the ranking. Greece is last on the ESAF ranking for the seventh consecutive year in a row, and its gap with the next to last country, Romania, is growing.

## Bank loans for small businesses, volumes and pricing conditions

**In the six months leading up to June 2020, borrowing costs for small borrowers declined to record lows (Figure 21).** The magnitude of this decline depends on the loan maturity. Borrowing costs for small loans, a good proxy for SME lending, have continued to fall in recent months, in particular for short and medium-term maturities. Long-term borrowing costs for small loans have stagnated. These evolutions contrast with the large loans segment, where short and medium-term borrowing has become slightly more expensive since the start of the pandemic, but long-term borrowing costs have declined.

**Over the 12 months leading up to June 2020, the interest rate on small loans<sup>21</sup> decreased in all but four countries<sup>22</sup> (Figure 22).** In Ireland and the Baltic countries, borrowing costs for small borrowers increased, going against the general trend of declining rates. In Estonia and Ireland, borrowing rates increased more strongly for small loans (increasing size spread), thereby increasing the competitive disadvantage of SMEs vis-à-vis larger firms. Borrowing costs decreased most strongly for Greek, Portuguese and especially Finnish SMEs. In Greece, the drop in borrowing rates was common across all size segments of the lending market, whereas in Finland and Portugal, the decline was driven by a drop in the cost of SME lending, as evidenced by the drop in the size spread.<sup>23</sup>

**Issuance of small loans<sup>24</sup> to non-financial firms in the euro area increased drastically during the second quarter of 2020, exceeding EUR 50 billion in April (Figure 23).** This increase contrasts with the plateauing trend that emerged in early 2019. Over the entire second quarter, small business lending increased by 27% compared with the same quarter a year ago.

19 The rating corresponds to the intensity of the problem perceived by the respondent. A rating above seven on a scale of ten for the SAFE survey reveals a serious problem.

20 The index was developed by the EIF's Research & Market Analysis division. See Torfs (2020) for the most recent update of the ESAF Index.

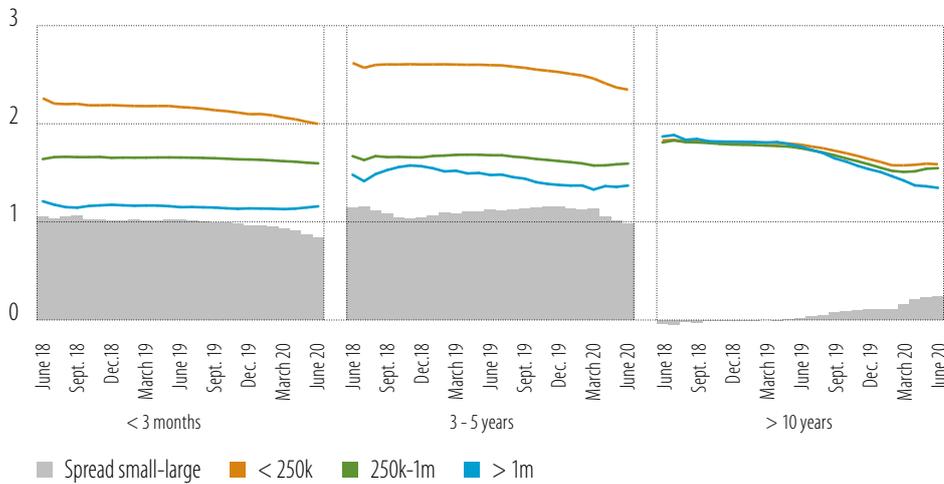
21 As measured by a 12-month backward looking moving average, to eliminate the influence of erratic monthly fluctuations.

22 For which data were available.

23 This is the difference between the cost of borrowing on small loans and on large loans.

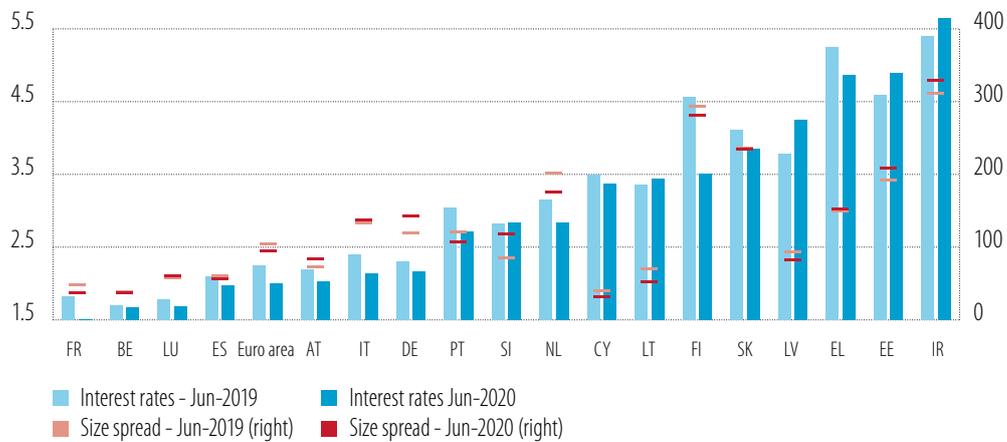
24 As shown by Hueriga et al. (2012), small loans, loans of less than EUR 250 000, are a good proxy for SME loans. To better reflect lending conditions to SMEs specifically, rather than small loans in general, the data exclude interest rates on revolving loans and overdrafts, since these instruments are used independently of firm size.

**Figure 21**  
Interest rates by loan size and maturity, and size spread (% , 12-month moving average)



Source: ESBFO (Kraemer-Eis et al., 2020), based on ECB.

**Figure 22**  
Interest rates on small loans and size spread in euro area countries (left axis: % and basis points; right axis: 12-month moving average)



Source: ESBFO (Kraemer-Eis et al., 2020), based on ECB.

Note: Small loans are less than EUR 250 000. The spread is calculated as the difference in the bank lending rates on small and large loans (exceeding EUR 1 million). Countries or data points for which no sufficient data were available are omitted.

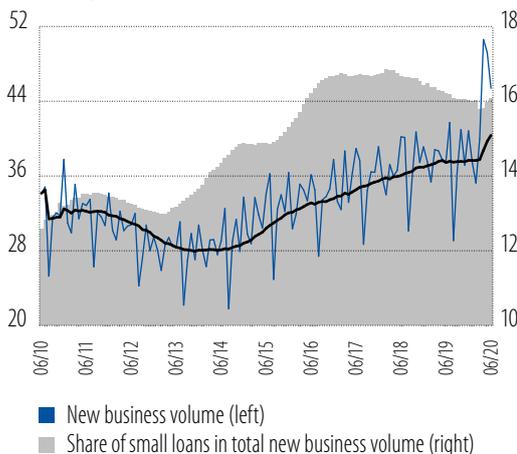
**The rise in corporate borrowing is a direct consequence of the policy measures implemented to limit the fallout of the COVID-19 crisis.** The financing support measures, which mostly targeted SMEs, led to a minor increase in the relative importance of small lending in the corporate debt market, as the 12-month moving average of the share of small lending to total lending increased slightly, to just over 16%, by June 2020.

