

Kraemer-Eis, Helmut; Botsari, Antonia; Gvetadze, Salome; Lang, Frank; Torfs, Wouter

Working Paper

European Small Business Finance Outlook 2020: The impact of COVID-19 on SME financing markets

EIF Working Paper, No. 2020/67

Provided in Cooperation with:

European Investment Fund (EIF), Luxembourg

Suggested Citation: Kraemer-Eis, Helmut; Botsari, Antonia; Gvetadze, Salome; Lang, Frank; Torfs, Wouter (2020) : European Small Business Finance Outlook 2020: The impact of COVID-19 on SME financing markets, EIF Working Paper, No. 2020/67, European Investment Fund (EIF), Luxembourg, https://www.eif.org/news_centre/publications/EIF_Working_Paper_2020_67.htm

This Version is available at:

<https://hdl.handle.net/10419/224759>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

European Small Business Finance Outlook 2020:

The impact of COVID-19 on SME Financing markets

Helmut Kraemer-Eis ■
Antonia Botsari ■
Salome Gvetadze ■
Frank Lang ■
Wouter Torfs ■



Helmut Kraemer-Eis heads the EIF's Research & Market Analysis division.

Contact: h.kraemer-eis@eif.org
Tel.: +352 248581 394



Antonia Botsari is Research Officer in the EIF's Research & Market Analysis division.

Contact: a.botsari@eif.org
Tel.: +352 248581 546



Salome Gvetadze is Research Officer in the EIF's Research & Market Analysis division.

Contact: s.gvetadze@eif.org
Tel.: +352 248581 360



Frank Lang is Senior Manager in the EIF's Research & Market Analysis division.

Contact: f.lang@eif.org
Tel.: +352 248581 278



Wouter Torfs is Senior Research Officer in the EIF's Research & Market Analysis division.

Contact: w.torfs@eif.org
Tel.: +352 248581 752

Editor:

Helmut Kraemer-Eis,
Head of the EIF's Research & Market Analysis, Chief Economist

Contact:

European Investment Fund
37B, avenue J.F. Kennedy, L-2968 Luxembourg
Tel.: +352 248581 394
http://www.eif.org/news_centre/research/index.htm
Luxembourg, September 2020



Scan above to
obtain a PDF
version of this
working paper

Disclaimer:

This Working Paper should not be referred to as representing the views of the European Investment Fund (EIF) or of the European Investment Bank Group (EIB Group). Any views expressed herein, including interpretation(s) of regulations, reflect the current views of the author(s), which do not necessarily correspond to the views of the EIF or of the EIB Group. Views expressed herein may differ from views set out in other documents, including similar research papers, published by the EIF or by the EIB Group. Contents of this Working Paper, including views expressed, are current at the date of publication set out above, and may change without notice. No representation or warranty, express or implied, is or will be made and no liability or responsibility is or will be accepted by the EIF or by the EIB Group in respect of the accuracy or completeness of the information contained herein and any such liability is expressly disclaimed. Nothing in this Working Paper constitutes investment, legal, or tax advice, nor shall be relied upon as such advice. Specific professional advice should always be sought separately before taking any action based on this Working Paper. Reproduction, publication and reprint are subject to prior written authorisation.

Executive summary¹

This European Small Business Finance Outlook (ESBFO) provides an overview of the main markets relevant to the EIF (equity, guarantees, securitisation, microfinance, Fintech)². It is an update of the December 2019 ESBFO edition.

We start by discussing the general market environment, then look at the main aspects of equity finance and guarantees/SME Securitisation (SMESec). Finally, before we conclude, we briefly highlight some important aspects of microfinance and Fintech in Europe.

Economic outlook and SME Access to Finance:

- Since the publication of the previous ESBFO in December 2019, the COVID-19 pandemic has severely impacted the global economic outlook. The economic damage resulting from the lockdown measures is unprecedented.
- The European economy entered into a deep recession during the first half of 2020, as it experienced the deepest quarterly output contraction since World War II. The European economy is expected to contract by more than 8% over the course of 2020.
- While all national economies have been impacted, some countries were hit much worse than others. GDP of Italy, Spain, Croatia and France is forecasted to shrink by more than 10%. Contractions in Sweden, Denmark and Poland are expected to be more moderate, but still significant, ranging from 4 to 5.5%.
- The slowdown in economic activity could have a devastating effect on European insolvencies and the worst hit European countries are expected to experience increases in bankruptcies by up to 30% in 2020.
- Whether global growth will pick up in the period ahead will crucially depend on whether a new surge in virus transmissions can be avoided and policy measures aimed at kick-starting the economic recovery will prove effective.
- Similar to the nature of the crisis, public policy action on European and national levels - including support by the EIB Group - in response to the COVID-19 pandemic has been unprecedented.
- Already at the onset of the pandemic, the EIB Group reacted rapidly to address SMEs' most urgent liquidity needs.³ As part of the Group's reaction to the COVID-19 crisis, the EIF is partnering with the EIB, mandators, the EU, National Promotional Institutions and Member States to put in place relevant packages to help small businesses mitigate the challenges of the crisis.
- The increase in the rate of loan issuance across the Euro area has led to a significant acceleration in the upward trend of corporate leverage, with total outstanding loans to

¹ This paper benefited from comments and inputs by many EIF colleagues, for which we are very grateful; we would like to express particular thanks to Julien Brault, Andrea Crisanti, Cindy Daniel, Oscar Farres, Laurent Maurin, Barry McGrath, Kristian Pal, Elitsa Pavlova and Simone Signore. We would also like to thank colleagues from AECM, AFME, ECB, EMN, Euler Hermes, GEM, the Invest Europe research team, and the SMEUnited study unit for their support. All errors are of the authors.

² We are using the term "equity finance" to combine semantically the areas of Venture Capital and Private Equity. However, if we refer here to equity activities, we mainly consider those of EIF's investment focus, which excludes Leveraged Buyouts (LBOs) and Public Equity. The term SME Securitisation (SMESec) comprises transactions backed by SME loans, leases, etc. The reader is also referred to the respective market glossaries in Annex 1 and Annex 2 in Kraemer-Eis et al. (2018c).

³ See for details: <https://www.eib.org/en/press/all/2020-086-eib-group-will-rapidly-mobilise-eur-40-billion-to-fight-crisis-caused-by-COVID-19.htm>

non-financial corporations in the Euro area rising by nearly 6% since the beginning of the year. Corporate borrowing costs have continued to decline, reaching a new record low in June 2020.

- Even before the surge in liquidity needs during the height of the lockdown, European SMEs reported a rise in access to finance issues, as the share of Euro area SMEs that consider access to finance to be a highly important problem has increased further during the second semester of 2019, to 27 percent.

Private equity:

- Over the past 20 years, the European private equity (PE) and venture capital (VC) activity exhibited booms and busts. The most famous peak periods were observed in 2000 and 2006. However, both booms were followed by significant downturns, i.e. the “dotcom crisis” in the early noughties and the financial and economic crisis from 2007 onwards. The severe crash of the European PE activity in 2008-2009 was followed by a rebound and PE fundraising and investments reached new record levels in 2019.
- There is substantial lack of consensus with regard to the short-term developments of the European PE/VC ecosystem in the first two quarters of 2020. Nevertheless, most analysts agree that the investment activity in the wake of COVID-19 has stalled at best. A recent EIF research paper provides elements that support a cautious optimism vis-à-vis the recovery of the PE/VC ecosystem in the aftermath COVID-19: e.g. a market that has so far stalled but not crashed, the increased experience and maturity of the industry, high levels of dry powder and the readiness of public policy intervention. However, uncertainty remains high and the risks for far more severe outcomes are substantial.
- EIF survey results confirm that expectations about the forthcoming months have considerably worsened. At the beginning of the COVID-19 crisis, PE mid-market (MM) fund managers’ pessimism increased particularly with respect to their state of business, the fundraising environment, the access to finance of portfolio companies, future portfolio development and exit prospects. VC fund managers were also particularly concerned about the fundraising environment and the exit opportunities in the near future. For business angels (BAs), the worsened outlook mainly concerned the access to finance of portfolio companies and finding co-investors. As per the biggest challenges arising since the onset of the COVID-19 crisis, PE MM fund managers and BAs were concerned about the general market volatility and the exit environment, while VCs stated that they worried more about fundraising.
- The COVID-19 pandemic could have a strong and immediate adverse impact on the European PE market activity, at a time where activity levels had reached a new all-time high. The fall in fundraising and investment volumes has the potential to echo the drop in activity witnessed during the global financial crisis, e.g. between 2007 and 2009. However, the wide margin of error around our model forecasts confirm that uncertainty remains high.
- As the European PE/VC ecosystem will continue to experience significant challenges in the aftermath of the COVID-19 pandemic, a strong policy response in support of the PE/VC markets is imperative.

SME guarantees:

- Credit guarantees “remain the most wide-spread instrument in use across countries” to ease SMEs’ access to finance (OECD, 2018), and are particularly relevant “in those

countries where a network of local or sectoral guarantee institutions is well established” (OECD, 2013).

- The intensive use of guarantee instruments to counter the fall-out of the COVID-crisis, both at the national as at the European level, is evidenced by the strong rise in guaranteed lending volumes that occurred during the initial phase of the containment period.
- The strong surge in guaranteed lending of loans with a longer maturity indicates companies are also in dire need of support for longer term investment funding.
- AECM statistics show that Turkey, Italy and France are the top three countries in terms of both the volume and the number of outstanding SME guarantees.
- Relative to GDP, Turkey, Hungary, Portugal and Italy have the largest markets.
- In the full-year 2019, despite a significant heterogeneity across countries, AECM members report on average a decrease both in outstanding guarantees in portfolio and in new guarantees granted.
- However, these trends are largely driven by the guarantee activity of one Turkish AECM member. Following an unprecedented increase in guarantee activity during 2017, the guarantee activity in Turkey is now much lower than before, but it still represents the highest share of total AECM outstanding guarantees.
- In the full-year 2019, the growth in newly-granted guarantees was particularly strong in Ireland, Greece, Croatia and Kosovo. By contrast, new guarantee activity decreased the most in Bosnia-Herzegovina, Romania, Bulgaria and Lithuania.

SME Leasing:

- Leasing is an important additional instrument to facilitate access to short- and medium-term financing for SMEs, ranked second after traditional bank-related products.
- During the second semester of 2019, Euro area SMEs state that the availability of leasing or hire-purchase has improved the most compared to other external financing sources, but a deterioration in future availability is expected.
- Leasing is mainly used for investments in property, plant or equipment.
- Finland, Germany and Austria are the countries with the highest proportion of SMEs using leasing, contrary to countries in the south of Europe.
- Leasing as a financing source is more prevalent among industrial firms.
- The use of leasing grows with firm-size.

SME securitisation:

- Overall, the SME securitisation (SMESec) market in Europe is underdeveloped. Before the outbreak of the COVID-19 crisis the market was still suffering from after-effects of the financial crisis, but improving. Now, the market is adversely affected by the new crisis. Strengthening this market is an effective way to facilitate the flow of funds to the real economy, without creating distortions.

- In terms of new issuances the SMESec market was weak in 2019, with only EUR 23bn. Also 2020 started poorly, with no visible activity in HY1.⁴
- Despite the financial and sovereign crisis, the European securitisation market has performed well, with the SME segment showing low default rates. Although the economic framework conditions worsened, SMESec market performance has been stable in the recent past. The impact of COVID-19 on SMESec asset quality remains to be seen, as well as the strength of structural protection and their ability to buffer adverse effects of the pandemic.
- Many support measures are aiming at a market revival, amongst which are important regulatory adjustments. The new regulation - a key element of the Capital Markets Union (CMU) - introduces significant changes to the market's framework, including the important step of a signalling approach via simple, transparent and standardised STS-labelled securitisations - which receive preferential regulatory treatment. The new securitisation regulation applies since 01 January 2019.
- Continued pressure on banks to manage capital efficiently drives demand for synthetic transactions. In this context, on 06 May 2020 EBA published its proposal for developing a STS-framework for synthetic securitisations. The EC agreed with EBA's analysis and published on 24 July 2020 its related proposal for an amended regulation in the context of the Capital Markets Recovery Package.
- On 10 June 2020 the High Level Forum of the Capital Markets Union presented its final report, including a set of recommendations concerning the revival of the securitisation market.

Microfinance and inclusive finance:

- The COVID-19 crisis affected the most vulnerable segment of the labour market. Persons having relatively unstable, low-paid, and part time jobs were hit first. Young people, especially new graduates, found it difficult to find jobs. Self-employed persons and freelancers have also suffered massively from the lockdowns.
- Microenterprises and social enterprises will play an important role in the recovery process, as they are crucial contributors to employment and social innovation, especially in countries with high unemployment rates.
- According to the data from the latest ECB SAFE survey, microenterprises have perceived a significant increase in the external financing gap indicator. Moreover, the share of enterprises which see access to finance as their most important problem has increased and remained higher among microenterprises than among their larger peers.
- Microenterprises, in general, use less bank loans than their larger peers, as they are more likely to be rejected if they decide to apply for a bank loan. Often they choose not to apply for a bank loan due to fear of rejection, insufficient collateral, high interest rates and excessive paper work.
- Microenterprises, especially from disadvantaged groups, face greater barriers to secure finance when scaling up their businesses. In addition to difficulties accessing finance, they face other barriers including lack of growth motivations, lack of entrepreneurship skills and smaller entrepreneurship networks.

⁴ As explained in the text, there is a significant part of this market that is not visible in the statistics (e.g. unrated bilateral transactions).

- Access to finance is crucial not only for existing microenterprises, but also for those who are eager to create a business in order to escape poverty or unemployment and contribute to job creation. In addition to financial support, unemployed people are often in need of acquiring the necessary skills for success through coaching and mentoring.
- Customers, as they get rejected by or discouraged from banks, often apply for a microcredit from Microfinance institutions (MFIs). MFIs do not always charge lower interest rates than banks, but they are less demanding in terms of collateral and guarantee requirements.
- MFIs are currently facing challenges in securing adequate sources of debt and equity.
- There is a large interest among MFIs in supporting green finance. Green loans are offered by MFIs specifically designed either for financing energy efficiency, renewable energies and/or for environmentally friendly activities. Frequently, MFIs who have no specific green loans in place, still finance environmentally friendly activities or technologies under their usual micro lending.
- Digitalisation of microfinance operations is efficient for both lenders and borrowers especially in the COVID-19 lockdowns and the imposed social distance regulations, yet suppliers are only partially digitalised and poor customers often have no access to digital payments.

Fintechs:

- Globally, investment in Fintech companies stalled in 2019. In line with global trends, investments in EU-27 Fintech companies also declined slightly. While global investment volumes were supported by large deals in the M&A segment, the EU-27 market was supported by robust growth in the early stage markets.
- The EU Fintech market matured further in 2019, as median deal size increased across all deal stage segments.
- European crowdfunded volumes continued to expand, and the European share in global volumes also gained, after four consecutive years of decline.
- About half of global alternative financing was derived from institutional investors, although large geographical differences exist.
- Preliminary evidence indicates an adverse impact of the COVID-19 pandemic on investments in European Fintech companies.
- The COVID-19 pandemic is expected to have a heterogeneous impact on the sector, bringing both opportunities and significant challenges.

Table of contents



1	<i>Introduction</i>	1
2	<i>Economic outlook & SME Access Finance</i>	3
2.1	Economic Outlook.....	3
2.2	SME access to finance.....	12
3	<i>Private equity</i>	22
3.1	Introduction.....	22
3.2	COVID-19 and the Global Financial Crisis: similarities and differences.....	24
3.3	Market sentiment at the start of the COVID-19 crisis in Europe.....	27
3.4	The prospects of European PE/VC after COVID-19.....	45
3.4.1	Where was the European PE market headed before COVID-19 hit?.....	45
3.4.2	Where is the European PE market headed after COVID-19?.....	47
3.5	Private Equity: concluding remarks.....	48
4	<i>SME debt products</i>	51
4.1	SME guarantees	51
4.1.1	Credit Guarantee Schemes as a policy response to market failures.....	51
4.1.2	Credit guarantees as a policy response to the COVID-19 crisis.....	53
4.1.3	Market size and activity in 2019.....	56
4.2	Leasing.....	60
4.3	SME Securitisation.....	62
4.3.1	SMESec market activity.....	65
4.3.2	SMESec prospects.....	71
5	<i>Microfinance</i>	77
5.1	Microfinance and social inclusion	77
5.1.1	What is Microfinance?.....	77
5.1.2	A support tool for necessity-driven business creation.....	78
5.2	The demand for microfinance: microenterprises and their finance decisions.....	85
5.3	The supply of microfinance: the diversity of European MFIs.....	89
5.4	The challenges for microenterprises to access to finance.....	93
5.5	Microfinance prospects.....	95
6	<i>Fintechs</i>	97
6.1	Investment in European Fintech companies.....	98

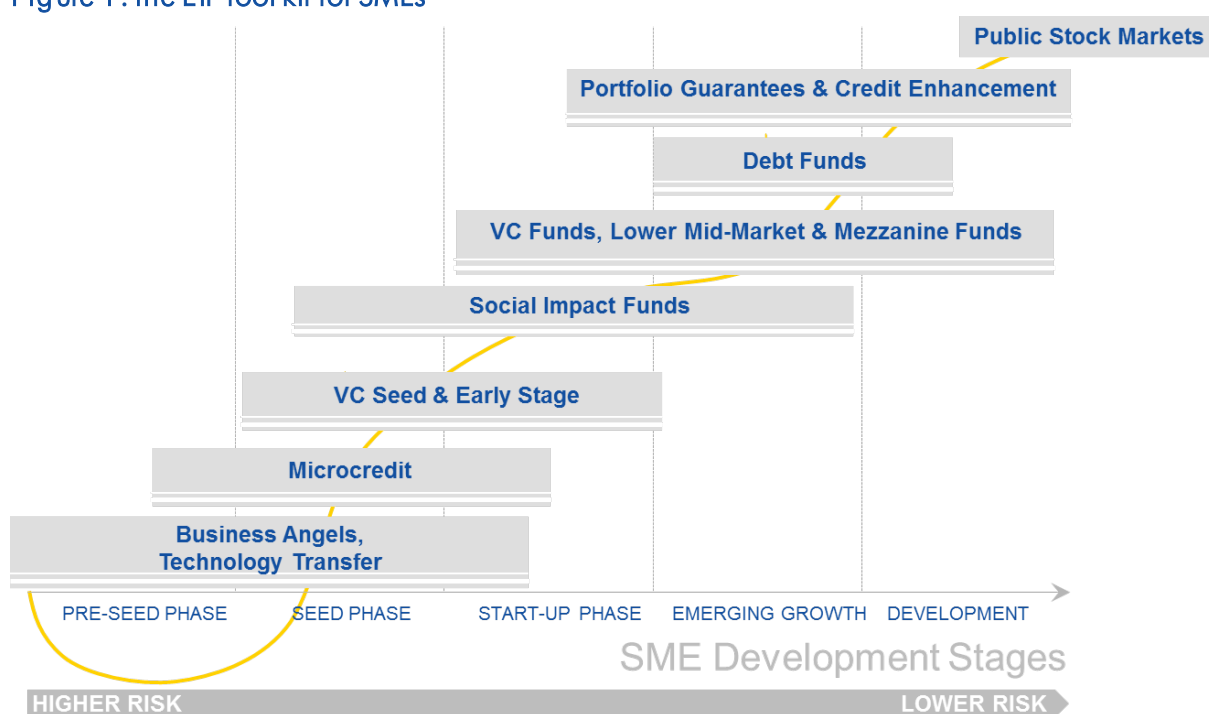
6.2	The crowdfunding market	100
6.3	Fintechs in the age of COVID-19	105
7	<i>Concluding remarks</i>	106
	<i>References</i>	110
	<i>About ...</i>	118
	<i>... the European Investment Fund</i>	118
	<i>... EIF's Research & Market Analysis</i>	118
	<i>... this Working Paper series</i>	118
	<i>EIF Working Papers</i>	119

1 Introduction

The European Investment Fund (EIF) is the European Investment Bank (EIB) Group's specialist provider of risk financing for entrepreneurship and innovation across Europe, delivering the full spectrum of financing solutions (equity instruments, guarantee and credit enhancement instruments, as well as microfinance) through financial intermediaries.

The EIF focuses on the whole range of small and medium-sized enterprises (SMEs), starting from the pre-seed, seed-, and start-up-phase (technology transfer, business angel financing, microfinance, early stage VC) to the growth and development segment (formal VC funds, mezzanine funds, portfolio guarantees/credit enhancement, see Figure 1).

Figure 1 : the EIF tool kit for SMEs



Source: EIF

Public support to SMEs is crucial given their importance for the European economy. SMEs are defined by the European Commission⁵ as firms having less than 250 employees. In addition, they are required to have an annual turnover below EUR 50m, or a balance sheet total less than EUR 43m (see Table 1).

⁵ Commission Recommendation 2003/361/CE of 6 May 2003.

Table 1 : EU definition of SMEs

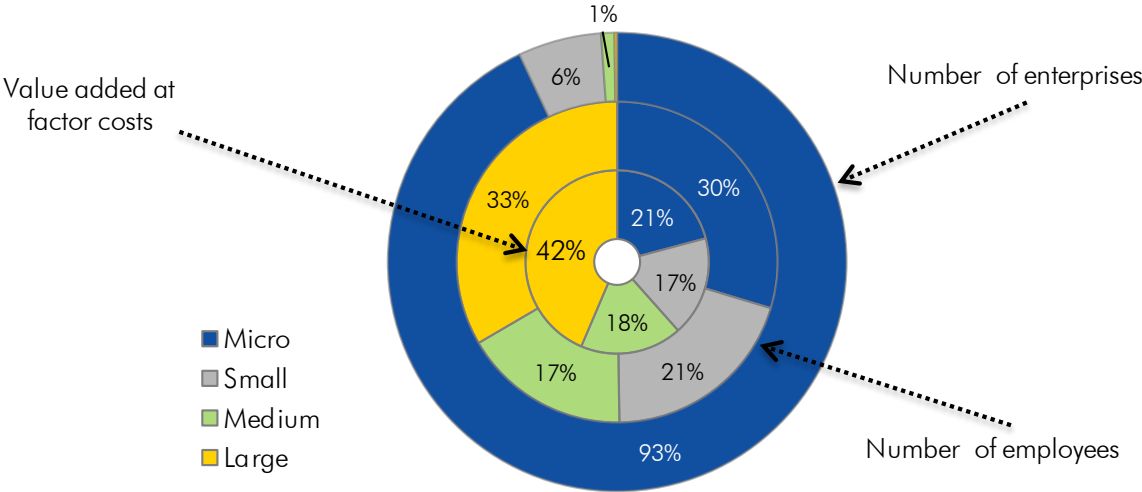
	Employees	Turnover	Balance sheet total
Micro	<10	≤ EUR 2m	≤ EUR 2m
Small	<50	≤ EUR 10m	≤ EUR 10m
Medium-sized	<250	≤ EUR 50m	≤ EUR 43m

Note: In the context of defining enterprise categories, often the category of mid-caps is mentioned in between SMEs and corporates. We define mid-caps as enterprises with a minimum of 250 and a maximum of 2,999 employees; there is also the sub-category of small mid-caps, with a maximum of 500 employees.

Source: European Commission (2019)

SMEs contribute significantly to European job creation and economic growth (Figure 2). In 2018, 24.5 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 56.8% of total added value (EUR 4,161bn).

Figure 2: SMEs, employment and value added in the EU, 2018



Source: Authors, based on European Commission (2019)

The European Small Business Finance Outlook (ESBFO) provides an overview of the main SME financing markets relevant to the EIF (equity, guarantees, securitisation, microfinance and Fintech). The present edition is an update of the ESBFO December 2019 (Kraemer-Eis et al., 2019) and constitutes the first iteration in what from here on out will be an annual publication. The general approach, however, remains unaltered.

We start by discussing the general market environment, with a particular focus on the COVID-19 crisis, after which we focus on the main aspects of SME financing in Europe, such as equity markets, SME guarantees and SME Securitisation (SMESec) markets. Finally, we briefly highlight important aspects of microfinance in Europe, as well as of the emerging Fintech area.

2 Economic outlook & SME Access Finance

2.1 Economic Outlook

The COVID-19 pandemic and consequent lockdown restrictions

Since the publication of the previous European Small Business Finance Outlook (Kraemer-Eis et al., 2019), the COVID-19 virus has severely impacted the global economic outlook. What was initially a localised flu outbreak in Wuhan, China, quickly expanded to a global pandemic. The virus is believed to have initially been imported, through international trade relationship, to the north of Italy, after which it was able to spread across Europe by vacationers that returned from winter holiday trips.

The pandemic prompted governments all over the world to instate strict lockdown measures that severely limited mobility of people (Figure 3). Restaurants and hotels, being potential transmission centres of the virus, were the first establishments to shut down, but other retail stores and selected production facilities where social distancing measures were impossible to implement soon followed. With stores closed and teleworking the norm, the strength of the pandemic slowly faded in Europe throughout April, and by May most European countries carefully started to ease their lockdown measures. By June, EU-internal borders were re-opened and the tourist sector was permitted to re-start their activities, be it subject to severe restrictions.

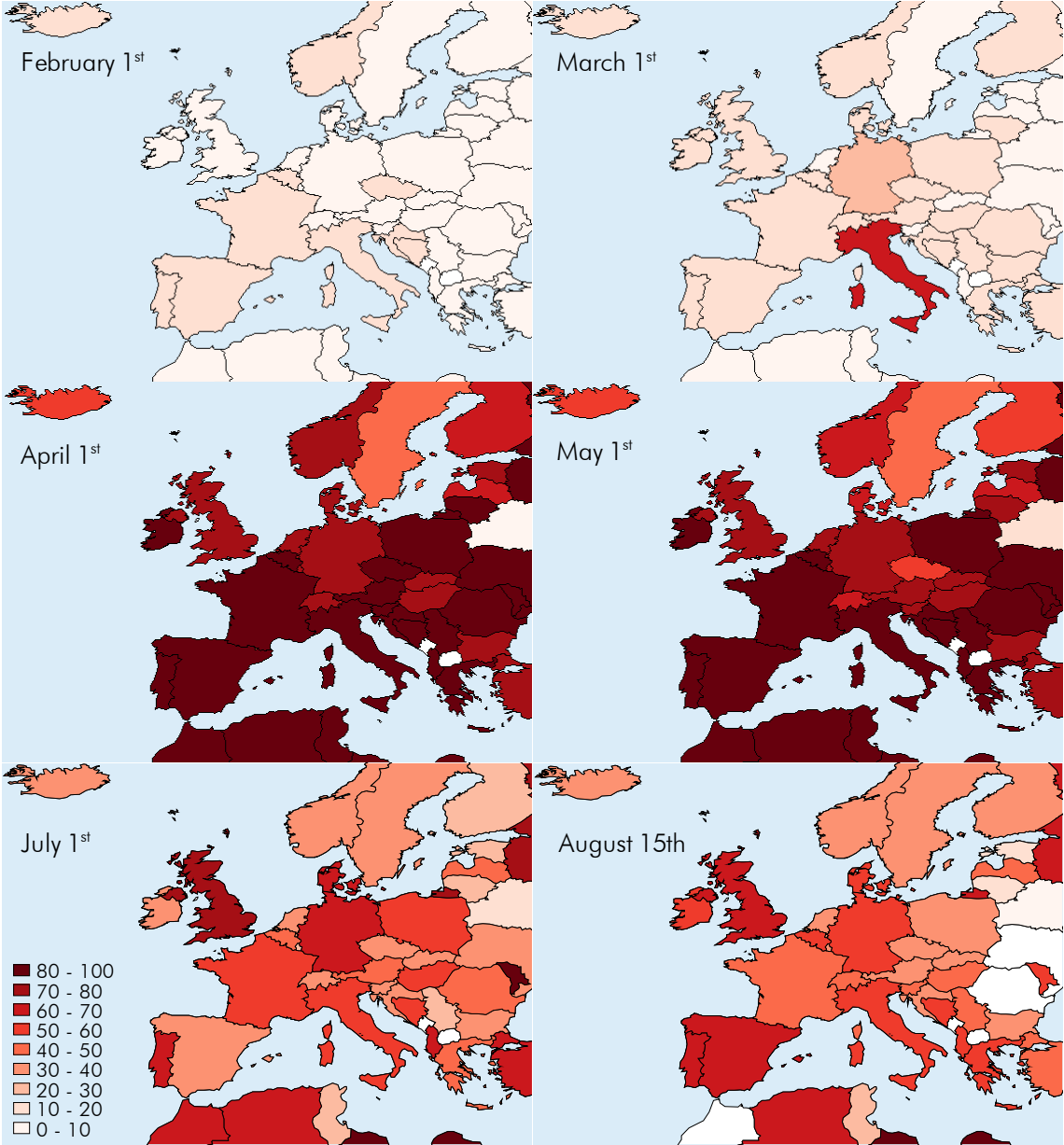
However, consequent local flare-ups of the virus forced local governments across Europe to re-instate lockdown restrictions to varying degrees. By mid-August, for example, the Belgian and Spanish governments have re-introduced certain lockdown measures, to varying degrees, such as local curfews and general mouth mask obligations in urban areas. Also the hospitality and event sectors were partly shut down again. These persistent restrictions inhibited the European economy to regain its full strength throughout the second quarter of 2020. By the end of September, daily new cases hit a new record, indicating that the end of the pandemic is far from near.

An unprecedented shock to the global economy and a long road to recovery

The economic damage resulting from the lockdown measures is unprecedented. The shock was initially transmitted via a complex mix of supply (for example, labour restrictions due to illness of workers and/or their family members, school and business closures) and demand factors (e.g. reduced demand for specific goods and services, curtailing of investments). Subsequently, it was further amplified by financial markets and global trade linkages, as it spilled over to most segments of the economy.

The IMF projects the global economy to contract by 4.9% in 2020. The path to recovery is expected to progress significantly slower than initially anticipated. This is rooted in a series of factors, such as continued social distancing rules throughout the second half of the year, large scarring effects that will have a negative impact on global supply chains and a hit to productivity as business adapt to the stringent hygienic requirements imposed upon them by governments in an attempt to reduce transmission rates (IMF, 2020a).

Figure 3: Oxford COVID-19 Government Response Tracker



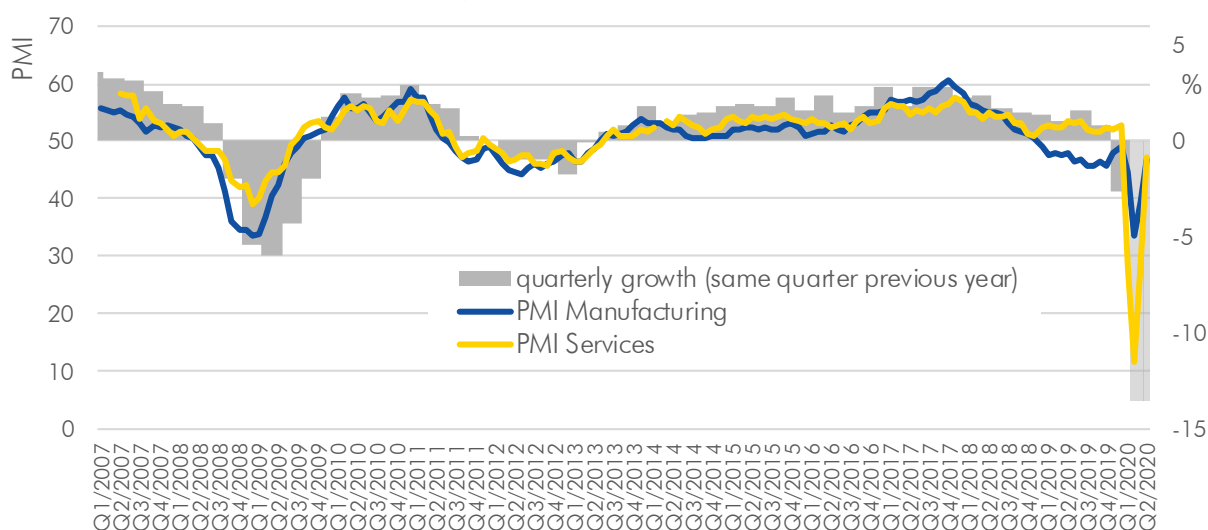
*Note: The Oxford Government Response tracker provides a way to monitor the intensity of government policies aimed at preventing the spread of the COVID-19 virus, and covers a wide variety of different measures, from mouth-mask obligations to downright local lockdowns (for white-shaded areas no data was yet available at the time of writing).
 Source: Authors, based on Hale et al. (2020)

In accordance with global developments, also the European economy entered into a deep recession during the first half of 2020, as it experienced the deepest quarterly contraction since World War II (European Commission, 2020a). Traditional economic indicators used to determine the state of the economy in real time plummeted at unseen rates. The Eurozone Purchasing Manager Index (PMI), plunged at an unprecedented rate (Figure 4) in March 2020 (IHS Markit, 2020a). The service sector, which was hit particularly hard by the lockdown restrictions, suffered an unprecedented blow, as entrepreneurial confidence plummeted and its PMI hit a record low of 11 in April 2020.

Even though the manufacturing sector fared better, it also contracted significantly during the first and second quarter of 2020, with a decline in business confidence that matched that of the Financial Crisis. Both PMIs remained at record low levels through April and May, but experienced a strong recovery from June onwards, reflecting the gradual loosening of the restrictions throughout Europe. Despite of the strong recovery, both PMIs were still below 50 in June 2020, hinting at a continued contraction throughout the entire second quarter of 2020.

The European Commission estimates that during the height of the pandemic, when the most stringent lockdown measures were in place, the Euro area economy operated at just 70-75% of its capacity. During the first quarter of 2020, of which only the final weeks coincided with the containment measures, EU GDP was down by 3.2% (Eurostat, 2020 June 9). EU GDP is forecast to contract by more than 8% over the course of 2020, the largest annual drop since the end of WWII.⁶ These forecasts were subjected to consecutive downward revisions, as the impact turned out significantly more severe than initially anticipated.

Figure 4: Euro area PMI and quarterly GDP growth evolution during the COVID-19 crisis



*Note: Q2/2020 GDP growth is a preliminary estimate

Source: Authors, based on Eurostat data

Private investments are expected to drop particularly severely, and are forecast to drop by 15%, mostly due to the fact that investments nearly came to a standstill during the first half of the year. They are expected to recover partly during the second half of the year, although the current state of the pandemic renders this prediction all but certain. Moreover, the recovery will remain sluggish, as firms currently dispose of a significant amount of idle capacity, and increased uncertainty about how demand will evolve in the short to medium term could encourage them to further delay investment decisions. This will be aggravated due to persistent liquidity issues, as elevated debt burdens will force firms to sell assets, to avoid going into bankruptcy (European Commission, 2020a).

⁶ Noteworthy, 2019 predictions were also revised downward in the Spring forecasts, after economic growth in the EU lost momentum due to cyclical and structural headwinds (European Commission, 2020b).

Recovery will be further delayed by a severe hit to productivity across the European economy, as productive efficiency slumped throughout May and June as companies experienced difficulties adapting their business processes to the social distance regulations. Productivity declines were observed in services as well as manufacturing (IHS Markit, 2020b).

For 2021, assuming that the pandemic is kept under control, for example due to the development and distribution of an effective vaccine, or innovations in contact tracing technology, the Commission expects a strong recovery, with a growth rate of 5.8% of GDP, driven to an important extent by a more than proportional rise in investments (+9.7%).

Table 2: European Commission Summer 2020 forecast for the EU

(Real annual percentage change, unless otherwise stated)	Forecasts					
	2016	2017	2018	2019	2020	2021
Real GDP growth	2.1	2.7	2.1	1.2	-8.3	5.8
Gross fixed capital formation*	3.3	3.7	2.9	5.7	-13.7	9.7
Inflation	0.2	1.7	1.9	1.2	0.6	1.3
Unemployment rate*	8.6	7.6	7.2	6.7	9.0	7.9

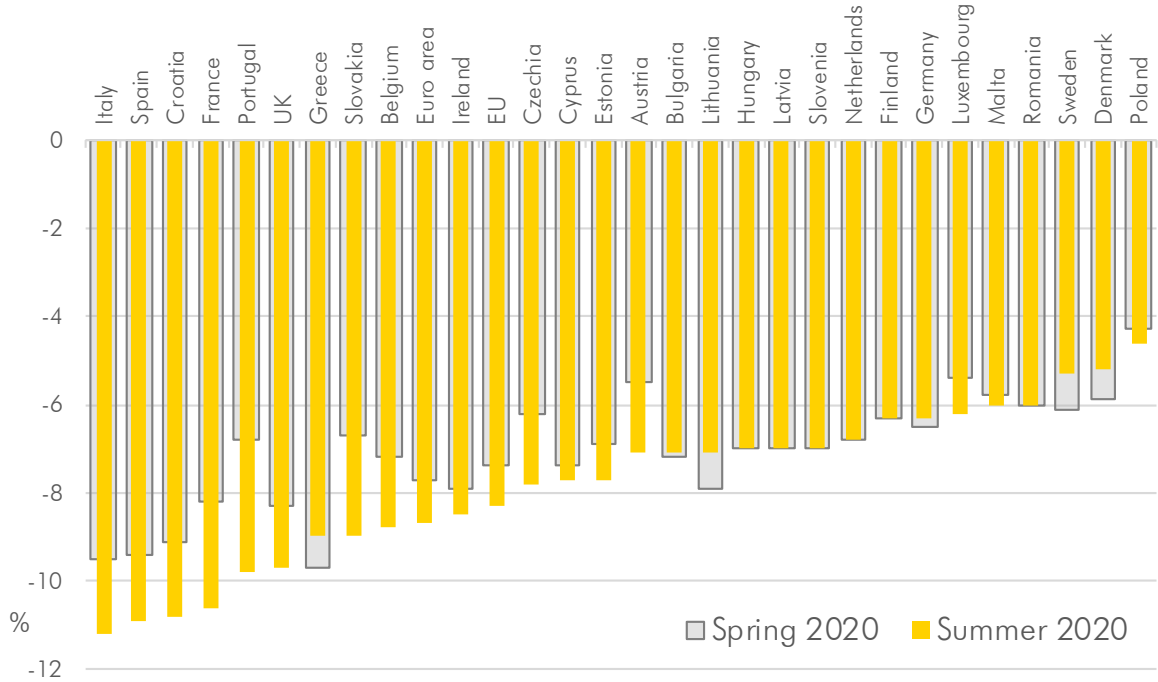
*Note: Gross fixed capital formation (unemployment rate) forecasts stem from the European Commission Spring forecasts as they are not explicitly reported for the EU in the Interim Summer forecasts. They will likely be subjected to downward (upward) revisions in the upcoming, and more elaborate, Autumn forecasts, which are set to be published in September.

Source: *European Commission (2020a)*

Although no country escaped the adverse economic consequences of the crisis, the extent to which the pandemic ravaged local economies differs significantly between Member States (Figure 5). Countries like Italy, Spain and France, who were among the first European countries where the virus spread, suffered most, with forecasted contractions exceeding 10%. This contrasts with the Nordic region, where GDP declines are expected to be more modest, but still severe, estimated around 5%.

For all but a handful of countries, the economic impact of the pandemic was initially severely underestimated. In particular for countries that were expected to suffer most, forecasts have been revised further downwards. Portuguese annual growth was revised downwards by as much as 3 percentage points, but also French (-2.4pp), Slovakian (-2.3pp), Italian (-1.7pp) and Croatian (-1.7pp) estimates were subjected to significant downward revisions as the pandemic ravaged their respective economies worse than initially anticipated. It is not unlikely these numbers will be subjected to additional downward revisions, depending on how the situation evolves.

Figure 5: Country specific impact of COVID-19 on 2020 GDP growth (Summer vs Spring forecast)



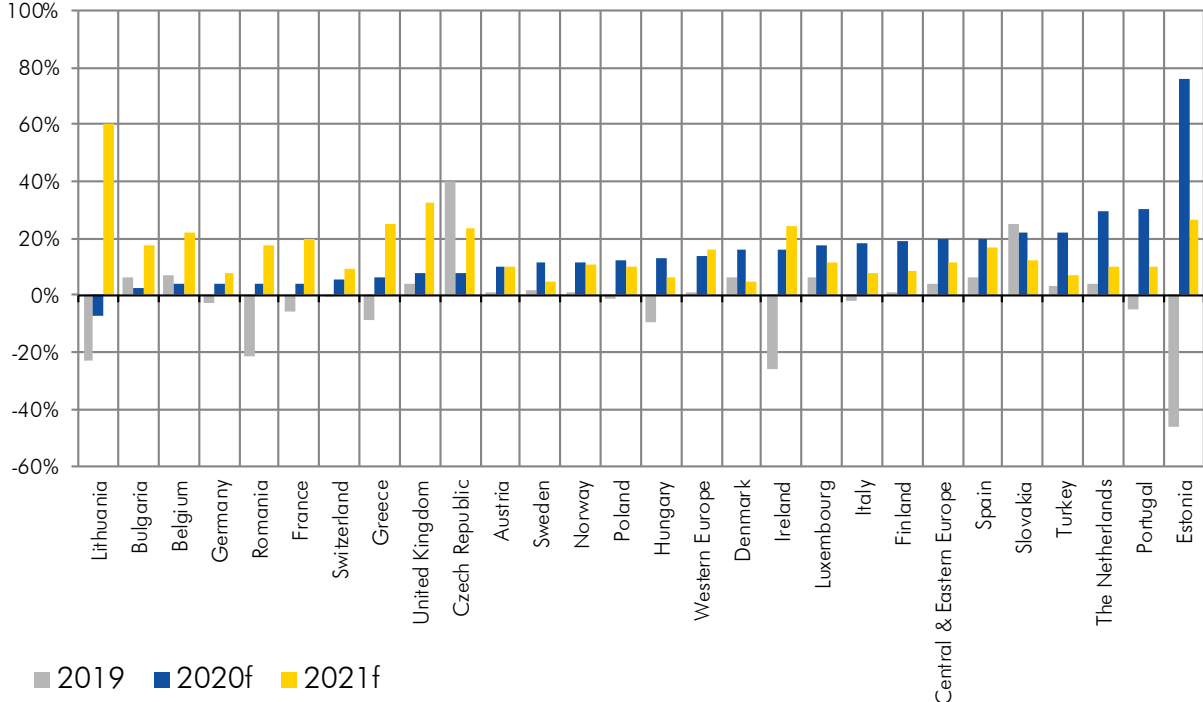
Source: Authors, based on European Commission (2020a, 2020b)

The slowdown in economic activity could have a devastating effect on European insolvencies. Euler Hermes (2020) expects that the number of bankruptcies will rise significantly in the period ahead, forecasting an increase in corporate insolvencies for all European countries throughout 2020 and 2021. This increase is expected to be particularly pronounced in Estonia, Portugal, the Netherlands, Slovakia and Spain. If these forecasts were indeed to materialise, the European economy might not rebound as swiftly as anticipated, paving the way for a U-shaped recovery, instead of the initially anticipated V-shaped recovery path.