## Securitisation

**A well-functioning securitisation market can support new loans to SMEs.** SME securitisation – which includes transactions backed by SME loans, leases and other products<sup>25</sup> – can provide indirect access to capital markets for SMEs by transforming illiquid loans into an asset class with adequate market liquidity. When analysing these securities, it is important to look not only at bank lending, but also at leasing companies, which form part of the securitisation market. Given that bank financing has been less available for leasing companies since the crisis began, it could be expected that SME securitisation is more relevant for leasing.

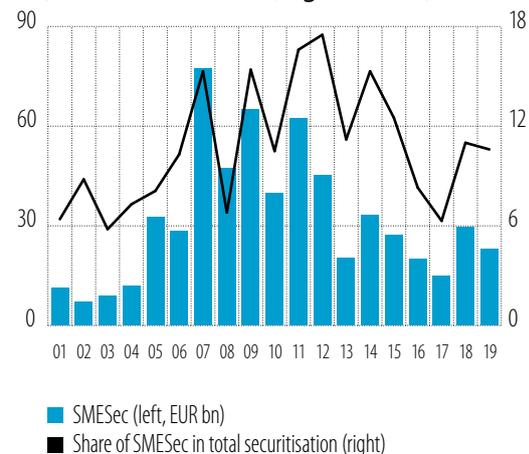
**Before the coronavirus outbreak, SME securitisation issuance was still suffering from the after-effects of the financial crisis. The coronavirus crisis hasn't helped.** The overall issued (and visible) volume of SME deals in 2019 was only EUR 23 billion (Figure 24). The market share of SME securitisation in overall securitisation issuance rose (with some volatility) from 6% in 2001 to 18% (of total yearly issuance) in 2012, the highest value ever registered in the European Union. This, however, was due to overall activity declining (while SME securitisation decreased slightly less). From 2014 to 2017, the share of SME issuance in overall activity slipped from 15% to 6.3%, based on shrinking SME securitisation volumes. In 2019 the share was 10.6%.<sup>26</sup> In the first quarter of 2020 there was no visible SME securitisation activity.

**Figure 23**  
**Small corporate bank loans in the euro area**  
(EUR billion)



Source: ESBFO (Kraemer-Eis et al., 2020), based on ECB data, loans to non-financial corporations (<EUR 0.25 million), new business volumes in the euro area (12-month backward moving averages).

**Figure 24**  
**Issuance activity of SME ABS in Europe**  
(left axis: EUR billion; right axis: %)



Source: ESBFO (Kraemer-Eis et al., 2020), based on the Association for Financial Markets in Europe (AFME).  
Note: SMESec: securitisation of transactions for small and medium-sized enterprises, equivalent to SME ABS.

**The base of investors in SME securitisation has not yet recovered, and a very small fraction of issuances are placed with investors.** The nature of the SME securitisation market changed from a developing market (pre-crisis, with most transactions placed in the primary market) to a purely retained/ECB repo-driven market during the financial crisis (with almost no placement on the primary market). The retention rate<sup>27</sup> increased from a pre-crisis level of below 50% in 2007 to values of 85% to 100% since 2009. This shift led to liquidity drying up and originators accepting higher costs as the repurchase agreements envisaged considerable haircuts on the face value of the notes. For individual countries, placed issuances of SME

25 For more information on the importance of leasing for SME finance, see Kraemer-Eis and Lang (2012).

26 Driven by negative market sentiment, but also by shrinking SME stocks in financial intermediaries' loan books. Moreover, during the crisis, the large volumes of synthetic SME securitisation transactions that were evidenced on SME portfolios pre-2007 (dominated primarily by German SMEs on the back of KfW's PROMISE programme) virtually disappeared.

27 This is the share of ABS remaining on the balance sheet of the issuer.

securitisation occurred only in Italy and the United Kingdom (EUR 0.7 billion each), as well as in Germany (EUR 0.5 billion) and Spain (EUR 0.3 billion), in 2019.

**Like other financial markets, the SME securitisation market is now suffering from the COVID-19 crisis.** At the start of the new crisis, transaction parties focused more on amending deal documentation than on deal origination (Moody's, 2020). Therefore, new issuance stalled. It remains to be seen if the second half of the year – which is traditionally stronger than the first half – will show a recovery. The impact of the crisis on SME securitisation asset quality and deal performance remains to be seen. At the beginning of the 2008 financial crisis, there was also a fear that the SME securitisation market would suffer from defaults, but the defaults didn't materialise. The recovery of the securitisation market is essentially tied to the economic recovery, which is in turn tied to the evolution of the pandemic. Any predictions about the future are therefore highly uncertain.

## Outlook for private equity and venture capital<sup>28</sup>

**Private equity is a form of equity investment in private companies that are not listed on the stock exchange.**<sup>29</sup> It is a medium to long-term investment, characterised by active ownership, for example by strengthening management expertise, delivering operational improvements and helping companies access new markets. Venture capital is a type of private equity focused on startups with high growth potential, supporting entrepreneurs with innovative ideas for a product or service that need investment and expert help in growing their companies.

**Venture-backed startups are historically vulnerable to recessions and economic slowdowns.** The dotcom crisis in the early 2000s and the global financial crisis in 2007-2008 led to significant reductions in fundraising and investment. In particular, the financial crisis led to a near collapse of the European private equity market, as fundraising and investment volumes declined by 75% from their pre-crisis levels (Figure 25). Similar events occurred on the venture capital markets.

**In 2019, European venture capital and private equity markets rose to new heights after a decade-long recovery (Figure 25).** Compared to 2018, private equity investment volumes rose by 12% to EUR 95 billion. Growth on the venture capital investment market was even stronger, with 2019 volumes just shy of EUR 11 billion. Fundraising also grew significantly on both markets. By the end of the year – right before the coronavirus pandemic would ravage the European economy – it appeared that the European private equity and venture capital markets had finally erased the losses inflicted by the global financial crisis, and had recovered beyond pre-crisis levels.

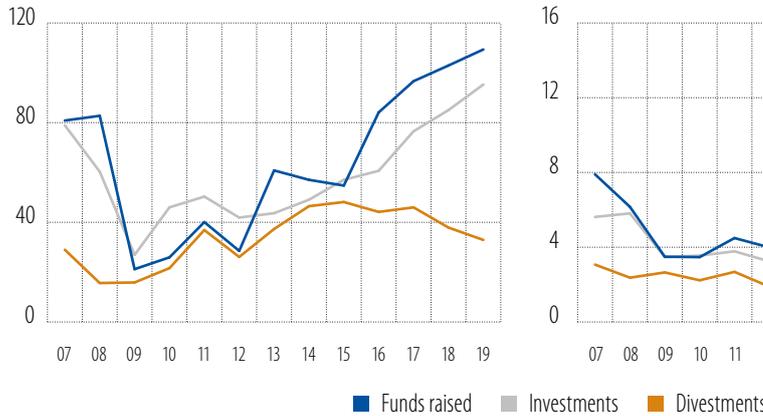
**While it remains unclear whether the coronavirus pandemic will have an equally devastating impact on the European private equity and venture capital markets as the 2008 financial crisis, the general consensus is that investment activity has stalled.** The pandemic tore through the EU economy, inflicting a series of complex supply and demand shocks, meaning that the impact on the private equity and venture capital markets is different from 2008. A complicating factor is the well-known opaqueness of the private equity and venture capital markets, resulting in the high degree of uncertainty about the initial reaction on these markets in Europe. Figure 27 and Figure 28 plot the indexed growth of private equity and venture capital investments in Europe until the first quarter of 2020, according to various leading data providers.<sup>30</sup> It reveals a substantial lack of consensus with regard to the short-term developments of the European private equity and venture capital ecosystem in the first half of 2020.