The economic outlook is looking particularly dire for SMEs. Nearly all European SMEs (90%) reported to have experienced turnover losses in relation to the lockdown, with about 2 in 10 SMEs having lost 100% of their turnover for several consecutive weeks (SMEunited, 2020a). With most liquidity support measures being debt-focused, SME insolvency risks could increase dramatically.

There are several reasons to believe SMEs are suffering disproportionately from the current crisis. On the supply side, their small scale business models and limited work force size renders it more challenging to handle absenteeism, for example, when 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 distance regulations. A survey on teleworking practices, for example, brought to light a significant gap in the prevalence of teleworking between SMEs (10-20%) and large firms (48%), with the most important reason cited being a lack of appropriate digital infrastructure (OECD, 2020). On the demand side, SMEs represent a disproportionate share of companies in those sectors that were hit most severely, such as the hospitality and construction sectors.

Figure 6: Rate of change in insolvencies, 2019-2020(f)-2021(f)*



*Note: 2020 & 2021 values are forecasted. The jump in Estonian insolvencies is a consequence of changes in their legal framework.

Source: Authors, based on Euler Hermes (2020)

Forecasting uncertainty in the age of COVID-19

Currently, economic forecasters operate in a challenging and uncertain environment. Hence, economic projections are subject to a significant amount of uncertainty as they are based on a number of crucial assumptions.

First and most importantly, whether global growth will pick up in the period ahead will crucially depend on whether policy makers will be able to avoid a new surge in virus transmissions. If the surge in infections that is currently waging through different EU countries triggers a new set of stringent lockdown restrictions during the autumn of 2020, the prospects on the recovery of the European economy will most definitely deteriorate. In addition, the forecasts furthermore assume that the plethora of policy measures that were taken in an attempt to mitigate the economic fallout of the crisis will proof to be effective. Finally, the forecasts further assume that the de-escalation process in international trade relationships will continue to progress. Recent evolutions have already challenged the validity of these conditions, further strengthening the credibility of the assertion that the risks of the forecasts are on the downside.

The challenging environment in which economic forecasts currently operate is further evidenced by the lack of relationship between the average economic sentiment during the months March until July⁷, and the projected growth rate in 2020.

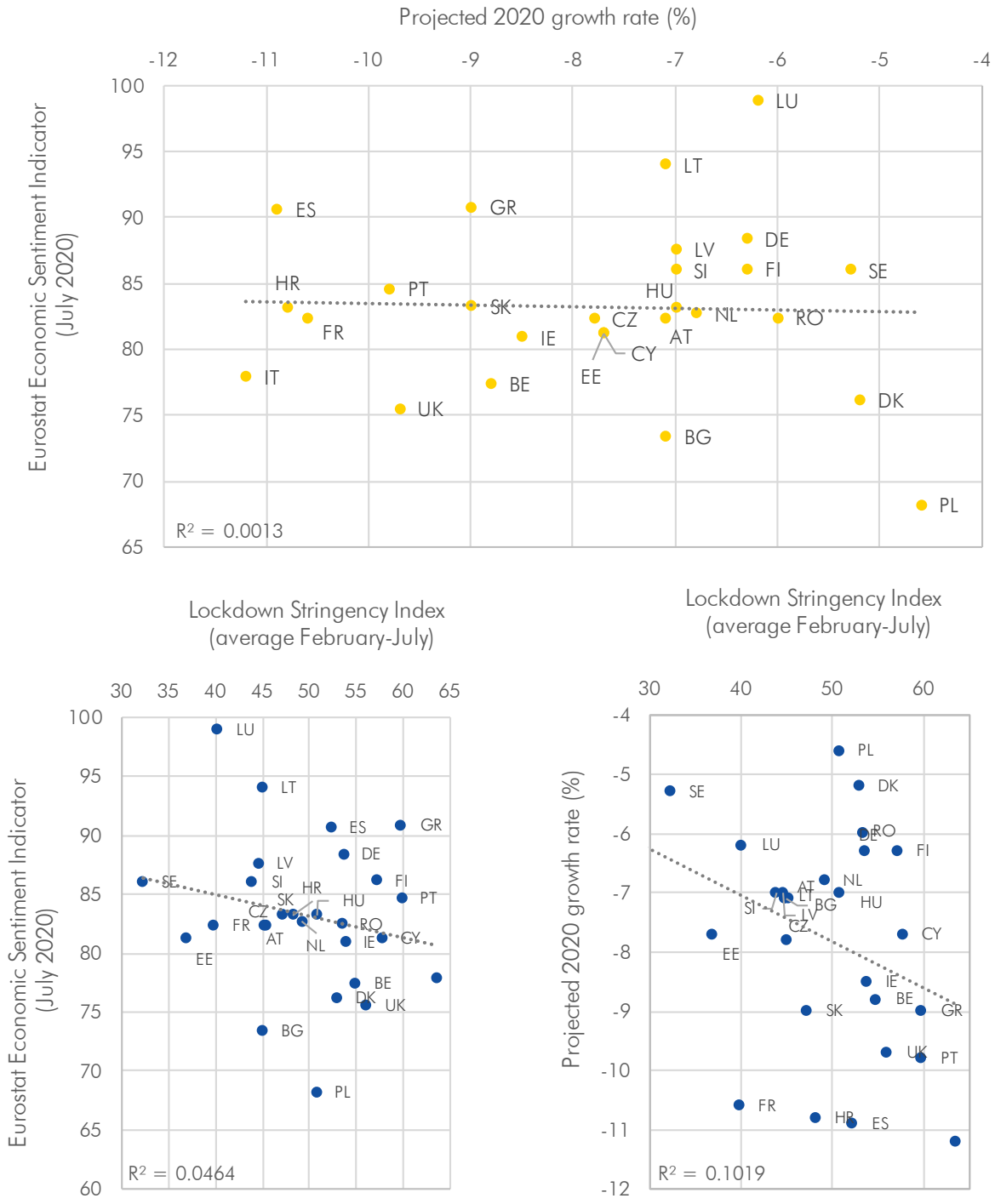
While one would expect that dire growth prospect would be reflected in depressed producer and consumer sentiment, the correlation plot shows no apparent positive relation between the two measures (Figure 7, upper panel, $R^2=0.0013$). The lack of a clear relationship is remarkable, given how the economic sentiment indicator is constructed, as it takes into account different aspects of a country's economic ecosystem, from consumer confidence to producers' past experience with respect to demand and inventory status, as well as future expectations. The divergence between economic sentiment and economists' growth projections is symptomatic of the current environment of economic uncertainty. Adding the average lockdown stringency in between February and July as an intermediate explanatory variable between economic sentiment and projected growth does reveal two expected relationships: first, the stricter the lockdown in a given country, the lower the economic sentiment; second, harsher lockdown restrictions evidently lead to lower growth projections.

Since the confinement measures had a profoundly different sectoral impact, European producer confidence in different sectors evolved equally divergent (Figure 8). While all indicators tumbled down at record rates between March and May, confidence in the general service sector was hit most severely. Traditionally the sector with the most optimistic perspective, confidence levels dipped to a record low level of -43 during the height of the lockdown. While increasing in the month thereafter, confidence levels were still well below those in the rest of the economy by July. Consumer confidence, traditionally less volatile, also dipped significantly, but to a lesser extent than the supply side confidence indicators. Interestingly, European companies were already becoming increasingly pessimistic during the months preceding the COVID-19 crisis, during which in particular industrial sentiment took a strong hit.

Compared to the 2008 Financial Crisis, the drop in these sentiment indicators was more abrupt, although the magnitude of the decline was comparable. Evolutions in recent months indicate that European producers and consumer were anticipating a V-shaped recovery.

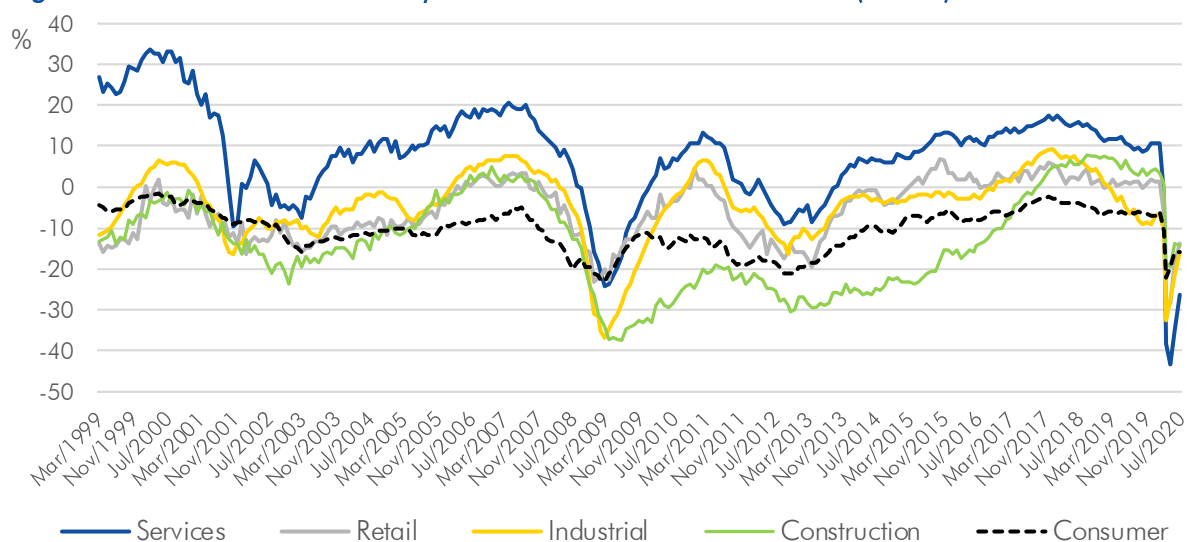
⁷ The Eurostat Confidence Index consists of 15 individual confidence indicators, which are in turn "produced to reflect overall perceptions and expectations at the individual sector level in a one-dimensional index. Each confidence indicator is calculated as the simple arithmetic average of the (seasonally adjusted) balances of answers to specific questions chosen from the full set of questions in each individual survey. The industrial confidence indicator is the arithmetic average of the balances (in percentage points) of the answers to the questions on production expectations, order books and stocks of finished products (the last with inverted sign). The services confidence indicator and the financial service confidence indicator are the arithmetic average of the balances (in percentage points) of the answers to the questions on business climate and on recent and expected evolution of demand. Balances are seasonally adjusted. The consumer confidence indicator is the arithmetic average of the balances (in percentage points) of the answers to the questions on the past and expected financial situation of households, the expected general economic situation and the intentions to make major purchases over the next 12 months. The retail trade confidence indicator is the arithmetic average of the balances (in percentage points) of the answers to the questions on the present and future business situation, and on stocks (the last with inverted sign). The construction confidence indicator is the arithmetic average of the balances (in percentage points) of the answers to the questions on order book and employment expectations." For a further elaboration on the construction, see https://ec.europa.eu/eurostat/cache/metadata/en/ei_bcs_esms.htm.

Figure 7: The average economic sentiment in the EU-27 countries (+UK) during the COVID-19 pandemic vs projected annual 2020 growth



Source: Authors, based on Eurostat and European Commission (2020a) data

Figure 8: Confidence indicators by sector and Consumer confidence (EU-27)



Source: Authors, based on Eurostat data

Potential recovery patterns

In this context, media pundits also often refer to the concept of a more prolonged ‘U-shaped recovery’. Apart from the shape of the curve of selected indicators,⁸ the underlying theory of these concepts refers to the potential of the COVID-crisis to generate structural market imbalances, which take a long time to resolve.

A reference to a V-shaped recovery implies the underlying hypothesis that after lockdown measures are lifted, economic relations return to normal. Whether this indeed occurs, depends on public recovery policies. Adjustments of bankruptcy laws and deferral of loan repayments can avoid a wave of bankruptcies, which in turn, together with crisis-specific unemployment schemes, can ensure that labour market matches are not permanently destroyed. This will minimise overall frictional costs in the road to recovery. Moreover, as durable investments that were postponed are executed as recovery progresses, growth in the near post-pandemic future will overshoot its equilibrium path, bringing the economy back to its initial growth trajectory.

If, on the contrary, policy makers do not succeed in avoiding a wave of bankruptcies, this will inevitably result in structural imbalances in different segments of the economy, which necessarily implies a costly and slow recovery process, in which investments and consumer spending are postponed even longer. This would then result in what is referred to as a U-shaped recovery trajectory, in which the economy will eventually converge to a level close to the initial growth trajectory, but the recovery process will be much slower than under the scenario of a V-shaped recovery.

⁸ Frequent reference to the resemblance of chartist patterns to letter of the alphabet emerged in the wake of the COVID-19 crisis, but are only loosely rooted in economic theory. For a comprehensive discussion on the different recovery patterns, see <https://www.brookings.edu/blog/up-front/2020/05/04/the-abc-of-the-post-COVID-economic-recovery/>.

Another often cited hypothesis proposes the possibility of an L-shaped recovery trajectory. In this case, economic growth in the post-pandemic period will not sufficiently overshoot its initial equilibrium level, because of the existence of severe and persistent market imbalances. Planned investment projects are postponed indefinitely, leading to persistent high unemployment and reduced consumption levels. This implies that the economy will not be able to reach its initial growth trajectory, giving rise to the L-shaped recovery pattern.

Policy responses

Similar to the nature of the crisis, policy responses at European and national levels aimed at preventing a U-shaped recovery, or worse, have been unprecedented.

On European level, for the first time in history, the European Commission decided on a comprehensive package of fiscal policy measures, flanked by an accompanying loosening of the ECB's monetary policy standards. Inter alia, the ECB announced its Pandemic Emergency Purchase Program (PEPP) mid-March. The PEPP is a EUR 750bn temporary asset purchase programme of private and public securities to counter the risks to the monetary policy transmission mechanism and the outlook for the Euro area. It was later topped up to EUR 1.35bn.

Based on the proposals of the European Commission, on 21 July 2020 the EU leaders have agreed to a comprehensive package of EUR 1.8bn which combines the multiannual financial framework and an extraordinary recovery effort under the Next Generation instrument. The exact national allocation is yet to be determined, but it is to be expected that high-debt countries that were hit hardest by the pandemic will be the largest beneficiaries. The package will inter alia be financed by borrowing at the European level (IMF, 2020b).⁹ The EIB Group is part of the European response to contain the economic effects of the crisis and started immediately to work on crisis and recovery measures (for more information see the concluding remarks of this document).

2.2 SME access to finance

COVID-19 and short run liquidity needs

The confinement measures that were introduced in the wake of the initial COVID-19 outbreak severely impacted European SMEs' liquidity needs. As revenues dried out, about 4 in 10 SMEs reported to experience liquidity issues as a direct consequence of the economic lockdown. This increases to 5 in 10 for the most affected sectors of the economy, such as hospitality, retail and construction (SMEunited, 2020a). Even against a background of extensive policy support measures, over 1 in 2 EU corporates is estimated to face urgent liquidity needs after a 3 month lockdown period, adding up to a total minimum liquidity shortfall close to EUR 100bn (Maurin et al., 2020). This dramatic rise in liquidity needs occurred against the backdrop of worsening access to finance conditions.

⁹ For more information please visit, for example: <https://www.ecb.europa.eu/home/search/coronavirus/html/index.en.html>, <https://www.consilium.europa.eu/media/45109/210720-euco-final-conclusions-en.pdf>, https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response_en, and <https://www.eib.org/en/about/initiatives/covid-19-response/index.htm>

SMEs' perspective on access to finance¹⁰

The share of Euro area SMEs that considers access to finance to be a highly important problem¹¹ has increased further during the second semester of 2019, to 27 percent (Figure 9, left panel), indicating the start of a trend reversal after several consecutive years of decreasing access to finance issues. Now, nearly one in three SMEs report severe difficulties in accessing finance, confirming the existence of a structural SME finance gap. Interestingly, the share of large firms reporting severe issues in accessing finance has also been on the rise lately. Although still below the SME segment, access to finance issue for large firms have risen more strongly, so that the two series have almost converged.

The share of SMEs reporting severe issues in accessing finance varies significantly from country to country (Figure 9). In Greece, about 43% of SMEs experienced significant problems in securing suitable finance solutions, a slight improvement compared to HY1/2019. While still the

worst performing country in the Euro area, this represents a marked improvement compared to the beginning of measurement in 2013, when nearly 7 in 10 Greek SMEs reported severe issues in accessing finance. Also in France, SMEs had slightly less difficulties in accessing finance in HY2/2019. In all other countries, SMEs reported more issues in securing external financing.

The SAFE survey also asks SMEs which factors they believe are driving the availability of external financing. During the second semester of 2019, SMEs' perceived their access to finance prospects were negatively affected mostly by the general economic environment, followed by the firm-specific outlook (Source: Authors, based on ECB SAFE (ECB, 2020) data

Figure 10). Insufficient public support for external financing markets, which has been a concern for several semesters, continues to worry European SMEs, although to a slightly lesser extent. All other factors considered were believed to have positively impacted the availability of external finance, although the general level of optimism has further decreased compared to the previous semester.

The SME Financing gap

Access to finance is an important issue to SMEs. Financial institutions are generally reluctant to extend uncollateralised credit to SMEs, even at high interest rates. As a result, many SMEs with economically viable projects cannot obtain the necessary financing from the regular system of financial intermediation.

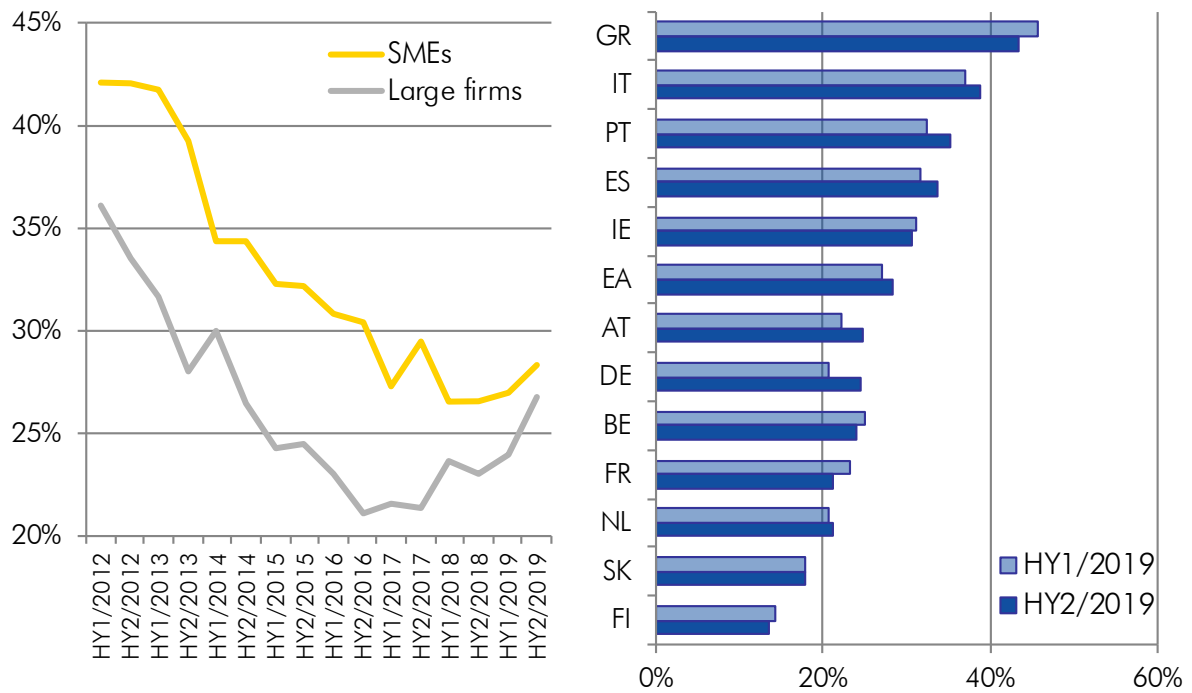
This phenomenon is often referred to as the SME financing gap, a situation in which the market is not able to supply a sufficient amount of external financing to SMEs. This market failure, resulting in a sub-optimal equilibrium outcome is rooted in the existence of information asymmetries, which lead to credit rationing either through adverse selection of low quality borrowers or moral hazard issues (Akerlof, 1970; Jaffee and Russel, 1976; Stiglitz and Weiss, 1981).

This market failure warrants government intervention in SME capital markets, for example, through credit guarantee schemes (see chapter 4) or public support for the venture capital eco-system (see chapter 3).

¹⁰ The discussion on SMEs' perspective on access to finance opportunities is based on the ECB's SAFE survey (ECB, 2020). As of today, the most recent wave of the survey covers the second semester of 2019. Therefore, the results presented here do not incorporate the impact of the COVID-crisis.

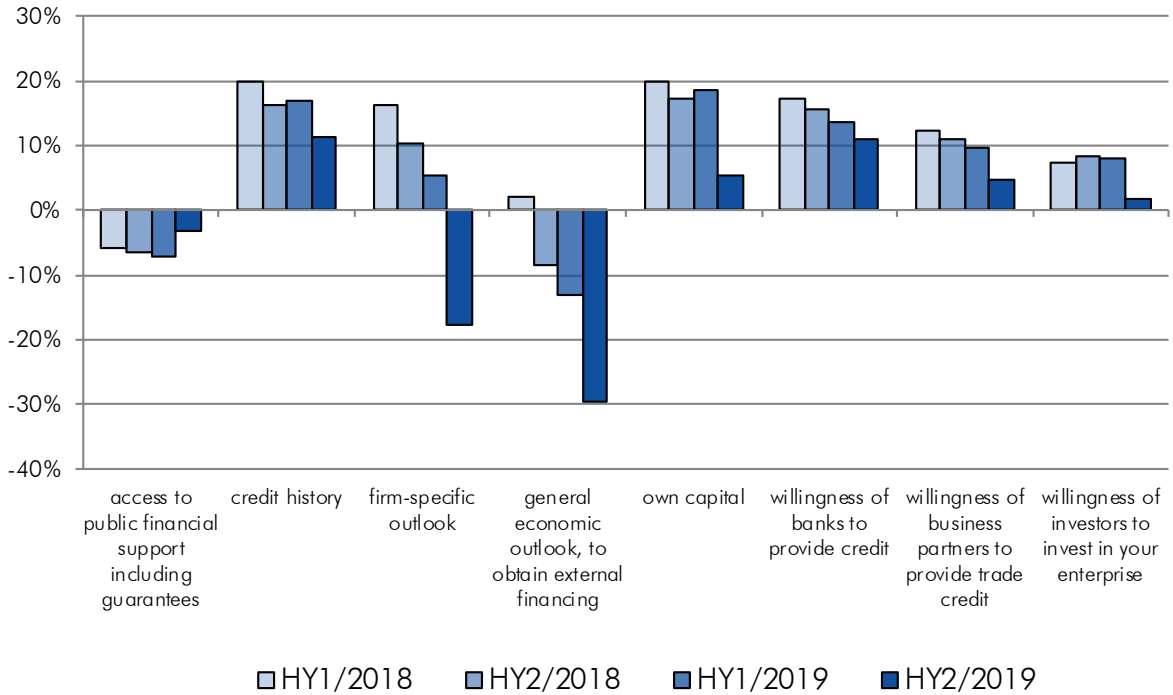
¹¹ Rating it 7 or higher on a scale of 10 for the SAFE survey item Q0b, pressingness of problems that the firm is facing.

Figure 9: Percentage of SMEs ranking access to finance as a highly important issue



Source: Authors, based on ECB SAFE (ECB, 2020) data

Figure 10: Factors driving the availability of external financing to Euro area SMEs



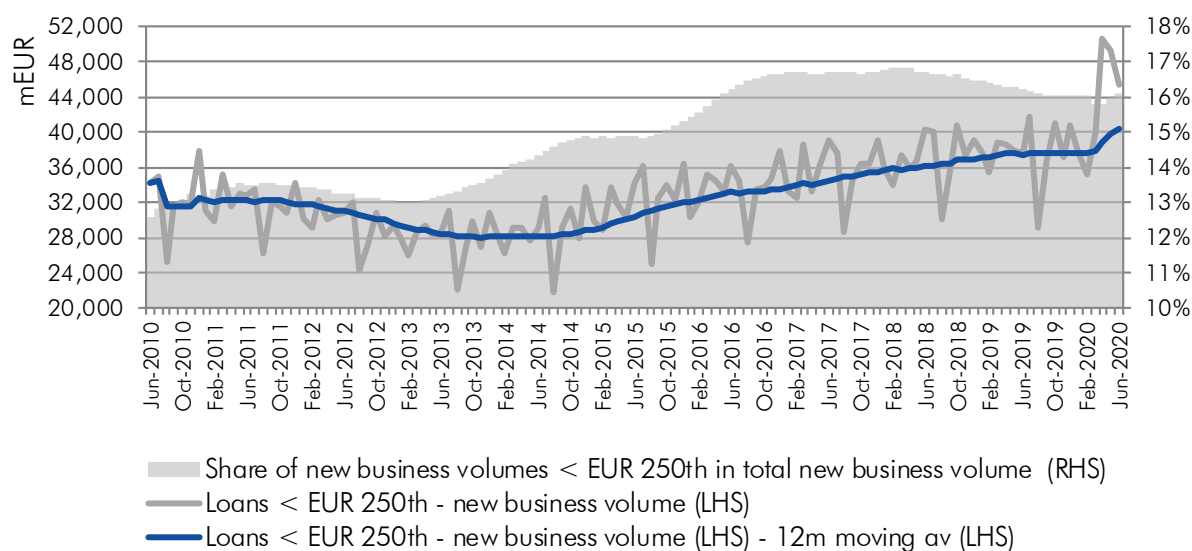
Source: Authors, based on ECB SAFE (ECB, 2020) data

SME bank finance conditions

The bank lending channel has traditionally been the most important source of external financing for SMEs, particularly in Europe, where SMEs rely disproportionately on debt to finance their investments. Banks' issuance of small loans (< EUR 250th, a proxy for SME lending^{12,13}) to Euro area non-financial corporations has increased drastically during the second quarter of 2020, exceeding EUR 50bn in April (Figure 11). This presents a stark departure from the plateauing trend that set in early 2019. Over the entire second quarter combined, small business lending increased by 27% compared to the same quarter one year earlier.

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

Figure 11: Small loans to NFCs (< EUR 250th), new business volumes in the Euro area (12 months backward moving averages)



Source: Authors, based on ECB Data

The impact of the COVID-19 crisis on corporate borrowing differs strongly among countries. Loan issuance in Slovenia and France doubled in the second quarter of 2020 (as a share of GDP), whereas in Belgium, banks actually issued less loans compared to the same quarter one year earlier (Figure 12, panel a). The already elevated levels of corporate borrowing in Q2/2019 could be one potential explanation for this contrasting evolution. Also Spain (+45%), Italy (+28%), Slovakia (+43%) and Portugal (+48%) recorded increases in corporate lending activity well above the Euro area average (+19%). In Germany, on the other hand, no significant increase occurred.

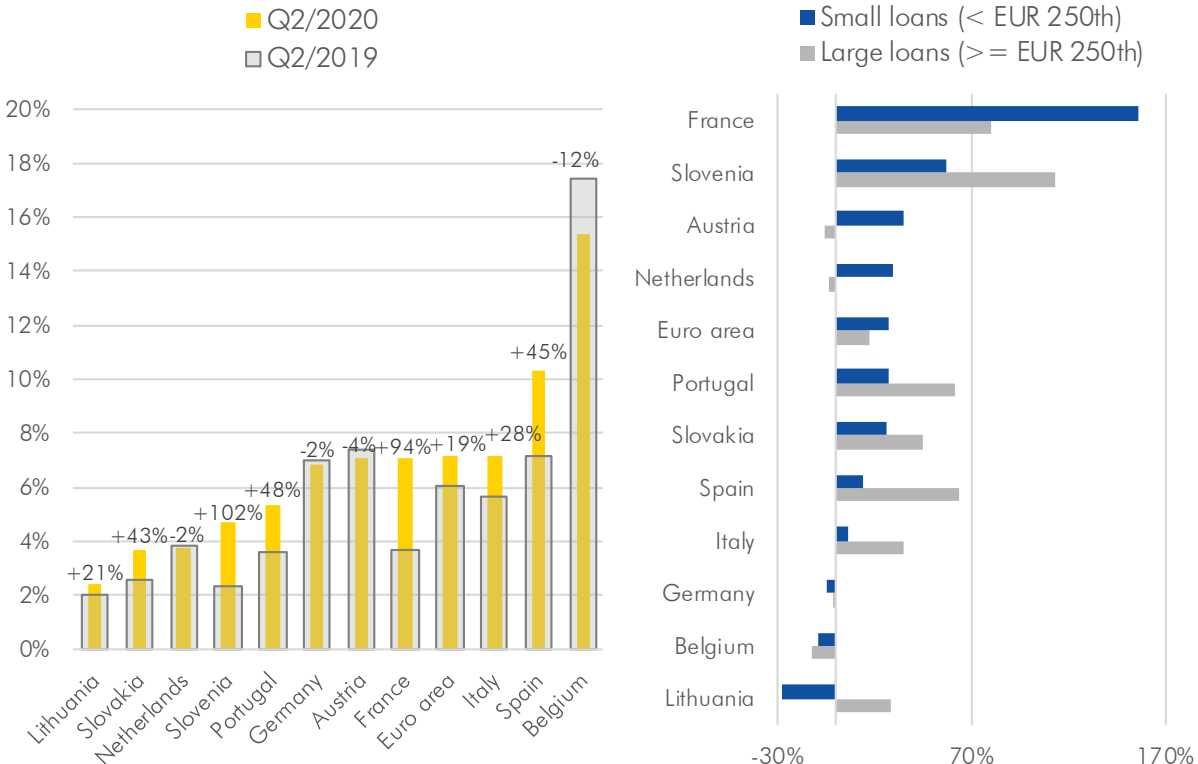
¹² Huerga et al. (2012) show that small loans are a good proxy for the SME lending market.

¹³ To better reflect lending conditions to SMEs specifically, rather than small loans in general, the data excludes interest rates on revolving loans and overdraft, since these instruments are used independently of firm size.

Figure 12: Evolution of loan issuance (NBV*) to NFC in the wake of the COVID-19 pandemic in Euro area countries

a) Total loan issuance in Q2/2020 (vis-à-vis Q2/2019, % of 2019 GDP)

b) Growth in loan issuance in Q2/2020 (small vs large loans, vis-à-vis Q2/2019)

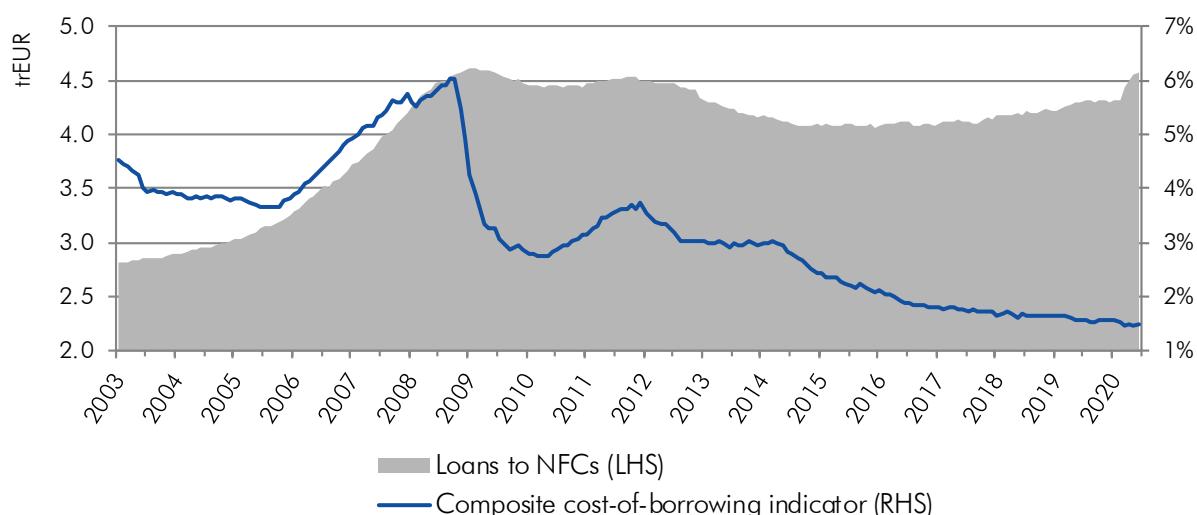


*Note: NBV = New Business Volumes, of loans other than revolving loans and overdrafts, convenience and extended credit card debt, summed over all maturities, to non-financial corporations.
 Source: Authors, based on ECB Data

The differential evolution in issuance for different loan size segments could either point towards diverging national policy strategies, or different corporate liquidity needs. For example, the increase in corporate borrowing in France was mainly driven by a rise in the demand for small loans, as small lending activity rose disproportionately, by more than 150% (Figure 12, panel b). While French large loan issuance also rose strongly, at 80%, the increase was less pronounced. This contrasts with Slovenia, which also experienced a strong increase in corporate borrowing, but the segment of large loans was the driving force behind this evolution (+112%). Also in Spain, Portugal, Slovakia and Italy the rise in corporate borrowing was driven by an increase in large loan issuance. In Lithuania, even though total corporate lending increased, the segment of small loans contracted significantly.

The increase in the rate of loan issuance across the Euro area has led to a significant acceleration in the upward trend in corporate leverage, with total outstanding loans to non-financial corporations in the Euro area rising by nearly 6% since the beginning of the year (Figure 13). At EUR 4.56tr (June 2020), outstanding loans have now surpassed their earlier record level, reached at the dawn of the 2008 financial crisis. This was undoubtedly driven by the continued decline in corporate borrowing costs which have dropped to a record-low level of 1.49% in June 2020.

Figure 13: Outstanding loans to NFCs and composite borrowing costs (Euro area)



Source: Authors, based on Eurostat Data

During the six months leading up to June 2020, borrowing costs for non-financial corporations have undergone contrasting evolutions, depending on the sub-segment under consideration (Figure 14). Borrowing costs for small loans, a good proxy for SME lending, have continued to decline in recent months, in particular for short- and medium-term maturities. Long-term borrowing costs for small loans have stagnated. These evolutions stand in stark contrast with occurrences on the segment for large loans, where short- and medium-term borrowing have become slightly more expensive since the start of the COVID-crisis, but long-term borrowing costs have declined.

These contrasting evolutions have led the size spread on the long-term maturity segment to rise again, after hovering near zero for the past years. This could indicate the presence of elevated risk levels of long-term SME capital lending due to the uncertainty regarding their survival probabilities in the post-pandemic economic environment. The size spread on the short-term maturity market on the other hand decreased significantly since April 2020. One potential explanation could be the extended support for SME liquidity needs provided by public guarantee programs, which renders such lending activity less risky, and hence warrants a lower interest rate. Short-term liquidity needs for larger corporations, on the other hand, often not supported through such schemes, are likely to be considerably more risky, and hence more expensive, explaining the divergent evolution between the two market segments.

Source: Authors, based on ECB Data

Figure 15 illustrates the heterogeneity that exists for borrowing costs for small loans within the EU.¹⁴ SMEs face the most favourable lending conditions in Belgium, Luxembourg and France, while the most expensive lending environment is found in Ireland, Greece and Estonia. Compared to other

¹⁴ In this context, see Wagenvoort et al. (2011) who show that the European market integration for small loans, in particular with a short rate fixation, has not yet been achieved, explaining the non-uniformity of bank lending rates on small loans across Europe.

Euro area SMEs, Irish SMEs also face the largest competitive disadvantage vis-à-vis large firms, as evidenced by the Irish size spread.

Over the 12 months leading up to June 2020, the interest rate on small loans¹⁵ decreased in all but four countries. 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.

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 most for small loans (increasing size spread), thereby widening the competitive disadvantage of SMEs vis-à-vis larger firms.

While some might argue that cross-country heterogeneity in interest rates on small loans could be explained by differences in the risk-profile of local SMEs, a recent study found that such factors were not strong predictors of small loan interest rates (Caroll and McCann, 2016). Controlling for individual risk factors, the authors conclude that national interest rate differences for SME lending are associated with a country's institutional characteristics, such as the recoverability of collateral and lack of competition in the banking sector. This latter explanatory factor was found to be of particular relevance for explaining the interest rate size-spread documented in Figure 14 and Source: Authors, based on ECB Data

Borrowing costs by maturity and size segment.

The ECB provided data on interest rates for lending segments by size (small, <EUR 250th; medium-sized, EUR 250th – EUR 1m; large, >EUR 1m) and maturity (short-term, < 3months; medium-term, 3-5 years; long-term, > 10 years). Whereas the first maturity segment indicates demand for short-term liquidity needs, the latter segment arguably is the most relevant proxy for the cost of durable investments. From these data, one can derive the interest rate size spread, for each maturity class, defined as the excess interest rate charged on loans smaller than EUR 250th compared to loans with a value exceeding EUR 1m. A high size-spread indicates a disadvantaged competitive position for small firms vis-à-vis larger borrowers.

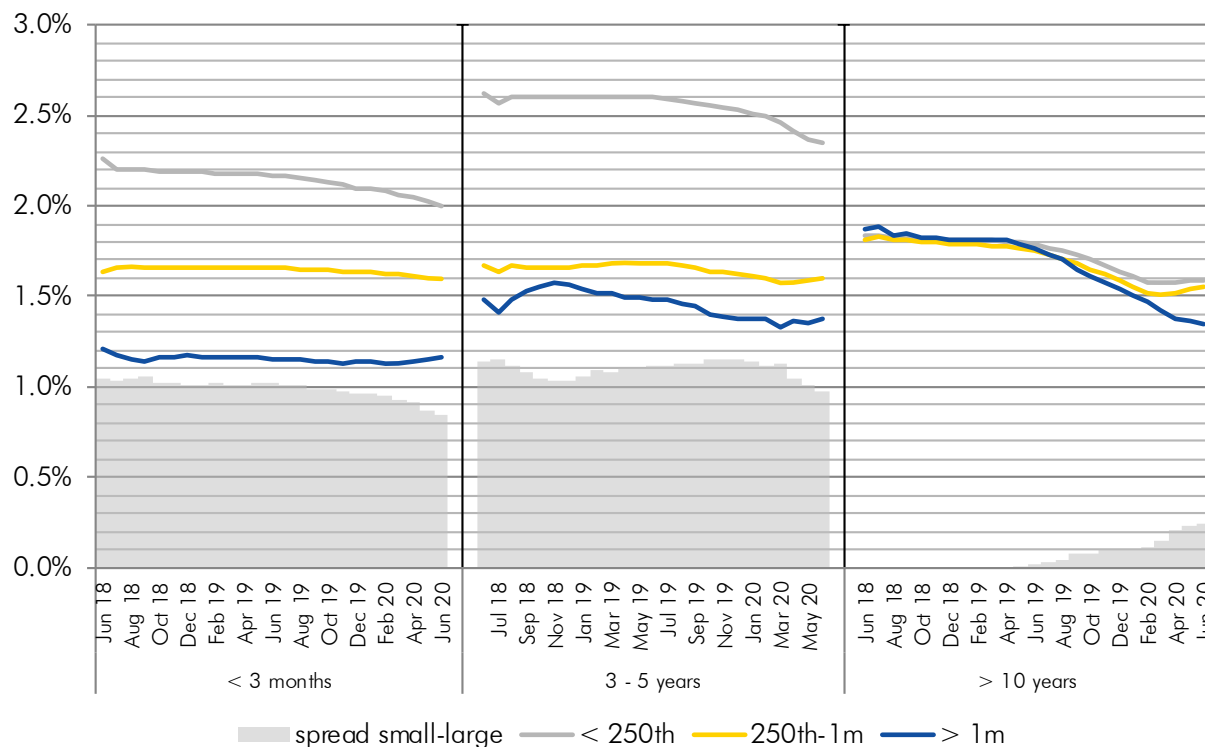
Regardless of maturity, small loans are burdened with higher interest rates (Figure 14). Such a size-spread conflicts with traditional finance theory, which suggests that the risk of default increases with loan size (Stiglitz, 1972). The absence of this expected relationship could evidence the presence of fixed screening costs, which imply higher interest rates on small loans. Or it could indicate that small loans are used for different, more risky purposes, such as financing working capital. The fact that the size spread is particularly high for short-term loans, provides some support for this argument. It is also possible that banks possess a higher degree of power in the small loan market segment, putting an upward pressure on the price of small loans, thereby increasing the cost of obtaining bank finance for SMEs.

Figure 14 also exposes an anomaly in the maturity spread of small loans. As liquidity decreases with loan maturity, long-term loans should carry higher interest rates. This holds indeed true for medium-sized and large loans. For small loans, however, short-term lending is actually more expensive. This too can be interpreted as evidence for the presence of a fixed cost element related to screening.

¹⁵ As measured by a 12-month backward looking moving average, to eliminate the influence of erratic monthly fluctuations.

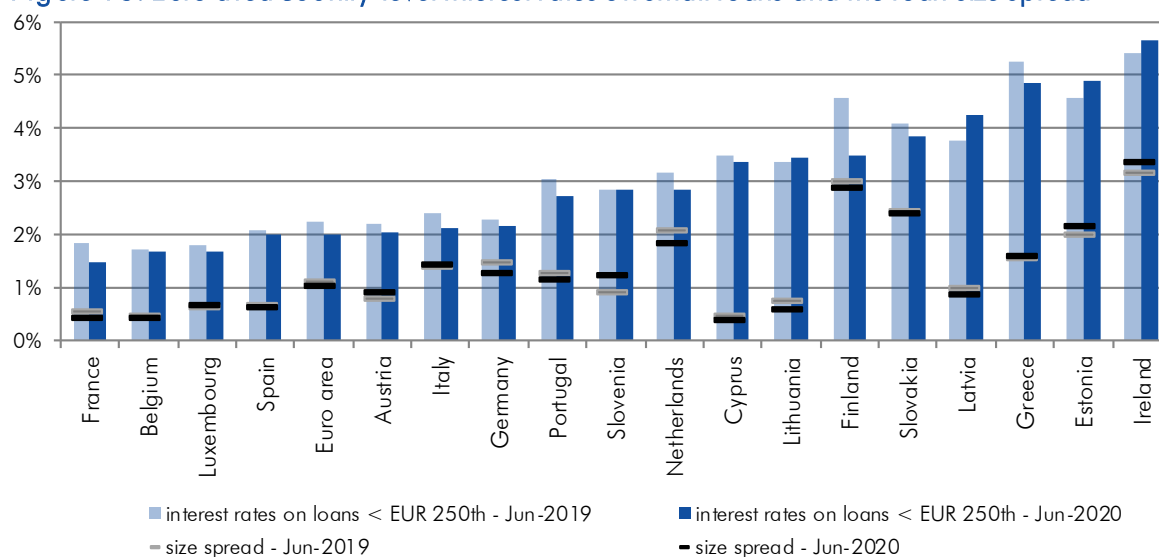
Figure 15. Large firms have greater bargaining power, which leads to lower interest rates on larger loans and hence, a lower size spread (Berger and Udell, 2006; see also Affinito and Farabullini, 2009).

Figure 14: Interest rates by loan size and maturity, and the interest rate size spread



Source: Authors, based on ECB Data

Figure 15: Euro area country-level interest rates on small loans and the loan size spread*



*Note: The spread is calculated as the percentage point difference between loans exceeding EUR 1m and loans smaller than EUR 0.25m. Twelve month backward moving averages were used to eliminate the influence of monthly outliers as well as seasonal influences and focus on the underlying trend. Countries or data points for which no sufficient data was available are omitted.

Source: Authors, based on ECB Data

The EIF SME Access to Finance Index

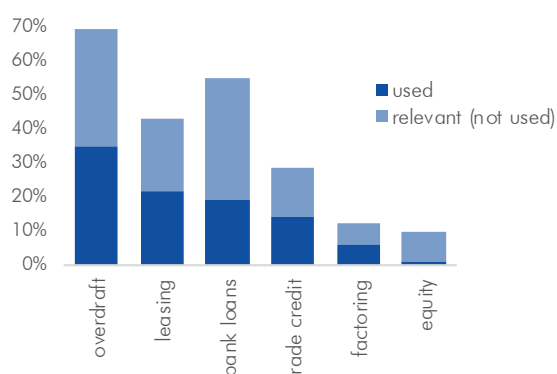
The ESAF Index is a composite indicator that summarises the state of SME financing for the EU27 (+ UK) countries. The 2019 ESAF results, based on data available in June 2020 (Figure 16), present the situation as it was at the end of 2019, and hence do not incorporate the impact of the COVID-crisis.

The 2019 ESAF ranking is headed by Sweden, with Germany and Finland completing the top 3. Compared to 2018, Sweden retained the top spot in the ranking, despite of a minor deterioration in its macro environment (Table 3), which was compensated for by a significant improvement in equity conditions. The Swedish IPO market, for example, more than doubled in 2019. Greece lags the ESAF ranking for the seventh consecutive year in a row, with a growing gap to the penultimate country, Romania. The ESAF further indicates that SME financing condition improved considerably in France (up 5 spots in the ranking), that replaced Finland to join Germany and Sweden in the top 3, but also in Hungary, Austria and Luxembourg. SME access to finance deteriorated in Finland, Belgium, Slovenia, the Netherlands, Malta, Czech Republic, Denmark and Estonia.

By providing a full overview of the ranking of the 27 EU countries (+ UK) on each of the four subindices, Table 3 delivers a deeper insight into the driving forces behind the 2018-2019 ESAF dynamics. For a full overview of the 2019 update and a more elaborate description on the driving evolutions, the reader is referred to Torfs (2020).

The ESAF Index

SMEs typically rely on a variety of financing products to fund their investments and daily operations. Therefore, SME access to finance is a complex phenomenon, difficult to measure using individual indicators.



The ESAF Index aims to summarise the state of SME financing in the EU27 + UK in one simple statistic. To do so, it aggregates 15 different indicators that cover different aspects of the SME financing markets into four subindices, using equal weighting and geometric aggregation techniques.

The individual indicators are grouped into four subindices:

Bank Lending Index

- Percentage of SMEs using bank loans
- Percentage of SMEs using grants or subsidised bank loans
- Percentage of SMEs not applying because of possible rejection
- Interest rate for loans under EUR 250th
- Interest rate spread vs large loans

Credit & Leasing Index

- Percentage of SMEs using overdraft
- Percentage of SMEs not applying because of possible rejection
- Percentage of SMEs using leasing or hire-purchase
- Median interest rate charged for bank overdraft application

Equity Index

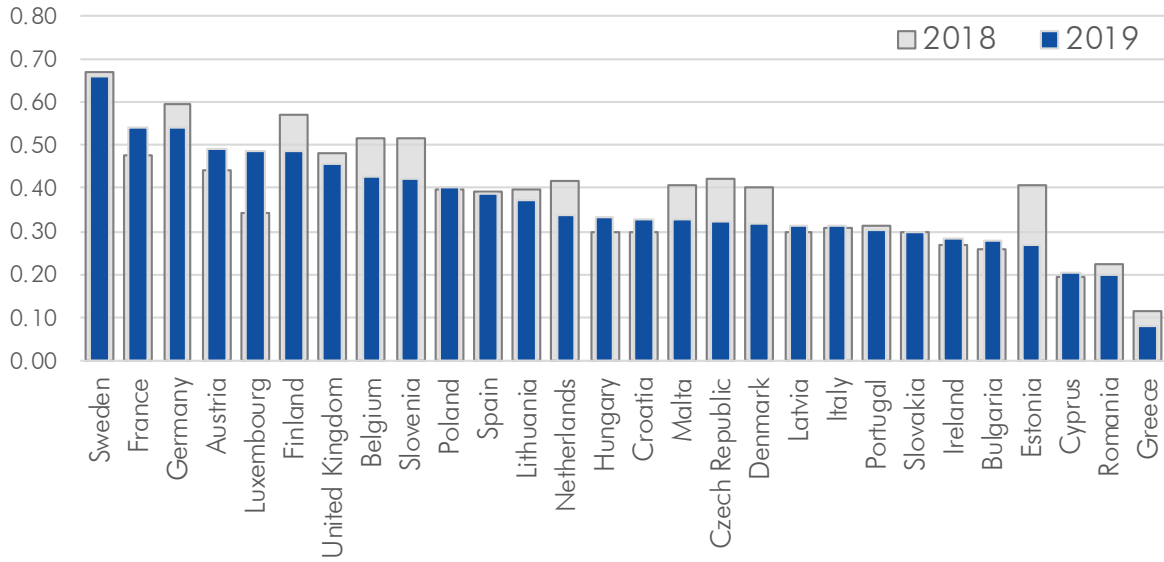
- Venture Capital Investments / GDP
- Value of IPO market / GDP
- Percentage of SMEs using equity capital

Macro Index

- Gap between actual and potential GDP
- Bank non-performing loans to total gross loans
- Percentage of SMEs not feeling finance constraint

An elaborate description of its methodology can be found in Gvetadze et al. (2017).

Figure 16: The EIF SME Finance Index: country comparison and evolution over time



Source: Torfs (2020)

Table 3: The ESAF subindices: country ranking 2019 (vs 2018)

	ESAF	Loans		Equity		Credit & Leasing		Macro	
	2019	2019	(2018)	2019	(2018)	2019	(2018)	2019	(2018)
Sweden	1	11	(11)	1	(1)	6	(7)	15	(11)
France	2	3	(1)	3	(11)	13	(12)	13	(20)
Germany	3	10	(12)	5	(6)	5	(5)	7	(3)
Austria	4	6	(3)	13	(24)	4	(2)	4	(2)
Luxembourg	5	8	(7)	9	(19)	17	(25)	2	(17)
Finland	6	19	(19)	4	(2)	1	(1)	10	(9)
United Kingdom	7	17	(16)	2	(4)	9	(11)	18	(16)
Belgium	8	5	(6)	14	(10)	11	(6)	14	(14)
Slovenia	9	2	(2)	22	(14)	2	(4)	9	(6)
Poland	10	9	(4)	19	(26)	7	(9)	11	(7)
Spain	11	1	(8)	18	(15)	19	(18)	16	(18)
Lithuania	12	14	(14)	15	(17)	20	(13)	6	(12)
Netherlands	13	24	(28)	10	(7)	14	(14)	8	(5)
Hungary	14	22	(23)	17	(20)	21	(23)	1	(1)
Croatia	15	12	(15)	21	(23)	16	(17)	17	(21)
Malta	16	4	(9)	11	(8)	26	(26)	22	(10)
Czech Republic	17	15	(10)	27	(18)	10	(15)	5	(4)
Denmark	18	28	(27)	7	(3)	3	(3)	24	(24)
Latvia	19	16	(26)	12	(16)	24	(19)	19	(8)
Italy	20	7	(5)	16	(21)	22	(21)	25	(23)
Portugal	21	13	(13)	24	(27)	12	(10)	21	(22)
Slovakia	22	21	(17)	26	(28)	8	(8)	12	(15)
Ireland	23	25	(24)	8	(12)	23	(20)	20	(25)
Bulgaria	24	18	(22)	28	(22)	18	(22)	3	(19)
Estonia	25	23	(18)	6	(5)	27	(24)	23	(13)
Cyprus	26	20	(20)	25	(13)	25	(27)	26	(27)
Romania	27	27	(21)	20	(25)	15	(16)	27	(26)
Greece	28	26	(25)	23	(9)	28	(28)	28	(28)

Source: Torfs (2020)

3 Private equity

3.1 Introduction

Private Equity (PE)/Venture Capital (VC)¹⁶ is an essential source for start-up, young, and high growth companies to create value, often through innovation. External equity is not to be seen as a substitute for traditional, mainly bank-centred, SME financing instruments. Rather, it serves a specific and restricted group of SMEs and mid-caps (including startups), which, nevertheless, significantly contribute to the innovativeness, productivity and development of the overall economy.

However, there are impediments to the development of a vibrant European PE/VC market and the “[p]resence and accessibility of alternative funding avenues is underdeveloped for SMEs, e.g. venture capital & angel investing” (AFME and BCG, 2015; AFME, 2017). The justification for public intervention in the area of SME financing in general, and external equity financing in particular, is rooted in a number of factors, such as the presence of information asymmetries in the relationship between financier and recipient, the presence of fixed costs of investment and the existence of positive externalities originating from SMEs’ innovation activities. In the PE/VC market, the long investment cycles can also deter private investors, especially in early stage financing, while public agents can be considered as more “patient” investors.

Moreover, in situations of economic and financial market crises, the markets for PE and VC, in particular, have typically also come under pressure. The historical data confirms that the European PE/VC ecosystem is sensitive to changes in the macroeconomic landscape (Kraemer-Eis et al., 2020; Gompers and Lerner, 1999; Prencipe, 2017). Such considerations are of particular importance, as the COVID-19 pandemic and associated mitigation measures caused a major shock to the European and global economy in the course of 2020. In this chapter we provide an overview of the European PE/VC market activity and prospects. Due to the above-mentioned considerations related to the exceptional economic disruptions caused by the pandemic, we decided to deviate from the usual structure of this chapter and to focus instead on the current situation in the European markets for PE and VC, including finance provided by business angels (BAs), during the COVID-19 crisis. A related study was published recently as an EIF Working Paper, i.e. in Kraemer-Eis et al. (2020). We present the results of these analyses in this chapter. For an overview of considerations related to structural developments in the European PE markets, the reader is referred to the previous ESBFO issue (Kraemer-Eis et al., 2019). We intend to revisit such structural discussions in future ESBFO issues again, when the fog surrounding the impact of the current crisis on the markets will have lifted.

¹⁶ In this chapter, we follow the Invest Europe approach that includes VC as a subcategory of PE.

The adverse effects of the COVID-19 pandemic also spilled over to PE and VC activities. At the fund level, there are adverse repercussions for fundraising, investment, and exits – and consequently on the financing of innovative SMEs in Europe (see e.g. Mason, 2020). General Partners (GPs) are expected to focus on cash flow management and resource management, while smaller and less established fund managers may struggle to source LP commitments (PitchBook, 2020).

This would prove detrimental to most young and innovative SMEs across Europe: a high portion of these are non-revenue generating and/or cash-flow negative. If access to PE/VC funding is restricted, they might be unable to access funding through alternative channels. Even for revenue-generating innovative SMEs, the potential reduction in sales due to COVID-19 might erode their capital base. This would reduce their chances to capture any additional debt financing to avoid insolvency.

In addition, venture-backed start-ups are historically vulnerable to recessions and economic slowdowns. In addition to the potential drop in demand induced by COVID-19, start-ups are unlikely to have significant revenue; they typically have immature operational infrastructure and must therefore rely on outside capital (usually venture) to fund further operations and growth. Start-ups and scale-ups with a problematic cash flow situation at the start of COVID-19 might involuntarily become the target of opportunistic acquisitions (PitchBook, 2020). This might be particularly likely for regions outside of major PE/VC hubs, which could exacerbate the existing cohesion gaps (Mason, 2020). Similarly, the COVID-19 crisis is likely to have diverging effects across industries, creating “winners” – e.g. consumer health, biotech – as well as “losers” – e.g. travel, mobility and jobs (see Dealroom and Sifted, 2020). Moreover, European tech companies are often acquired by non-EU buyers, leading to leakage of EU innovation and future job creation.¹⁷

The purpose of the present chapter is to discuss the potential effects of the COVID-19 crisis on the European PE and VC ecosystem. To this end, this chapter follows a twofold approach. It first discusses the sentiment of European investors in the wake of the COVID-19 crisis, as gathered by three separate waves of the EIF’s 2020 Surveys targeted to Business Angels, VC and PE Mid-Market investors respectively. In addition, this chapter uses time series analysis to discuss the potential prospects of the European PE/VC ecosystem after the COVID-19 crisis.

This chapter is mainly concerned with the cyclical behaviour of the European VC/PE market. However, the European PE/VC ecosystem also continues to be affected by a number of structural impediments, e.g. information asymmetries, thin markets due to the high fragmentation across (and within) national borders. We discuss these in Kraemer-Eis et al. (2016), with a focus on the structural failures of financing markets and an economic rationale for public intervention. For a practical approach to estimate the potential loss of activity induced by structural issues in the European PE/VC market, see Kraemer-Eis and Lang (2014) and fi-compass (2020).

The chapter is organised as follows. Section 3.2 sets the scene by taking a brief look at the historical development of the European PE/VC markets, including during the Global Financial Crisis. Section

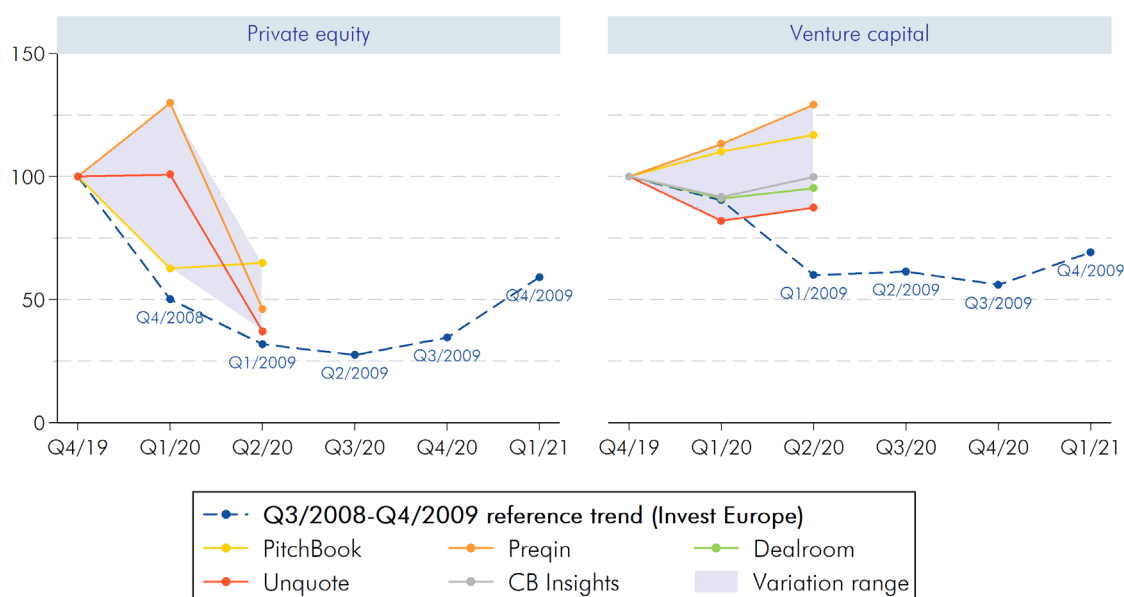
¹⁷ Based on an analysis of 3,600 EIF-supported seed and start-up VC investments from 1996 to 2015, Prencipe (2017) finds that about 50% of the performing EIF-backed European investees were acquired by non-European corporations, particularly from the US. This “raises the issue of whether the missing scale-up phenomenon in Europe could be linked to the lack of serial tech buyers, that is, incumbents in highly innovative and competitive sectors” (Prencipe, 2017).

3.3 exploits the unique opportunity brought by three concurrent EIF Surveys administered in early 2020 to discuss the sentiment of investors at the outbreak of the crisis, when uncertainty increased dramatically. Section 3.4 discusses the results of a simple time series model to forecast the prospects of the European PE/VC market after COVID-19, based on the Spring 2020 GDP forecasts of the European Commission. Section 3.5 concludes.

3.2 COVID-19 and the Global Financial Crisis: similarities and differences

The COVID-19 pandemic has led to an unusual mix of supply and demand shocks that are rather unique in recent economic history. Therefore, the determinants of the COVID-19 crisis differ significantly from the GFC. It is thus debatable how much can be inferred from past crises about the prospects of the European VC/PE ecosystem after COVID-19 (Mason, 2020). As a consequence, the initial reactions in the European PE/VC market might prove more informative.

Figure 17: Indexed real growth of PE/VC investments in Europe (Q4/2019 = 100), by data provider



Source: Authors, based on data from Invest Europe, PitchBook, Preqin, Dealroom, Unquote, CB Insights.

However, a complicating factor is the renowned opaqueness of the PE/VC market, resulting in the high degree of uncertainty about the initial reaction of the European PE/VC markets. Figure 17 plots the indexed growth of PE/VC investments in Europe according to various leading PE/VC data providers.¹⁸ There is substantial lack of consensus with regard to the short-term developments of the European PE/VC ecosystem in the first two quarters of 2020. Nevertheless, most reports agree that the investment activity in the wake of COVID-19 has stalled at best. For instance, Dealroom reports

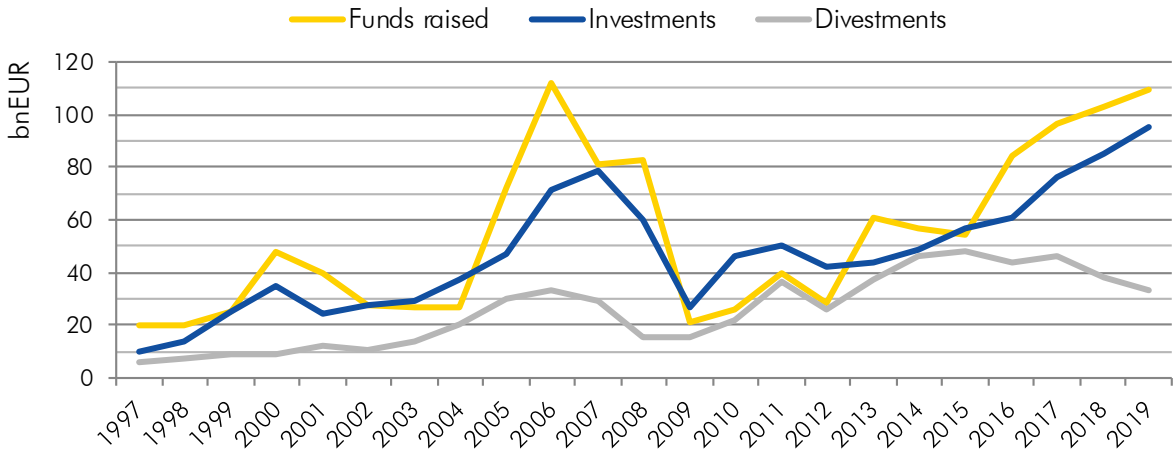
¹⁸ Invest Europe: "Quarterly Activity Indicator Q1 2007 - Q3 2015"; PitchBook: PitchBook database [Accessed: 2 July 2020]; Preqin: Preqin database [Accessed: 3 July 2020]; Dealroom (and Sifted): Dealroom and Sifted, 2020; Unquote (and Aberdeen Standard Investments): "Private Equity Barometer", Q1 2020 edition; CB Insights (and PwC): "MoneyTree Report Q1 2020".

that in early 2020 VC activity remained relatively stable due to the fact that many signed deals were already in the works before the introduction of lockdown measures.

The reaction to past economic shocks can provide at least a useful benchmark against which we can assess the potential effects of the COVID-19 pandemic. To this end, Figure 18 includes the quarterly evolution of the European PE/VC market during the GFC, based on data from Invest Europe, the European private equity and venture capital association.

What happened following the GFC?¹⁹ Data from Invest Europe (Figure 18) shows that total PE fundraising in Europe suffered a 74% drop, from EUR 83bn in 2008 to EUR 21bn in 2009.²⁰ Figure 19 shows that VC fundraising halved over the course of two years, from EUR 7.9bn in 2007 to EUR 3.5bn in 2009. As a consequence, the average fund size shrunk drastically, with a disproportionate impact on scale-up financing. The average PE fund size more than halved from EUR 358m in 2008 to EUR 128m in 2009. The average VC fund size decreased by about 40% over the course of two years, from EUR 56m in 2008 to EUR 32m in 2010. However, the relative fall in the number of active funds was higher in the VC than in the PE market.

Figure 18: Activity levels in the European Private Equity market over time

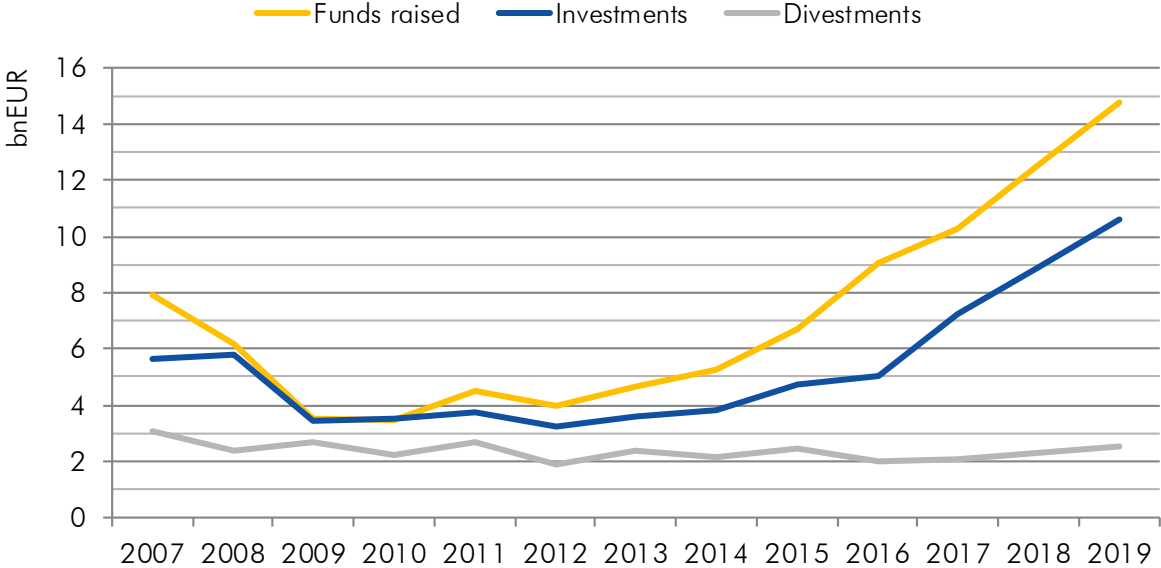


Source: Authors, based on Invest Europe data

Data from Invest Europe also shows that the industry temporarily shifted away from seed/early stages to later stages financing. As a consequence, fewer innovative firms were able to obtain financing and the (average) amount per funding round decreased. The anticyclical policy response led, inter alia, by the EIF caused an increase in the share of government agencies in VC fundraising, from less than 15% in 2007 to around 35% in 2011. Such anticyclical policy response helped the European VC ecosystem to stay afloat during the GFC, and likely played a role in the rekindling of the overall market activity after 2012 (Kraemer-Eis et al., 2016).

¹⁹ See Kraemer-Eis et al. (2019) for more detailed information on the European PE/VC market development over time.
²⁰ For comparison, in the years following the dot-com crash total PE fundraising decreased by 44% between 2000 and 2003.

Figure 19: Activity levels in the European VC market over time



Source: Authors, based on Invest Europe data

Exit opportunities for investees also narrowed considerably: for instance, the number of IPOs in Europe decreased by almost 85% in the years 2007 to 2009 (PwC, 2012).²¹ Start-up valuations shrunk significantly,²² and holding periods until successful exit went up. It would take almost an entire decade, i.e. in 2015-2016, for PE and VC fundraising to revert to their pre-crisis levels.

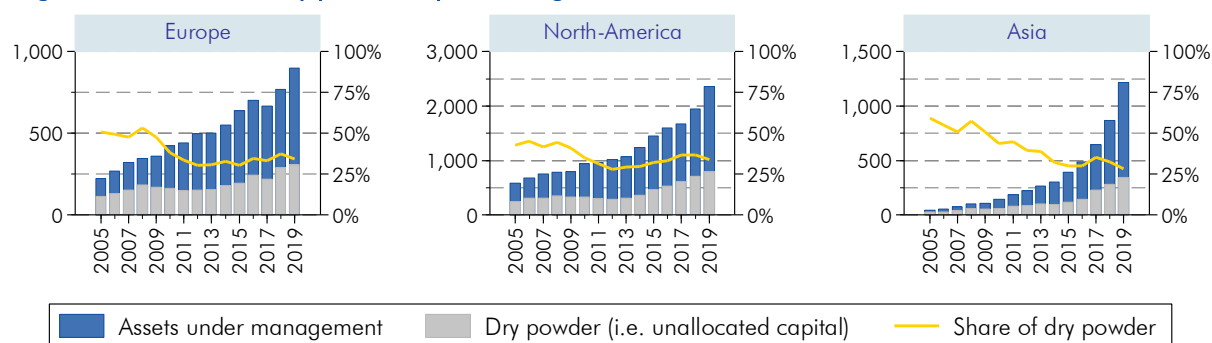
Overall, historical data confirms that the European PE/VC ecosystem is sensitive to changes in the macroeconomic landscape (see Gompers and Lerner, 1999; Prencipe, 2017 for additional analyses). However, there is mounting evidence that the European VC/PE ecosystem has matured in the past decades (Axelson and Martinovic, 2013; Sahut and Braune, 2015), which could potentially contribute to its stronger resilience during downturns.

In addition, analysts pointed to the increased availability of funds raised, though yet unallocated capital (i.e. “dry powder”) as a potential mitigating factor that advantaged the PE/VC industry as it entered the COVID-19 crisis. Figure 20 shows the total dry powder levels and the share of dry powder over assets under management (AuM) by geographical focus of investments and over time, according to data from Preqin. While the levels of dry powder in Europe almost doubled in 2019 compared to 2007, the relative share of dry powder was actually lower, consistent with the decreasing share observed across regions of the world.

²¹ Prencipe (2017) shows that major recession events such as the dot-com bubble (2001–2002) and the European sovereign debt crisis (2009–2010) were linked to peaks in investment write-offs in the EIF venture capital portfolio.

²² For instance, Prencipe (2017) shows that the median valuation of EIF-backed early stage start-ups fell by 25% in the period Q1/2008 to Q4/2009.

Figure 20: AuM and dry powder by Fund region focus over time, EUR bn



Source: Preqin

Following the deep downturn induced by the GFC, the European PE/VC ecosystem had undertaken a significant recovery. In fact, before the COVID-19 crisis hit, activity levels in the European PE market had reached a new all-time high (Invest Europe, 2020). The general sentiment among market participants was optimistic (Botsari et al., 2019; Kraemer-Eis et al., 2019). In the next chapter, we use newly collected survey data to analyse the revised market sentiment in the wake of COVID-19.

3.3 Market sentiment at the start of the COVID-19 crisis in Europe

This chapter focuses on the market sentiment among European private equity (PE) and venture capital (VC) investors at the start of the COVID-19 crisis in Europe. The results are survey-based and are derived from the latest waves of the *EIF VC Survey*, the *EIF Business Angels Survey (EIF BA Survey)* and the new *EIF Private Equity Mid-Market Survey (EIF PE MM Survey)*.²³ See Kraemer-Eis et al. (2020) for details of the sample selection and data preparation process for each of the surveys.

All surveys target both equity investors that are EIF-supported as well as other VC/PE MM/BA investors. To the best of our knowledge, the combined *EIF VC Survey* and the *EIF PE MM Survey* currently represent the largest survey exercise among GPs in Europe. The questionnaires of these surveys mainly covered the following topics: general characteristics of the respondents' equity investment activities/market sentiment, valuations, the financing for scaling up companies in Europe, IPOs, environmental, social and governance (ESG) considerations and impact investing.

In our analysis, we aim at identifying respondents' perception of the current market situation and their outlook for the months ahead.²⁴ Hence, we focus on survey questions that asked for the respondents' market sentiment. The analysis covers a range of topics relating to the state of business of the respondents' firms, fundraising, investments, co-investments, the exit environment, the challenges in investors' business activities, valuations, the development and access to finance of portfolio companies, and long-term growth perspectives.

²³ The *EIF VC Survey* and the new *EIF PE MM Survey* are surveys among general partner (GP)/management companies active in the VC market and the private equity mid-market, respectively, and headquartered in the EU27, the UK and other European countries. The *EIF BA Survey* is a survey among business angels (BAs) in Europe.

²⁴ Those survey results that are unrelated to the crisis will be presented in separate forthcoming EIF Working Papers (for example, results related to ESG or scale-up financing). For the results of previous EIF surveys, please see the overview of the EIF Working Paper series, which is available here: https://www.eif.org/news_centre/research/index.htm.

Before vs after COVID-19: choice of the appropriate cut-off date

The latest regular waves of the three EIF surveys were closed in mid-March, at a time when the most severe economic effects of the current COVID-19 crisis only started to materialise across Europe. In order to reveal the initial impact of the crisis on European PE and VC activities, we analyse discrepancies in responses received before and after a certain cut-off date, which we set to be 1 March 2020.²⁵ This cut-off date was chosen to ensure that the number of responses in both categories (i.e. received before and after that date) is sufficiently high to avoid random differences in the 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.²⁶

However, all the following analyses have to be read against the background that all surveys were closed very early in the crisis, i.e. before it reached its – so far – most severe period. Hence, we can expect that the respondents' feedback at a later date, e.g., in April or May, would have been much more pronounced to the negative side than the results presented here.

Respondents' profile

Among the respondents of our EIF surveys, approximately 4 in 10 VCs come from VC firms headquartered in Germany, the UK, the Netherlands and France (Figure 21). In the case of PE MM fund managers, it is the UK, France, Italy and Germany that feature more prominently. In unreported results, the UK and Germany are the two European countries most frequently mentioned by BA survey participants as the main target countries for BA investments.

See Kraemer-Eis et al. (2020) for details of the respondents' profiles in terms of target sectors and investee company development stages.

State of business/business environment

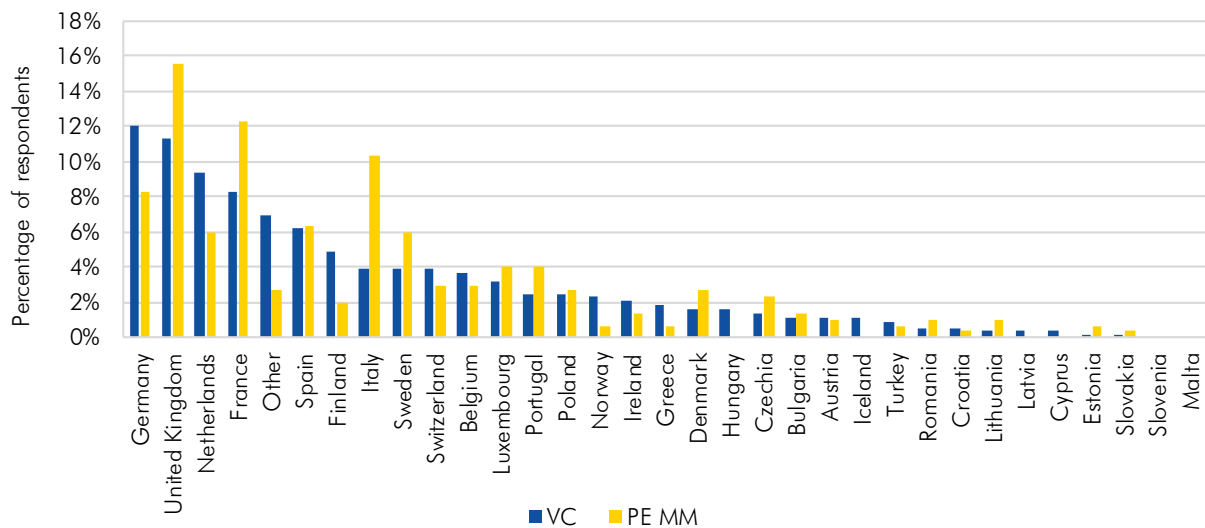
Both VC and PE MM fund managers evaluated very positively their current (i.e. at the time the surveys were conducted) state of business (Figure 22). Regarding VCs, an overwhelming majority of 85% (*EIF VC Survey 2019*: 86%) considered their current state of business to be "good" or "very good", with PE MM respondents exhibiting a similarly high percentage (at 78%). BAs were relatively more pessimistic, with just 1 in 2 expressing satisfaction with the business environment for BA activities in their main target country.²⁷

²⁵ Please note that, in our terminology in this chapter, "after 1 March" means after and including 1 March.

²⁶ On 2 March, the ECDC (European Centre for Disease Prevention and Control) announced that the coronavirus risk level had risen from moderate to high for people in the EU. At the same time, the European Commission established the coronavirus response team, bringing together different strands of action focused on three key areas of societal concern – medical, transportation, and economy. This reaction marks one of the first major coordinated political efforts in the EU (European Commission, 2020c). In Italy, the country that was hit particularly strongly by the COVID-19 crisis at the beginning of its spread throughout Europe, the period end-February/beginning of March marks a change in the crisis measures from an approach that had addressed the regional level to measures addressing the national level. On 1 March, the Italian Council of Ministers approved a decree to organise the containment of the outbreak. On 29 February, the US upgraded the status of Italy to Level 3 (guidance to avoid non-essential travel), and multiple companies deferred all non-essential travel to countries affected by major virus outbreak. (Source: https://en.wikipedia.org/wiki/COVID-19_pandemic_in_Italy)

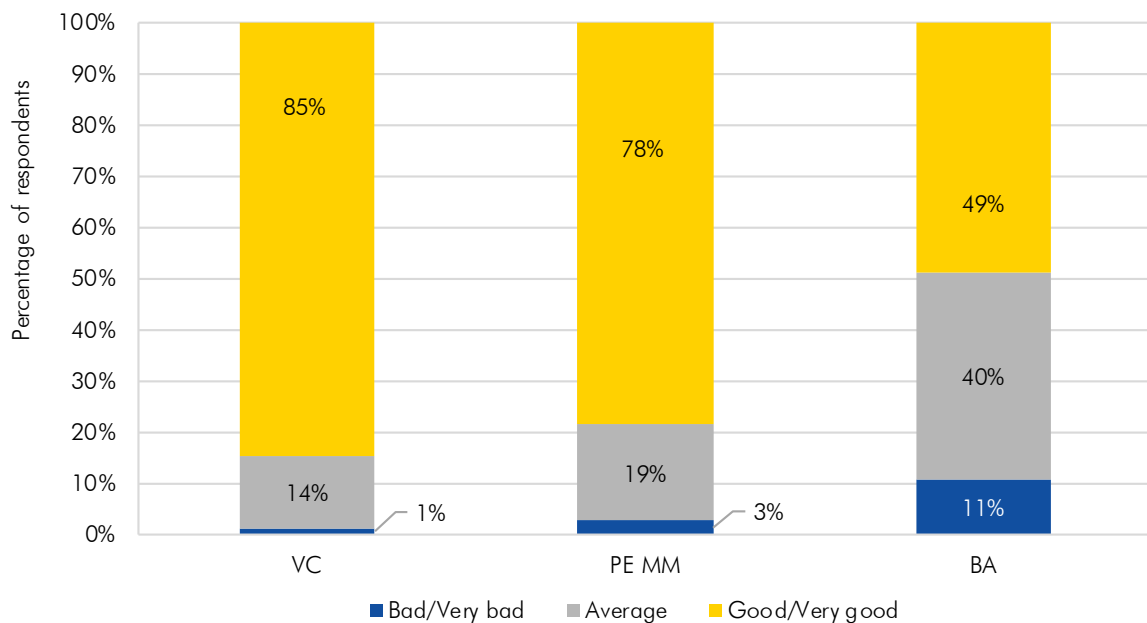
²⁷ In the *EIF BA Survey 2019*, BAs evaluated much more positively the business environment for BA activities – with 68% of the respondents rating it as good/very good. However, the results from the *EIF BA Survey 2019* and those from the *EIF BA Survey 2020* may not be entirely comparable, given that the *EIF BA Survey 2019* only targeted BAs that had been supported by the EIF

Figure 21: Distribution of respondents by firm headquarter country²⁸



Q. In which country is your firm headquartered?

Figure 22: State of business



Q. How would you assess the current state of your business? / How would you rate the current business environment for BA activities in your main target country?

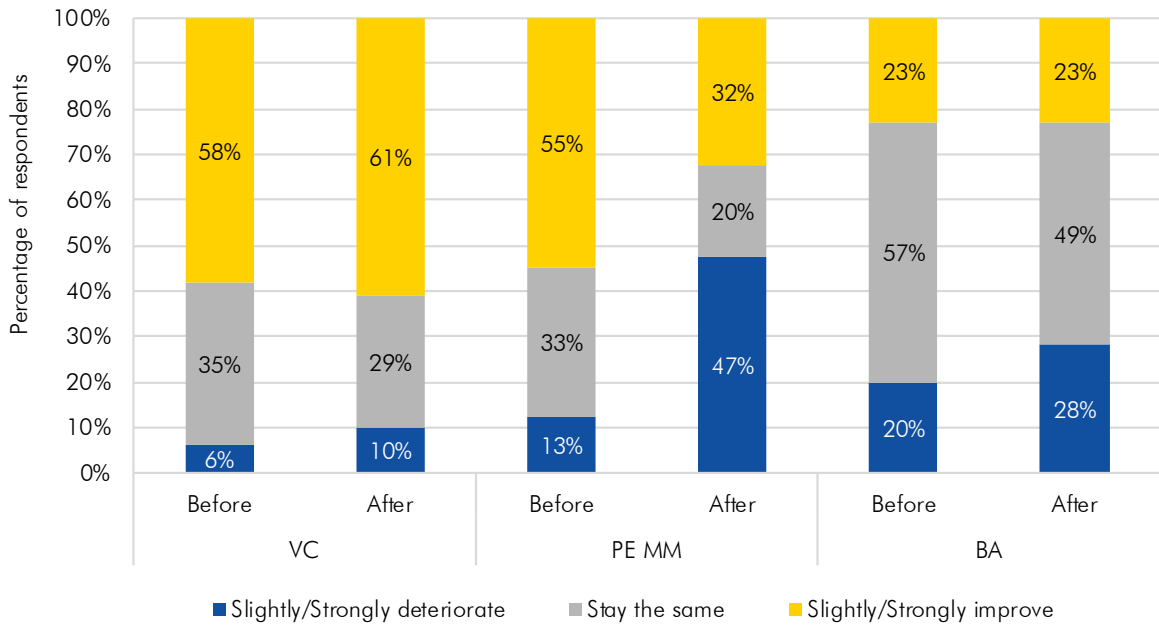
*Note: This figure does not show the split between responses received before and after the start of the crisis, as we did not observe any considerable difference between these two groups. See Kraemer-Eis et al. (2020) for further details.

under the European Angels Fund (EAF), whereas the *EIF BA Survey 2020* addressed the wider population of BAs active in Europe. This is why in all subsequent questions, we refrain from drawing on a comparison between the two BA survey waves.

²⁸ Unless stated otherwise, all figures in this chapter are authors' elaborations based on EIF's combined BA/VC/PE MM survey data.

Concerning expectations for the next 12 months (Figure 23), across all three surveys, we note (to varying degrees) an increase in the percentage of respondents who expect their state of business to deteriorate. This is particularly the case for PE MM fund managers: while only approximately 1 in 10 PE MM investors who responded before the 1st of March expect a deterioration of their state of business in the next 12 months, this number soars to nearly 1 in 2 PE MM fund managers for responses received after the 1st of March. Leaving aside differences in the underlying business lines, another plausible explanation for the particularly acute difference between the before/after March 1st results for PE MM fund managers could be that the *EIF PE 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 to a greater extent the aftermath of the crisis.

Figure 23: State of business, next 12 months



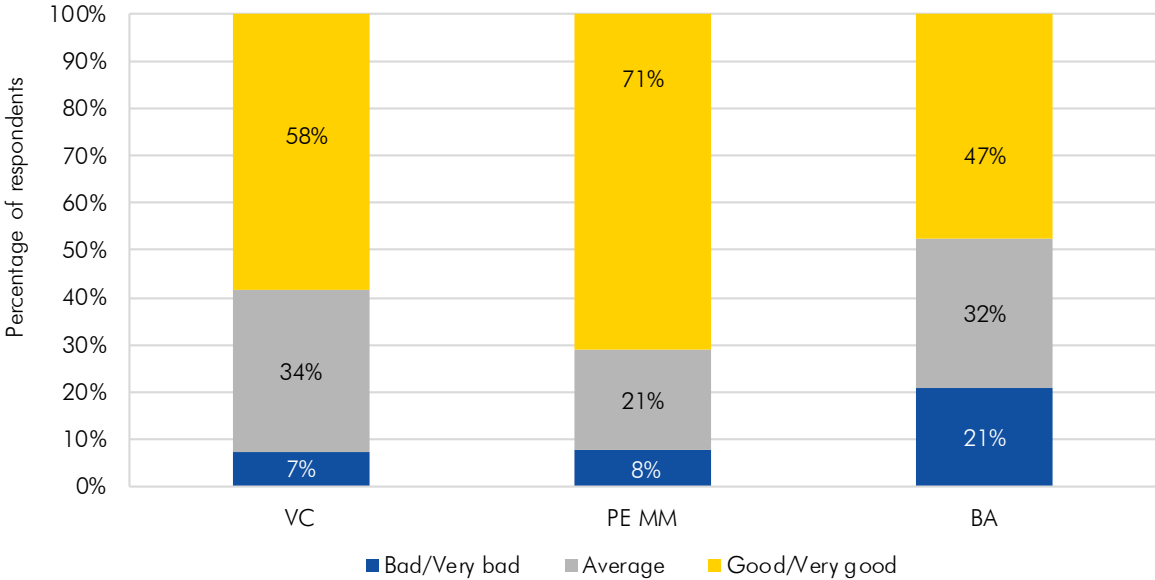
Q. How do you expect the state of your business to change over the next 12 months? / Over the next 12 months, how do you expect the business environment for BA activities in your main target country to change?

Access to external finance and fundraising environment

At the time the surveys were conducted, PE MM fund managers were the most optimistic in their evaluation of the access to external finance of their portfolio companies (71% of respondents), followed by VC fund managers (58%; *EIF VC Survey 2019*: 64%) and BAs (47%), see Figure 24.

When the future outlook is considered (Figure 25), there is once again a significant increase in the percentage of respondents who expect the access to external finance for their portfolio companies to worsen in the next 12 months, particularly among respondents who participated to the surveys after March 1st. For BAs, the percentage of respondents who expect a deterioration of the access to finance more than doubles before and after the cut-off date, whereas for PE MM fund managers, the respective percentage almost triples.