<sup>28</sup> Large parts of this section are based on Kraemer-Eis et al. (2020a) and Kraemer-Eis et al. (2020b), a recent EIF working paper that analyses the sentiment on European private equity and venture capital markets.

<sup>29</sup> See Invest Europe at <https://www.investeurope.eu/about-private-equity/private-equity-explained/>.

<sup>30</sup> Invest Europe: "Quarterly Activity Indicator Q1 2007 - Q3 2015"; PitchBook: PitchBook database [Accessed: 2 July 2020]; Preqin: Preqin database [Accessed: 3 July 2020]; Dealroom and Sifted, 2020; Unquote (and Aberdeen Standard Investments): "Private Equity Barometer", Q1 2020 edition; CB Insights (and PwC): "MoneyTree Report Q1 2020".

**Figure 25**  
Fundraising, investment and divestment amounts by private equity firms in Europe (EUR billion)



Source: Kraemer-Eis et al. (2020b), based on data from Invest Europe.

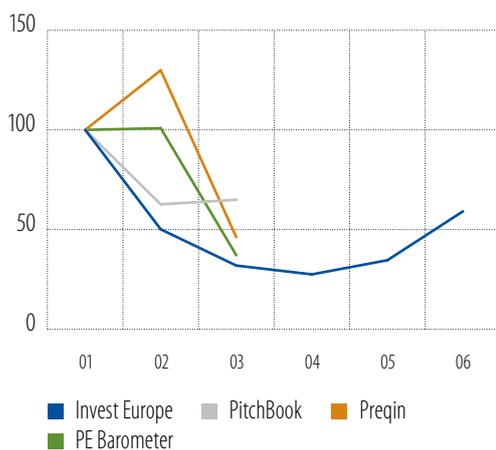
**Figure 26**  
Fundraising, investment and divestment amounts by venture capital firms in Europe (EUR billion)



Source: Kraemer-Eis et al. (2020b), based on data from Invest Europe.

Analysts point to the increased availability of capital that has been raised but not used as a factor that could potentially shield the private equity and venture capital industry from the worst of the COVID-19 crisis. In Europe, unallocated capital (dry powder) almost doubled in 2019 compared with 2007. However, the share of dry powder in total assets under management actually decreased. One reason for this could be the quicker deployment of private equity and venture capital funds. Anecdotal evidence suggests that deployment dropped to three to four years vs. five years in the past.

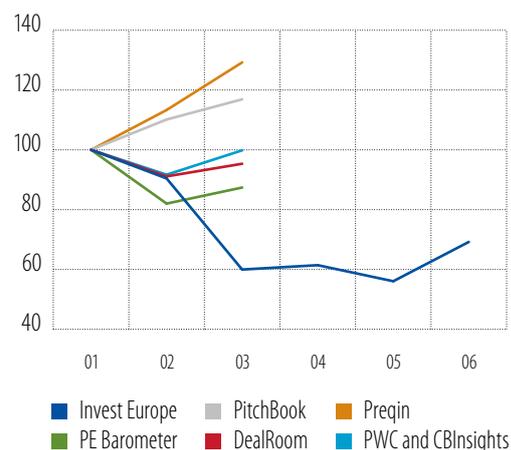
**Figure 27**  
Outlook for private equity investments in Europe



Source: Kraemer-Eis et al. (2020b), based on data from Invest Europe, PitchBook, Preqin, Dealroom, Unquote, CB Insights.

Note: 2019:Q4=100. The plain line "Invest Europe" refers to the episode of the great financial crisis.

**Figure 28**  
Outlook for venture capital investments in Europe



Source: Kraemer-Eis et al. (2020b), based on data from Invest Europe, PitchBook, Preqin, Dealroom, Unquote, CB Insights.

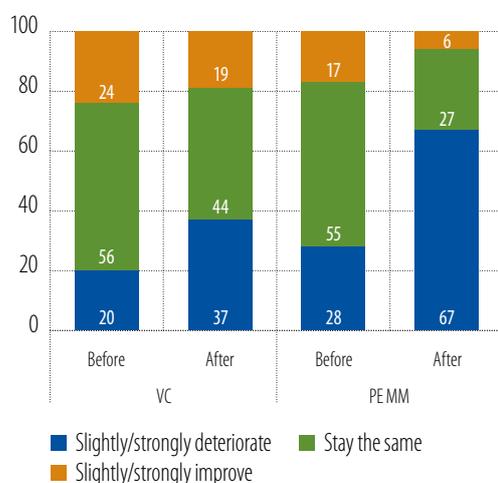
Note: 2019:Q4=100. The plain line "Invest Europe" refers to the episode of the great financial crisis.

The recent wave of the EIF's signature business angel, venture capital and private equity survey can be used to gauge how the pandemic changed the sentiment of European fund managers. The survey was launched just prior to the COVID-19 outbreak in Europe. To measure the initial impact of the crisis

on European private equity and venture capital activities, we analyse discrepancies in responses received before and after a certain cut-off date, which we set at 1 March 2020. All surveys were closed mid-March.<sup>31</sup>

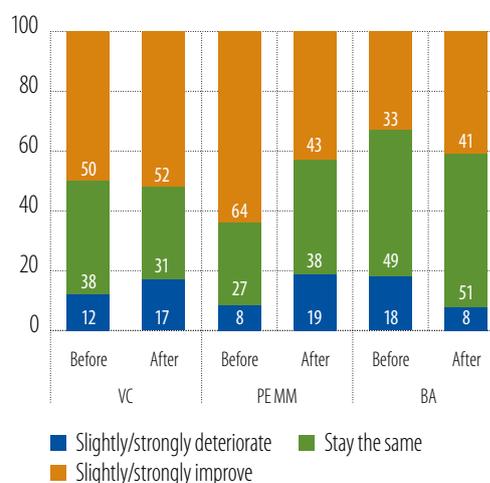
**The pandemic caused a significant deterioration in fund managers' optimism regarding fundraising (Figure 29).** Following the onset of the pandemic, almost four in ten venture capital fund managers expected the fundraising environment to deteriorate, more than twice the number before the pandemic hit. Private equity middle market fund managers became even more pessimistic, as nearly seven in ten of them predict fundraising will become more challenging in the year to come.<sup>32</sup>

**Figure 29**  
**Fundraising environment, next 12 months**  
(Percentage of respondents)



Source: Kraemer-Eis et al. (2020b).  
Question: Over the next 12 months, how do you expect the fundraising environment to develop?

**Figure 30**  
**New investments, next 12 months**  
(Percentage of respondents)



Source: Kraemer-Eis et al. (2020b).  
Question: To venture capital/private equity managers: How do you expect the number of your new venture capital/private equity mid-market investments to develop over the next 12 months? Question to Business angels: How do you expect the number of your new investments to develop over the next 12 months?

**The COVID-19 crisis does not seem to influence the outlook of future investment opportunities to the same extent as the global financial crisis (Figure 30).** All three investor groups expect a net increase<sup>33</sup> in new investments in the year to come. The sentiment could reflect investors' expectation that firms battered by the pandemic will need to raise more funding, or alternatively that declining valuations could create new opportunities.