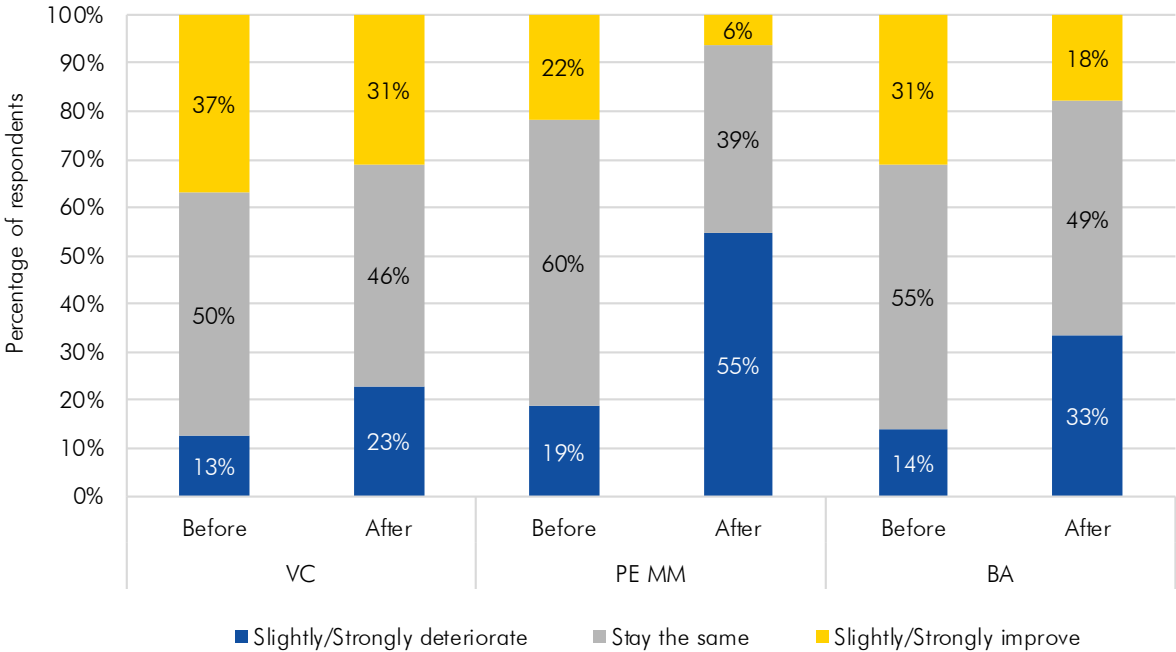
Figure 24: Access to external finance



Q. How would you rate the access to external finance of your portfolio companies?

*Note: This figure does not show the split between responses received before and after the start of the crisis, as we did not observe any considerable difference between these two groups. . See Kraemer-Eis et al. (2020) for further details.

Figure 25: Access to external finance, next 12 months

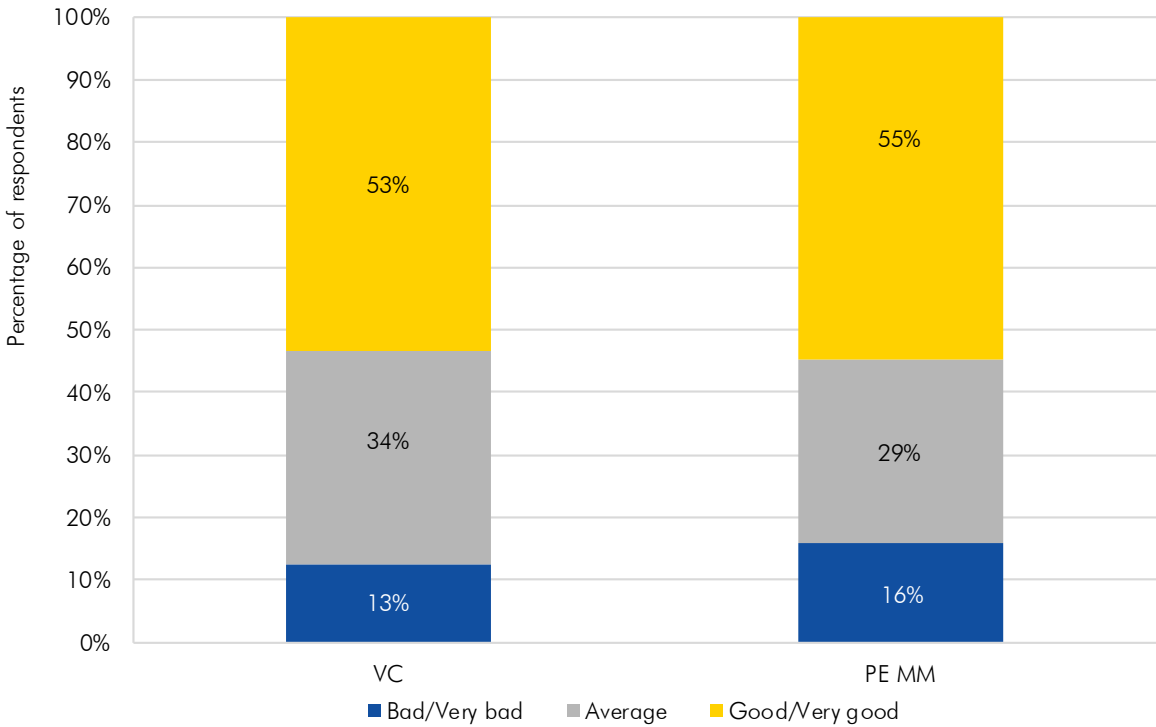


Q. Over the next 12 months, how do you expect the access to external finance of your portfolio companies to develop?

The survey results regarding the fundraising environment²⁹ re-affirm that fundraising is always perceived as an important issue in the VC and PE MM business. Even before the crisis (Figure 26), just about 1 in 2 investors (VC: 53%, compared to 51% in the *EIF VC Survey 2019*; PE MM: 55%) considered the fundraising environment to be “good” or “very good”.

When asked about fundraising expectations in the next 12 months (Figure 27), the investors’ perception of the pre-crisis situation is completely reversed. In the case of VCs, for responses received after the cut-off date of March 1st, almost 4 in 10 VC fund managers expect the fundraising environment to deteriorate (twice the figure compared to the pre-March 1st responses) and only approximately 2 in 10 expect an improvement. PE MM fund managers are even more pessimistic. Among respondents who participated to the survey after the 1st of March, the vast majority of 67% expect a deterioration of the fundraising environment (up from 28% among the pre-March 1st respondents), while only a tiny 6% expect an improvement.

Figure 26: Fundraising environment

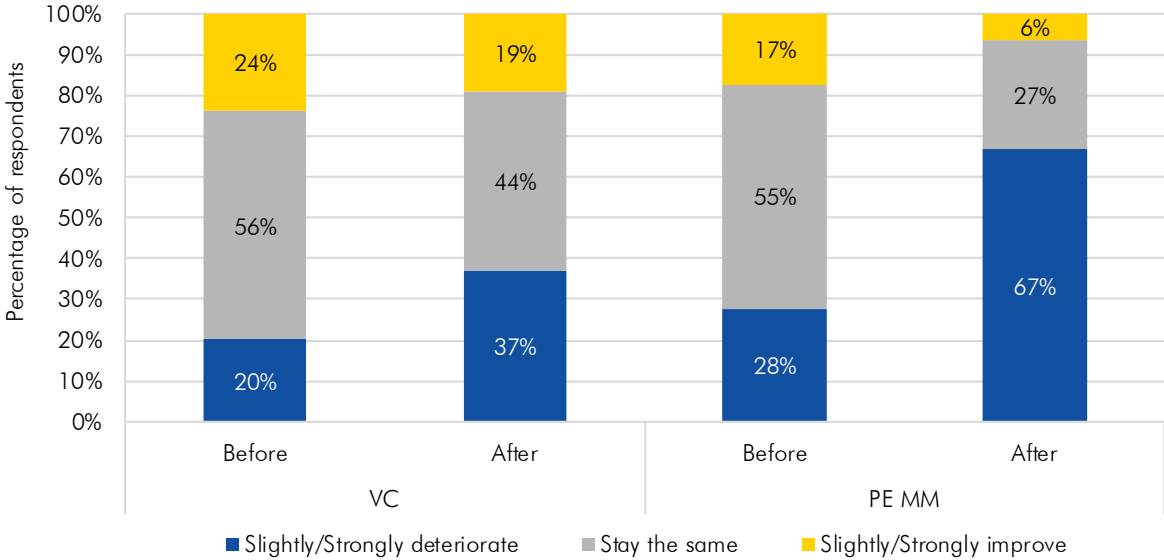


Q. How would you rate the current fundraising environment for VC/PE mid-market funds?

*Note: This figure does not show the split between responses received before and after the start of the crisis, as we did not observe any considerable difference between these two groups. See Kraemer-Eis et al. (2020) for further details.

²⁹ The questions regarding the fundraising environment were only asked to VC and PE MM fund managers.

Figure 27: Fundraising environment, next 12 months



Q. Over the next 12 months, how do you expect the fundraising environment to develop?

In the context of expected difficulties in the future fundraising environment, the EIF performed a separate ad hoc survey of institutional investors in PE, VC and other alternative asset classes. We present the main results in Box 1 below, before we turn to the perception of fund managers and business angels as regards the easiness to find co-investors.

Box 1 : EIF Investor Sentiment Survey

In June 2020, the EIF’s Institutional Client Relationship team conducted a survey among worldwide private equity and private debt investors. Among the 101 investors that responded between 8 and 15 June, 67% were headquartered in Europe, 13% in Middle East, and 16% in other Asia. Most of the respondents work for banks (19%) or pension funds (20%). Other important respondent groups were asset managers (14%) and insurance companies (11%). The main survey topics covered the market outlook, the impact of COVID-19, and ESG.

In terms of the current market outlook, investors assessed private equity, incl. venture capital, (overweight: 47%), private credit (44%) and secondaries (41%) to be the best investment opportunities over the next 12 months. In light of COVID-19, most investors were planning to maintain their exposures to certain geographic regions, with 60% of respondents stating this for Europe, 59% for North America and 52% for Asia. Among the respondents, 25% stated to plan increases in their exposures to Asia, 19% to Europe and 15% to North America. Among the respondents, 78% of the investors are equally considering both existing and new relationships when it comes to close new investment opportunities. When asked if investors make commitments in funds prior to a first close, 57% of the respondents are comfortable in doing so, with European investors more comfortable than others.

Box 1 continued:

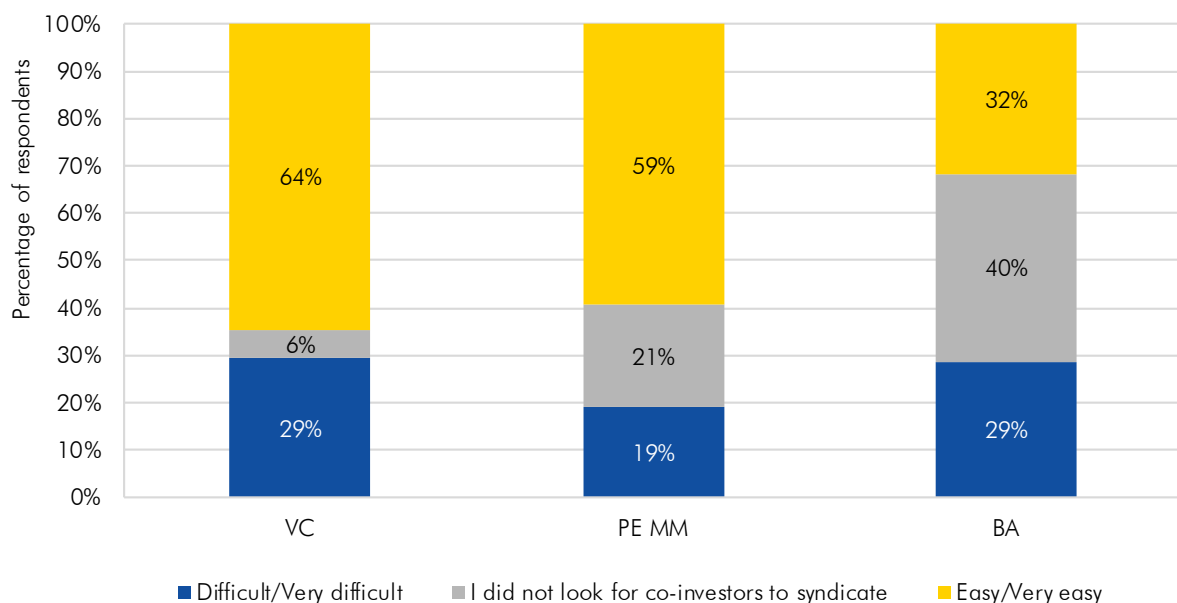
With respect to the impact of COVID-19, the disruption caused by the crisis is expected to last more than 6 months for a vast majority (71%) of investors. Asian and Middle East investors appear more optimistic than European ones. The majority (66%) of investors have reviewed their strategic allocation with a main focus on specific current investments while assessing the impact on the long run. For the moment, the current trend is not to reduce allocations to alternative investments for 49% of the respondents, with an additional 42% even increasing their allocation, in particular from Asian and European investors. The picture is mixed with regard to the investors' appetite for investing in first-time/debut funds: While 48% of the respondents expect no impact, 46% intend to reduce their exposures (35%) or stop all new investments (11%) with first-time/debut funds. The expected impact is particularly high for Asian and Middle East investors.

When asked what proportion of their investment strategy the respondents expect to qualify as "impact investment" over the next 12 months, 34% expected to reach more than 25%, 56% less than 25%, and 10% nothing.

The detailed results of this survey can be found in EIF (2020). The results will be used to help the EIF gauge how to best tailor its ongoing support for both fund managers and institutional investors to ensure the continuation of a healthy and thriving ecosystem in Europe.

The current (at the time the surveys were conducted) situation in finding co-investors was perceived difficult by 29% of VCs and BAs and only 19% of PE MM fund managers (Figure 28), with the majority of the respondents not expecting the situation to change over the next 12 months (Figure 29). For VCs, the situation was perceived similarly in the *EIF VC Survey 2019*.

Figure 28: Easiness in finding co-investors

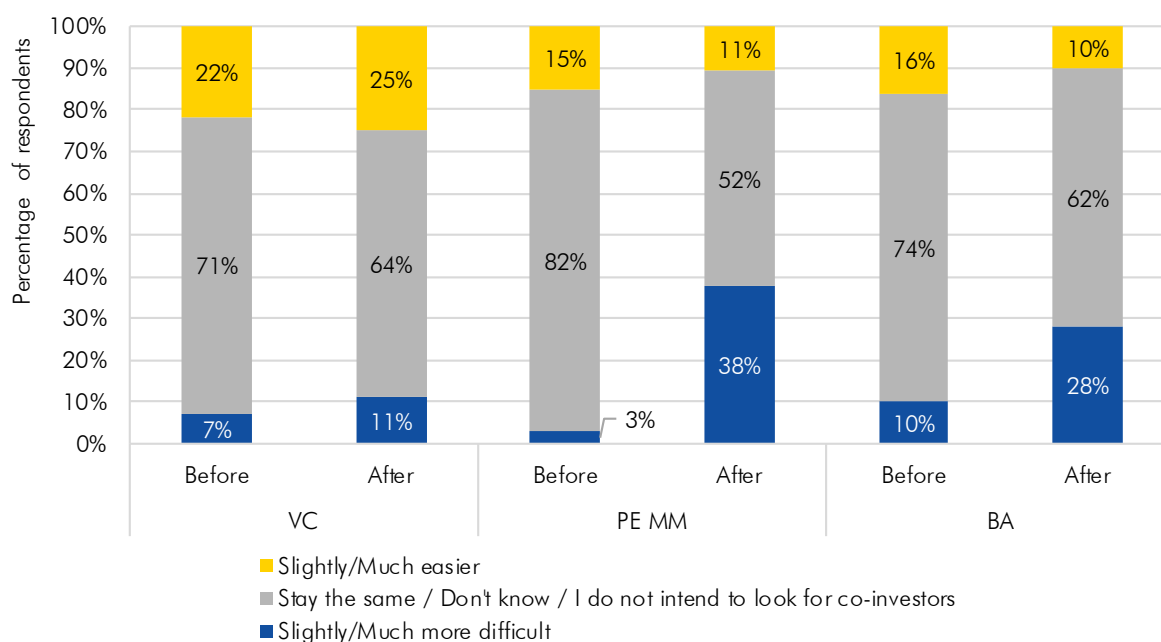


Q. How easy/difficult is it currently to find co-investors to syndicate?

*Note: This figure does not show the split between responses received before and after the start of the crisis, as we did not observe any considerable difference between these two groups. See Kraemer-Eis et al. (2020) for further details.

However, after March 1st, we observe a higher share of respondents who expect greater difficulties in finding co-investors (Figure 29). This change is visible across all three surveys. The most remarkable change is observed in the PE MM market, where hardly any fund manager (just 3%) expected a more difficult access to co-investors before the crisis, with the respective share significantly increasing to 38% after our cut-off date.

Figure 29: Easiness in finding co-investors, next 12 months



Q. Over the next 12 months, how do you expect finding co-investors to syndicate to become?

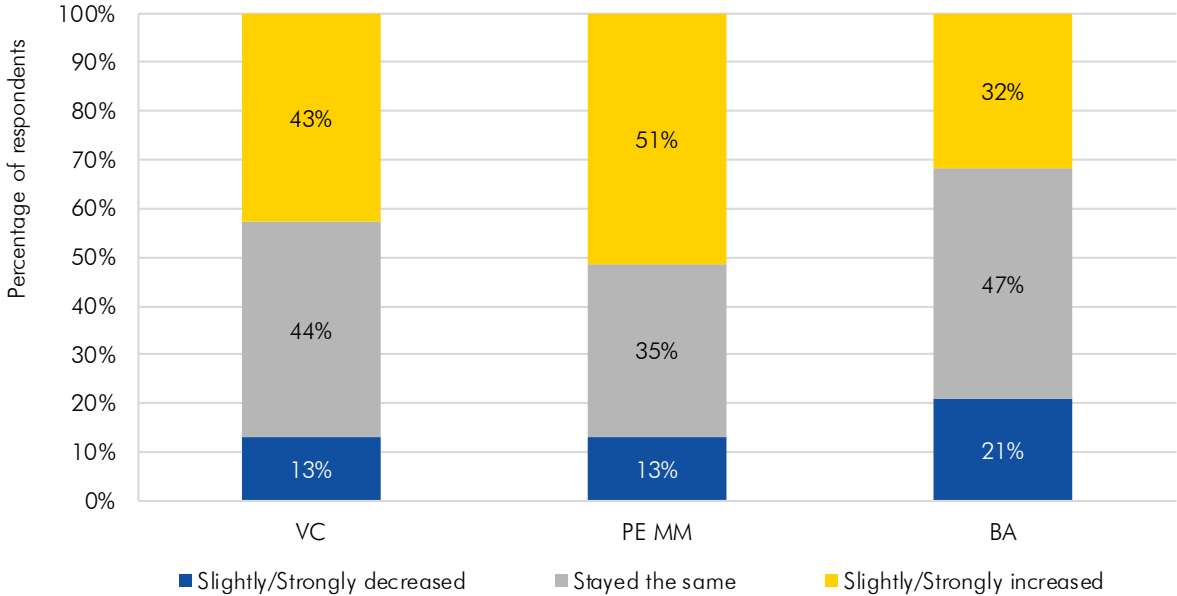
*Note: In the case of BAs, the question asked for expectations regarding different co-investor types (other BAs, VCs, etc.). Here, we present the results for the co-investor type "other BAs".

Investments

Almost 9 in 10 VCs and PE MM fund managers as well as 8 in 10 BAs reported to have at least maintained the number of new investments undertaken over the last 12 months (with a significant percentage of respondents even reporting an increase), (see Figure 30).

In the course of the next 12 months (Figure 31), the percentage of VCs and BAs who expect an increase in the number of new investments to be undertaken rises further, both among investors who responded before March 1st as well as among investors who responded after this cut-off date. However, in the case of PE MM fund managers, those who participated to the survey before March 1st exhibit a much more optimistic outlook regarding future investments (64% expect an increase and just 8% expect a decrease) compared to post-March 1st respondents (among whom 43% expect an increase and a non-negligible 19% expect a decrease).

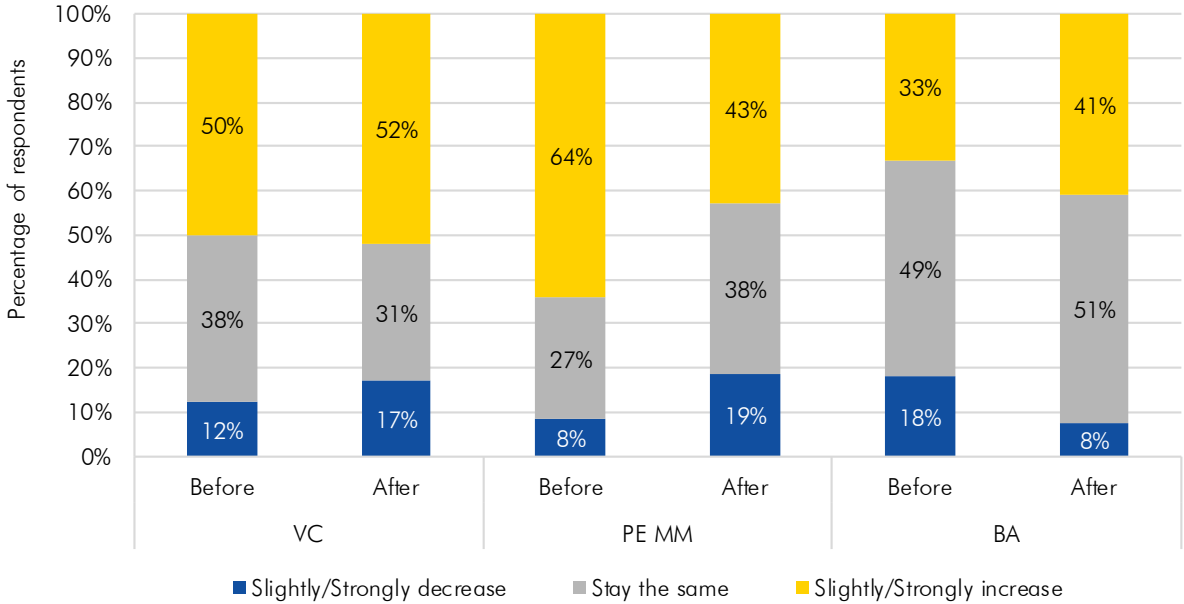
Figure 30: New investments, last 12 months



Q. How has the number of your new investments developed over the last 12 months?

*Note: This figure does not show the split between responses received before and after the start of the crisis, as we did not observe any considerable difference between these two groups. See Kraemer-Eis et al. (2020) for further details.

Figure 31: New investments, next 12 months



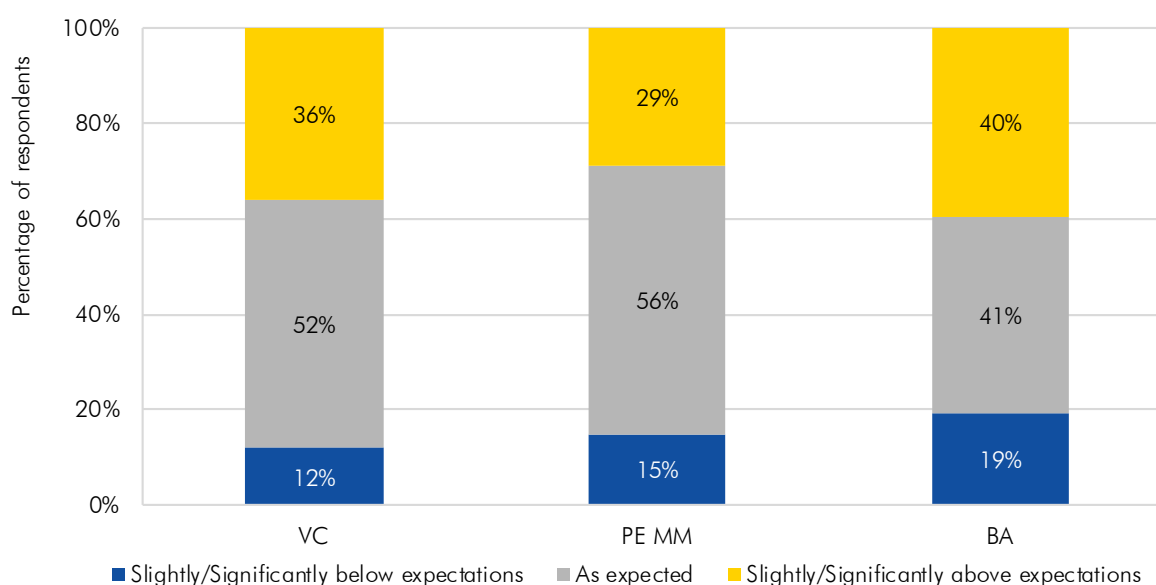
Q. How do you expect the number of your new VC/PE mid-market investments to develop over the next 12 months? / How do you expect the number of your new investments to develop over the next 12 months?

Portfolio development and exit environment

When asked about the development of their portfolios over the last 12 months (Figure 32), around half of the respondents across all three surveys stated that it was in line with expectations (in the *EIF VC Survey 2019*, 44% of the respondents stated that portfolio development exceeded expectations and 43% stated that it was according to expectations).

The 40% of the BAs who stated that past portfolio development exceeded expectations was the highest percentage across the three surveys. At the same time though, the share of respondents who reported that over the last 12 months portfolio companies have developed below expectations is also the highest among BAs (19%), compared to PE MM (15%) and VC fund managers (12%).

Figure 32: Portfolio development, last 12 months

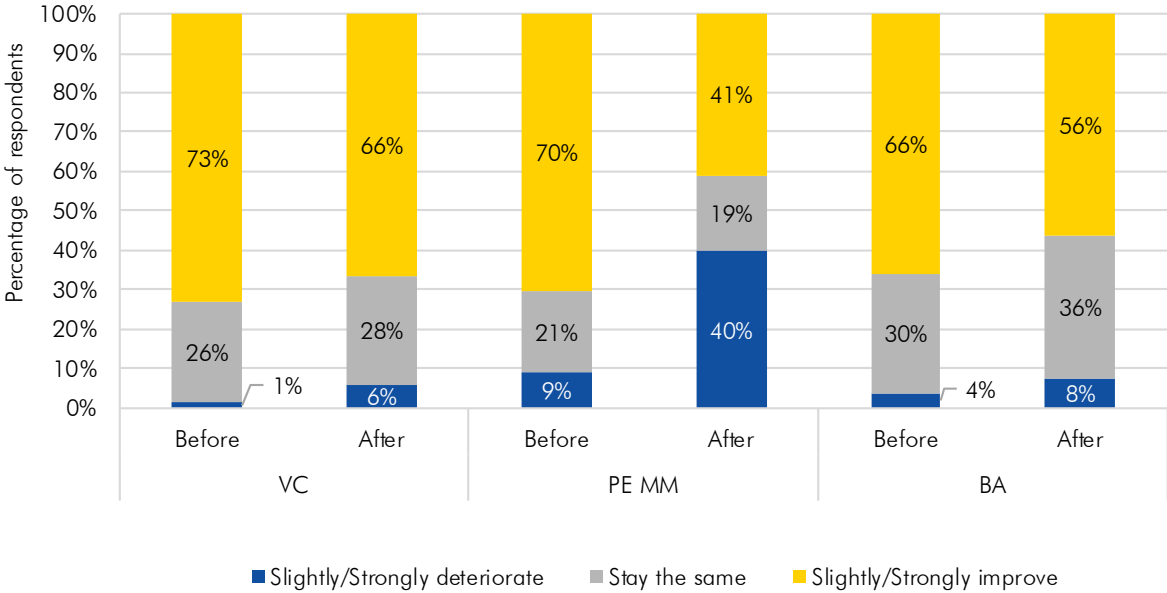


Q. How did your portfolio companies develop over the last 12 months?

*Note: This figure does not show the split between responses received before and after the start of the crisis, as we did not observe any considerable difference between these two groups. See Kraemer-Eis et al. (2020) for further details.

With respect to future portfolio development (Figure 33), the share of PE MM fund managers expecting a deterioration increased drastically to 40% among respondents after the cut-off date of March 1st, compared to only 8% for BAs and 6% for VCs. Furthermore, the percentage of PE MM fund managers expecting an improvement in future portfolio development almost halved in the post-March 1st period compared to the pre-March 1st responses, while much less dramatic changes are observed in the case of VCs and BAs. Given that PE MM firms focus on more mature companies, a higher exposure to capital markets may have driven this increase in negative sentiment.

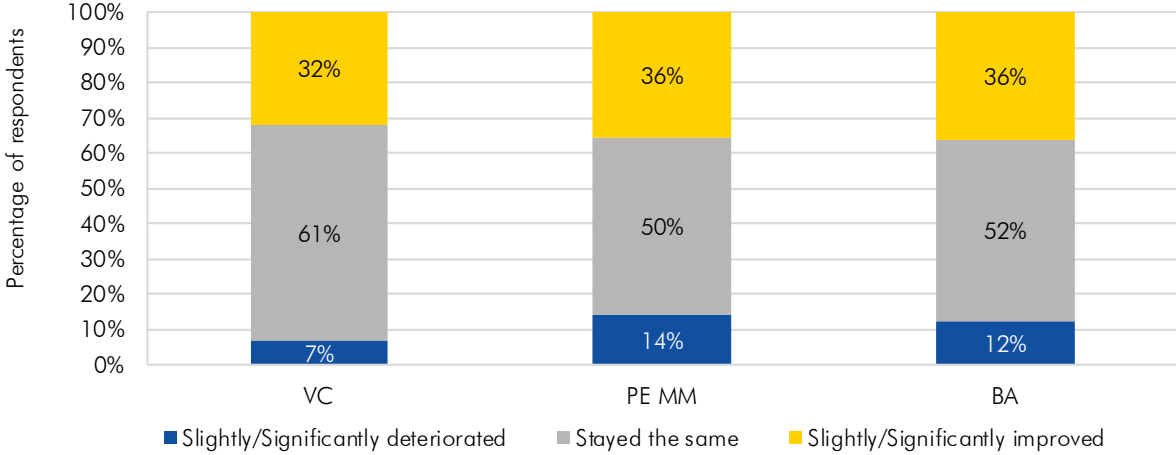
Figure 33: Portfolio development, next 12 months



Q. Over the next 12 months, how do you expect your overall portfolio to develop?

When asked about the development of their portfolio companies’ exit environment over the last year (Figure 34), the responses across all three surveys reflect a common theme, namely that around a third of the respondents are positive when looking back on the exit environment, with the remaining majority largely indicating that the exit environment has stayed the same.

Figure 34: Portfolio companies’ exit opportunities, last 12 months



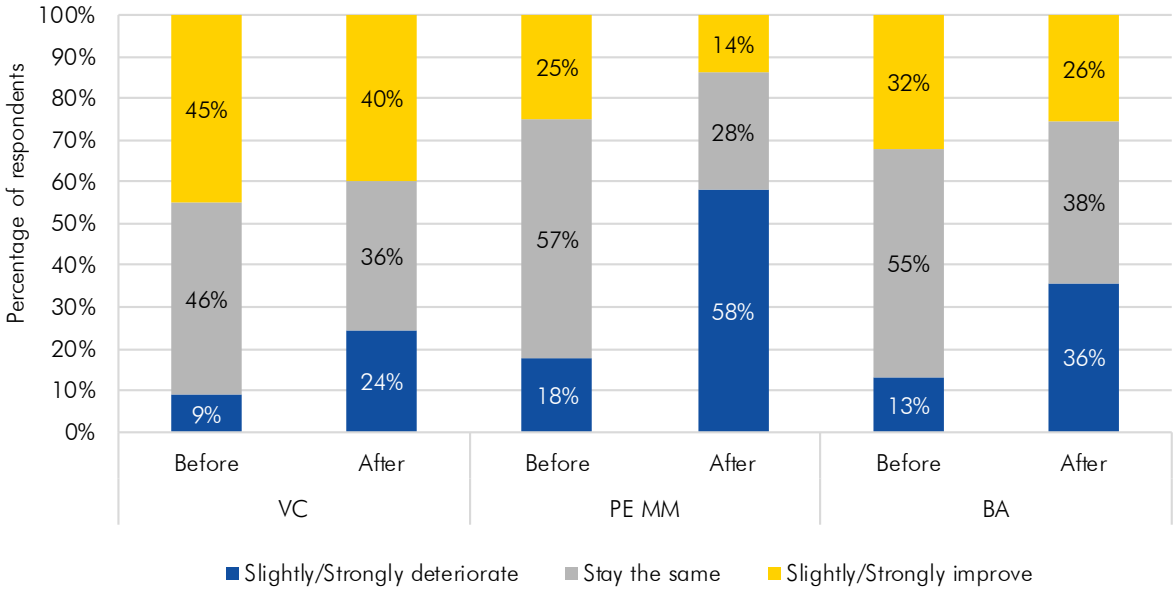
Q. Over the last 12 months, how has the exit environment for your portfolio companies developed?

*Note: This figure does not show the split between responses received before and after the start of the crisis, as we did not observe any considerable difference between these two groups. See Kraemer-Eis et al. (2020) for further details.

On future exit prospects (Figure 35), there is variation both within surveys as well as across surveys. Most notably, for all three types of investors, the percentage of respondents expecting a deterioration in exit opportunities is around three times higher among responses received after 1 March compared to responses received before the cut-off date. Nonetheless, both the percentage point increase and

the before/after variance in the sentiment of VC fund managers is the lowest among the three surveys. VCs are relatively more positive both before and after 1 March – they exhibit the lowest percentage of respondents expecting a deterioration of exit prospects as well as the highest percentage of respondents expecting an improvement.

Figure 35: Portfolio companies’ exit opportunities, next 12 months



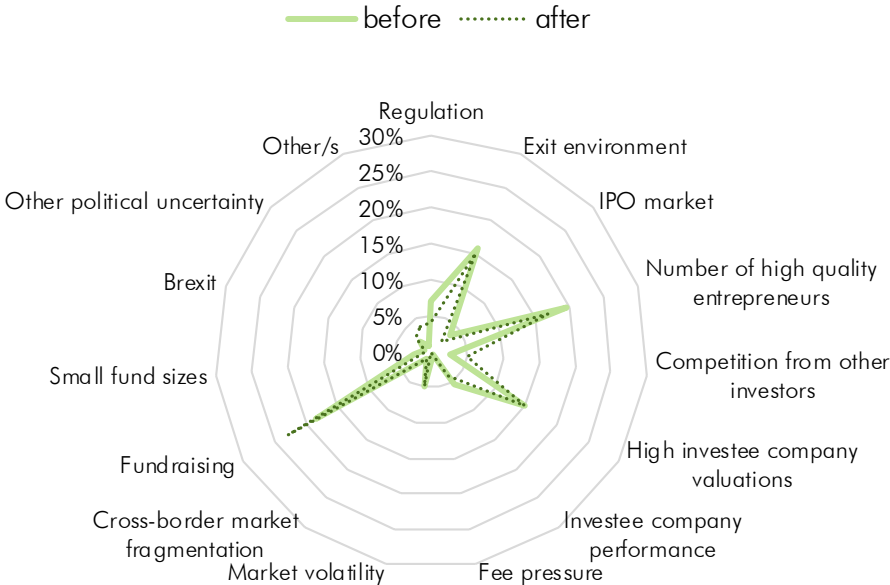
Q. Over the next 12 months, how do you expect the exit opportunities of your portfolio companies to develop?

Challenges and valuations

Our three respondent groups revealed a quite heterogeneous perception as regards the impact of COVID-19 on the challenges for their business. For this survey question, the distribution of VC fund managers’ responses was quite similar before and after our cut-off date (Figure 36). Fundraising, the number of high quality entrepreneurs, the exit environment, and high investee company valuations remained the issues that respondents ranked most frequently as the first most important challenge in VC business. The most pronounced change was recorded for fundraising, for which the share of respondents who selected this item as their most important challenge increased from 19% before the crisis to 23% in March.

The picture looks quite different for fund managers active in the private equity mid-market (Figure 37). Before the crisis, high investee company valuations were ranked most frequently (28%) by respondents as the most important challenge in PE mid-market business, followed by competition from other investors (13%), the number of high quality entrepreneurs (13%), fundraising (10%), and investee company performance (10%). After the crisis, respondents were particularly concerned about market volatility (18%), while valuations (12%) were stated by far less respondents than before the crisis. The exit environment was also increasingly mentioned as the most important challenge (selected by 10% of respondents after 1 March vs. 3% before).

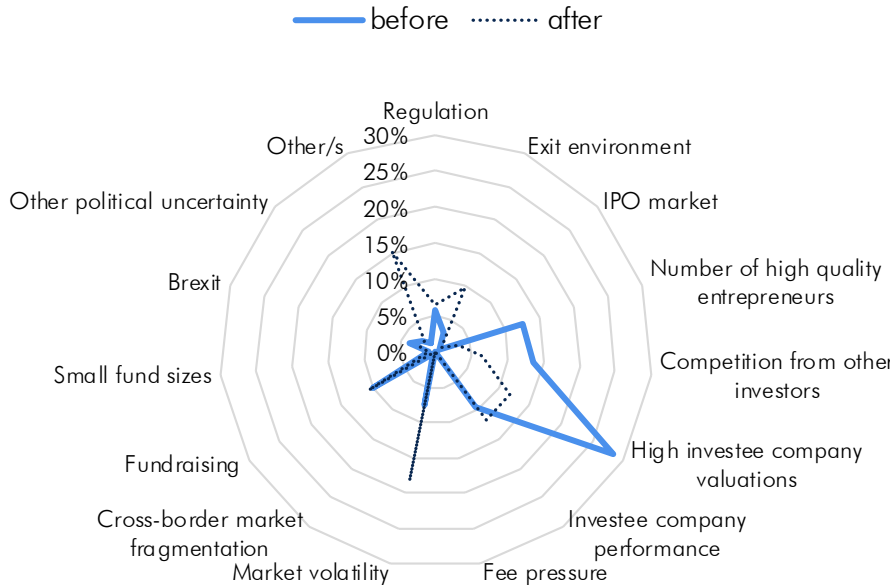
Figure 36: Biggest challenges in VC business



Q. Please select the biggest challenges you currently see in venture capital business.

*Note: This question allowed for multiple selections; the figure shows the responses for the items that respondents ranked as their first most important challenge.

Figure 37: Biggest challenges in PE mid-market business

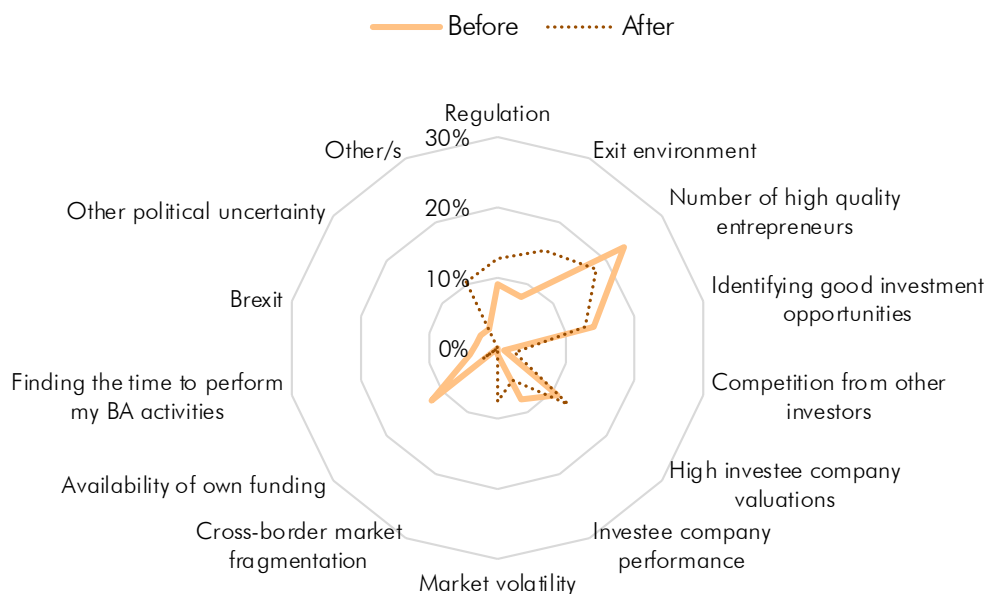


Q. Please select the biggest challenges you currently see in PE mid-market business.

*Note: This question allowed for multiple selections; the figure shows the responses for the items that respondents ranked as their first most important challenge.

For business angels, we observed the strongest increase for the challenges regarding market volatility (increase from 1% before 1 March to 8% thereafter) and the exit environment (increase from 8% to 15%). The most pronounced change in the opposite direction was recorded for BAs' concerns about the availability of own funding, for which the share of respondents who stated this item to be their most important challenge in their BA activity decreased from 12% to 3%.

Figure 38: Biggest challenges in BA activity

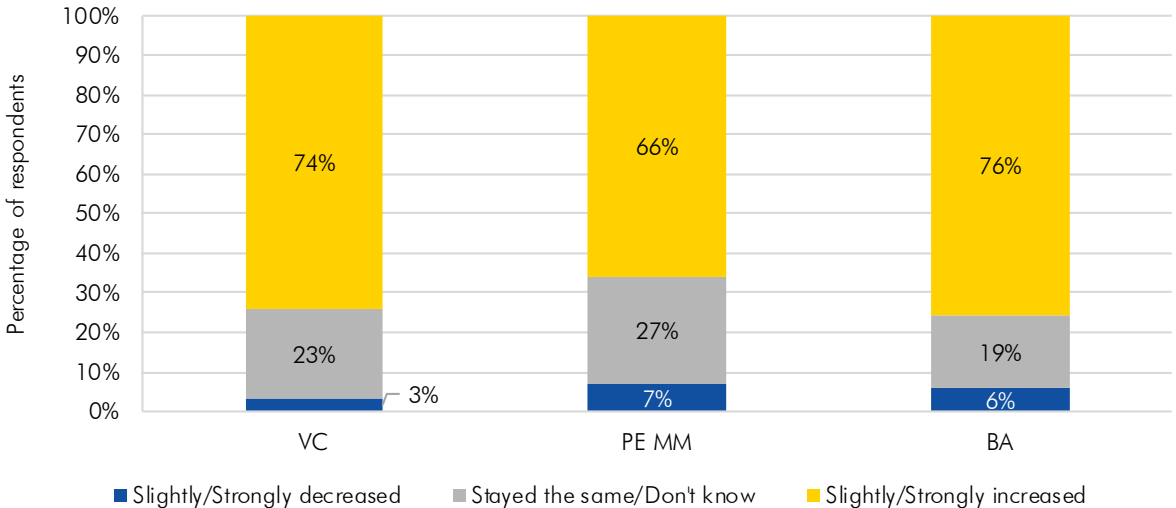


Q. Please select the biggest challenges you currently see in your BA activity.

*Note: This question allowed for multiple selections; the figure shows the responses for the items that respondents ranked as their first most important challenge.

Company valuations increased over the 12 months preceding the survey, according to a large majority of respondents in all three surveys (VC: 74%, PE MM: 66%, BA: 76%), see Figure 39. Looking ahead, a remarkable change in expectations was recorded for company valuations (Figure 40). This was observed across all three respondent groups. The most pronounced changes were documented among BAs and PE MM fund managers. While almost half of the PE MM respondents (48%) expected an increase in valuations before the cut-off date, a majority of those fund managers (53%) who responded after March 1st expected a decline in valuations. Among the BAs, almost all respondents (89%) expected an increase in valuations before the crisis, while after March 1st, respondents were virtually equally split between those expecting further growing valuations (53%) and those anticipating a downturn (47%). Among VC fund managers, the share of respondents who expected lower valuations picked up in a less pronounced way, i.e. from 7% before March 1st to 28% after the cut-off date.

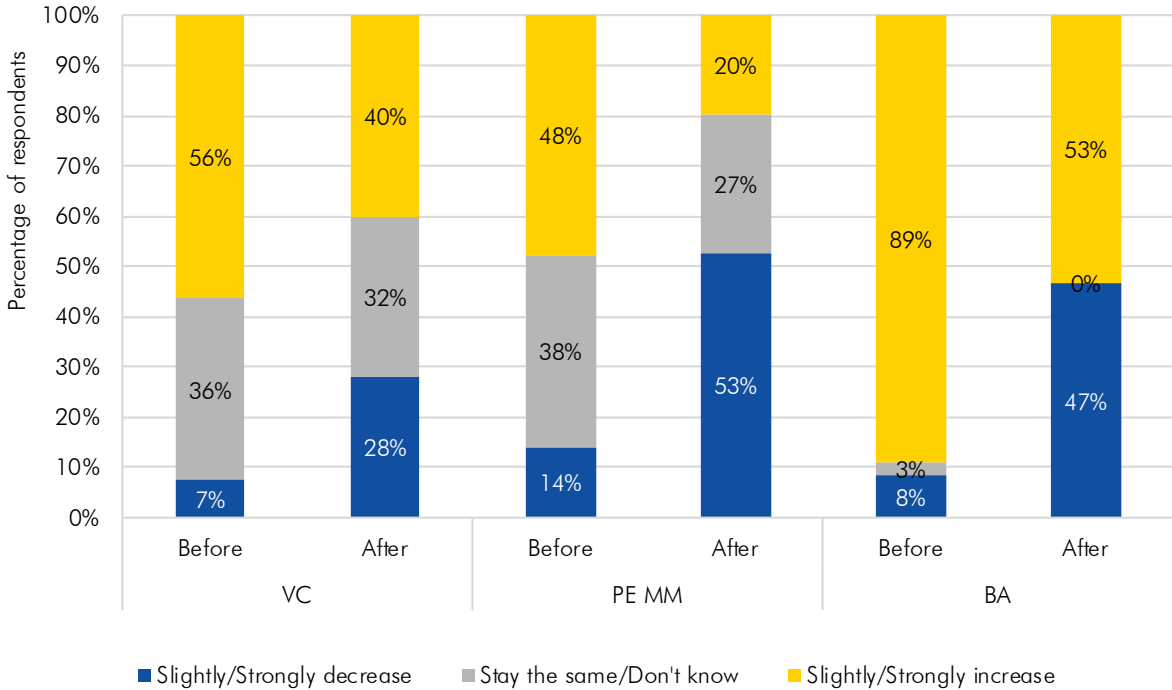
Figure 39: Company valuations, last 12 months



Q. When you consider your market over the past 12 months, how have the following items developed?
 VC/PE MM: Investee company valuations; BA: Current valuations in portfolio companies.

*Note: This figure does not show the split between responses received before and after the start of the crisis, as we did not observe any considerable difference between these two groups. See Kraemer-Eis et al. (2020) for further details.

Figure 40: Expected change in company valuations, next 12 months

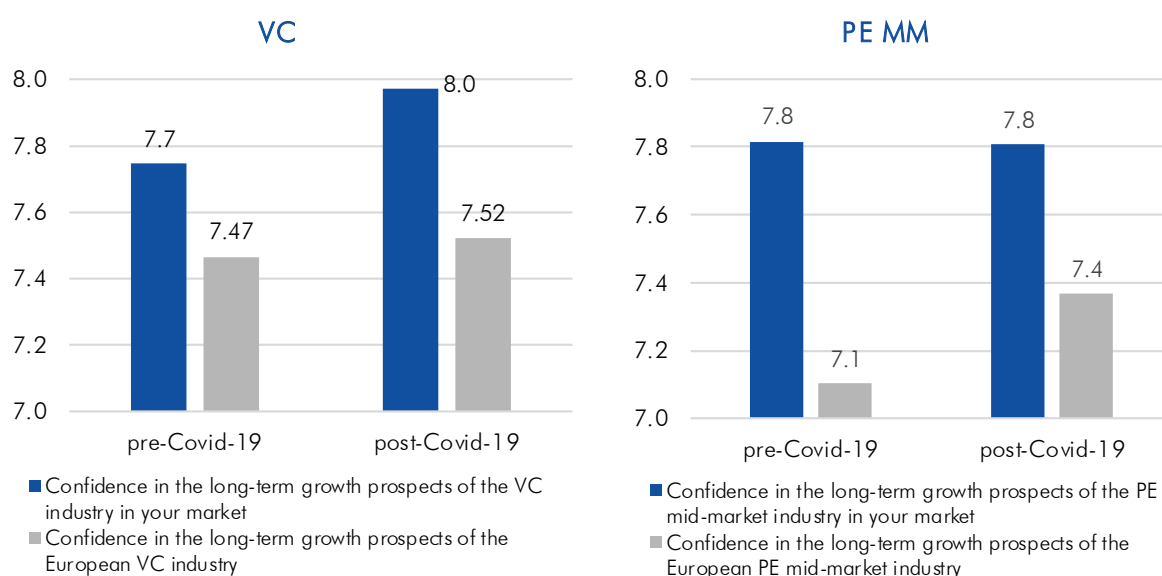


Q. When you consider your market over the next 12 months, how do you expect the following items to develop? VC/PE MM: Investee company valuations; BA: Current valuations in portfolio companies.

Long-term growth prospects³⁰

Contrary to the results presented above, which showed an increase in negative market expectations after the start of the COVID-19 crisis in Europe, fund managers' have a different view of the long-term growth prospects (Figure 41). When asked about their own market, VC fund managers have become more optimistic on balance. Before the crisis, the average respondent scored the long-term growth prospects of the VC industry in her/his own market with a value of 7.7 on a scale of 1 to 10. By contrast, respondents who provided their answer in March, gave an average score of 8.0. PE MM fund managers' sentiment after the start of the crisis was the same as before the crisis (7.8). However, this respondent group showed an increased optimism for the overall European PE MM industry, as the average score increased from 7.1 to 7.4. Fund managers also became more optimistic for the European VC industry. The increase was less pronounced (from 7.47 to 7.52), but the level of the average score was still slightly higher than that for the European PE MM industry.

Figure 41: Confidence in long-term growth prospects (averages)



Q. On a scale of 1 to 10, how confident are you in the long-term growth prospects of... the VC (PE MM) industry in your market / the European VC (PE MM) industry?

EIF counterparts' feedback early in the COVID-19 crisis

Apart from providing general policy-oriented suggestions based on its market insight, the EIF takes into account market players' feedback in its own business development. In order to gather such feedback as regards the impact of COVID-19 on fund managers' activities and on their portfolio companies, the EIF performed additional surveys at the beginning of the crisis, which were addressed only to its own counterparts. Box 2 summarises the main results.

³⁰ The EIF Business Angels Survey did not include this question.

Box 2: Surveys of EIF counterpart fund managers

To obtain more information about the impact of COVID-19 on EIF counterparts, their portfolio companies and the European private equity/venture capital markets, the EIF's Investments Technology & Innovation and Lower Mid-Market teams surveyed fund managers active in the European VC and PE mid-market at the beginning of the crisis. The surveys addressed only fund managers, in which EIF has invested. PE mid-market fund managers were surveyed between 29 February and 5 March; the survey had 106 participants representing more than 900 companies. VC fund managers were surveyed between 17 and 20 March 2020; the survey had 198 participants representing more than 5,000 companies. Key takeaways are as follows:

Venture Capital Markets:

In the VC market segment at fund level the impact of the market crash has been immediate:

- Already in the early days of the crisis (i.e. at the survey period in mid-March), 40% of VC fund managers felt an immediate impact on their fund raising traction, with private sector investors pulling out of even imminent closings
- At the same time, 77% of VC fund managers believe that they will be negatively impacted in their fundraising by the COVID crisis.
- The average delay in fundraising was estimated by them to be in the magnitude of 7 months

At portfolio company level, VC fund managers observe and/or anticipate:

- Syndicates for follow-on financing rounds have been halted or significantly been reduced in size as fund managers centralise their resources on rescuing their own portfolios
- Exit negotiations even for imminent exits are halted or aborted
- Fund managers expect to lose up to 27% of their portfolio due to capital shortage if lockdown measures are not lifted by June 2020
- In the biotech sector the impact is of particular relevance as capital shortage cannot be tackled through hibernation measures: interrupted clinical trials are sunk-cost and, if resumed, need to be redone from start.

In the Mid-Market Segment:

- Already at the beginning of the crisis, 62% of the 130 funds were impacted
- At the same time, 25% of the 905 investee companies were impacted, either on sales or on supply chain
- Fund Managers reported an impact in all EU-27 countries
- Despite the early days of the crisis in Europe, Fund Managers were already confirming liquidity issues in their portfolios (reduction of demand, higher production costs)
- Most impacted sectors: Manufacturing, Consumer products & services, IT & Telecommunications

Summary of key findings

In this chapter, we combined market sentiment insights from our three surveys targeting business angels and fund managers active in venture capital and the private equity mid-market. Despite differences in the response periods of the three EIF surveys, we identified a number of challenges faced by these investor types after the start of the crisis, both on a fund and on a portfolio company level. We summarise here some notable results.

Expectations for the 12 months succeeding the surveys (i.e. until early 2021) have considerably worsened. For PE MM fund managers, the pessimism increased particularly with respect to their state of business, the fundraising environment, the access to finance of portfolio companies, future portfolio development and exit prospects. VC fund managers also became particularly more concerned about the fundraising environment and the exit opportunities in the next 12 months. For BAs, the most remarkable increases in negative expectations were observed for the access to finance of portfolio companies and with respect to finding co-investors. When asked about their biggest challenges after the start of the crisis, PE MM fund managers and BAs were much more concerned about the general market volatility and the exit environment than before the crisis, while VCs were more concerned about fundraising.

Our analysis offers the unique opportunity to compare results from BAs vis-à-vis VC and PE lower mid-market fund managers. The differences in the feedback received from our three respondent groups reflect the different nature of their business models. Business angels, unlike formal VC investors, do not have to report to LPs. Furthermore, they often invest for the very long term in start-ups. This makes the current turmoil less of a factor for many of them (Lewin, 2020). Rather than fundraising or their state of business, BAs have become more worried about their portfolio companies access to finance and the opportunities to co-invest alongside other BAs. However, a common concern among all three respondent groups after the start of the crisis, which is visible either through a worsening in expectations or through an increased mention as the biggest challenge, is the future exit environment. Divesting their portfolio companies is a common concern among all equity investors.

3.4 The prospects of European PE/VC after COVID-19

The central purpose of this chapter is to assess the potential impact of the COVID-19 pandemic on the European³¹ PE and VC markets.³² To this end, we introduce and discuss the results from a simple Vector Auto-regression model (VAR, see Sims, 1980). VARs provide a macroeconomic framework to capture the complex dynamics in multiple time series. Using the VAR framework and the historical developments of European GDP and the European PE industry over the past 20 years, this chapter provides indicative estimates on the short-term prospects of European Private Equity and Venture Capital after COVID-19.

3.4.1 Where was the European PE market headed before COVID-19 hit?

Since the deep downturn of the GFC, the European PE ecosystem had undertaken a significant recovery and developing path. In fact, before the COVID-19 crisis hit, activity levels in the European PE market had reached a new all-time high. Had the COVID-19 crisis not taken place, how would the activity look like in the near future?

The VAR framework can help us address this counterfactual question by means of dynamic forecasts. However, VAR estimation requires long-term and high frequency time series about the quantities of interest. To this end, we transform Invest Europe yearly time series to quarterly via the Denton

³¹ For the purpose of this analysis, the “European market” relates to EU-27, Norway, Switzerland and United Kingdom.

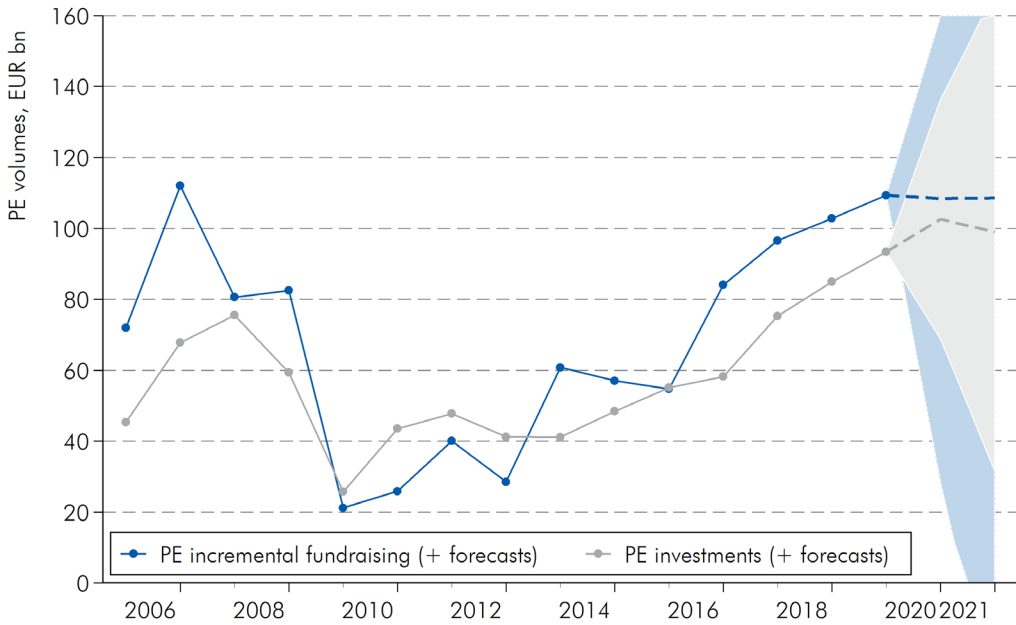
³² PE market figures in this analysis pertain to the entire PE sphere, i.e. including VC investments.

interpolation method (Denton, 1971). We used PitchBook’s quarterly fundraising and investment series for European PE as the high-frequency indicator variable.³³

Our quarterly VAR model contains three variables – GDP, PE fundraising and PE investments – selected according to economic reasoning. To satisfy the requirement of stationarity, we transformed all series into the first difference of logarithms. This transformation was instrumental in ensuring the series contained no unit-root. Moreover, we determined the number of lags in our model using several lag-length tests. Our final VAR specification appears appropriate and stable. See Kraemer-Eis et al. (2020) for additional information.

Figure 42 displays the forecasted path of the European PE market in the absence of COVID-19. Notice the large uncertainty of the estimates in 2021, as shown by the 90% confidence bands. The point estimates of the VAR forecasts point to a 10% increase in investment activity in 2020 had the COVID-19 crisis not hit the European PE ecosystem. The VAR forecasts also point to a stable fundraising market in 2020, with virtually no change from 2019 levels. PE investments were expected to hit an inflection point in 2021, with a 3% drop from 2020 levels, while fundraising once again was not expected to experience much change. However, the extreme uncertainty around 2021 forecasts indicates that this is just one of many possible scenarios that could have taken place.

Figure 42: Short-term forecasts of European PE activity levels



*Note: 90% confidence bands estimated through bootstrapping (2,000 simulations). For presentation purposes, we cap the confidence intervals at a minimum of zero and a maximum of EUR 160bn.

Source: Authors, based on Invest Europe, PitchBook, and European Commission data.

³³ PitchBook’s quarterly time series contain a significant amount of noise, either due to measurement error and/or the presence of “mega-deals”. Both phenomena are able to sway the underlying trend in the time series for a given quarter. In order to reduce statistical uncertainty and provide a more robust estimate of the impact of a GDP shock on the European PE market, we smooth PitchBook data via a four-quarter moving average filter. We implemented this data processing step before carrying out the quarterly interpolation of Invest Europe’s annual data.

3.4.2 Where is the European PE market headed after COVID-19?

The Spring 2020 economic outlook of the European Commission (EC, 2020b) confirms that the COVID-19 crisis will lead to a severe GDP contraction in the EU-27, Norway, Switzerland and United Kingdom. The EC forecasts assume that the major economic impact of COVID-19 will be observed in Q2/2020, with more subdued economic repercussions from the pandemic during the second half of 2020 (EC, 2020b). As a result, the aggregate economy in the European region is expected to shrink by 8% in 2020.

How is this adverse, exogenous shock to GDP likely to impact the European PE market? The *impulse response function* derived from our VAR model tackles this important question. However, a number of additional assumptions are necessary in order to estimate this function and identify the potential COVID-19 shock to the European PE market.

First, we need to represent the forecasted COVID-19 impact on GDP as a one-off drop in economic output, *i.e.* a one-quarter shock. To this end, we assume that the economic impact of the COVID-19 crisis will coincide with the period of strictest lockdown measures, manifesting its full economic impact in Q2/2020. Following the initial shock, economic growth reverts to its pre-COVID-19 forecasted path. We use the European Commission's Winter 2020 forecasts (European Commission, 2020d) to construct the pre-COVID-19 forecasted path.

This approach leads to an implied one-off contraction of the European economy by 38% in Q2/2020. It is important to stress that such quarterly GDP contraction, unprecedented in recent economic history, represents only a convenient device to accommodate the quarterly specification of our VAR model. Hence, the one-off drop is not the direct outcome of the Commission's forecasts that show a less extreme, but more prolonged, U-shaped recovery spanning several quarters.

We need a second assumption to identify the potential effects of COVID-19 on the European PE market. As customary in the VAR literature, we need to specify a variable whose contemporaneous shocks do not immediately affect the other variables. In other words, the selected variable impacts the other indicators with a lag of at least one quarter. Based on the literature about the PE market (see *e.g.* Gompers and Lerner, 1999), we are persuaded to assume that the effects of GDP on PE investments and fundraising only occur with a lag.

Figure 43 shows the impulse response function (IRF) for PE fundraising (left panel) and PE investments (right panel). Figure 32 shows the percentage growth of PE fundraising and investments in response to a one percent GDP shock. For instance, the right panel of Figure 32 shows that a 1% increase in GDP leads to an approximately 1% increase in PE investments, one quarter after the GDP change. The confidence bands for the IRF of PE fundraising (left panel) show that, according to our data, GDP shocks do not affect PE fundraising in a significant way.

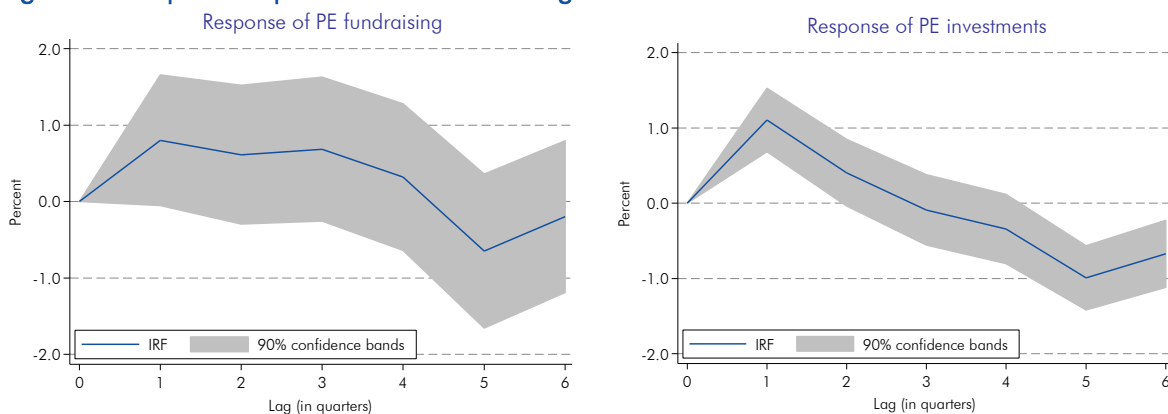
Based on Figure 43, we can extrapolate the potential response of the PE market to the COVID-19 induced GDP shock (-38%). In Figure 44, we use the estimated impulse response curve to forecast PE fundraising and investment levels in the aftermath of the COVID-19 crisis (right scale). Figure 44 also plots the quarterly GDP fluctuations and the assumed COVID-19 GDP shock (left scale). Figure 44 shows that the COVID-19 pandemic could have a strong and immediate adverse impact on PE

market activity. PE investments (Figure 44, upper panel) are estimated to decrease by 17% in 2020. Point estimates indicate further decline during 2021 (-11% compared to 2020), but the high degree of statistical uncertainty indicates that 2021 forecasts should be interpreted with caution. The fall in investment volumes in 2020 echoes the drop in activity witnessed during the global financial crisis, e.g. between 2007 and 2008. Fundraising volumes (Figure 44, bottom panel) could also decline significantly by 20%. Once again, the drop in PE fundraising is comparable to the fall in activity caused by the GFC.

The average estimate for 2021 PE fundraising shows an even more severe fall, with a -50% drop compared to 2020 levels. However, the extreme uncertainty around 2021 forecasts indicates we should interpret these results with caution.

Comparing the post-COVID-19 scenarios with our counterfactual forecasts described section 3.4.1, we can quantify the PE fundraising and investment shortfall induced by COVID-19. Beneficiaries of European PE investments are expected to suffer from an investment shortfall of EUR 24.8bn by the end of 2020. The average estimated impact on PE fundraising is equally severe, with an expected fundraising gap of EUR 21.7bn by the end of 2020. Due to the high uncertainty in our estimates, we cannot draw an unambiguous picture of the PE fundraising and investment markets at the end of 2021.

Figure 43: Impulse responses of PE fundraising and PE investments



*Note: 90% confidence bands estimated through bootstrapping (2,000 simulations).

Source: Authors, based on Invest Europe, PitchBook, and European Commission data.

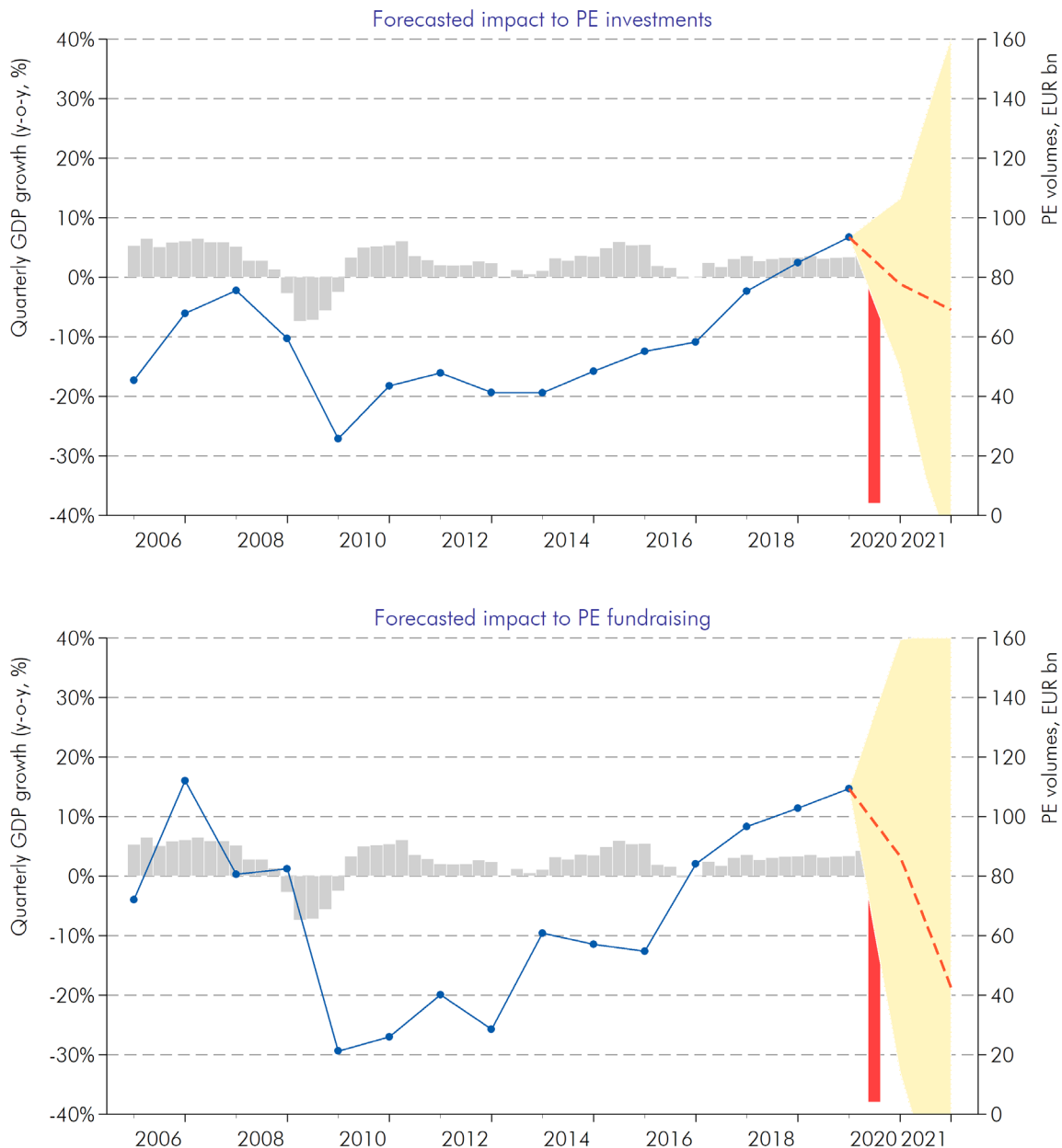
3.5 Private Equity: concluding remarks

As the COVID-19 induced economic crisis unfolds at a global scale, society is set to face numerous and unprecedented challenges. In this chapter, we looked at the potential ripple effects to the European PE/VC industry, which disproportionally contributes to innovation, value and job creation across the continent.

In section 3.2, we set the scene by discussing the historical fluctuations of the European PE/VC market. However, given that the determinants of the COVID-19 crisis are fundamentally different from previous recessions (e.g. the GFC), we conclude that the historical performance can only provide a reference framework to assess the future effects of the COVID-19 pandemic. We provide

elements that support a cautious optimism vis-à-vis the recovery of the PE/VC ecosystem in the aftermath COVID-19. The market has so far stalled but not yet crashed, and the increased experience and maturity of the industry, as well as high levels of dry powder and the readiness of public policy intervention, could potentially cushion the blow, compared to previous crises. At the same time, uncertainty is high and the risks for far more severe outcomes remain substantial.

Figure 44: The potential impact of the COVID-19 shock on the European PE Market



*Note: 90% confidence bands estimated through bootstrapping (2,000 simulations).

Source: Authors, based on Invest Europe, PitchBook, and European Commission data.

In section 3.3, we substantiate the negative economic outlook brought by the COVID-19 pandemic on the European PE/VC market by means of a combined survey exercise towards Business Angels, VC and PE MM investors. Our results confirm that expectations for the forthcoming months have

considerably worsened. For PE MM fund managers, the pessimism increased particularly with respect to their state of business, the fundraising environment, the access to finance of portfolio companies, future portfolio development and exit prospects. VC fund managers were also particularly concerned about the fundraising environment and the exit opportunities in the near future. For BAs, the worsened outlook mainly concerned the access to finance of portfolio companies and finding co-investors. As per the biggest challenges arising since the onset of the COVID-19 crisis, PE MM fund managers and BAs were concerned about the general market volatility and the exit environment, while VCs stated that they worried more about fundraising.

In section 3.4, we use a simple Vector Auto-regression model to assess the potential impact of the COVID-19 pandemic on the European PE market. We find that the COVID-19 pandemic could have a strong and immediate adverse impact on the European PE market activity, at a time where activity levels had reached a new all-time high. The fall in fundraising and investment volumes has the potential to echo the drop in activity witnessed during the global financial crisis, e.g. between 2007 and 2009. An important caveat of our analysis is the wide margin of error around our model forecasts.

Our surveys to Business Angels, VC and PE MM investors show that market players are particularly concerned about the potential worsening of the exit environment in the wake of COVID-19. Divesting their portfolio companies ranks high among the concerns of all types of equity investors. Policy measures that aim at improvements in this area were already called for before COVID-19 spread across Europe. They have become even more relevant in the current crisis situation in order to incentivise equity investments and to sustain the growth of innovative companies in Europe.

Overall, we provide evidence that the European PE/VC ecosystem has faced and could continue to experience significant challenges in the aftermath of the COVID-19 pandemic. Crucially, the economic consequences of the COVID-19 pandemic will not be uniform, but vary according to e.g. the geography, industry and investment development stage. The shortage of funding might be particularly significant in regions outside of major PE/VC hubs, which is likely to exacerbate the existing cohesion gaps (Mason, 2020). Similarly, the COVID-19 crisis will likely have diverging effects across industries, creating “winners” – e.g. consumer health, biotech – as well as “losers” – e.g. travel, mobility and jobs (Dealroom and Sifted, 2020).

4 SME debt products

4.1 SME guarantees

4.1.1 Credit Guarantee Schemes as a policy response to market failures in the SME bank-lending market

Relevance as a policy instrument

Credit Guarantee Schemes (CGSs) “are used widely across economies as important tools to ease financial constraints for SMEs and start-ups” (OECD, 2013). This is because guarantee mechanisms, “whereby should the borrower default the guarantor compensates a pre-defined share of the outstanding loan” (OECD, 2015), reduce the risk of lenders and favour the provision of financing to viable businesses that are constrained in their access to finance.

Credit guarantee programs expanded substantially in the years 2007-2011, as governments responded to the global financial crisis. Carefully designed guarantee schemes have positive macroeconomic effects, meaning that the costs for the tax payers due to default payments are outweighed by the positive stimulating effects of guarantees on the economy, such as fiscal income generated by the supported projects or positive impact on social benefits programs due to created or maintained jobs. Therefore, CGSs “remain the most wide-spread instrument in use across countries” to ease SMEs’ access to finance (OECD, 2018). While CGSs do not alleviate information asymmetries directly, and hence do not address the root of the market failure, they can increase the incentives of lenders to supply credit to SMEs by providing a substitute for collateral, and if designed correctly, increase overall welfare.³⁴

CGSs hold significant advantages over alternative types of government supports, such as direct government lending. First, the final lending decision stays with a market-based, private-sector entity (rather than a public agency) – the bank –, which has the expertise and the necessary technology to evaluate credit applications and projects. This is likely to ensure a more efficient selection among borrowers than if the task is done by a public agency, since – given that the guarantee is partial – it leaves part of the risk with the privately operating lender. Second, compared to direct lending programs, CGSs have much lower initial cash flow needs, and as such, have a leverage component. As a consequence, they can also be used when fiscal constraints are tight.³⁵ Third, if CGSs are

³⁴ Arping et al. (2010) examine the conditions under which CGSs are socially preferred over government co-funding, using a moral hazard model in the spirit of Holmstrom and Tirole (1997). They conclude that provided entrepreneurs are not substituting public for private collateral, a welfare-maximising strategy prefers CGSs over government co-funding of investment projects. Government involvement in the establishment and funding of CGSs can also be motivated by resolving coordination failure between private-sector entities, which prevents them from pooling their resources. Anginer et al. (2014) argue that when lenders are risk averse, efficient provision of guarantees may not occur on a private-sector basis due to collective action problems, i.e. although the stakeholders are all aware of the problem, the lack of action comes from the misalignment of the private interests with those of the society. They also stress that the incentives for collective action are even weaker in economies with less developed financial systems. The state, on the contrary, is able to resolve the collective action frictions that get in the way of risk spreading. However, to achieve this objective, the state has to maintain the incentives for lenders to monitor projects efficiently, and to deter the borrower from excessive risk-taking. This can be done by pricing guarantees in a way that ensures the expected losses are covered by the fees charged, and promotes the risk being shared with the private sector.

³⁵ However, the small initial cash outlay of credit guarantee schemes also has disadvantages. Honohan (2010) notes that, as a large number of borrowers can be reached with only relatively small initial costs in the short-run, political incentives exist for the public sector to supply guarantees generously, while concealing the true long-term fiscal costs of a

supranational, they can contribute to an efficient geographic distribution of credit. Results from a recent EIB and EIF survey on European CGSs (see Chatzouz et al., 2017) highlight that all but one existing CGSs choose to operate within the national borders of the country they are headquartered in. This is likely to be caused by the existence of cross-border information frictions related to national legal frameworks that govern the functioning of CGSs, and obvious practical difficulties to assess risks in different cultural, linguistic and business contexts. Supranational CGSs can therefore contribute to an efficient cross-border allocation of credit.

Hence, the EIF plays an important role in the European guarantee eco-system. Through a wide range of financial intermediaries, such as banks, leasing companies, guarantee funds, mutual guarantee institutions, promotional banks and other financial intermediaries, the EIF effectively provides both financing to SMEs and guarantees for SME financing. Apart from EIF guarantees for securitised SME financing instruments (see Section 4.3), the EIF offers guarantees/counter-guarantees for portfolios of microcredits, SME loans or leases.³⁶ In doing so, the EIF manages and implements several mandates on behalf of the European Commission, but also of national and regional Managing Authorities.

CGS impact evaluation

The role of CGSs in enhancing SME access to finance is often not properly evaluated (Schich et al., 2017). Even in the case CGSs undergo some form of assessment, these are often focused on financial and not on economic additionality. A toolkit for impact evaluation of public CGSs for SMEs was developed by the World Bank Group and First Initiative (2018).³⁷

A number of recent studies have investigated the impact of some of the EU guarantee programmes on the beneficiary firms. Based on an analysis of the MAP (Multi-Annual Programme for enterprises and entrepreneurship) EU SME Guarantee Facility and focusing on Central, Eastern and South Eastern Europe (CESEE) countries, Asdrubali and Signore (2015) find significant positive effects of this EU guarantee program on the beneficiary firms. By breaking down the sample by country, signature year, size and age classes, the authors find that micro and young SMEs have benefited the most from MAP-guaranteed loans in terms of economic additionality. More recently, Bertoni et al. (2019) contribute to this body of research by focusing on the population of SMEs located in Italy, Benelux and the Nordics and benefiting from the guaranteed loans provided under the CIP (Competitiveness and Innovation framework Programme) and MAP programmes. They find that, after receiving a guaranteed loan, beneficiaries grew more rapidly than comparable non-beneficiaries in terms of assets, sales and employment.³⁸ Brault and Signore (2019) review past research from the EIF Working Paper Series and produce the first pan-European assessment of EU credit guarantees to SMEs. This meta-analysis covers over 360,000 loans guaranteed by the SMEG facility under MAP and CIP from 2002 to 2016. The results show that guaranteed loans provided by the EIF under the

program behind the uncertainty around the expected long-term losses on the guarantee portfolio. This can result in unexpected fiscal costs further down the road.

³⁶ See for more information the EIF website www.eif.org.

³⁷ EIF provided input to the project. A short summary of this methodological approach is provided in Kraemer-Eis, Botsari, Gvetadze, Lang and Torfs (2017).

³⁸ Similar results are also reported by Bertoni et al. (2018) in their analysis of French SMEs.

CIP and MAP programmes effectively boosted firm growth and increased survival chances of beneficiaries.

4.1.2 Credit guarantees as a policy response to the COVID-19 crisis

The intensive use of guarantee instruments, both at the national as at the European level, is evidenced by the strong rise in guaranteed lending volumes that occurred during the initial phase of the COVID-19 lockdown period. The share of guaranteed lending in total new business volumes of small loans (< EUR 0.25m) peaked at 44% in April, nearly doubling in volume compared to February levels (Figure 45). While the category of guaranteed loans also included collateralised lending, it is safe to assume this evolution was driven by the surge in government guarantee programs that aimed to address the urgent liquidity needs of European corporations.

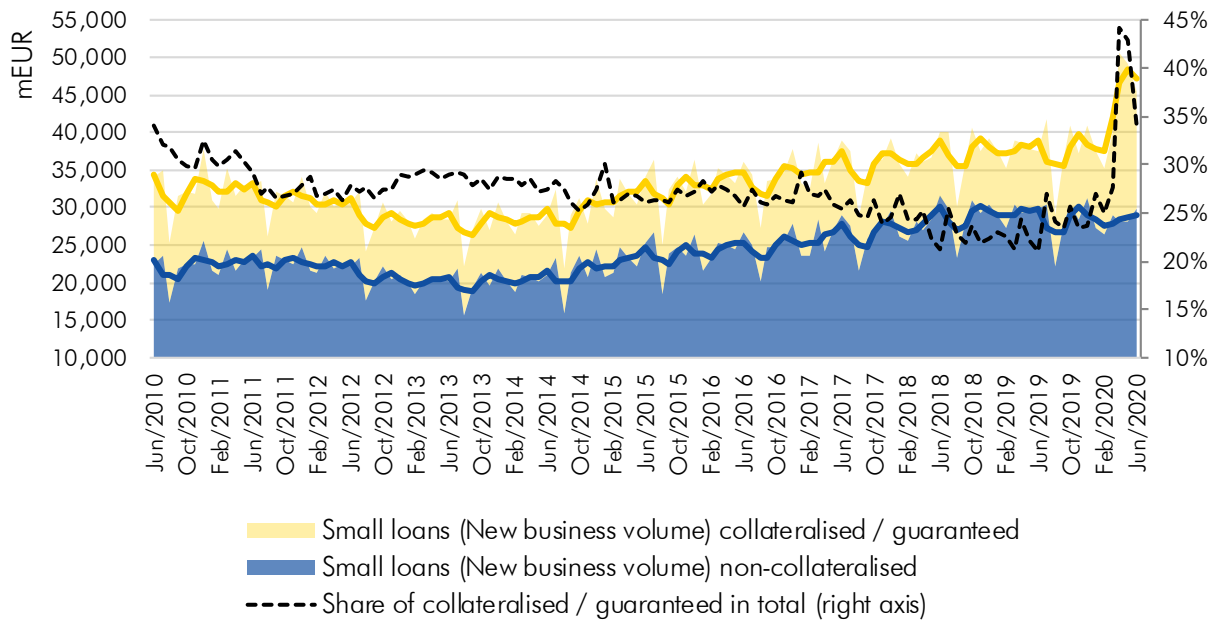
While short-term liquidity needs are often cited as the most pressing problem faced by SMEs during the containment period, the strong surge in guaranteed lending of loans with a maturity between 1 and 10 years indicates companies were also in dire need of support for longer term capital funding. The rise in short- and medium-term SME lending support came at the expense of long-term lending support, as the share of guaranteed/collateralised lending with a maturity over 10 years plummeted from 83% to 52% (Source: Authors, based on ECB Data

Figure 46).

This could indicate that guarantee instruments were to some extent diverted away from long-term investment support during the height of the containment period. Alternatively, companies could have used assets that would have normally served as collateral for long-term investment capital in order to secure much needed liquidity. The guaranteed share in SME long-term lending started to increase again in June, the most recent data available at the time of writing. In terms of volumes, however, the amount of long-term lending is negligible compared to medium-term, but especially short-term lending, the latter category making up the bulk of SME lending (nearly 70% during the first 6 months of 2020).

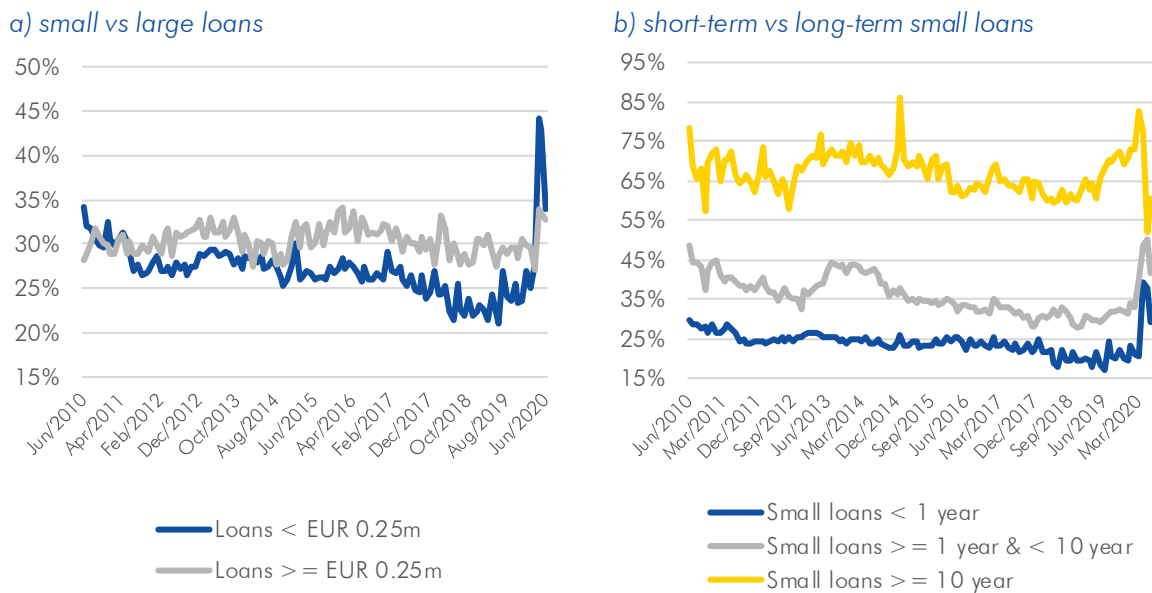
The numerous research studies discussed in section 4.1.1 confirm the effectiveness of the EIF's policy response in the past and support the view that the EIF's activities can represent viable policy instruments to mitigate the impact of the COVID-19 crisis (see also Box 3, for a discussion). Through the European Investment Bank Group, a EUR 25bn COVID-19 guarantee fund aims at delivering up to EUR 200bn for the European economy, with a focus on European SMEs. The EIF will manage a significant share of this Pan-European Guarantee Fund, implemented via SME credit guarantees.

Figure 45: Guarantee instruments in response to the COVID crisis, the share of guaranteed small lending (< 0.25m EUR)



*Note: SME lending is approximated by considering new business volumes of loans smaller than EUR 250th.
 Source: Authors, based on ECB Data

Figure 46: The share of guaranteed/collateralised lending in total lending during the COVID-crisis, new business volume to Euro area non-financial corporations



Source: Authors, based on ECB Data

Box 3: Credit guarantees in the COVID-19 crisis – relevance and economic impact

Credit guarantees are a crucial policy tool in support of SMEs and mid-caps during the COVID-19 crisis. They were advocated by the IMF to address the near-term liquidity needs of firms (Gopinath, 2020). A mid-April inventory of coronavirus-related fiscal pledges for a broad range of countries reveals an overall prevalence of credit guarantees. The US had at the time pledged EUR 470bn of guaranteed loans, and European States EUR 1,600bn. Through the European Investment Bank Group, a EUR 25bn COVID-19 guarantee fund aims at delivering up to EUR 200bn for the European economy, with a focus on European SMEs. A significant portion of this support instrument will be implemented via SME credit guarantees. The EIF will manage a significant share of this fund.