**A strong policy response in support of the private equity and venture capital markets is imperative to maintaining long-term growth** (Samila and Sorenson, 2011). A strong response is also a desirable strategy given the significant public policy efforts to build a thriving risk-capital ecosystem for SME financing in Europe over the past decade (as well as in the context of creating a Capital Markets Union). For this reason, the EIF – as a leading provider of SME finance in the European Union and the largest

31 Please note that, in our terminology in this chapter, "after 1 March" means after and including 1 March. The cut-off date was chosen to ensure that the number of responses in both categories (such as received before and after that date) is sufficiently high to avoid random differences in market sentiment between the two respondent groups. Moreover, we identified several changes in the political reaction to the crisis that support our choice of this particular date. See Kraemer-Eis et al. (2020b) for details.

32 Leaving aside differences in the underlying business lines, another plausible explanation for the particularly acute difference between the before/after 1 March results for private equity middle market fund managers could be that the EIF Private Equity Mid-Market Survey ran for a longer period (compared to the other two surveys) in the course of March, and therefore it might have captured the aftermath of the crisis to a greater extent.

33 Net increase means the share of respondents expecting an increase minus the share of respondents expecting a decrease.

public investor in the venture capital ecosystem in Europe – is considerably stepping up its efforts, both in the equity and debt markets.<sup>34</sup> The EIF's efforts are in conjunction with the EIB Group's response to the pandemic and in close cooperation with the European Commission.

## Policy support can contain the damage to investment

**Lower net revenues resulting from the lockdown and reduced activity will be passed on to corporate balance sheets.** In a simplified balance sheet approach, net revenues are retained and converted to capital to finance cash and liquid assets, real investment and debt reduction. A loss in net revenues will therefore result in a reduced cash balance, increased indebtedness and/or lower investment. In this section, we show how the deployment of policy support must rely on a proper sequencing of initiatives over time.

### Less ability to self-finance, and a trade-off between debt and investment

**History suggests that following downturns, firms' cash buffers absorb a part of the reduction in net revenues.** This is likely to happen in the European Union, especially as EU firms entered the crisis with sizeable cash positions (Figure 12). During the lockdown period, these positions decreased, but post-crisis, firms will likely not fully restore their cash positions. We estimate that over the global financial crisis and sovereign debt crisis, cash positions were reduced by 2% of GDP. According to current forecasts, during the coronavirus crisis output will be reduced by up to twice as much as during the financial and sovereign debt crises. Moreover, given the current very low interest rate environment, returns on cash and liquid assets are almost nil. Following the coronavirus crisis, cash positions will therefore likely be drawn down more than during the Lehman Brothers crisis. The loss in net revenues is likely to be about 3% of GDP.

**According to the EIBIS, internal resources are used to finance 60% of investment (EIB, 2019).** This ratio is an average across firms. However, half of firms do not tap external finance. When firms do use external finance, their funding mix consists of 60% external finance and 40% internal finance (median values). These two extreme cases are considered below.

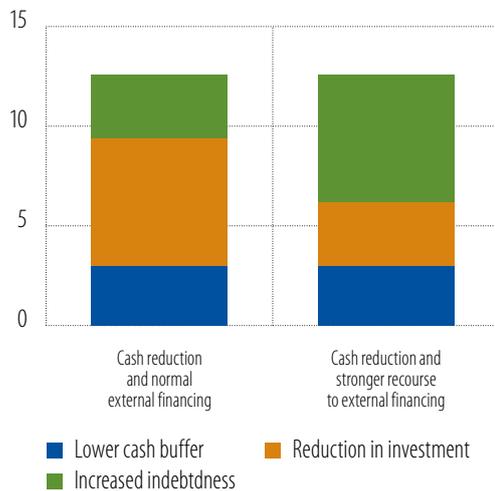
**In the "as usual" case, firms do not alter their financing pattern and continue financing two-thirds of their investment internally.** In this case, in the less adverse scenario presented in Figure 14, after drawing on cash positions, two-thirds of the remaining decline in net revenue would be absorbed by lower investment (a reduction of 6.4% of GDP). EU corporate investment would shrink by 48.5%. Debt would also help to fill the gap, and rise by 3.2% of GDP (Figure 31, left-hand bar).

**Alternatively, if corporations were to increase their use of external finance, the decline in investment would be more contained.** We use the EIBIS to calibrate this change and assume that the whole sample of firms uses external finance, even those that do not do so in a normal period. In this example, corporations that normally finance investment only through internal resources (around 50% of firms according to the EIBIS) use external finance. The share of external finance to investment would then rise from one-third to two-thirds. Following the decline in net revenues, investment would be reduced, but by only 3.2% of GDP (a fall of 24.3% compared with 2019 levels of investment). The cost, however, would be a higher level of indebtedness – to 6.4% of GDP (Figure 31, right-hand bar).

**Estimates suggest that the pandemic's impact on investment could be well above that of the global financial crisis.** During the global financial crisis, corporate investment fell by 19% (Figure 32). The larger decline in corporate investment following the coronavirus crisis is in line with forecasts that depict a much higher impact on GDP and European Commission findings of a cumulative drop in private investment of EUR 831 billion in 2020 and 2021 taken together (European Commission, 2020).

34 The EIF's debt products fall outside the scope of this working paper. For a brief overview, see Brault and Signore (2020).

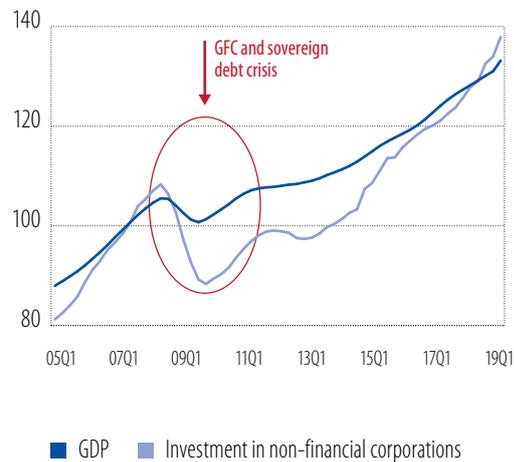
**Figure 31**  
Filling the gap: impact on investment and indebtedness (% of GDP, EU economy)



Source: Eurostat, ORBIS and EIB Economics Department calculations.

Note: Results under the benign scenario: heightened policy support and three-month normalisation period. See Maurin and Pal (2020).

**Figure 32**  
Historical perspective on GDP and non-financial corporate investment (index, 100=2007)



Source: Eurostat and EIB Economics Department computations.