Previous studies have shown the effectiveness of EIF-guaranteed lending programs (Asdrubali and Signore, 2015; Brault and Signore, 2019). Targeted firms were able to increase assets and sale by up to 35%, and expanded their workforce by up to 30%. They were also less likely to go bankrupt, decreasing bankruptcy rates by a third, and up to a half in some countries. The ratio of intangible assets to total assets, a proxy of the weight of innovation in firms' business models, increased by a third. The effect on productivity was ambivalent, with negative short-run effects (in Central, Eastern, and Southern Europe), but positive impact over the medium-long run (in France). *Ceteris paribus*, the positive effects were stronger for young and small firms – which typically experience more severe credit rationing – for the service industry over manufacturing, and (expectedly) for larger loans.

There were however limits to the impact of such guarantees. Notably, they did not seem to have an unequivocal impact on profitability. Moreover, the documented positive impacts were not larger for high-tech and knowledge-intensive sectors, which would be expected to face harsher credit constraints. Over the past years, these sector-specific shortcomings prompted a proliferation of targeted guarantees instruments and/or other hybrid instruments aimed at addressing these target groups. Finally, the magnitude of the impact varied across countries, although these differences disappeared after controlling for the national characteristics of firms, e.g. their sector, age, and size. Hence, the characteristics of national economic and industrial landscapes appear to shape the economic impact of credit guarantees.

The economic effects of national guarantee programmes might diverge due to at least three factors, which tend to vary across countries. A first factor relates to the magnitude of the deployed credit guarantee volumes. A second factor pertains to the features of national industrial landscapes, shown to increase or decrease the effectiveness of credit guarantees. A third factor has to do with the varying capacity of European States to withstand the fiscal consequences of potential future defaults of guaranteed loans. The volumes of credit guarantees currently pledged across countries are significantly larger than what has been observed in recent history. It is only natural to think that the absolute amount of defaults and/or cancellations on guaranteed loans will rise as the crisis unfolds.

Credit guarantee programmes at the European level help addressing these types of shortcomings. Thanks to their European-wide deployment, they can at least partially offset the heterogeneous fiscal response across European countries. Thanks to their relatively larger impact on the most credit-constrained firms, they might benefit more those regions hit the hardest by the crisis. By expanding the number and/or the size of loans available to SMEs in supported nations, they may contribute to significant economic impact, even in areas where the impact of guarantees may be lower. Thanks to the European backstop they offer to national public and private guarantee schemes, European guarantees also help harmonise costs at the European level in the case of future defaults. As such, European credit guarantees have a useful role to play along other existing or debated European mutualisation schemes.

Source: Brault and Signore (2020)

4.1.3 Market size and activity in 2019

Market information concerning CGSs in Europe is gathered by AECM, the European Association of Guarantee Institutions.³⁹ In the following, based on data from the latest AECM Scoreboard,⁴⁰ we provide information about the use of guarantees in countries with at least one AECM member to show the state and development of this important market segment. Key figures based on *outstanding guarantees* on SME loan portfolios (as at 31 December 2019) are presented in Table 1. The guarantee activity data presented here reflect the market situation as it was at the end of 2019 and therefore does not capture the impact of the COVID-19 crisis.

In terms of total *volumes* of guarantee activities,⁴¹ the core countries are Turkey (EUR 33.5bn), Italy (EUR 25.1bn), France (EUR 21.7bn), Germany (EUR 5.5bn) and Spain (EUR 4.3bn). Turkey and Italy also have the highest total *number* of outstanding guarantees (1,184,147 and 921,626 respectively), followed by France (736,358). The total number of *supported SMEs* in the portfolios of the AECM members amounts to 2.8m, one third of which are located in Italy.

The highest *average size* of outstanding guarantee in portfolio, in the EU, was documented in Austria (EUR 210.9th), followed by Croatia (EUR 157.4th), Latvia (EUR 155.1th) and Germany (EUR 132.3th). Italy and France, despite exhibiting two of the highest volumes of outstanding guarantees in portfolio, have relatively small average sizes of guarantees (EUR 27.3th and EUR 29.5th, respectively), reflecting the presence of large populations of SMEs borrowing small loans in their portfolios.

At the end of 2019, the guarantee activity of AECM members has on average slightly decreased (–3.2%) compared to a year ago. It needs to be noted however that this is largely due to a significant decrease in the guarantee activity of one Turkish AECM member which holds the highest share (approximately one fourth) of total AECM outstanding guarantees.⁴² In fact, excluding the statistics of this AECM member, outstanding guarantee volumes at the end of 2019 exhibit an increase of 2.4% (instead of the decrease of –3.2%) compared to the previous year.

The outstanding guarantee value decreased the most in Turkey (–12.2%), Greece (–10.0%), Estonia (–7.7%) and Bulgaria (–7.3%). By contrast, the highest growth rates were recorded in Kosovo (+49.4%), Czechia (+22.4%), Ireland (+19.6%) and Austria (+18.1%).

³⁹ We thank our colleagues from AECM for their support. AECM currently has 48 members in 24 EU Member States plus Azerbaijan, Bosnia and Herzegovina, Kosovo, Russia, Serbia and Turkey. In the AECM member countries, the AECM members cover all or almost all SME guarantee activity. Some AECM members are national associations or networks and thus have their own member organisations. AECM has purely private, mutual, public, and public-private mixed members; 36 out of its 48 members are NPBIs. Source: AECM. The EIF is active in all AECM member countries with the exception of Azerbaijan and Russia.

⁴⁰ See AECM Statistical Yearbook 2019.

⁴¹ In the first semester of 2019, AECM introduced a clearer definition of the outstanding guarantee volume and asked its members to indicate whether the latter includes guarantees until the moment of the calling of the guarantee or until the moment of the disbursement of the guarantee. However, given that a common understanding on this matter could not be reached, the data presented in subsequent tables do not take into account this differentiation in the definition of outstanding guarantee volume.

⁴² The Turkish AECM member in question experienced an unprecedented increase in its guarantee activity during 2017 due to the implementation of a Portfolio Guarantee System in Treasury backed bank loan guarantees. However, since 2018, its reported volumes have been decreasing, mainly due to the depreciation of the Turkish lira vis-à-vis the Euro.

Table 4: Outstanding guarantees and number of supported SMEs in portfolio as at 31 December 2019, AECM members by country

Country	Volume [thEUR]	% change from 2018	Number	Implied average guarantee size [thEUR]	Number of SME beneficiaries
Austria	1,297,973	18.1%	6,153	210.9	4,584
Belgium	1,062,532	4.8%	11,255	94.4	9,400
Bosnia-Herzegovina	5,602	7.2%	65	86.2	46
Bulgaria	233,122	-7.3%	4,282	54.4	4,316
Croatia	248,084	10.8%	1,576	157.4	1,576
Czechia	945,000	22.4%	12,212	77.4	9,573
Estonia	101,204	-7.7%	1,108	91.3	738
Finland	1,301,018	5.1%	13,325	97.6	10,127
France	21,736,186	-2.6%	736,358	29.5	606,536
Germany	5,522,879	-0.1%	41,735	132.3	34,371
Greece	927,605	-10.0%	92,273	10.1	13,359
Hungary	3,034,361	4.5%	61,423	49.4	50,250
Ireland	104,000	19.6%	2,850	36.5	4,838
Italy	25,128,397	1.4%	921,626	27.3	923,863
Kosovo	43,885	49.4%	3,120	14.1	3,456
Latvia	179,253	15.3%	1,156	155.1	855
Lithuania	234,482	0.2%	2,631	89.1	2,004
Luxembourg	223,417	-0.9%	2,229	100.2	551
Netherlands	1,890,357	1.7%	16,414	115.2	16,074
Poland	3,216,452	7.6%	91,243	35.3	91,243
Portugal	3,757,958	6.5%	99,610	37.7	57,359
Romania	456,595	-1.4%	5,426	84.1	4,262
Serbia	5,356	0.1%	371	14.4	352
Slovenia	299,068	-0.1%	2,783	107.5	2,165
Spain	4,321,144	4.1%	76,591	56.4	134,616
Turkey	33,448,966	-12.2%	1,184,147	28.2	852,446
UK	678,218	0.5%	8,681	78.1	7,903
Total	110,403,114	-3.2%	3,400,643	32.5	2,846,863

Notes:

*The statistics do not include the business figures of one Hungarian AECM member for which no data were available and of one Romanian AECM member that only has a Counter Guarantee activity.

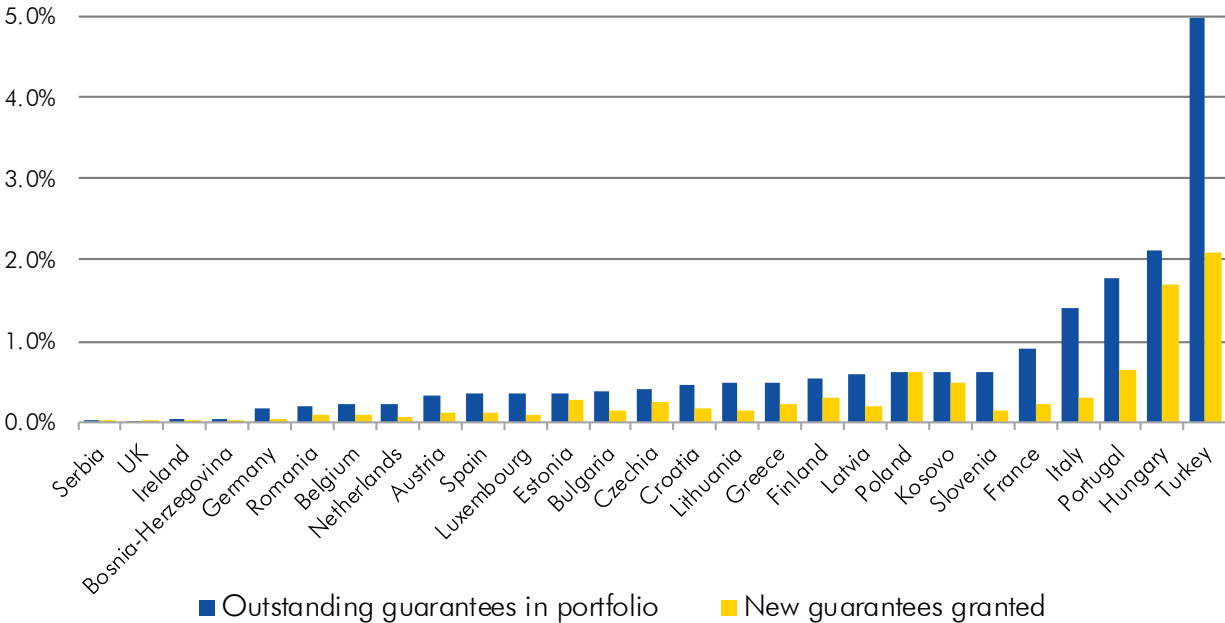
*In the case of Bulgaria, Ireland, Italy, Kosovo and Spain, the number of SME beneficiaries is reported to be higher than the number of guarantees. This is due to different reporting approaches (e.g., the number of SMEs refers to a member count, instead of the actual beneficiaries of guarantees in that particular year).

*The fact that some AECM member organisations may include former 'inactive' SME beneficiaries in their portfolio even though the guarantee scheme already reached its maturity could distort the total number of SME beneficiaries. Therefore, for the purpose of computing the implied average guarantee size, the 'Total Number of Guarantees Outstanding' rather than the 'Total Number of SME Beneficiaries' is taken into consideration.

Source: Authors, based on AECM data

Turkey leads the ranking in terms of the relative importance of guarantees compared to the value of economic activity (4.98% of GDP), see Figure 47. The top three is completed by Hungary (2.11%) and Portugal (1.77%). Relative to GDP, Turkey also recorded the highest amount of *new guarantees* in 2019 (2.10%), followed by Hungary and Portugal (1.69% and 0.65%, respectively).

Figure 47: Volumes of outstanding guarantees in portfolio and of new guarantee volumes granted in the full-year 2019 scaled by GDP*



*Note: At 31 December 2019 or latest available data.
Sources: Authors, based on AECM, Eurostat and World Bank data

The total new guarantee activity in the full-year 2019 constitutes 35.0% of the total volume of outstanding guarantees for the same period (Table 5). Newly-granted guarantees in the full-year 2019 amount to EUR 38.6bn, with one Turkish AECM member accounting for almost one third of this total. Hence, while the new guarantee volume of this member is much lower than before, it still represents an important share of the total new guarantee activity.

At first glance, new guarantee activity by AECM members in 2019 shows a decrease of 7.0% compared to the previous year. However, as also pointed out earlier, this is largely driven by the much lower new guarantee volume generated by one Turkish AECM member. As a result, when the statistics of this member are excluded from the aggregate figures, new guarantee volumes in 2019 show in fact an increase of 2.0% compared to the year before.

At the same time, significant variation in the growth rates of new guarantee activity is documented across countries. For example, apart from Turkey (which experienced a decrease in new guarantee activity by 17.6% in 2019 compared to 2018), new granted guarantees also decreased significantly in Bosnia-Herzegovina (-44.0%), Romania (-27.2%), Bulgaria (-26.9%) and Lithuania (-26.7%). On the contrary, new guarantees in the full-year 2019 increased strongly in Ireland (+272.5%), Greece (+49.2%), Croatia (+39.6%) and Kosovo (+28.9%).

Table 5: Newly granted guarantees in the full-year 2019, AECM members by country

Country	Total 2019 (thEUR)	% change from 2018	Percentage of outstanding
Austria	430,652	25.0%	33.2%
Belgium	460,778	7.5%	43.4%
Bosnia-Herzegovina	863	-44.0%	15.4%
Bulgaria	95,167	-26.9%	40.8%
Croatia	86,195	39.6%	34.7%
Czechia	544,188	27.6%	57.6%
Estonia	74,169	0.1%	73.3%
Finland	742,221	4.9%	57.0%
France	5,437,383	-13.2%	25.0%
Germany	1,084,106	-1.0%	19.6%
Greece	419,120	49.2%	45.2%
Hungary	2,424,482	-1.8%	79.9%
Ireland	53,567	272.5%	51.5%
Italy	5,282,630	-4.7%	21.0%
Kosovo	33,531	28.9%	76.4%
Latvia	63,067	18.5%	35.2%
Lithuania	75,568	-26.7%	32.2%
Luxembourg	54,897	-19.8%	24.6%
Netherlands	553,042	-5.6%	29.3%
Poland	3,284,957	21.8%	102.1% (1)
Portugal	1,379,328	15.2%	36.7%
Romania	184,995	-27.2%	40.5%
Serbia	2,449	19.2%	45.7%
Slovenia	72,170	-4.4%	24.1%
Spain	1,415,628	10.4%	32.8%
Turkey	14,099,371	-17.6%	42.2%
UK	232,699	18.5%	34.3%
Total	38,587,224	-7.0%	35.0%

Notes:

*The statistics do not include the business figures of one Hungarian AECM member for which no data were available and of one Romanian AECM member that only has a Counter Guarantee activity.

(1) For the Polish AECM member, the total new guarantee activity in the full-year 2019 exceeded the total volume of outstanding guarantees for the same period. As a result, new guarantees in Poland are in excess of 100% of outstanding guarantees in portfolio. If the Polish AECM member in question mostly offers short-term guarantees and if the duration of the latter is less than one year, then it is reasonable to assume that many of the newly-granted guarantees are reported in the related statistics on new guarantee volumes, but are not subsequently reflected in the statistics on outstanding guarantees.

Source: Authors, based on AECM data

4.2 Leasing

According to the latest ECB SAFE survey wave (October 2019 – March 2020), Euro area SMEs state that the current availability of leasing or hire-purchase has improved (net balance) the most over the past six months compared to other external financing sources (see Figure 48). By contrast, survey respondents expect that the availability of leasing will deteriorate, on balance, over the next six months, to a lesser extent however compared to other external financing sources.

There is a wide heterogeneity in the use of leasing, across countries, industries and firm-sizes. A country-by-country analysis (see Figure 49, Panel A) reveals that Finland, Germany and Austria are the countries with the highest proportion of SMEs using leasing or hire-purchase, while SMEs in the south of Europe use leasing less frequently. Compared across industries (see Figure 49, Panel B), leasing as a financing source is more prevalent among industrial and construction firms, contrary to Euro area SMEs that state “trade” as their main activity. Finally, the use of leasing or hire-purchase grows with firm-size (measured by annual turnover), see Figure 49, Panel C.

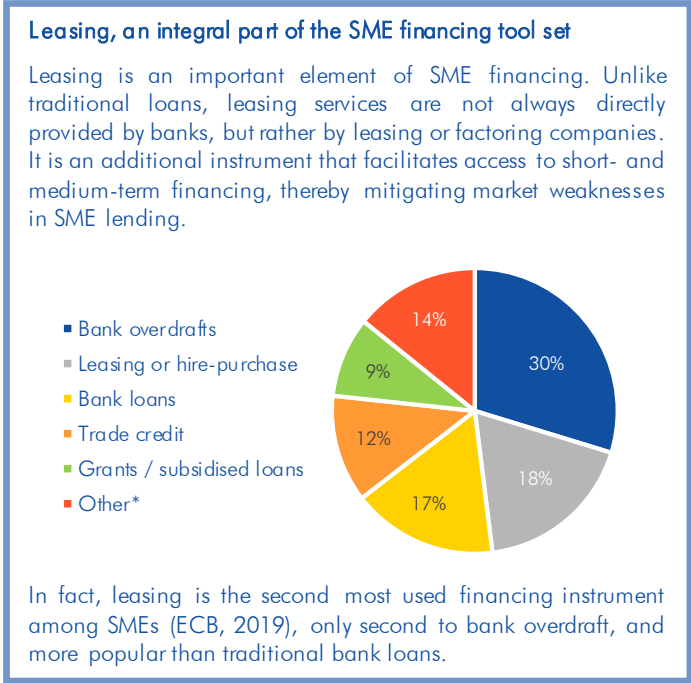
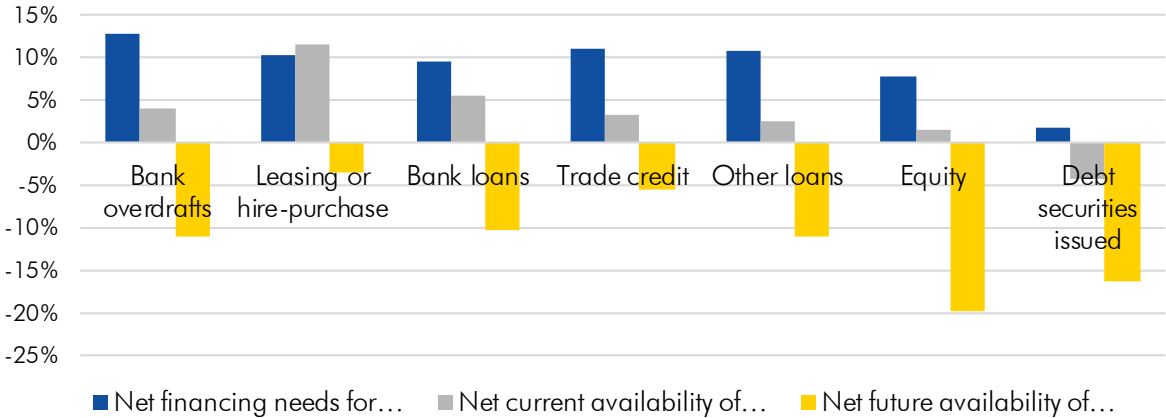


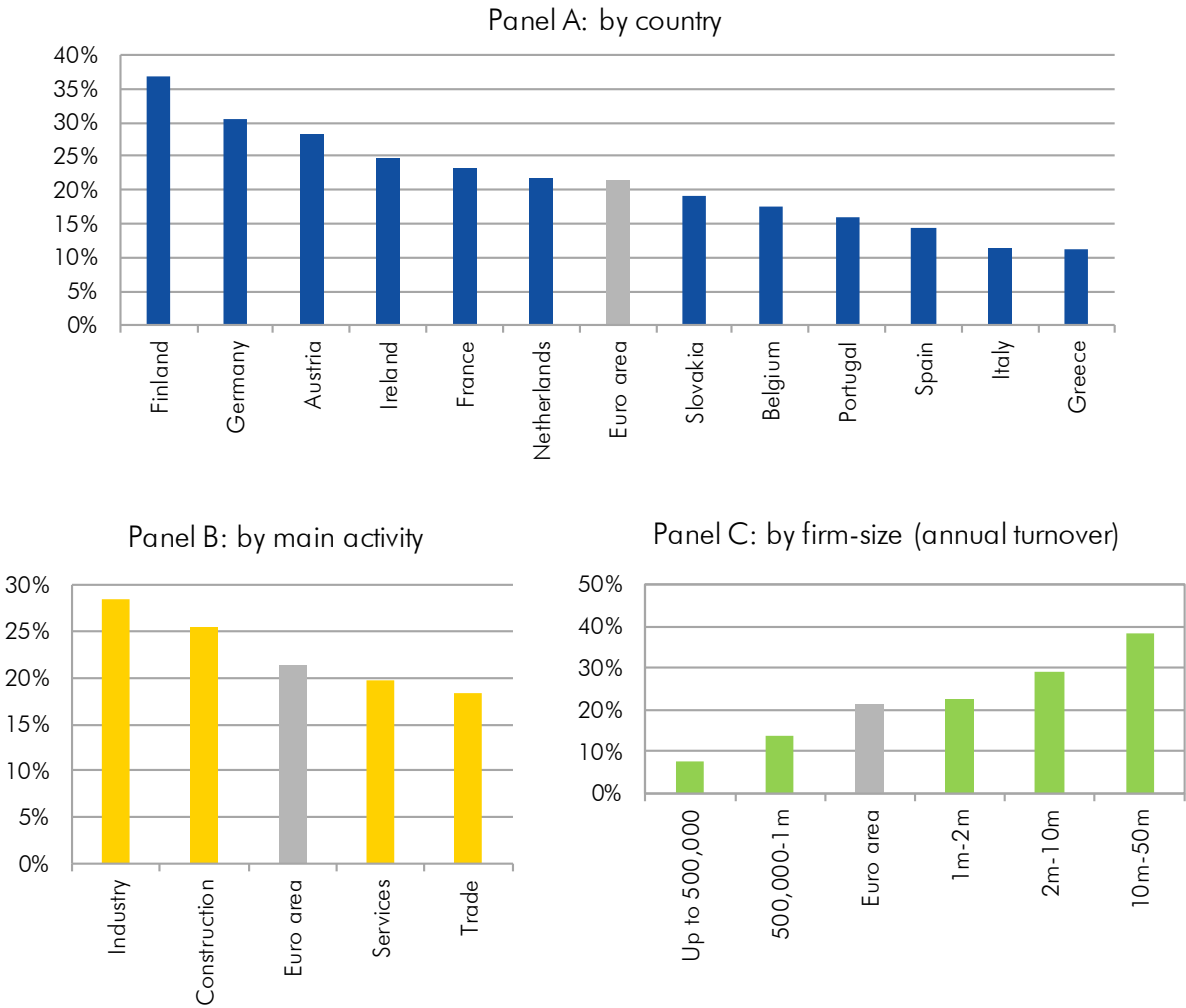
Figure 48: Evolution of financing needs and availability of financing sources for Euro area SMEs (HY2/2019)



*Note: “Net financing needs” reflects the percentage of respondents stating that their needs for the respective financing source have increased over the past six months minus the percentage of those stating a decrease; “Net current (future) availability” reflects the percentage of respondents stating (expecting) an improvement in the availability of the respective financing source over the past (next) six months minus the percentage of those stating (expecting) a deterioration; all percentages reflect weighted results and have been calculated on the basis of the number of respondents who consider the respective financing source to be relevant for their enterprise.

Source: Authors, based on ECB SAFE (ECB, 2020)

Figure 49: Use of leasing or hire-purchase by Euro area SMEs – a cross countries, industries and firm-sizes (HY2/2019)

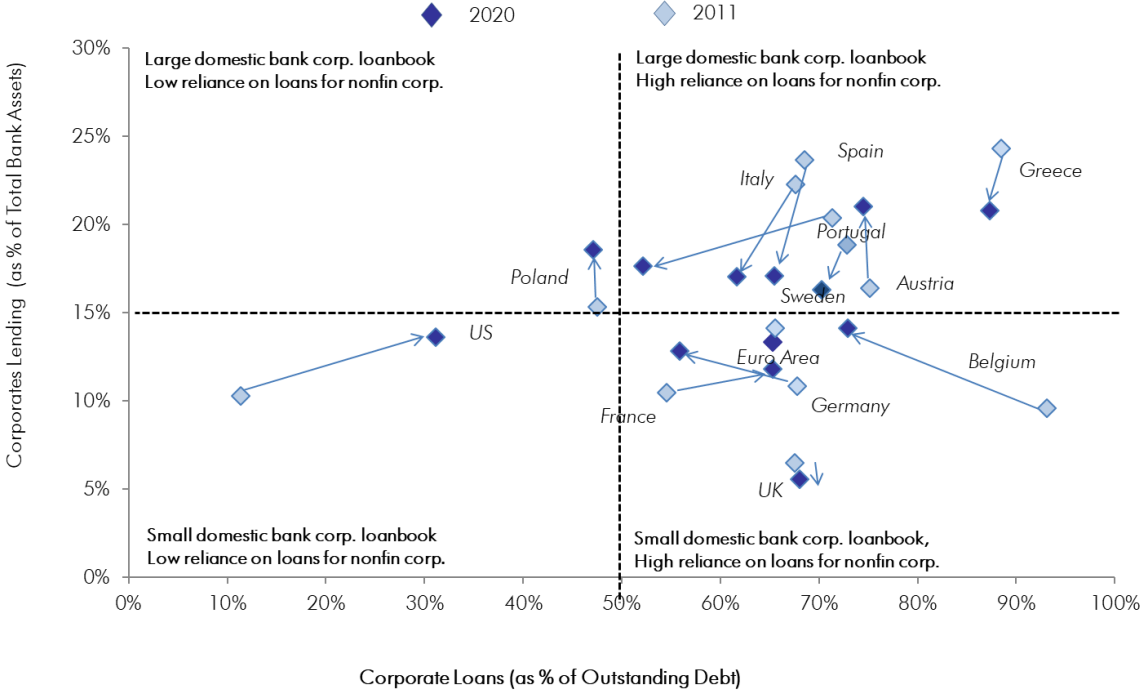


* Note: percentage of respondents (weighted results) stating that they have used leasing or hire-purchase over the past six months; "Industry" includes manufacturing, mining & electricity, gas and water supply.
 Source: Authors, based on ECB SAFE (ECB, 2020)

4.3 SME Securitisation⁴³

European SMEs rely heavily on bank lending. Figure 50 provides an indication of the different levels of bank reliance for various countries.⁴⁴ The ratio is moving towards more capital market action. For SMEs, the possibility to substitute bank lending with other sources of finance exists only to a limited extent. Capital market funding in the Euro area has been increasing since the financial crisis (see Figure 51). However, this is primarily possible for large corporations.

Figure 50: Reliance on bank financing by non-financial corporations (in percent)



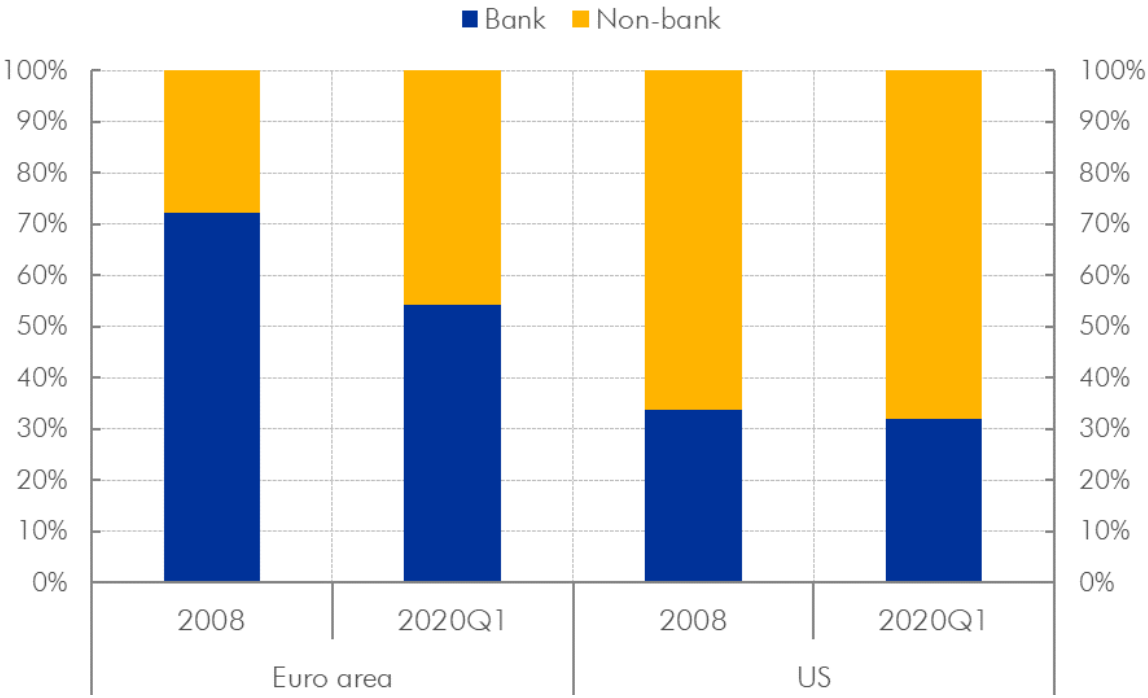
Source: Authors, based on IMF (2012) and updated information

Given that SMEs have only limited *direct* access to capital markets, a well-functioning securitisation market can provide an *indirect* access by transforming illiquid loans to SMEs into an asset class with adequate market liquidity. Securitisation can strengthen the capacity of banks to supply new loans. It can mitigate credit supply frictions and has the potential of having positive real effects on investment, sales, and employment (Berg et al., 2015). If properly done, securitisation can be a promising tool to enhance funding options for SMEs (Lagarde, 2019). For example, Kaya and Masetti (2018) analysed the impact of securitisation on access to finance for SMEs in the Euro area, based on firm-level survey data on SME financing conditions. They found that an increase in securitisation issuance reduces the probability of SMEs facing credit constraints and decreases the cost of bank financing for non-constrained firms.

⁴³ The term SME Securitisation (SMESec) comprises transactions backed by SME loans, leases, etc. It is important not only to look at banks/lending when analysing SMESec, but equally at leasing companies, which form part of the securitisation market. In particular, securitisation can help smaller originators to make use of the capital market (Moody's, 2017). For more information on the importance of leasing for SME finance, see Kraemer-Eis and Lang (2012 and 2014).

⁴⁴ The figure is related to non-financial corporations, not only SMEs.

Figure 51: Bank/non-bank debt financing of non-financial corporations in the Euro area and the US



Source: Authors, based on ECB data

It is sometimes stated that securitisation might lead to higher risk taking by banks (or lower lending standards). This is neither confirmed by performance data, nor by research. Kara et al. (2015) analysed data from the euro-denominated syndicated loan market. They found that, in the run up to

Securitisation, a value-laden term

Securitisation per se is neither good nor bad - it is a toolbox, an instrument, a technique. As such it is value-free. However, its aggressive, opaque, and overly complex use by some market participants has negative consequences for both, issuers and investors. Negative repercussions are also created by an overly simplified discussion where everything related to structured finance is lumped together and sometimes dismissed or branded as "toxic". The instrument is neither "toxic" nor is the underlying asset (in the case of SMESec: SME loans/leases) "toxic waste".

the financial crisis, banks relying on securitisation did not lower their lending standards more than other institutions. Albertazzi et al. (2017) used credit register data for loans to Italian SMEs and tested for the presence of asymmetric information in the securitisation market by looking at the correlation between securitisation and default probability. They found that, despite the presence of asymmetric information, securitisation did not lead to lax credit standards, but rather that the quality of securitised loans is better than the one of non-securitised loans, i.e. a positive selection effect takes place.

Loans to SMEs are a key driver for the functioning of the economy and, properly applied, securitisation is a replicable tool that can enhance access to finance for SMEs. By using this instrument in developed capital markets, public sector support for SMEs (e.g. guaranteeing mezzanine tranches) can create multiplier effects - and hence it is an efficient use of public resources, which is especially important against the background of scarce financial resources for public support and a high public debt burden in many key countries: "[...] strengthening SME securitisation may be one of the most effective ways to facilitate the flow of funds to the real economy, while not creating too much distortion" (Kaya,

2014). Integrated EU capital markets (and their need for transparency and standardisation) and the relative complexity of securitisation techniques require considerable know-how and show the necessity for specialised institutions. As an established and respected player in the European securitisation market, EIF, in close cooperation with the EIB, plays an important role via market presence, reputation building, and signalling.⁴⁵

Also the ECB is interested in securitisation, including SMESec, for three main reasons (Mersch, 2017): Firstly, the ABS (Asset Backed Securities) market acts as one of the transmission channels of the ECB monetary policy (facilitating the provision of credit to the real economy). Secondly, ABS form an important part of the collateral framework in the Euro system, and thirdly, this technique can transfer risk away from the banking sector, which may support monetary policy.⁴⁶

Already before the COVID-19 crisis, according to the European Banking Authority (EBA), the coming implementation of the Basel capital requirements would have required European banks to raise their capital by 25% on average and by 28.5% for systemically important institutions. This means an additional capital need for European banks of EUR 100bn. According to the EBA, European banks are expected to suffer a hit of up to EUR 380bn to their capital due to the economic disruption from COVID-19 (EBA, 2020b; Arnold et. al., 2020). Such limitations on the banks' side clash with increasing lending needs (e.g. based on COVID-19-crisis, greening the economy, digitisation, etc.). As reaction, banks can raise additional capital, or alternatively they can use securitisation and remove risks from their balance sheets so that more capital is free for new lending (Bell, 2020).

The reputation of the SME securitisation market segment is continuously improving and a de-stigmatisation is happening. In the context of the COVID-19 crisis one can even now read that "[...] the market is rehabilitated just in time to save Europe's small and medium sized enterprises (SMEs). [...] The same financing blamed for destabilising the European economy in the last crisis may now be used to rescue it" (Brown, 2020). However, as we will see later, SMESec placed with investors currently represents only a very small portion of the total issuance and there is for the time being only a very limited primary market.

The SMESec market in Europe is still underdeveloped despite SMESec having many advantages for banks, for investors, and – most importantly - for the SMEs. A real recovery and development of the primary securitisation markets could play a role in ensuring sufficient credit supply for SMEs during the crisis and the recovery process. Moreover, in addition to the direct effects of the SMESec markets, there are indirect benefits to SMEs from the development of other securitisation segments that free

⁴⁵ EIF's involvement in the SME securitisation market is twofold: 1) guaranteeing tranches of ABS transactions issued by banks in order to obtain funding, and 2) by guaranteeing tranches of synthetic securitisations which allow banks to release regulatory capital. For more information on the use of securitisation at EIF: <https://youtu.be/liDM-KPiScE>. The widely recognised role of EIF in the synthetic market, led to the securitisation division of EIF winning the award as "best SRT investor". The respective pitch to the competition can be found here: https://www.eif.org/news_centre/publications/eif-submission-to-the-sci-capital-relief-trades-awards-2019.htm

⁴⁶ In November 2014, the ECB started its Asset Backed Purchase Programme (ABSPP). The overall objective was to enhance the transmission of the monetary policy, support the provision of credit to the Euro area economy and, as a result, to provide further monetary policy accommodation. The ECB's support of the ABS market was a positive step. However, the programme has almost no direct impact on the SME segment of the market. On 14 June 2018 the ECB announced to reduce the asset purchases from October 2018 onwards, and then to stop the ABSPP by the end of 2018. In November 2019, the ECB restarted the purchase programme. At the end of June 2020 a portfolio of EUR 30.6bn was reported under the ABSPP. The detailed breakdown, presented on the 06th of May, revealed that SME transactions did not play a role so far (Raebel, 2020).

up space on bank balance sheets to allow for further SME lending (AFME et al., 2016). However, this will only be to the benefit of SMEs if the freed-up capital / fresh liquidity is going to be used to finance the real economy (i.e. for new SME lending).⁴⁷

4.3.1 SMESec market activity⁴⁸

The European securitisation market has grown steadily from the beginning of the previous decade until the outbreak of the GFC. However, it is much smaller than its US peer (see Figure 52). During the financial crisis, issuance remained initially at high levels in Europe, but these volumes were almost exclusively driven by the eligibility of ABS as collateral for ECB liquidity operations;⁴⁹ then the overall market activity decreased to the 2003/2004 levels.

Issuance

European total securitisation issuance in 2019 started slowly and was with EUR 216.8bn (EUR 116.6bn placed vs. EUR 100.2bn retained) the lowest since 2013. Most active markets in terms of overall securitisation issuance were the UK (market share 30% of the placed issuance) and Germany (11%). Also the start of 2020 was weak with only EUR 79bn in HY1, the lowest value since 2014.

Before the outbreak of COVID-19, SMESec issuance was still suffering from the after-effects of the financial crisis – and is now negatively affected again. The overall issued (and visible) volume of SME deals in 2019 was only EUR 23bn (see also Figure 53). The market share of SMESec 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 Europe. This, however, was due to the base effect, as the overall activity went down (while SMESec activity decreased slightly less). From 2014 to 2017 the share of SME issuance in the overall activity went down from 15% to 6.3%, based on shrinking SMESec volumes; in 2019 the share was 10.6%.⁵⁰ In HY1/2020 there was no visible SMESec activity at all.

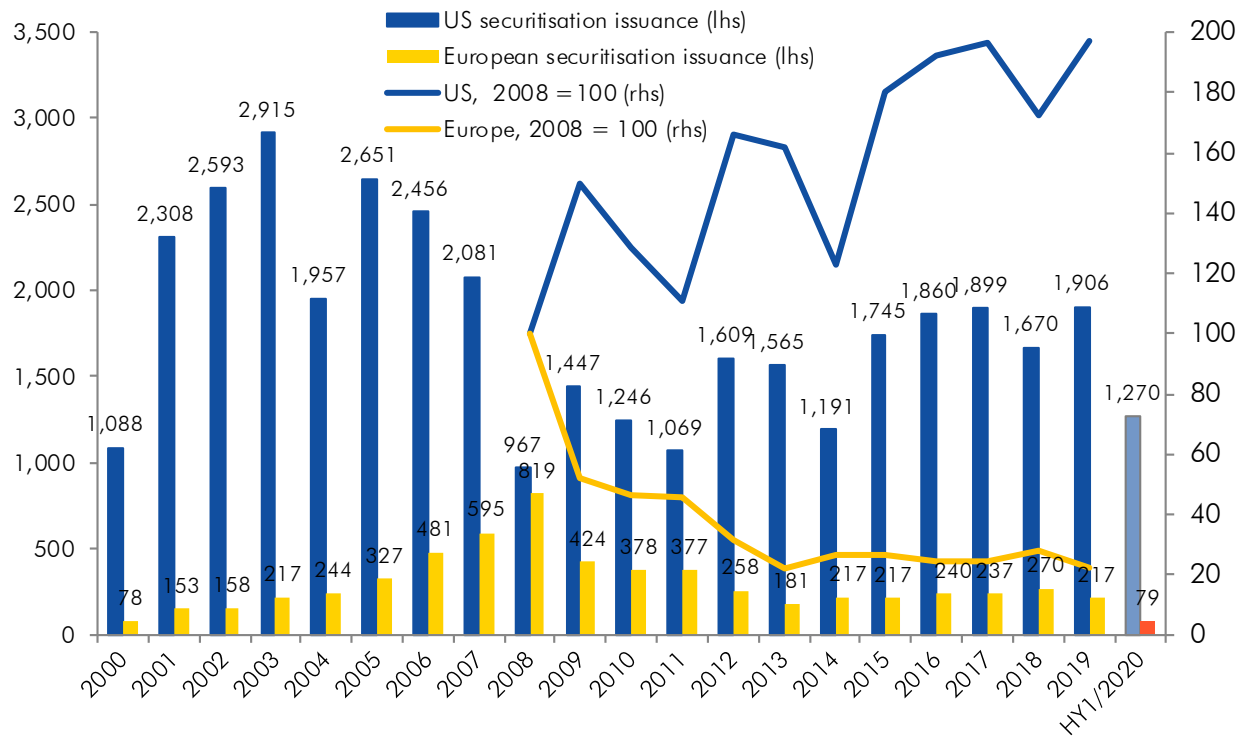
⁴⁷ See for a detailed discussion of SMESec: Kraemer-Eis, Schaber, and Tappi (2010), Kraemer-Eis, Passaris, and Tappi (2013), Kraemer-Eis, Passaris, Tappi, and Inglis (2015), Aiyar et al. (2015), or the joint statement of eight leading trade associations: AFME et al. (2016).

⁴⁸ If not flagged otherwise, the data source is AFME, the Association for Financial Markets in Europe. Please note, AFME changed sources of securitisation data. Historical data (i.e. data reported prior to Q1/2020) might be not comparable with current data. Moreover, collateral type categorisations have been subject to changes.

⁴⁹ The ECB's asset repurchase or "repo" facility allows (among other assets) Asset Backed Securities to be used as collateral for funding.

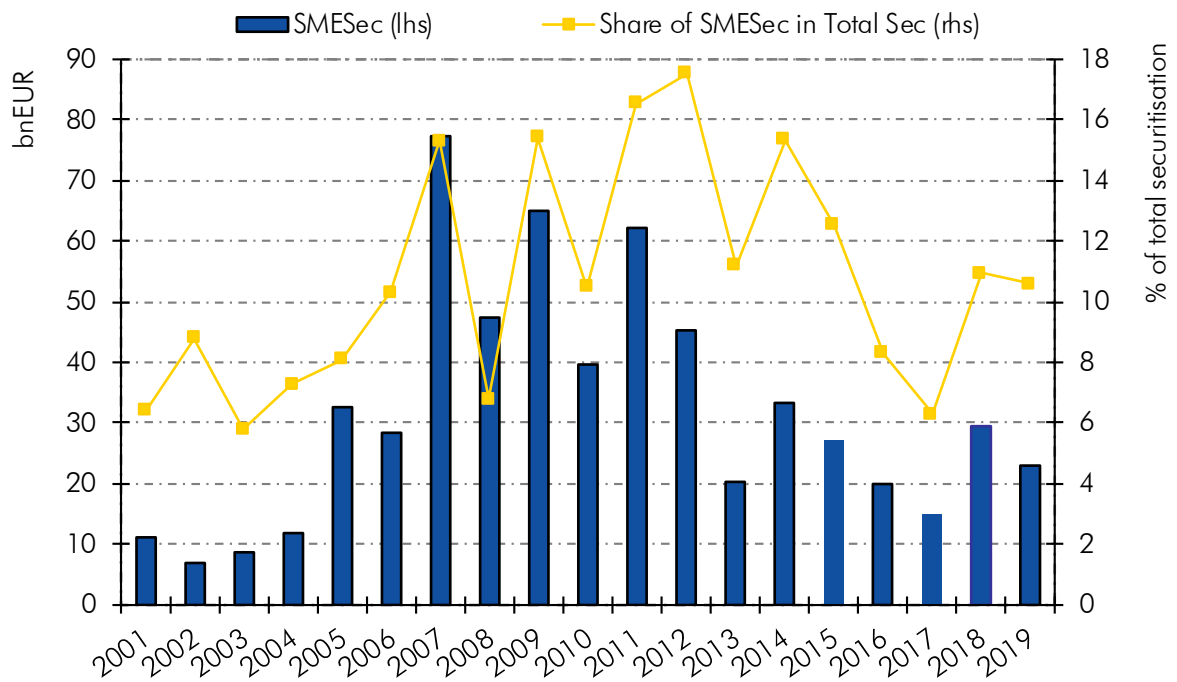
⁵⁰ Driven by the negative market sentiment, but also by shrinking SME stocks in the financial intermediaries' loan books. Moreover, during the crisis, the large volumes of synthetic SMESec transactions, that were evidenced pre-2007 on SME portfolios dominated primarily by German SMEs on the back of KfW's PROMISE program, virtually disappeared.

Figure 52: Securitisation issuance Europe versus US (annual issuance 2000 – 2020, bnEUR)



Source: Authors, based on AFME data

Figure 53: SMESec issuance in Europe (volume and share of total securitisation, bnEUR and %)



Source: Authors, based on AFME data

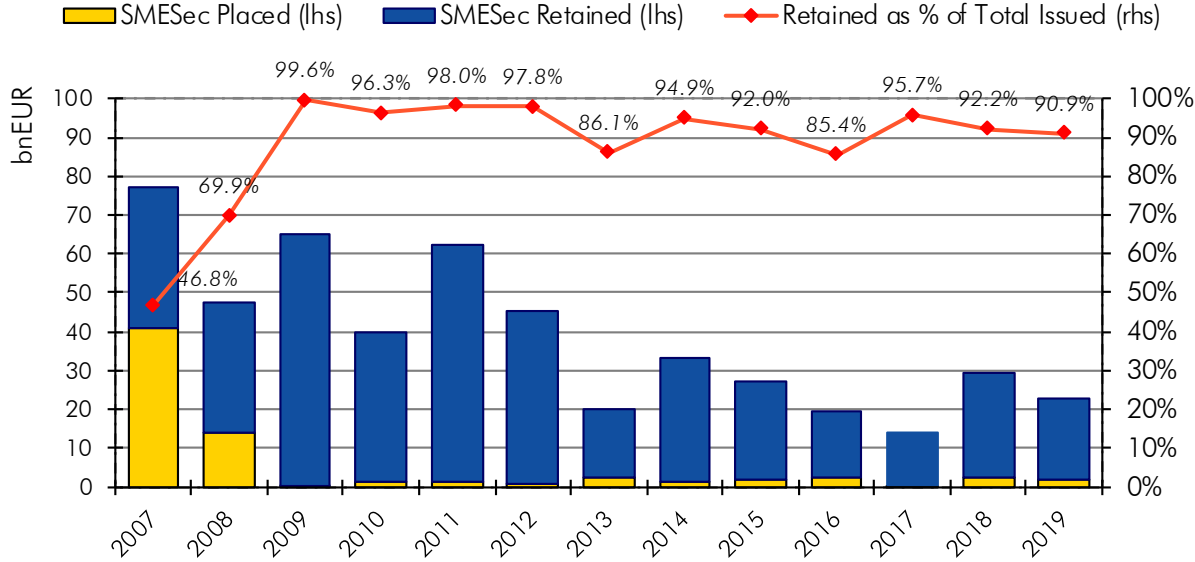
Typical originators of SMESec - also often active as repeat originators - are large banks or banking groups – some of them are active as originators in several countries, but also mid-sized banks. Moreover, in particular in the field of leasing, non-bank asset finance providers are active as originators. Typical originators of synthetic securitisation are credit institutions, in particular large/systemically important banks using internal rating-based models for calculating capital requirements. However, recently also some standardised banks have entered into synthetic transactions, based on support given by the EIB/EIF and in response to the introduction of the SEC-SA (Standardised Approach) risk weight approach under the new EU securitisation framework (EBA, 2020a).

Securitisation data

The AFME data used here, classifies only lending-based transactions in the SME basket. Most leasing-based transactions, classified in AFME’s data under ABS Leases in the overall ABS basket, are de-facto SME transactions. Moreover, in the securitisation market, there are often (synthetic) transactions on a private/bilateral or club basis that are not visible in the official statistics. Over the recent years there was a significant rise in number and volume of synthetic SME transactions, driven by risk transfer, asset liability management aspects, and regulatory capital considerations. These transactions do not appear in the statistics and can only be estimated via surveys of market participants. Based on such assessment, for example, EBA (2020a) estimates for 2018 a volume of around EUR 105bn, out of which 19.6bn SMESec (see EBA (2020a) for an analysis of the synthetic market). Therefore, the numbers, shown here, are an underestimation of the real market size and can be seen as a lower bound.

As already mentioned, it is important to note that only a very small fraction of the issuance has been placed with investors – the investor base has not yet recovered (see Figure 54). The nature of the SMESec 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 crisis (with almost no placement on the primary market). This shift led to liquidity drying up and originators accepting higher all-in costs as, in addition to the credit enhancement, the repos envisage considerable haircuts to the face value of the notes. In terms of countries, placed SMESec issuance in 2019 occurred only in Italy and UK (EUR 0.7bn each), as well as in Germany (EUR 0.5bn) and Spain (EUR 0.3bn).

Figure 54: European SMESec by retention



Source: Authors, based on AFME data

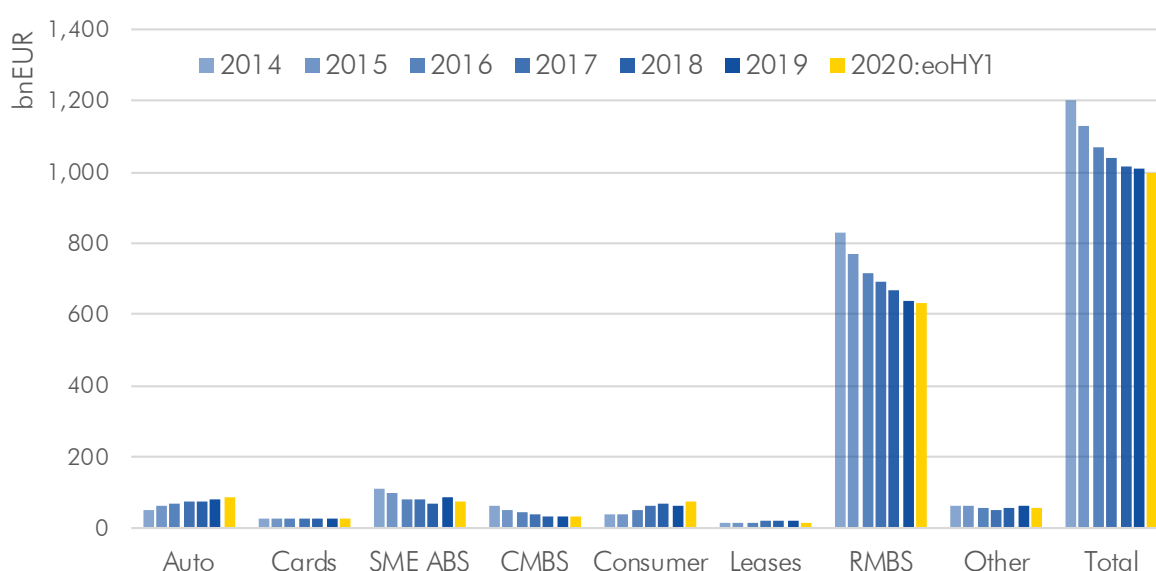
Outstanding

Due to low new activity levels, the volume of *total outstanding securitisation transactions* (see Figure 55) is on a downward trend (negative net supply). RMBS continues to be the most dominant securitisation type (by collateral).

Breaking down SMESec volumes per end of (eo) HY1/2020 by country shows that the main three countries together represent 85% in terms of outstanding: Italy (EUR 26.8bn/35%), Belgium (EUR 21.3bn, 28%), and Spain (EUR 17bn, 22%), see Source: Authors, based on AFME data

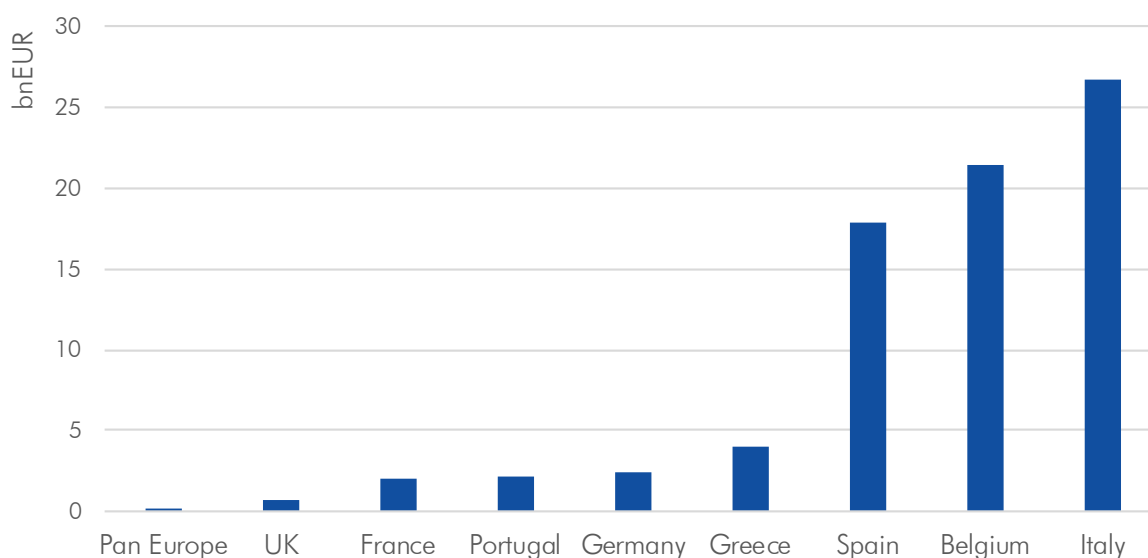
Figure 56.

Figure 55: European outstanding securitisation by collateral (end of HY1/2020, bnEUR)



Source: Authors, based on AFME data

Figure 56: European SMESec outstanding volume by country (end of HY1/2020, bnEUR)



Source: Authors, based on AFME data

SMESec performance trends

SMESec market activity in Europe started towards the end of the 1990s. At the time, this segment was relatively unknown to investors and rating agencies (based on the novelty of the applied tools, as well as on the heterogeneity of SMEs/SME loans), and the securitisation technique was also new to most of the originators with many banks not in a position to securitise SME loans (a typical hurdle is the IT infrastructure that has to be able to adequately support the securitisation transactions).

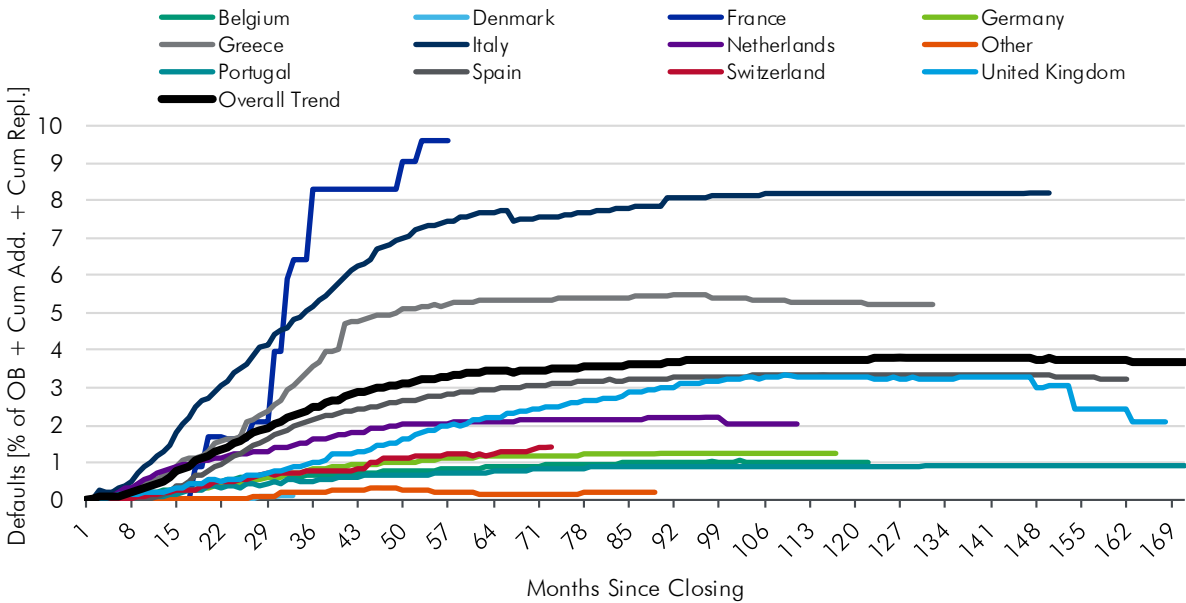
The performance of SMESec transactions depends on a number of parameters, including the structure of a transaction, SME credit risk (including recovery rates), portfolio structure (e.g. rating distribution, obligor concentration, industry concentration, etc.) and also macroeconomic parameters. Despite the financial and sovereign crisis and the prolonged negative economic cycle, the European securitisation market in general has performed relatively well with comparatively low default rates (for true sale and public synthetic balance sheet transactions). On the one hand, before the financial crisis started, SMESec volumes were small compared to the overall securitisation market – and the market had not had much time to develop. On the other hand, the limited track record was one of the reasons for the relatively conservative SMESec structures which can partially explain the good SMESec performance in Europe compared to other segments of the European securitisation market and to the US.

Also after the financial crisis, the positive SMESec performance was continuing, despite worsening economic framework conditions - inter alia driven by political event risk - the performance remained stable. The low losses are not only due to the typically high granularity, diversification and seasoning of these transactions, but also to the structural features (such as large credit enhancement) that helped counterbalance the negative effects of the deteriorating European economy (i.e. increased SME default rates). This leads to the effect that the performance of most senior SMESec tranches in Europe have been on par with prime RMBS, although typically prime residential mortgage loans tend to perform better than SME loans in the same country (Moody's, 2018).

Rating agencies report strong structured finance performance for Europe (see e.g. Moody's 2019, 2020b, S&P 2019a). FitchRatings (2019) expects the total losses on EMEA structured finance transactions, rated by Fitch and issued during the period 2000 to 2018 (volume EUR 3.5tr), to amount to only 0.5%. Losses in the SME segment are mainly caused by German SME loans, originated through an "originate-to-distribute" business model (non-granular hybrid transactions / German Mezzanine CDOs⁵¹, or by Spanish SME loans. "European securitisations in the basic and simplest asset classes displayed spectacularly good credit performance through the severe economic downturn triggered by both GFC and the subsequent Eurozone crisis. To this day, twelve years on, AAA to single-A rated senior tranches of traditional asset class securitisations in Europe have still not suffered a single euro of loss. This includes securitisations in what became at times highly stressed economies such as Spain, Greece and Italy. It became clear that properly structured transparent securitisations, such as Europe had been issuing, were a safe and resilient financing tool" (Bell, 2020). Figure 57 and Figure 58 show the cumulative credit events or defaults on original balance by country and by vintage of the SME transactions in the EMEA region rated by Moody's).

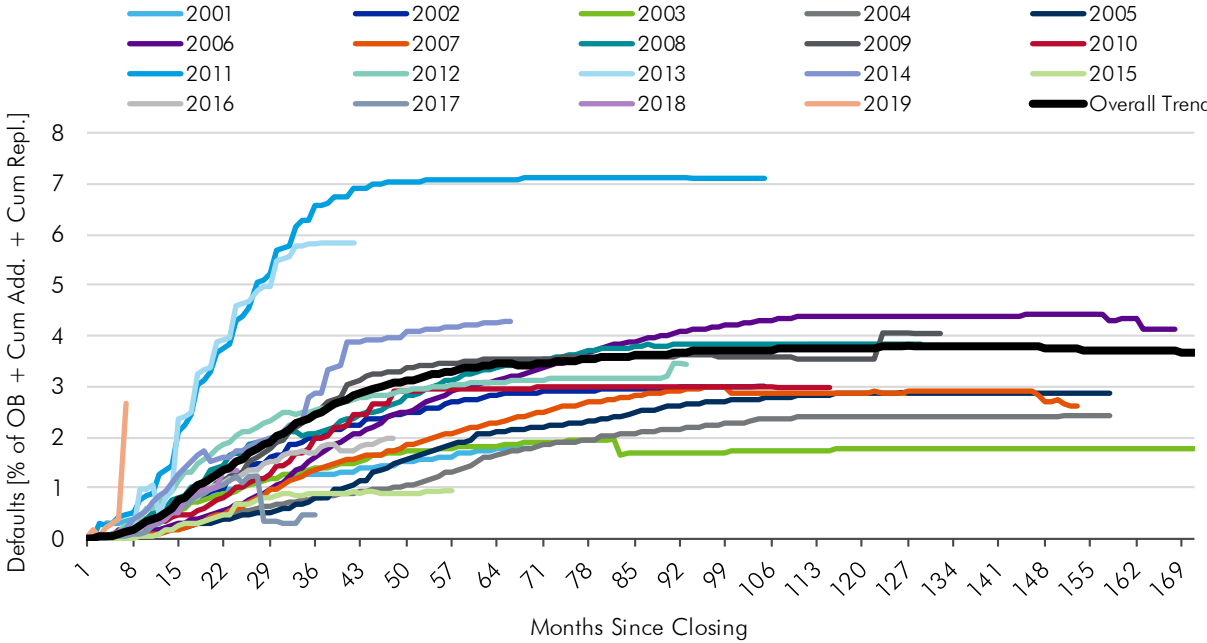
⁵¹ For more details see Kraemer-Eis, Passaris, and Tappi (2013).

Figure 57: SME loan and lease ABS - Cumulative credit events or defaults on original balance (seasoning by country)⁵²



Source: Moody's (2020a)

Figure 58: SME loan and lease ABS - Cumulative credit events or defaults on original balance (seasoning by vintage)



Source: Moody's (2020a)

⁵² Terminated transactions are included in the index calculation; hence, here “cumulative” curves can also show a drop. Additionally, Moody’s notes show that vintage seasoning charts might move unexpectedly for the last few data points, because transactions start at different points in time within a vintage, and, hence, some transactions may be more seasoned than others. The index includes only the transactions rated by Moody’s.

Nevertheless, the rating transition data shows that some downgrade pressure for SME transactions persists across all tranche levels.⁵³ The example below (Table 6) shows the rating migration of SME Collateralised Loan Obligation (CLO) transactions (rated by Fitch, migration since transaction closing). For example, of all the tranches, currently tracked by Fitch and initially rated AAA, 40% (by number⁵⁴) have paid in full (pif), 50% are still AAA, 10% moved down to A etc.

Table 6: Fitch European SMEs rating transition matrix (May 2020)

% of tranches		Current rating										
		PIF	AAA _{sf}	AA _{sf}	A _{sf}	BBB _{sf}	BB _{sf}	B _{sf}	CCC _{sf}	CC _{sf}	C _{sf}	
Initial Ratings	AAA _{sf}	40%	50%	0%	10%	0%	0%	0%	0%	0%	0%	0%
	AA _{sf}	38%	0%	54%	8%	0%	0%	0%	0%	0%	0%	
	A _{sf}	13%	13%	25%	50%	0%	0%	0%	0%	0%	0%	
	BBB _{sf}	11%	0%	0%	11%	67%	11%	0%	0%	0%	0%	
	BB _{sf}	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	
	B _{sf}	0%	0%	0%	17%	17%	0%	67%	0%	0%	0%	
	CCC _{sf}	0%	0%	0%	0%	0%	0%	0%	75%	25%	0%	
	CC _{sf}	0%	0%	0%	0%	0%	0%	0%	0%	50%	50%	
	C _{sf}	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	

*Note: sf indicates Structured Finance

Source: *FitchRatings (2020)*

4.3.2 SMESec prospects

COVID-19 impact

Today, the SMESec market, like other financial markets, is suffering from the COVID-19 crisis. New issuance stopped with the outbreak of the crisis. It remains to be seen if the second half of the year - which is traditionally stronger than the first half - is going to show a recovery. With the start of the new crisis, transaction parties focused more on amending deal documentation than on deal origination (Moody's, 2020b). Also the impact on SMESec asset quality and deal performance remains to be seen - the level of uncertainty is very high. On the one hand, SME default rates are going to increase in general - with related impact on SMESec portfolios. Also, widespread payment moratoria will affect SMESec portfolios. Moreover, SMEs' leverage will increase with potential long-term debt affordability issues, especially in case economies experience a slow recovery from current disruptions (Moody's, 2020c). In addition, sometimes, SMESec transactions have high concentration of underlying companies in crisis-exposed industry sectors such as tourism and retail. On the other hand, also at the beginning of the 2008 crisis there was fear that the SMESec market would suffer in terms of defaults, which was finally not the case (as seen above) - however, the market suffered in terms of activity volumes. The negative impact on the transactions will mainly depend on the shape of the recovery process (path and timing), which is coupled with the evolution of the pandemic. Like in the past, structural protection such as subordination levels, reserve funds, or liquidity facilities might limit idiosyncratic and recession risks (Moody's, 2020b). Securitisation transactions based on

⁵³ As explained in more detail in our previous working papers, during the financial crisis, the SMESec market has been hit by a wave of downgrades due to weaker (crisis-driven) performance effects in the underlying portfolios, as well as rating methodology changes. Typically, AAA tranches show strong rating stability, but during the crisis AA and even AAA tranches migrated downward. This was mostly driven by downgrades of the respective country/sovereign ratings, and the limitation by the country ceilings, or by downgrades of (not replaced) counterparties (whose rating is in turn affected by the respective sovereign ratings).

⁵⁴ Relative to the number of tranches in a given initial rating category.

marketplace lending, an asset class that is still relatively new to the market, might come under stress as respective borrowers might be hit hard by the COVID-19 crisis. Public loan guarantee schemes (on pan-European, national and sub-national levels), prompted by the COVID-19 crisis, often aim to support SMEs, bolstering their ability to remain current on debt obligations over the coming years, hence such schemes can have a positive impact on the future performance of securitisation transactions. However, diverging terms and conditions between schemes across different European jurisdictions exacerbate comparability of the schemes and their role for SMESec (Moody's, 2020c).

Regulatory adjustments

As described, even years after the financial crisis, the European SMESec market had not recovered – and it is now negatively affected by the COVID-19 crisis. Several direct and indirect support measures are aiming at a market revival, amongst which are important regulatory adjustments. Already well before the pandemic the EC started its important Capital Markets Union (CMU) initiative. One of the objectives is to further develop securitisation.

The High Level Forum (HLF) of the CMU presented on 10 June 2020 its final report with a set of recommendations. In conclusion, the HLF sees the Capital Markets Union as a 'must' if the EU wants to recover from this COVID-19 crisis. The report sets out a series of recommendations aimed at moving the EU's capital markets forward. Inter alia, the HLF recommends to the European Commission a review (until mid/end 2021) of the new securitisation rules that should seek to simplify the process for significant risk transfer assessments, adjust the prudential treatment of securitisation for banks and insurers, support the development of synthetic securitisation, reconsider the eligibility of securitisation for liquidity purposes, as well as simplify disclosures. The HLF proposes that the Commission puts forward a series of targeted, prudentially sound amendments to improve the EU securitisation framework (HLF, 2020).⁵⁵

In relation to the COVID-19 crisis, on 24 July 2020 the EC adopted a Capital Markets Recovery Package to facilitate bank lending. The package includes adjustments of the securitisation rules, including the extension of the framework for simple, transparent, and standardised securitisations to synthetic transactions (see below for more details) and the amendment of the regulation of capital requirements, including the removal of regulatory obstacles to the securitisation of non-performing exposures (European Commission, 2020f).

The new securitisation regulation, originally triggered by the GFC, entered into force on 17 January 2018 and is applicable for securitisation transactions since 01.01.2019 in all Member States; some grandfathering provisions are valid. The signalling approach via simple, transparent, and

⁵⁵ In the context of the CMU action plan, the European Commission indicated in 2017 the intention to also analyse the case for introducing European Secured Notes (ESNs) as new funding instrument. ESNs are defined as "dual recourse financial instruments on an issuer's balance sheet applying the basic structural characteristics of covered bonds to two non-traditional cover pool assets – SME bank loans and infrastructure bank loans" (EBA, 2018). The EC has been asked by the European Parliament to assess the case for introducing ESNs until two years after the introduction of the harmonised covered bond laws, most likely 2022 (S&P, 2019b and Raebel, 2019). For more details please see ESBFO December 2019.

standardised (STS)-labelled securitisations (incl. SMESec) - which receive preferential regulatory treatment – is an important step and forms a building block of the CMU.⁵⁶

These regulations do not only cover European issuers and investors. Any securitisation anywhere in the world must meet the general requirements of the regulation (e.g. related to due diligence, transparency, risk retention) for securitisation to be investible by EU institutional investors or by non-EU based investors, acting on behalf of EU institutional investors. For such a compliant securitisation to qualify as STS, it must satisfy a number of additional criteria and its originator, sponsor and Securitisation Special Purpose Entity must be established in the EU (see for more details BoA/Merrill Lynch, 2018). The transition to the new regime poses many types of challenges (legal, structural, informational, IT) to market participants, i.e. issuers and investors (PCS, 2018a and b). Activity volumes - for securitisation in general, but in particular for STS transactions - will be dependent on the market players' ability to meet the new requirements.

In March 2019 the first STS compliant transaction came to the market (AFME, 2019).⁵⁷ Until end of HY1/2020 there were 330 STS notifications in Europe (main countries: 58 in UK, 23 in Germany, 21 in the Netherlands and Italy). As regards collateral type, most of the transaction are Trade Receivables (103), Auto Loans/Leases (97) and RMBS (72); only 5 STS notifications were SMESec (AFME, 2020d).

Despite the STS introduction, the European securitisation - and with it SMESec – is still not picking up. Several market participants propose a number of measures that could support the market, these include rectifying the CRR and Solvency II capital calibrations⁵⁸, amending the LCR eligibility criteria, and extending the STS standard and its benefits to synthetic securitisations (Bell, 2020).

Increasing role of synthetic securitisations and a regulatory framework for STS synthetic balance-sheet securitisations

As mentioned earlier, synthetic securitisations do not appear in the statistics, shown above. However, the role of “synthetics” in the market is further growing. EBA (2020a) estimates that the total volume (in brackets SMESec volume) of such transactions increased from EUR 15.5bn (EUR 0bn) in 2010, to EUR 34.4bn (EUR 5.2) in 2014, to EUR 104.5bn (EUR 19.6bn) in 2018 (see Figure 59). On the funded securitisation side, the market development depends inter alia on the overall monetary policy of the ECB. As a move towards normalisation of monetary policy is currently not within the range of

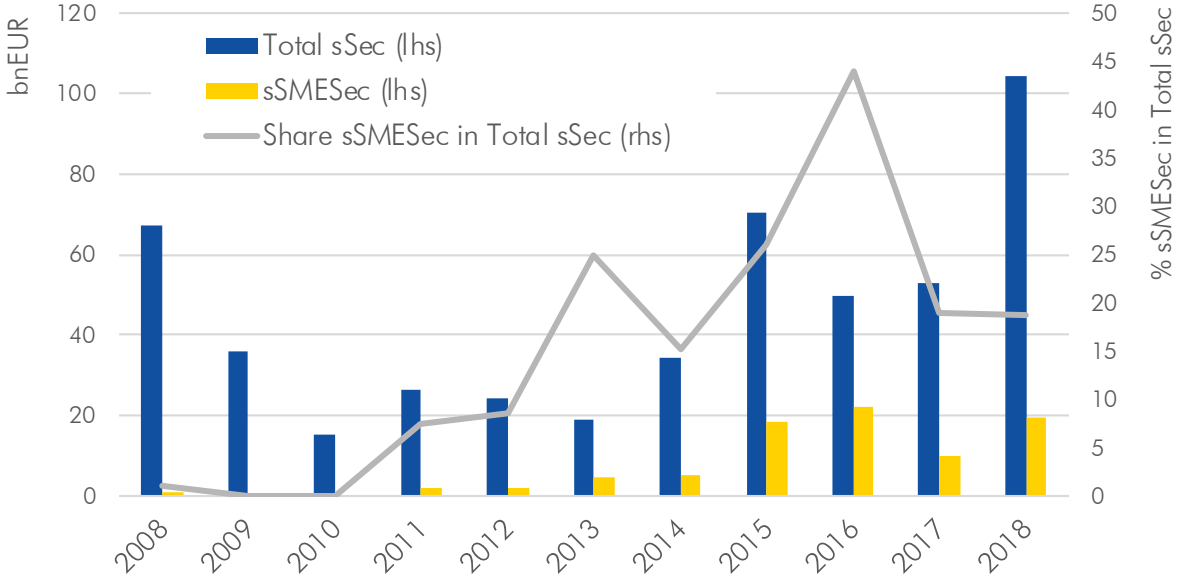
⁵⁶ Under the new regulations, the new risk weights for STS result in increased capital requirements for IRB banks compared to the past. Moreover, another perspective regarding STS - mentioned by some market participants - is that it can even circumvent a proper securitisation market recovery if “everything but STS” is seen as being toxic. It remains to be seen if the new regime is going to be a success, but it has potential to significantly support the revival of the market in Europe.

⁵⁷ In the preceding ESBFOs we presented the different steps as regards the regulatory development post financial crisis. For a detailed chronology please visit Kraemer-Eis, Botsari, Lang, and Torfs (2019).

⁵⁸ High charges on securitisations are preventing insurance companies from providing long-term investment capital to the securitisation markets. This has a negative impact on the potential revival of the investor base. The EC has asked the European Insurance and Occupational Pension Authority (EIOPA) to provide technical advice for a comprehensive review of the Solvency II Directive. Between October 2019 and January 2020 EIOPA undertook a public consultation which forms the basis for EIOPA's advice. The EC is expected to publish a report and identify necessary legislative proposals by the end of 2020 (Moody's 2020b).

vision the appetite for funded transactions will remain limited.⁵⁹ However, more stringent capital demands on banks and pressures to manage capital more efficiently will drive the growth of synthetic transactions in Europe.

Figure 59: Synthetic securitisation (sSec) and synthetic SME securitisation (sSMESec)



Source: Authors, based on EBA (2020a) data

EBA (2020a) states that, “while larger transactions, originated by the protection buyer, have been concentrated in a few jurisdictions (in particular, the UK, Germany, Spain, France and Italy), transactions have also been seen across many other EU Member States, particularly as a result of the activities of the EIF/EIB”. Since the financial crisis most of these transactions have been executed privately/bilaterally, and without involvement of rating agencies. As regards performance as of end of 2018 synthetic balance sheet transactions have performed even better than traditional securitisations, for all asset classes (incl. SMESec) and for all rating grades (EBA, 2020a).

Synthetic securitisations are subject to the European regulations on securitisations, including the rules on Basel capital requirements. Acknowledging their importance, certain synthetic SMESec were already considered under the STS framework and a wider extension of the STS category to synthetic securitisations is in preparation. The EBA (2020a) published on 06th of May its proposals for developing a 'simple, transparent and standardised' (STS) framework for synthetic securitization, endorsing better capital treatment and permitting the use of some excess spread for credit enhancement (see Box 4).

The EBA wrote the paper at the request of the European Commission to serve as technical advice for the Commission's report to the European Parliament on the topic. The EC agreed with the analysis conducted used it as a basis for its proposal for a “Regulation of the European Parliament and of the Council amending Regulation (EU) 2017/2402 laying down a general framework for

⁵⁹ “Put bluntly, so long as financial actors can obtain free money from their central bank there will remain little incentive to access more expensive funding sources such as securitisation” (Bell, 2017).

securitisation and creating a specific framework for simple, transparent and standardised securitisation to help the recovery from the COVID-19 pandemic”, published on 24 January 2020 in the context of the Capital Markets Recovery Package (European Commission, 2020g).

Box 4: EBA proposal for developing a STS framework for synthetic securitisations

The EBA report has been developed in response to the mandate assigned to the EBA in the Securitisation Regulation (Regulation (EU) No 2017/2402), which requires the EBA — in close cooperation with ESMA and EIOPA — to develop a report on the feasibility of a framework for simple, transparent and standardised (STS) synthetic securitisation that is limited to balance-sheet securitisation. To that end, the EBA published a discussion paper on the STS framework for synthetic securitisation in September 2019 for a 2-month consultation period. The new report builds on the discussion paper and the analysis of the responses received from stakeholders.

The report contains an extensive analysis of the synthetic securitisation market developments and trends in the EU, including data on the historical default and loss performance of the synthetic transactions, both before and after the financial crisis (up until the end of 2018). It examines the rationale of the STS synthetic product and assesses the positive and negative implications of its possible introduction. Based on the analysis conducted, the EBA recommends the following:

- Establish a cross-sectoral framework for STS synthetic securitisation that is limited to balance-sheet securitisation.
- To be eligible for STS status, synthetic securitisation must comply with the proposed criteria on simplicity, standardisation and transparency.
- The European Commission should consider the pros and cons related to a potentially differentiated capital treatment for STS balance-sheet synthetic securitisation, and any potential future proposal for STS synthetic securitisation should be accompanied by a mandate to the EBA to monitor the functioning of the STS synthetic market.

The report sets out a list of STS criteria for synthetic securitisation. With the aim of ensuring an appropriate level of consistency, the STS criteria follow the structure of the STS criteria for traditional non-ABCP securitisation that were introduced in the new EU securitisation framework in 2018, i.e. they include requirements on simplicity, standardisation and transparency that are adapted to the specificities of the synthetic securitisation when appropriate. In addition, the criteria include a number of synthetic-specific requirements that are not found in the STS traditional framework, such as requirements mitigating the counterparty credit risk that is inherently involved in the synthetic structures, including requirements on eligible protection contracts, counterparties and collateral, requirements addressing various structural features of the securitisation transaction and requirements ensuring that the framework targets only balance-sheet synthetic securitisation.

A separate chapter is dedicated to the analysis of a possible differentiated regulatory treatment of STS synthetic securitisation for the consideration of the European Commission. On the one hand, developments in the last few years have indicated the potential for the continuing growth of the synthetic sector and have confirmed the technical feasibility of the creation of a prudentially sound STS synthetic securitisation product that is comparable to the STS traditional securitisation product. In addition, the available performance data do not provide any evidence that the performance of the synthetic securitisation instrument is worse than that of the traditional securitisation instrument.

Box 4 continued:

The introduction of potentially limited and clearly defined differentiated regulatory treatment would match the historical performance of the synthetic securitisation, ensure better alignment with the STS traditional securitisation framework and help overcome the constraints of the current limited STS risk-weight treatment of some SME synthetic securitisations.

On the other hand, according to EBA, there are limitations of the performance data on which the analysis is based, there is limited experience with the STS traditional framework so far, and the risk of potentially overusing synthetic securitisation, which would potentially lead to a large-scale replacement of regulatory capital by risk mitigation strategies, leading to overleveraging of banks, should be duly taken into account. In addition, the preferential regulatory treatment is not included in the international Basel standards.

5 Microfinance

5.1 Microfinance and social inclusion

5.1.1 What is Microfinance?

Microfinance is traditionally defined as the provision of basic financial services to low-income people who lack access to banking and related services⁶⁰. However, more and more often, the definition is used in a wider sense, also to include financial services to existing microenterprises and self-employed (EMN, 2012; EMN, 2017).

The main achievement of microfinance is to reach unbanked⁶¹ clients, however, in some European countries, bankability is no longer a stressing issue. Introducing the concept of Inclusive Finance in Europe, therefore, became a logical continuation of Microfinance. Inclusive finance complements Microfinance and means not only directly providing finance to vulnerable groups but providing financial and non-financial products to enterprises who employ or serve those vulnerable groups.

Inclusive Finance is the range of financial and non-financial products and services provided to unemployed people or clients from other vulnerable groups who are facing difficulties in accessing the conventional banking services, due to their socioeconomic status, and more broadly to social enterprises who provide work-integration opportunities or services to groups deemed vulnerable from a socioeconomic standpoint. Inclusive finance promotes entrepreneurship and social inclusion, by providing support to micro-enterprises and social enterprises.

In Europe, microfinance consists mainly of small loans (less than EUR 25,000) tailored to microenterprises and people who aspire to be self-employed but face difficulties in accessing the traditional banking system, while inclusive finance also serves social enterprises and provide loans up to EUR 500,000 (more on social enterprises, see Torfs and Lupoli, 2017). There are many overlaps between the target groups of microfinance and inclusive finance, therefore, both groups are combined in this chapter.

⁶⁰ CGAP Definition, Consultative Group to Assist the Poor.

⁶¹ In the context of Microfinance unbanked people are considered those who have limited access to financial services: people who do not have an account with a financial institution due to insufficient funds, cost, distance and lack of necessary documentation.

5.1.2 A support tool for necessity-driven business creation

Mapping target groups for microfinance and inclusive finance is a challenging task. To grasp the magnitude of the market, we look at some important indicators related to unemployment, poverty and social exclusion, entrepreneurial motivation and intentions. These indicators are particularly important to analyse the market for potential entrepreneurs, as a combination of poor labour market prospects and poverty drives people to start new businesses.

In the context of the Europe 2020 social inclusion targets, Eurostat publishes the “people at risk of poverty or social exclusion” indicator, depicted in Figure 60. The indicator corresponds to the sum of individuals who are at risk of poverty, are severely materially deprived, or are living in households with very low work intensity.⁶² In 2018, nearly one fourth of EU27 citizens were at risk of poverty and social exclusion, with the highest rates recorded in some Eastern European countries (Bulgaria, Romania). The geographical fragmentation in poverty risk becomes clear when considering the mostly Nordic and Western European countries on the other side of the spectrum (Finland, Netherlands, Denmark).

Europe 2020 aims at ‘lifting at least 20 million people out of the risk of poverty or social exclusion’ by 2020 compared to the year 2008.⁶³ From 2018’s estimations, no more than 8 million managed to escape the risk of poverty and social inclusion since 2008 (see Source: Authors, based on Eurostat data

Definitions for Microfinance and inclusive finance

A microenterprise: an enterprise with fewer than 10 employees and a turnover below EUR 2m (as defined in the Commission Recommendation 2003/361/EC of 6 May 2003, as amended).

A social enterprise: an operator in the social economy whose main objective is to have a social impact rather than make a profit for its owners or shareholders, while operating in a market-driven environment (as defined by European Commission, 2011).

A microfinance institution (MFI): an organisation/financial intermediary that provides microfinance services. There is a wide spectrum of different MFI business models in Europe.

Microcredit in general is defined by the European Commission as a loan or lease under EUR 25,000 to support the development of self-employment and microenterprises. It has a double impact: (1) an economic impact, as it allows the creation of income generating activities, and (2) a social impact, as it contributes to the financial inclusion and, thus, to the social inclusion of individuals.

Microenterprise lending: micro-lending to existing enterprises. MFIs focus on the upper end market of microfinance, providing loans to bankable or nearly bankable microenterprises that have difficulties accessing loans up to 25,000 EUR from commercial banks due to risk aversion or lacking liabilities.

Social inclusion lending: lending to self-employed individuals that are excluded from banking services, due to their socioeconomic status of being socially excluded or (long-term) unemployed and/or belonging to financially excluded population groups like ethnic minorities or young people. The average loan sizes are relatively low, meant to support basic income creating activities.

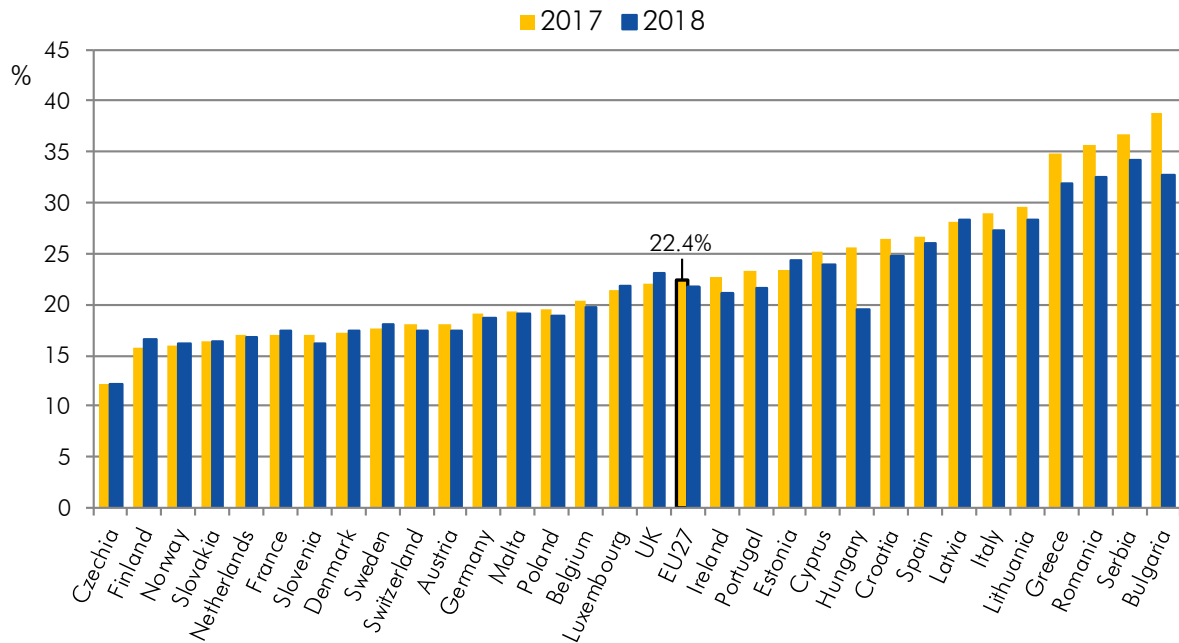
Figure 61). Some countries managed to reach their national targets and therefore progressed on their ways to more equality. The most distinct improvements were made by Poland, Romania, and Bulgaria, mainly due to falls in material deprivation. On the other hand Italy, Greece and Spain

⁶² At risk-of-poverty are persons with an equivalised disposable income below the risk-of-poverty threshold, which is set at 60% of the national median equivalised disposable income (after social transfers). For more information please see: http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=t2020_50.

⁶³ Furthermore, the indicator is part of the impact indicators of the Strategic plan 2016-2020, referring to the 10 Commission priorities, and included as main indicator in the Social Scoreboard for the European Pillar of Social Rights. It can be considered similar to the global SDG indicator 1.2.2 “Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions”.