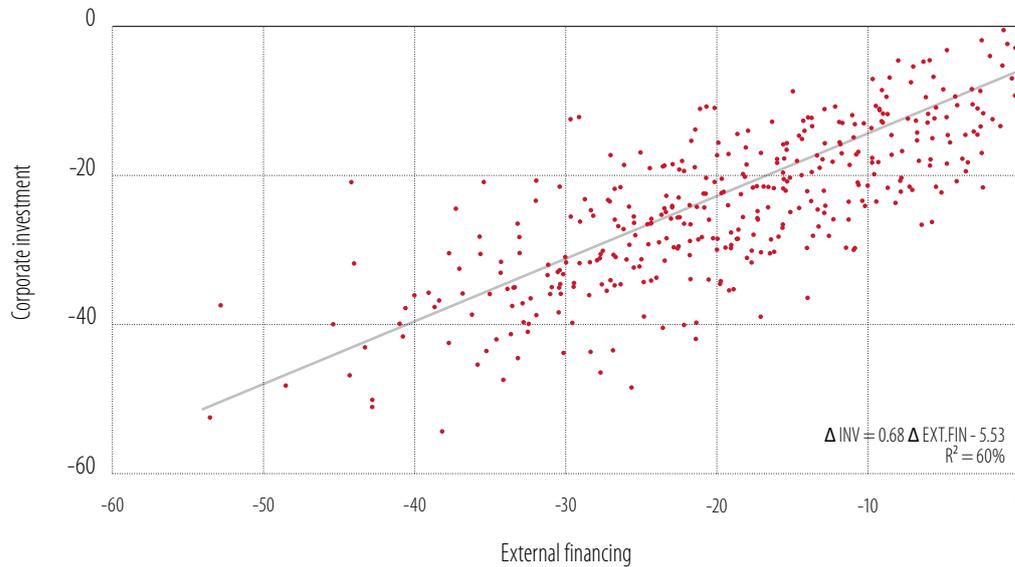
Note: Nominal values, fourth-quarter moving average to seasonally adjust the data. Last record Q4 2019..

**Model-based analysis using historical data confirms the link between the decline in net revenues and investment.**<sup>35</sup> We estimate a Vector Autoregressive model – a VAR – and calibrate a demand shock that triggers a 27% downwards deviation in gross operating surplus. That compares to the unconditional projection obtained from the model and the deviation corresponds to a net revenue loss over total assets of 5.4%. The comparison between the conditional and unconditional projections leads to several conclusions. Firstly, the shock is largely unprecedented, for all the variables in the model and even compared to the global financial crisis. Secondly, the shock triggers a maximum decline of 10% in real GDP. This result is similar to projections of major institutions, such as the ECB, European Commission, International Monetary Fund (IMF) and the OECD in the summer of 2020. Thirdly, in 2020, the median corporate investment gap, calculated as the difference between the conditional and unconditional projections, is around 25%.

**Model-based simulations strongly support the existence of the debt-investment trade-off.** The model estimated with Bayesian techniques helps to make a number of projections. We randomly select 400 conditional projections for which we plot the projected decline within the year after the shock to corporate investment and external financing. The results, presented in Figure 34, clearly show the existence of a strong relationship between the two. A strong decline in external financing is accompanied by a strong decline in corporate investment. The correlation between external financing and corporate investment is 60%. The estimated model therefore confirms the trade-off between leverage and corporate investment illustrated by the two extreme cases considered in the scenarios.

<sup>35</sup> We estimate a value-at-risk model comprising time series for real GDP, real corporate investment, three-month Euribor, gross operating surplus and external financing for the EU economy since 1999. Based on the model estimated with Bayesian techniques, we identify a demand shock with sign restrictions. See Maurin and Pal (2020) for more details.

**Figure 33**  
**The trade-off: larger investment decline or higher leverage?**



Source: Authors' estimates based on ECB and Eurostat.

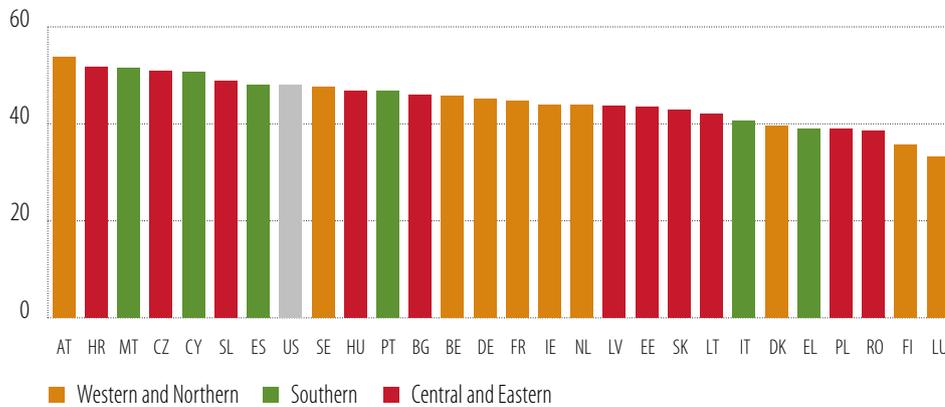
Note: Decline in external financing (x-axis) and in corporate investment (y-axis) associated with scenarios generating a median gross operating surplus 25% below its unconditional projection in 2020. The dots represent the minimum values reached within one year after the shock.

**Survey-based evidence confirms that investment will be affected.** Across the European Union, around 45% of European firms expect to maintain their investment plans, but a similar proportion, 45%, expect to cut or delay their investment plans. Figure 34 shows how firms plan to adjust their capital expenditure following the COVID-19 crisis.<sup>36</sup> The share of firms expecting to cut or delay investment plans is staggering, ranging from a low of 33% in Luxembourg to a high of 54% in Austria. A marginal share of firms expect to expand investment plans, possibly reflecting the digitalisation needs felt during the crisis or the need to increase the resilience of production chains.

**The COVID-19 crisis is likely to exacerbate finance constraints and therefore the investment gap.** Figure 35 depicts the proportion of firms reporting investment gaps for four categories of firms. The four categories separate firms by whether the COVID-19 will have/is having an impact on their activity in the short term and/or in the longer term. Each category separates firms into those that are finance-constrained and those that are not. In both cases, the proportion of firms reporting an investment gap tends to be higher when they are finance-constrained. The proportion is always higher for firms reporting that COVID-19 has a short-term impact, regardless of their region. Moreover, the difference in proportion is especially pronounced in Southern Europe and for those reporting a long-term impact.

<sup>36</sup> The question is one of the specific questions raised this year to gauge the impact of the COVID-19 crisis.

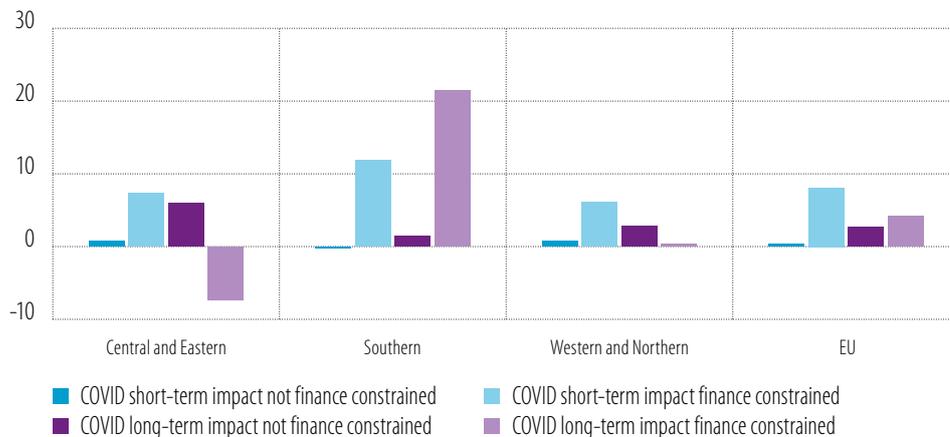
**Figure 34**  
**Corporates planning to cut investment as a consequence of the COVID-19 crisis (% of respondents)**



Source: EIBIS 2020.

Note: Orange represents countries in Northern and Western Europe, green is for Southern Europe, and red represents Central and Eastern Europe. The United States has a grey bar.

**Figure 35**  
**Investment gap, finance constraints and COVID-19 impact**



Source: EIBIS 2020.

## Longer-term uncertainty will likely have an impact

**The policy measures have succeeded in restoring confidence and avoiding a protracted tightening in financial conditions.** Figure 36 shows a financial condition indicator for the EU economy, a synthetic measure of the conditions for access to external finance based on more than 40 time series. Fuelled by high uncertainty, loss in confidence and a rise in risk aversion, the indicator rose sharply at the beginning of the crisis. The increase was short-lived, however, as various policy measures were announced and implemented quickly. These measures were forceful and credible enough to bring financial conditions back to their pre-crisis level. In Europe, the reappearance of cross-border market tensions has been avoided, but it is important to guard against pessimistic expectations that could become self-fulfilling (Pellegrino et al., 2020).

While acute financial constraints did not materialise, looming challenges will hamper the recovery in investment. The share of distressed firms at risk of default has started to increase (Figure 37). The rise is

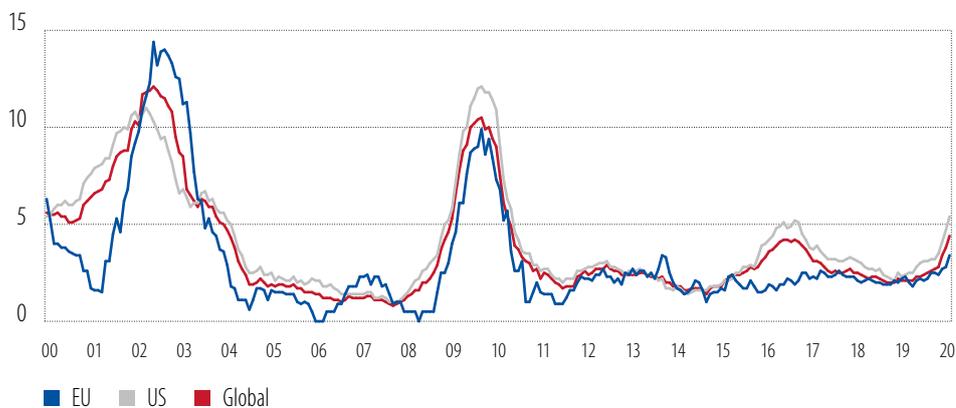
likely to continue and banks are expected to react to circumvent the rise in non-performing loans (IMF, 2020). In the June 2020 Bank Lending Survey, banks expect credit standards for enterprises to tighten considerably as credit risks rise.

**Figure 36**  
Financial condition indicator (index, de-meanned)



Source: ECB, Eurostat and EIB calculations.  
Note: See Anderson et al. (2020). A rise indicates a tightening. Last record: September 2020.

**Figure 37**  
Trailing 12-month speculative default rate (%)



Source: Standard and Poors and EIB calculations.  
Note: The global trailing 12-month speculative grade.

**This uncertain environment affects investment planning (Leduc et Liu, 2020).** In the EIBIS 2020, some 80% of EU firms consider uncertainty to be an impediment. Some 50% of firms even consider it to be a major impediment. The levels represent a substantial increase compared to previous years. As scientists discover more about the COVID-19 virus, policymakers are changing their response. Entrepreneurs are having difficulty anticipating what will happen. The possible succession of infection waves until a vaccine is widely distributed may lead firms to freeze their investment plans.

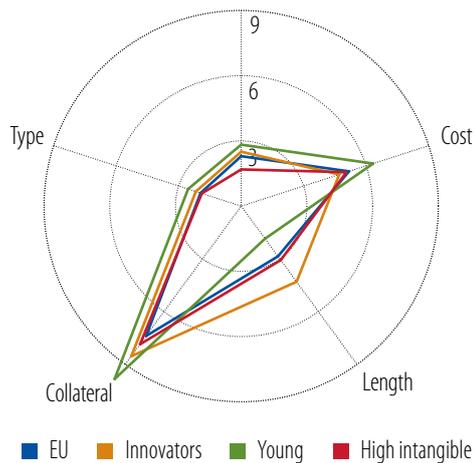
### Investment spending in some types of asset could decline even further

**Bank finance conditions remain more problematic for some types of firms.** Figure 38 depicts the satisfaction of firms with the terms of their loan offer, distinguishing between young firms, those investing in R&D and those investing in intangibles. Compared to the average EU firm, those investing in intangibles

are relatively more dissatisfied across the entire loan offer. Innovative firms are the most dissatisfied with the maturity of their loan. Young firms tend to be the most dissatisfied with the amount, cost and collateral requirement associated with their loan. In 2020, the proportion of young firms that are finance-constrained is more than 2 percentage points above the average across the entire universe of EU firms.

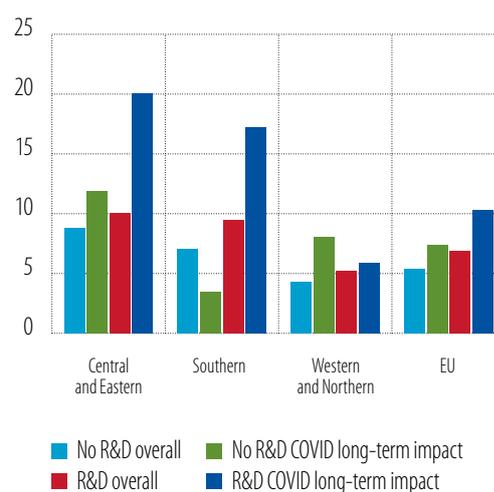
**Quantity rationing, the provision of insufficient credit, is the main factor hindering borrowers' propensity to invest in knowledge assets (such as R&D, training or software), while high costs and collateral requirements limit their ability to invest in intangibles.** Segol et al. (2020) use European firm-level data from the EIBIS to document the impact of bank loan terms on investment in the intangible assets of non-financial firms. The authors show that when firms receive a loan that is smaller than requested, they tend not to invest in intangibles. When firms are satisfied with their loan size, unfavourable rates, maturity and/or collateral requirements have no significant effect on the likelihood that firms will invest in intangibles. However, the terms of the loan can negatively affect their willingness to invest in multiple intangibles simultaneously. Inadequate loan terms (in addition to size) undermine firms' ability to benefit from the complementary nature of these assets (for example, R&D and training), which have been shown to be critical for productivity.

**Figure 38**  
Source of firms' dissatisfaction with a bank loan



Source: EIBIS 2020 and EIB calculations.

**Figure 39**  
Impact of finance constraints and COVID-19 on R&D investment



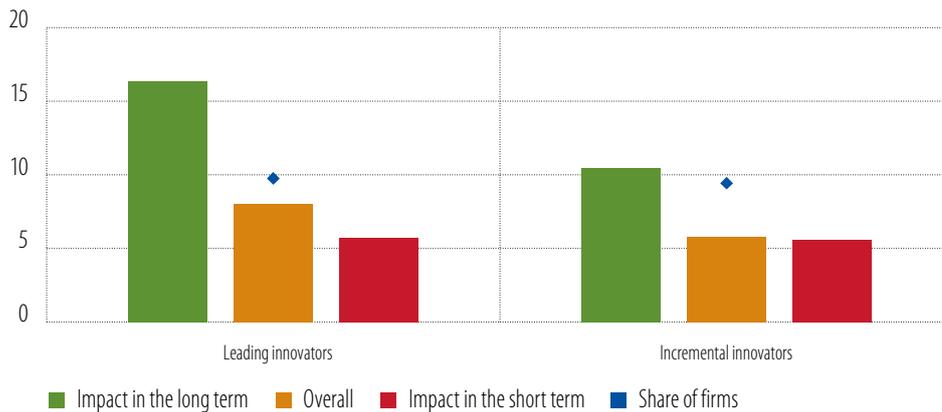
Source: EIBIS 2020 and EIB calculations.

**R&D spending is beneficial to long-term growth. For its part, the financial environment can impact economic growth, or at least the types of assets financed** (Levine, 2015). Outside of the COVID-19 crisis, the lack of financing for innovative firms is worrying because it could weaken long-term growth in the European Union. Levine (2015) and Thum-Thysen et al. (2017) show that R&D investments, which are key to competitiveness, raise economic growth. Generally, survey results show that firms investing in R&D and those that do not experience the financial environment differently. Finance is less available for R&D-investing firms, despite their higher profitability.

**In the long term, COVID-19 will likely exacerbate the financial constraints faced by firms investing in R&D.** Firms that invest in R&D face stronger financial constraints than those that do not (Figure 39). A higher share of firms investing in R&D investment are facing constraints, whether or not the crisis is expected to affect their business. Moreover, firms that report a long-term impact from COVID-19 tend to be more finance-constrained. Finally, the difference for firms with R&D investment holds across the European Union and in the three regions.

**Innovators will need more support after the COVID-19 crisis.** Figure 40 shows the proportion of leading and incremental innovators that report being finance-constrained. For each population, Figure 40 reports the share for the overall population as well as the share of sub-populations that expect the crisis to have a short-term or long-term impact on their investments. Firms that anticipate a long-term impact from the crisis tend to be more finance-constrained.

**Figure 40**  
**Innovators and finance constraints post-COVID-19**



Source: EIBIS 16-20 and EIB calculations

## Which policy measures should be taken to direct savings into real productive investments?

**At the onset of the COVID-19 crisis, policy initiatives were quickly deployed to address firms' most urgent liquidity needs.** These policies were initiated by governments, various national promotional banks and international financial institutions, including the EIB Group (the European Investment Bank and its subsidiary, the European Investment Fund). These initiatives included moratoriums, tax deferrals, guarantees, and adjustment to supervisory rules.

**Large guarantee envelopes were created, with relatively low takeup until the end of the summer (Falagiarda et al., 2020).** The amount of guarantees budgeted varies across the EU economy (Figure 41). Among the four larger EU economies, the support envelope varies from EUR 183 billion in Spain to EUR 756 billion in Germany. The huge differences in the amount of the guarantee package raised fears that firms in some countries would have an unfair advantage, which would erode the integrity of the single market. However, until the middle of the summer, headline numbers did not reflect actual commitments to individual companies. The take-up rate in Germany was much lower than in Spain and France. Guarantees covered around 50% of loan origination in Spain and France, 15% in Italy and 11% in Germany according to estimates from March to May 2020 (Anderson et al., 2020).

**More exposed to liquidity risks, SMEs have been cushioned by credit guarantees.** Credit guarantees are extensively used by financial institutions to alleviate the financial constraints of SMEs. National and regional guarantee institutions provide the main support for SME credit, but multinational providers such as the EIB Group can also play an important role.

**The volume of guaranteed loans rose sharply at the beginning of the crisis.** The share of guaranteed lending in newly issued small loans peaked at 44% in April, double the share at the beginning of the year (Figure 42). The rise was far above the level recorded for larger loans, suggesting that the guarantee measures were more beneficial to small businesses. While the category of guaranteed loans also included

collateralised lending, it is likely that the rise in guaranteed loans was driven by the surge in government guarantee programmes that aimed to address the urgent liquidity needs of European firms during the lockdown.

**Figure 41**  
State support packages to the corporate sector

Package size	Targeted companies			Instrument type			Financing type		Specific targeted sector				
	(%)	Small	Medium	Large	Loan	Guarantee	Equity	Working capital	Inv.	Innov/Digi	Export	Other affected	Agri
<b>Euro area</b>													
AT	2.3												
BE	10.6												
CY	-												
DE	39.4									(2)			
EE	4.8												
ES	8.2												
FI	2.8												
FR	12.4												
GR	-												
IE	-												
IT	28												
LT	2.1												
LU	3.9												
LV	-												
MT	6.8												
NL	10												
PT	1.4												
SI	6												
SK	-												
<b>Non-euro area</b>													
BG	8												
DK	8.6												
CZ	15.9												
HU	3.6												
HR	-												
PL	3.3												
RO	1.5			(3)									
SE	0.1												

[1] ECB estimates for EA countries. For non-EA countries IHS Markit.

[2] Start up programme by KfW and some at federal state level.

[3] Scheme announced on June 1 as part of the economic recovery measures, further details tbd.

Source: EIB calculations.

Note: Information collected on a best effort basis up to June 2020. ECB estimates for euro area countries. For non-euro area countries, IHS Markit.

**The decline in the proportion of small guaranteed loans with a maturity above ten years indicates that SME demand focused on the short term.** The rise in short and medium-term SME lending support came at the expense of long-term lending support, as the share of guaranteed or collateralised lending with a maturity of over ten years plummeted from 83% to 52% (Figure 43). This could indicate that guarantee instruments were to some extent diverted away from supporting long-term investment at the onset of the crisis. Alternatively, companies may have used assets that would have normally served as collateral for long-term investment to secure much-needed liquidity. The guaranteed share in long-term SME lending started to increase again in June, but by August – the latest record available – it still remained below the long-term average. In terms of volumes, the amount of long-term lending is very small compared to medium-term lending. Short-term lending, however, continues to dominate, making up the bulk of SME lending (more than two-thirds during the first half of 2020).

**Looking forward, abundant liquidity but a low-risk appetite in general calls for the use of other financial instruments.** With reduced earnings and increased debt, the investment vs. debt trade-off will become more acute as economies come out of the COVID-19 crisis, and risk-absorbing instruments will become more supportive (Boot et al., 2020). Household savings increased during the crisis. The

policy support successfully froze the economy but the lockdown prevented households from following a normal consumption pattern and savings went up. The rise partly reflected precautionary savings in the context of weakened confidence, but it resulted in more in cash accumulation. An increase in bank deposits mostly reflects savings resulting from the inability of consumers to spend. These resources could be mobilised to finance investment (Asimakoulos et al., 2020).

**Figure 42**  
**Share of guaranteed or collateralised corporate lending (% , three-month moving average)**



Source: ESBFO (Kraemer-Eis et al., 2020), based on ECB.  
Note: New business volumes to euro area non-financial corporations. Last record: August 2020.

**Figure 43**  
**Share of guaranteed or collateralised corporate small loans (%)**



Source: ESBFO (Kraemer-Eis et al., 2020), based on ECB.  
Note: Small loans are less than EUR 0.25 million.

**The European financial system is ill-suited to financing productive investment.** Each year, Europeans export one-fifth of their savings – around 3% to 4% of GDP – via current account surpluses. These savings will be needed to finance investments after the pandemic. In the EIBIS 2020, 40% of firms believe that in the long term, the pandemic will make it necessary to adapt their product/services portfolio, 40% think that it will affect their supply chain and more than 50% say that more digitalisation will be necessary. However, the European financial system is not properly integrated and does not support an adequate circulation of savings across the continent (Figure 44).<sup>37</sup>

**European companies remain very reluctant to issue equities.** Figure 45 reports the percentage of firms that would like equity finance to play a larger role in their funding. In the European Union, less than one firm in 50 wants equity to play a larger role. While this lack of interest is shared across the three regions, it is even more pronounced in Southern Europe. Several reasons exist for this, including the high cost of equity, a tax bias in favour of debt, the fear of dilution and losing control and a lack of financial literacy.<sup>38</sup>

**Start-ups are uncertain about how the crisis will affect their equity financing plans. Some start-ups may revisit their funding strategies and turn to venture debt to fuel their expansion.** Venture debt lending is a form of start-up financing for early and growth-stage venture capital-backed companies that lies at the intersection of venture capital and traditional debt<sup>39</sup> (de Rassenfosse and Fisher, 2016). Venture debt is best suited to companies that have already received equity-backed funding and have recently achieved profitability. It is used to finance growth, for example product development or the

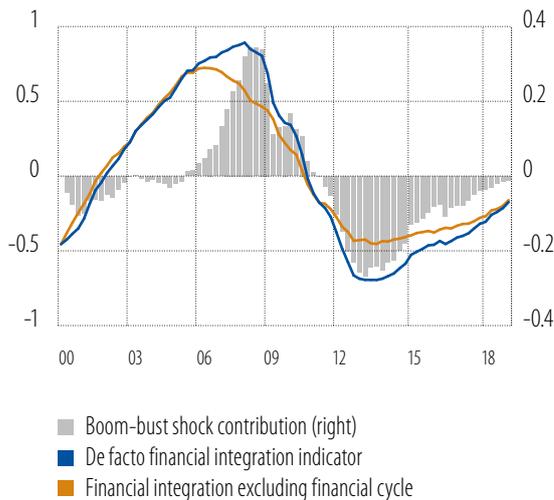
<sup>37</sup> The index is built using a Bayesian Factor Vector Autoregressive model. See Lake and Maurin (2021, forthcoming) and EIB Investment Report (2017). The index is dimensionless and with a mean of 0. An increase reflects higher integration. In Figure 44, the light blue line plots the posterior median of the baseline financial integration indicator. The grey bars portray the posterior median contribution of the boom-bust shocks to the financial integration indicator. The dotted dark blue line plots the difference between the two.

<sup>38</sup> For more details, see Chapter 6 in EIB (2018).

<sup>39</sup> Looking at venture debt providers shows there is no clear consensus on the definition of venture debt; generally, it refers to a variety of debt financing products and usually serves as a complementary method to equity venture financing.

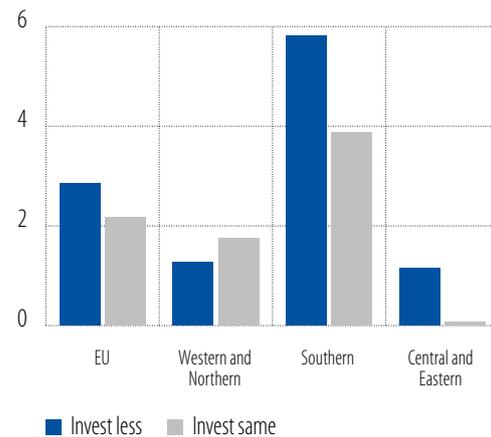
roll-out of new sites. Venture debt can provide additional funding between venture capital rounds and in conjunction with equity financing; it allows companies to reach each valuation round at a higher value. It can increase the runway of companies and therefore serve as a short-term cushion in case of unexpected events to enable them to reach the next valuation round.

**Figure 44**  
**Financial integration indicator**



Source: Based on Lake and Maurin (2021, forthcoming).  
See also: EIB Investment Report (2017).  
Note: See footnote 37.

**Figure 45**  
**New equities as a preferred source of finance by corporates (% of respondents)**



Source: EIBIS 2019 and 2020.  
Note: Based on question Q36: which type of finance would you like to play a larger role? New issued equity.

**Venture debt decreases dilution and loss of control over a startup through, for example, the granting of voting rights.** It is a non-dilutive financing option and cheaper than equity when the path to growth is clear and predictable. On the downside, if a company fails to generate enough profits, the fixed-cost nature of debt can prove burdensome.<sup>40</sup> Therefore, debt service in unstable economic environments might lead to debt defaults and subsequently dilution through debt conversion into equity.

**Venture debt is much more developed in the United States, but there is a growing interest in Europe.** For instance, around 84% of all venture debt deals in the last decade took place in the United States and Canada, whereas only 6% were in Europe. The reasons for this might be a less developed, more risk averse start-up ecosystem, mostly relying on traditional bank financing. The majority of European venture debt transactions are concentrated around the United Kingdom, France and Germany (Deloitte, 2019). The main providers of venture debt in Europe are funds, banks<sup>41</sup> and international financial institutions such as the EIB. The EIB is Europe's largest provider of venture debt, with EUR 600 million per year in long-term financing for highly innovative companies.

<sup>40</sup> Because startups usually cannot provide much collateral, lenders may expect higher interest rates of up to 15% as well as warrants on common equity.

<sup>41</sup> Boost & Co., Bootstrap Europe, Harbert European Growth Capital and Kreos Capital are the main issuing funds and Barclays, Goldman Sachs and Silicon Valley Bank are the main issuing banks.

## Conclusion and policy implications

**Firms entered the COVID-19 crisis on a stronger footing. However, the scale of the economic upheaval caused by the pandemic has not been seen in peacetime since the Great Depression.** Its magnitude pushes the boundary of standard textbook analysis of policy intervention during conventional recessions. It is clear that the end of the crisis relies on the widespread distribution of a vaccine, meaning that unlike economic recessions, economic policies will not be sufficient to trigger a rebound.

**Public interventions have been key to maintaining the economic system during lockdowns and will be equally crucial in providing the conditions for a strong and swift recovery.** In addition to the short-term effects of the crisis, investment capacity will be damaged, as internal financing resources shrink and indebtedness rises. This lower capacity is at odds with the need for more investment to reallocate resources across sectors, strengthen firms' digital capacities and shore up the resilience of the corporate ecosystem.

**The policy response to the crisis has been strong and preventive enough to maintain the flow of credit to the economy, but it is unlikely to be sufficient to address future challenges.** The deployment of policy support must rely on a proper sequencing of initiatives over time. At the onset of the crisis, the key priority was to immediately provide liquidity to firms. When economies reopened after the lockdown, the support ensured the credit channel functioned properly, providing funding and guarantee products for banks. This strategic sequencing is even more necessary now, as the second infection wave shows that a return to normal will not happen quickly.

**The crisis will force some firms to decide whether they are willing to take on more debt to fund much-needed investments.** Faced with a trade-off between debt and investment, firms need access to more equity-type financial products. Financial instruments that focus on equity tend to absorb losses and support risk-taking activities, and they need to be promoted. Work ongoing under the umbrella of the Capital Markets Union 2.0 for the European Union will provide an opportunity to redirect efforts to equity-type investments. The need for more developed capital markets will be even more pressing as the European Union comes out of the COVID-19 crisis.

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