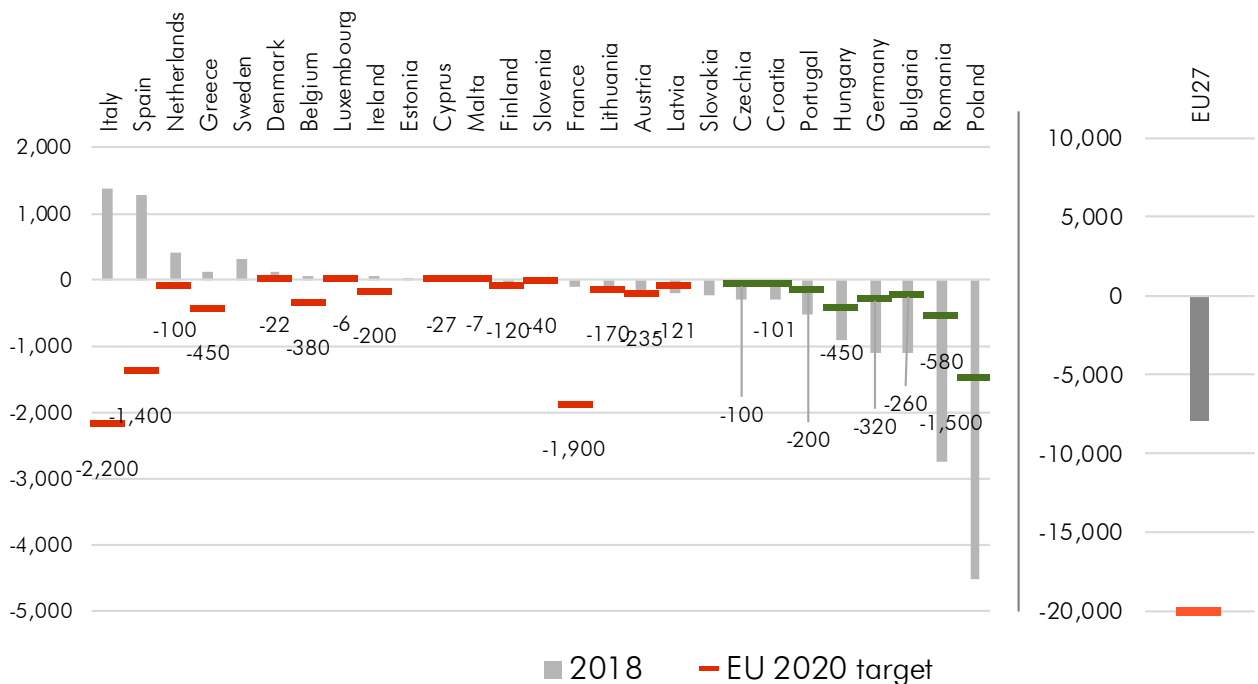
regressed compared to 2008. In 2020 the social situation has become much more severe due to the COVID-19 crisis, which makes achieving the target impossible.

Figure 60: People at risk of poverty or social exclusion (percentage of total population)



Source: Authors, based on Eurostat data

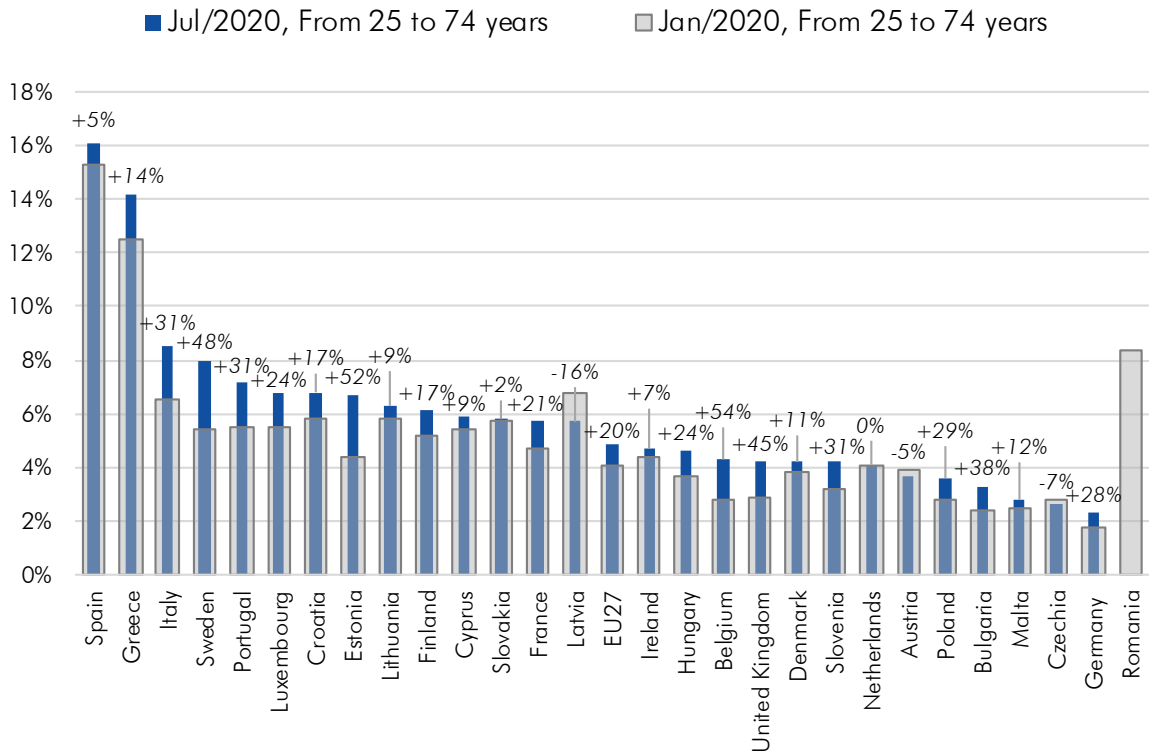
Figure 61: People at risk of poverty or social exclusion (cumulative difference from 2008, thEUR)



Source: Authors, based on Eurostat data

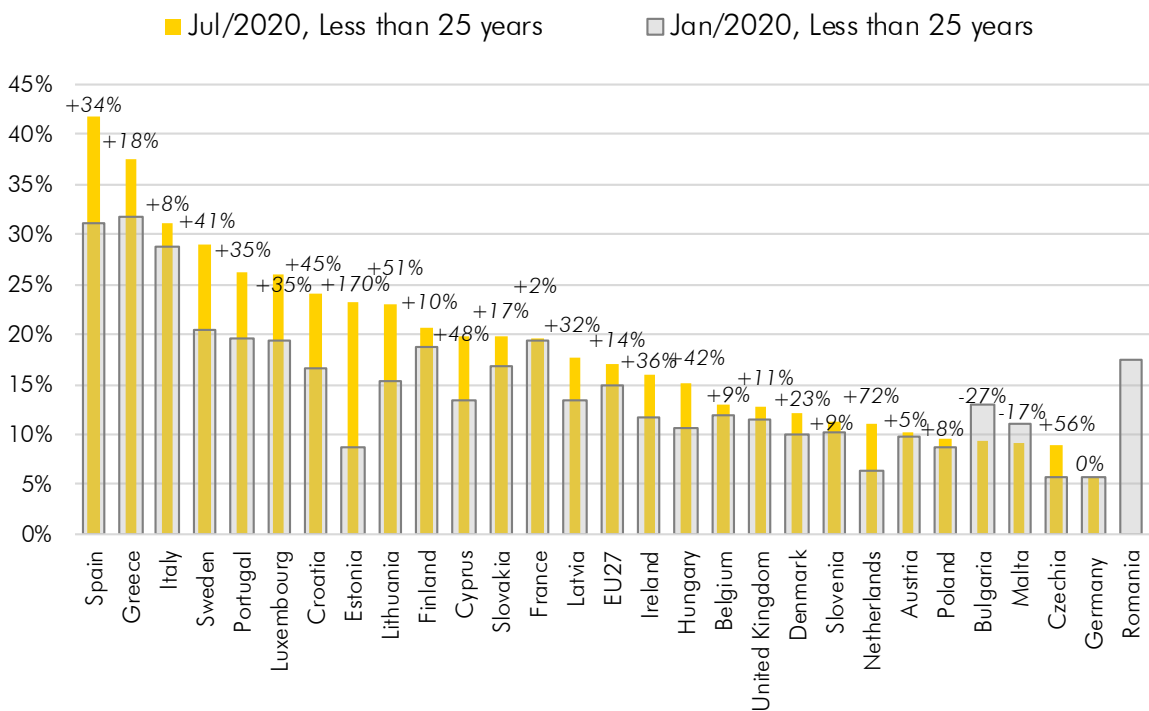
Figure 62: Unemployment rate by age groups, 2020

a) From 25 to 74 years



*Note: No recent unemployment data was available for Romania.

b) Less than 25 years



*Note: No recent unemployment data was available for Romania.

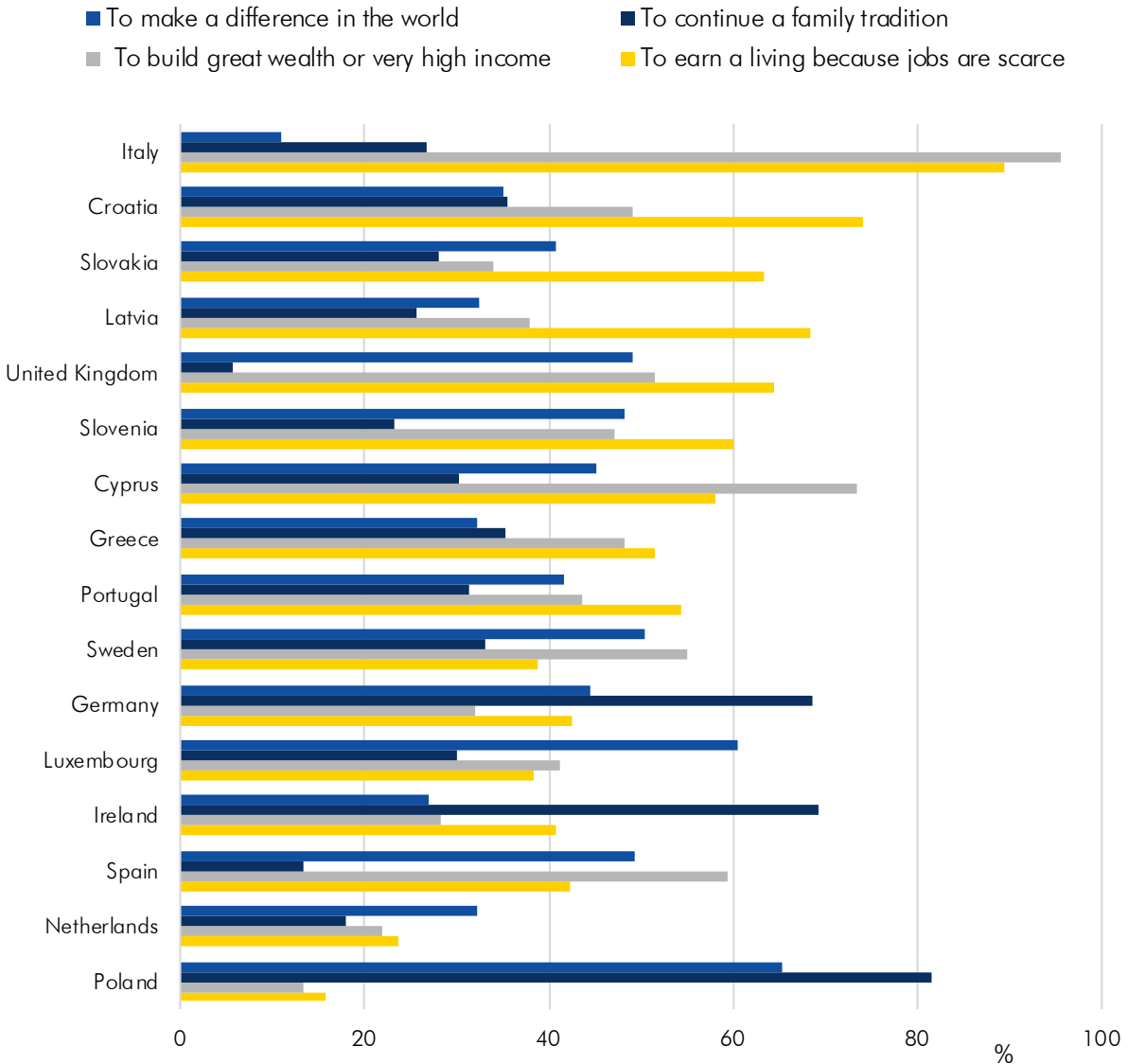
Source: Authors, based on Eurostat data

Unemployment also remains high in European countries, in particular youth unemployment. Source: Authors, based on Eurostat data

Figure 62 plots the unemployment rate for a number of European countries. While unemployment in Europe in general was declining until 2019, in 2020 they increased significantly in most countries due to the COVID-19 crisis. To overcome the damage will be particularly difficult in those member states where unemployment was already relatively high before the crisis.

People at risk of poverty and unemployed people are a potentially important group of business creators, since a decision to start a business often arises out of necessity especially in low-income countries. Indeed, the Global Entrepreneurship Monitor (GEM) reports that entrepreneurs often start businesses out of necessity, because jobs are scarce (see *Figure 63*). To build great wealth or very high income is another common motivation to start a business especially in low-income countries.

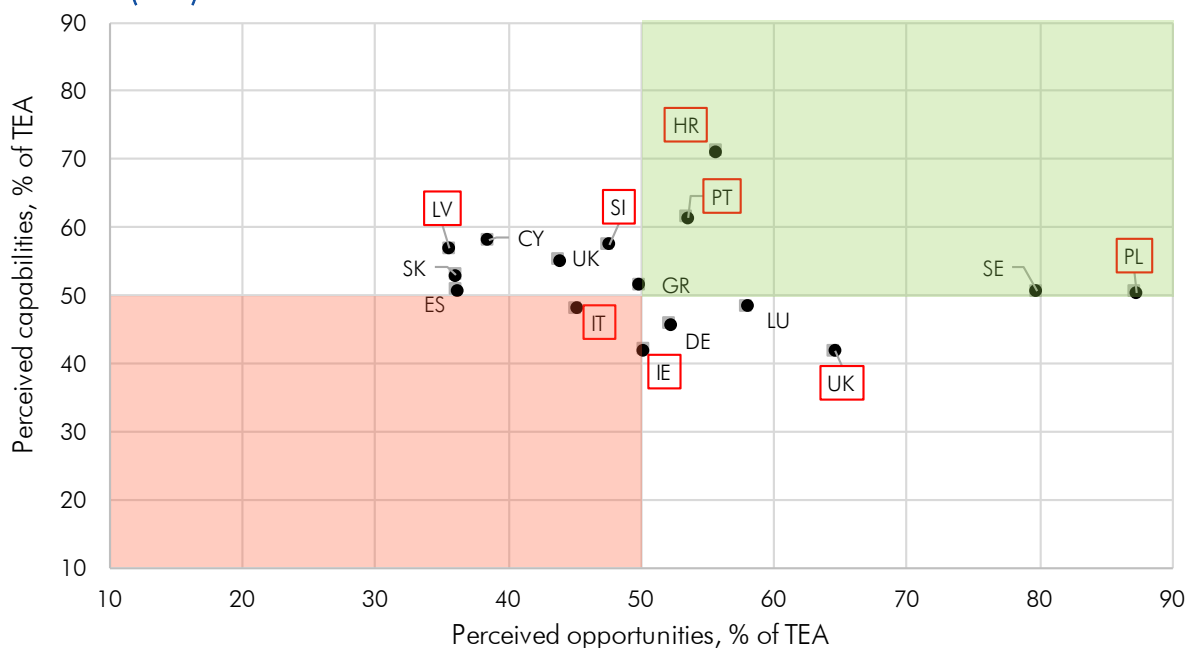
Figure 63: The motivation to start a business, selected countries, 2019



*Note: somewhat/strongly agree as % Total [early-stage] Entrepreneurial Activity (TEA), multiple answers are possible.
 Source: GEM (2019)

According to the GEM survey, the adult population in Europe sees good opportunities to start a firm locally, especially in high-income countries such as Sweden, the Netherlands and Luxembourg, while the worst opportunities were seen in Latvia, Slovakia and Spain (see Figure 64).

Figure 64: Perceived opportunities and capabilities, % Total [early-stage] Entrepreneurial Activity (TEA)



Source: GEM (2019)

Unexpectedly, not everyone seizes on the business opportunities they perceive around them. The intention to start a business seems to be unrelated to perceived opportunities, but related to perceived capabilities. In high-income countries, not as many believe they have the required entrepreneurial skills and knowledge (perceived capabilities). The Croatian, Portuguese, and Cypriot populations were most confident about their own entrepreneurial skills, while the least confident population was found in the Netherlands, Ireland and Germany. Croatia, Portugal and Poland are of the few countries whose population perceive both opportunities and capabilities, however, fear of failure prevents them to start a business (red squares in Figure 64). Only Sweden perceives both, good opportunities and capabilities, and also does not fear to fail compared to other countries.

Unemployment is one of the main challenges in Europe. Especially devastating is unemployment among young people, for whom time spent in unemployment increases the risk to be socially excluded and decreases not only current but also lifetime earnings. For many of them, self-employment can be a solution – and microfinance can be a tool to support such business creation.

The COVID-19 crisis affected the most vulnerable segment of the labour market. Persons having relatively unstable, low-paid, and part time jobs were hit first. Young people, especially those new graduates, had difficulties finding jobs. Self-employed persons and free-lancers (especially from cultural and creative sector) have also suffered massively from the lockdowns (European Commission, 2020a).

The social economy sector is crucial when the social situation worsens as a consequence of the crisis (see also Box 5 on migrants as job creators), however, enterprises in that sector have suffered themselves. Their activities have been strongly affected due to the crisis, they had to put some of their

employees on temporary unemployment schemes, had to reduce working hours and even had to dismiss employees (SEE, 2020).

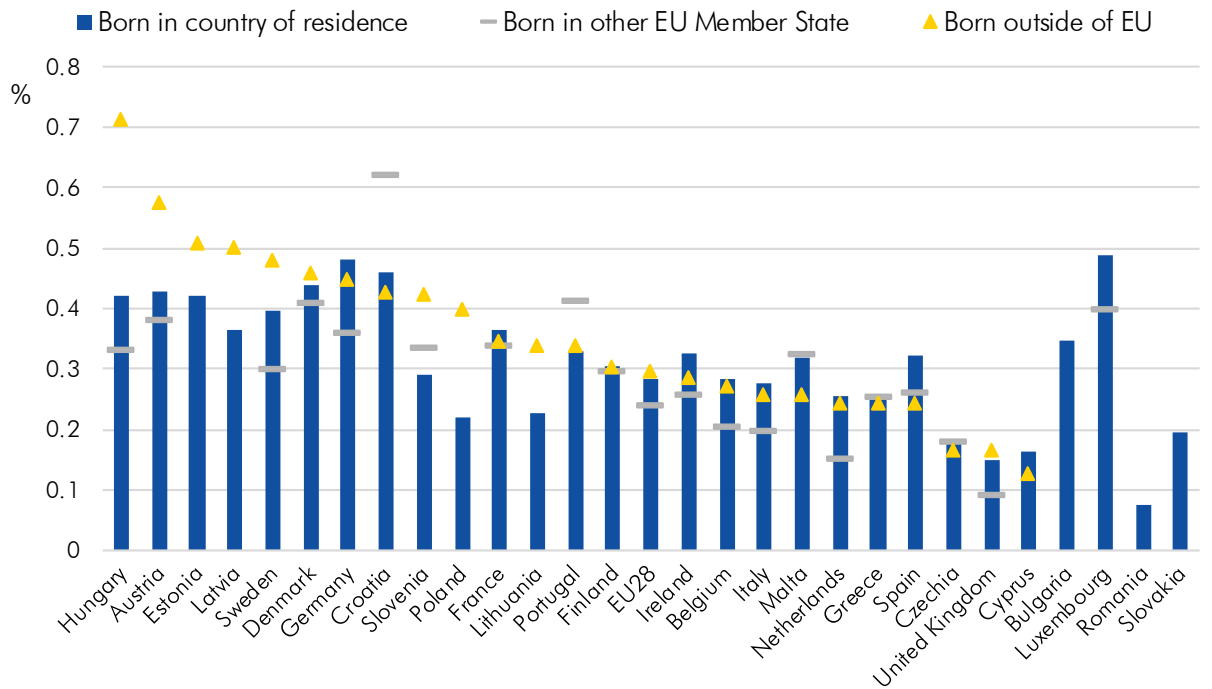
Box 5: Migrants as job creators

There is a tradition of debates whether immigrants are a burden or a benefit to society and whether they take jobs away from the natives (Borjas, 1995, 1999, 2017, OECD, 2017). Often, migrants not only do not “steal jobs” but they also contribute to entrepreneurial activity and create jobs.

In the European Union, foreign-born self-employed were as likely to create jobs as the native-born self-employed in 2019. Moreover, non-EU self-employed were more likely to create jobs than self-employed EU born migrants (30% vs. 24%). Immigrants were important job creators, especially in the Central and Eastern European countries: more than half of the self-employed born outside of the European Union had employees in Hungary (71%), in Austria (57%), in Estonia (51%) and in Latvia (50%). Unfortunately, data on immigrant job creators were not available in some countries.

Such results are remarkable when considering that immigrant entrepreneurs, especially those born outside the EU, typically face greater barriers to entrepreneurship than the native population. Such barriers are often administrative by nature. In many EU countries, for example, non-EU nationals starting their business are required to obtain or to renew their residence and business permit. For certain professions (for instance for dentists, accountants or cooks), it is required to obtain or validate their diplomas and certificates (de Lange, 2018). Immigrants face additional obstacles including language, cultural differences, settling costs and limited access to entrepreneurship training programmes or grant schemes. Therefore, immigrants need specific attention to overcome the challenges to stimulate their entrepreneurial activities (OECD, 2017, EESC, 2017).

Proportion of foreign-born self-employed with employees by country, 2019

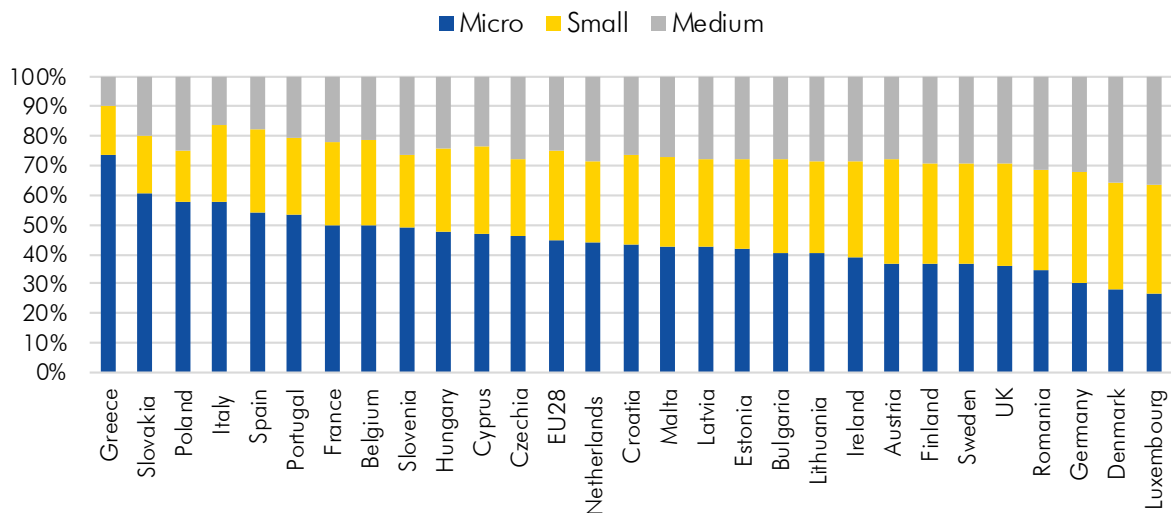


Source: Authors, based on Eurostat data

5.2 The demand for microfinance: microenterprises and their finance decisions

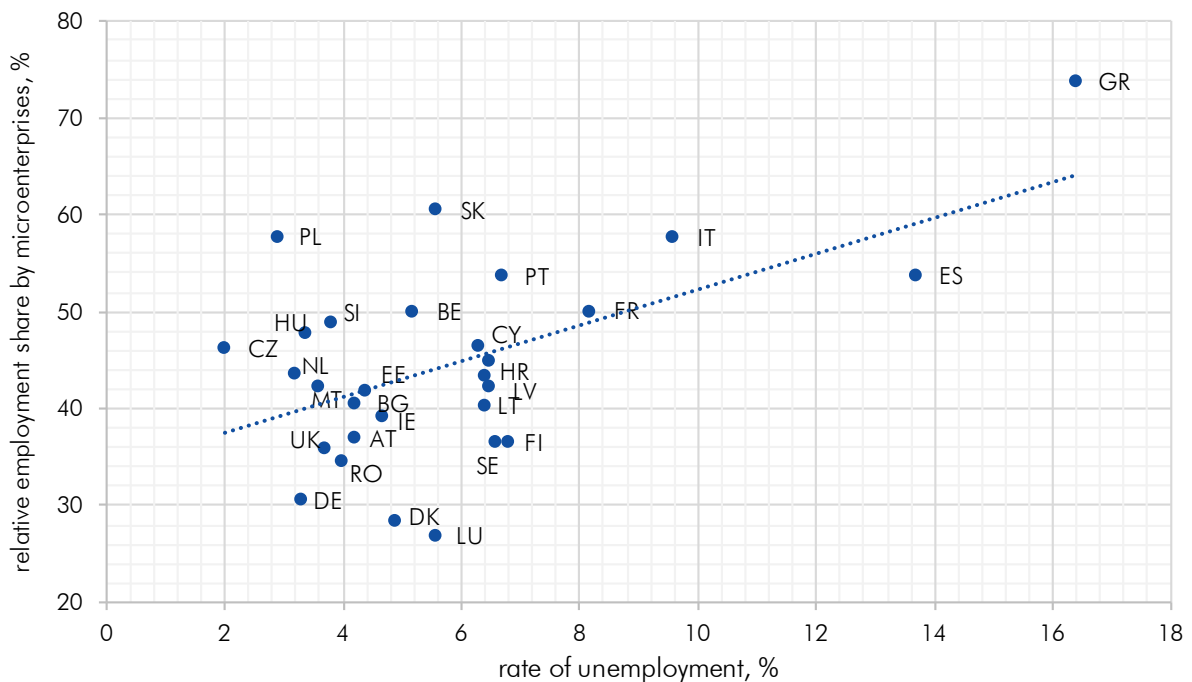
Microenterprises, making up 93% of all European businesses, are important contributors to employment as they account for 30% of total employment. In Slovakia, Poland, Italy, Spain, Portugal and France employment by microenterprises accounts for more than half of total SME employment and in Greece this amounts to more than 70% (Figure 65). Countries with high proportions of micro-businesses seem to show relatively higher levels of unemployment (see Figure 66).

Figure 65: Relative employment share by microenterprises compared to other size classes (2019)



Source: Authors, based on European Commission SBA data

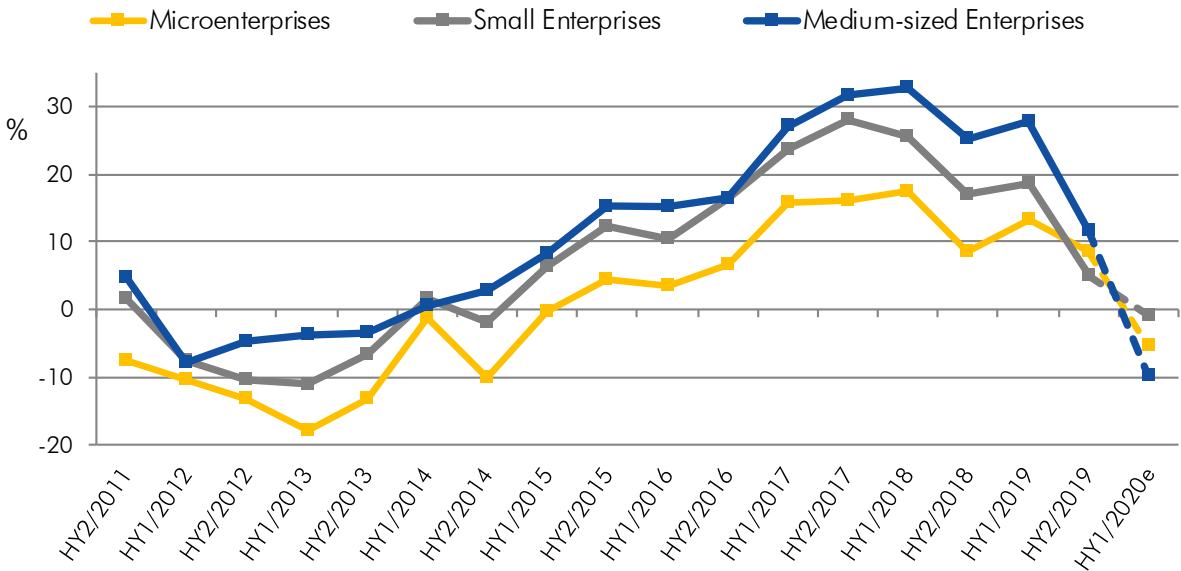
Figure 66: Relative employment share by microenterprises vs unemployment rate, 2019



Source: Authors, based on European Commission SBA and Eurostat data

While microenterprises are important for the European economic fabric, they generally face more challenging conditions compared to their larger counterparts. This is evidenced by Figure 67, which illustrates microenterprises' perception about the current economic climate and compares it to larger firms' perception. Until the second half of 2019, microenterprises were on balance more pessimistic than their larger counterparts were. Since then, the situation has improved slightly. However, they still report an expected negative change (from 8.5% to -5.5%) in their overall situation in the first half of 2020. Furthermore, the SMEUnited survey reveals that microenterprises expect their investment climate to worsen (SMEUnited, 2020b).

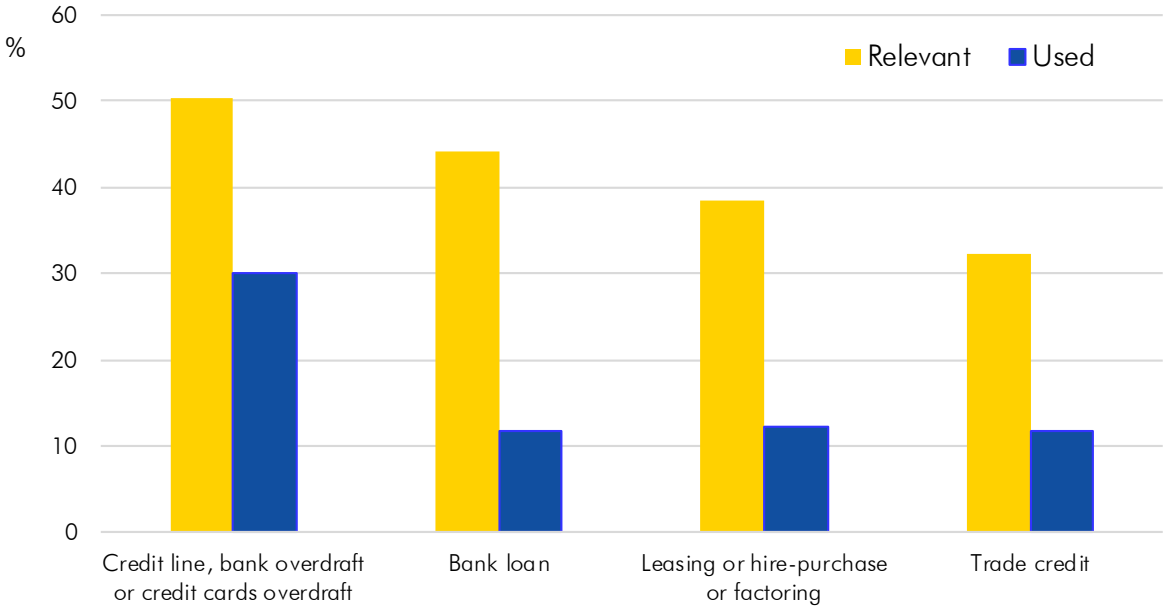
Figure 67: Overall situation of European microenterprises compared to other size classes



*Note: The figure plots net responses, which are calculated as the share of positive minus negative responses.
 Source: SMEUnited (2020b)

Microenterprises use less external financing instruments than their larger peers, presumably due to difficulties in accessing finance (Figure 68). For example, bank loans are used by 21.2% of small companies and 29.1% of medium companies, while only 12.9% of microenterprises used bank loans. Interestingly, almost half of the microenterprises indicated that bank loans are relevant sources of financing, far exceeding the rate at which they use it.

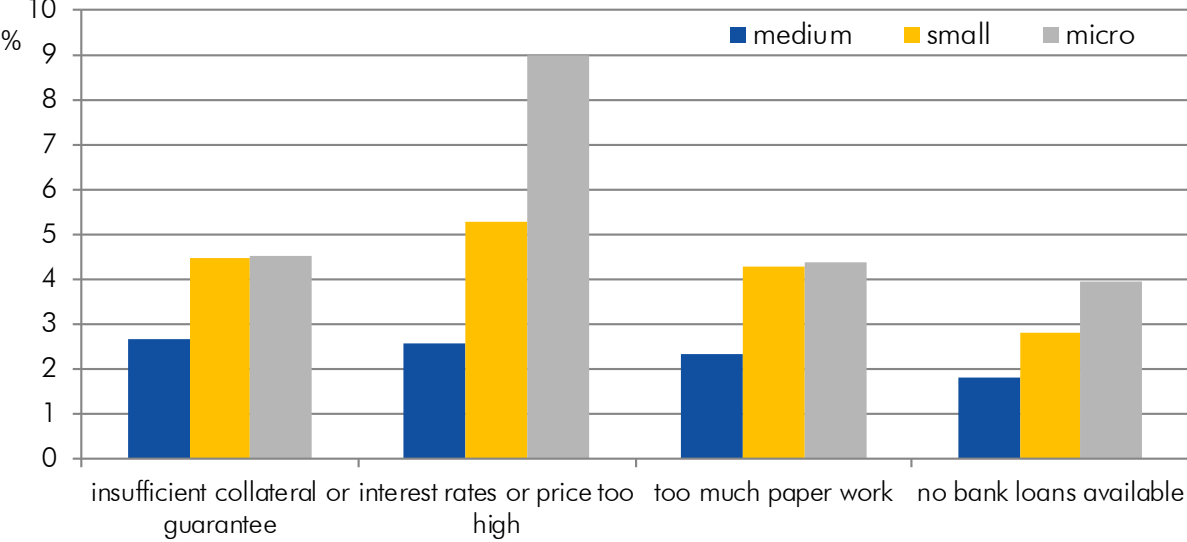
Figure 68: Relevance and use of different financing sources for microenterprises (HY2/2019)



Source: Authors, based on ECB SAFE (2020) data

The same survey states that the bank loan rejection rate is still the highest for microenterprises (6.2% however decreased from 10.8%), compared to 5.2% for small firms and 2.4 % for medium-sized firms (Figure 69). Consequently, the share of microenterprises that did not apply for a loan due to fear of rejection (discouraged borrowers) remains high at 6.7%. Forty-four percent of the microenterprises did not use bank loans because it was not a relevant source of financing. Disproportionally more microenterprises indicated that “interest rates or price [are] too high” or there is “insufficient collateral” involved.

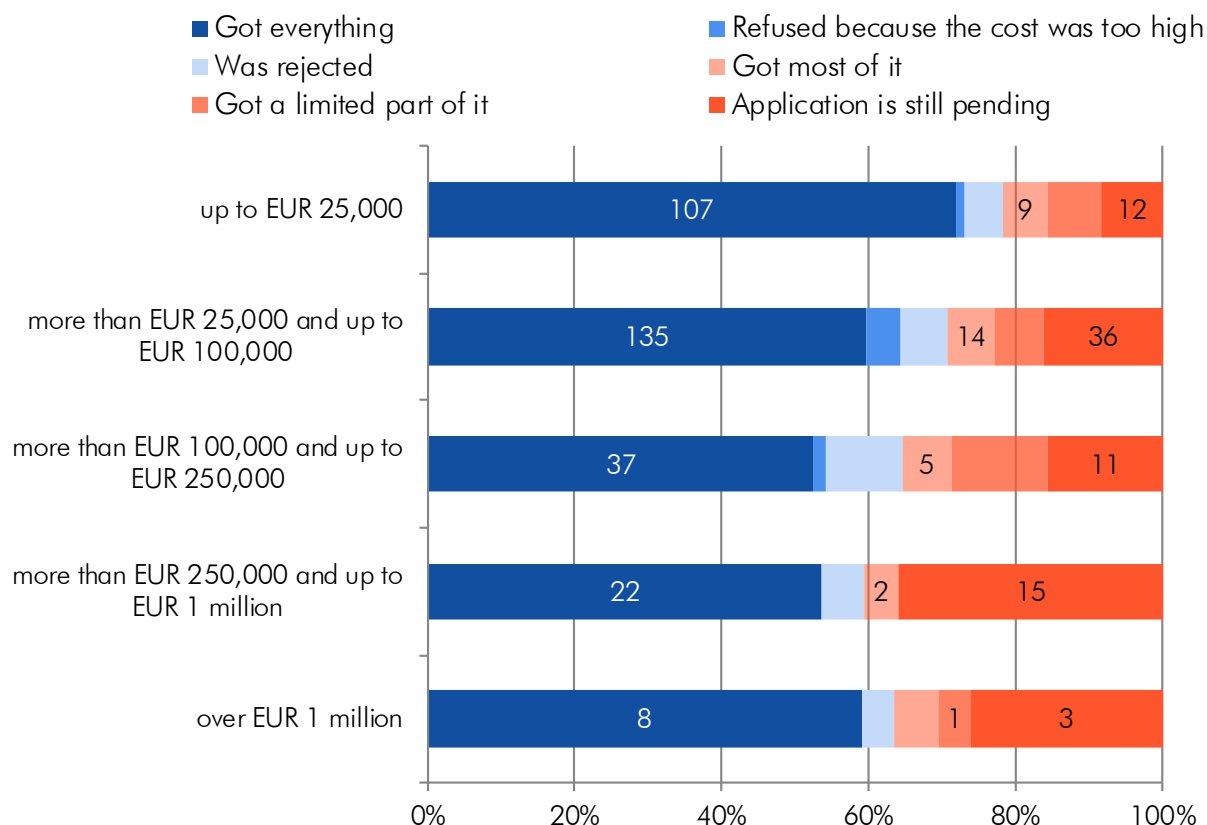
Figure 69: Reasons for bank loans being not relevant (by enterprise size class), HY2/2019



Source: Authors, based on ECB SAFE (2020) data

Unsurprisingly, microenterprises tend to apply for smaller loans more often than for bigger loans. This implies that microenterprises with high funding needs face persistent barriers to growth (see Figure 70). Barriers for scaling up businesses are especially prominent for those from disadvantaged groups, as in addition to difficulties accessing finance, they face other barriers, including lack of growth motivations, lack of entrepreneurship skills and smaller entrepreneurship networks (OECD, 2019b).

Figure 70: Application status of bank loans requested by microenterprises (by loan size), HY2/2019



*Note: the figure is based on responses from 525 European microenterprises who applied for bank loans in the past six month. The numbers inside the bars refer to the number of respondents per category

Source: Authors, based on ECB SAFE (2020) data

Because microenterprises do not frequently use bank loans due to insufficient collateral, high interest rates and excessive paper work, rejected or discouraged customers often turn to an alternative solution: microcredit from Microfinance institutions (MFI). MFIs do not always charge lower interest rates than banks, but they are less demanding in terms of collateral and guarantee requirement. Clients find MFIs more personal, tailor-made and simple; MFIs “know their customers”.⁶⁴

⁶⁴ Source: based on interim results from an ongoing research project on “Measuring Microfinance Impact in the EU”.

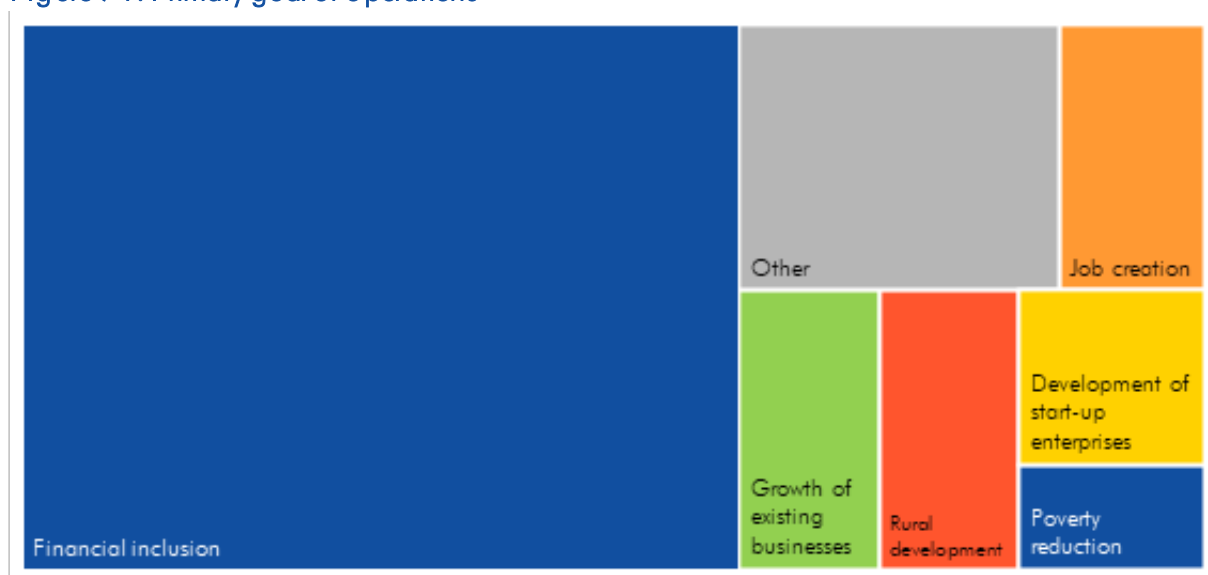
5.3 The supply of microfinance: the diversity of European MFIs

The microfinance market in Europe is highly fragmented and diverse, with no common business model (see for example, Kraemer-Eis and Conforti (2009) and Bruhn-Leon, Eriksson and Kraemer-Eis (2012)). Part of this fragmentation has geographical roots, as the role of microfinance is seen very differently across Europe. In Western Europe, microfinance is considered to be a social policy tool, as it serves businesses that are not commercially attractive for the mainstream financing providers, but nevertheless are able to create social value. On the other hand, in Eastern Europe, microfinance is seen more as a business activity which targets viable microenterprises that are financially excluded because the traditional credit market remains underdeveloped. Figure 71 outlines the primary development objectives of MFIs. Not surprisingly, Financial Inclusion is their main target, followed by job creation and rural development (more on social impact of MFIs, see Box 6).

European microfinance providers

European microfinance providers are very diverse across Europe. In addition to commercial banks that target microenterprises as part of their general SME lending activity, the spectrum of European microcredit developers includes many profit-oriented and non-profit associations: banks (both private and state-owned), non-bank financial institutions (NBFIs), microfinance associations, credit unions, cooperatives, government bodies, religious institutions and Non-Governmental Organisations (NGOs).

Figure 71: Primary goal of operations



Source: EMN-MFC (2020)

The European microfinance market is growing. The latest EMN market survey data show that, in 2019, more than one million microenterprises and start-ups received support by the surveyed organisations. Over the same period, total microloan portfolio outstanding also increased and reached EUR 3.3bn reported from 138 MFIs (EMN-MFC, 2020)⁶⁵.

⁶⁵ The survey figures presented in this chapter are preliminary results from EMN-MFC Microfinance Survey 2018-2019.

Box 6: The social return on investment (SROI) of four microfinance projects

This box presents results of the working paper “The social return on investment (SROI) of four microfinance projects” -which is part of the project “Measuring Microfinance Impact in the EU: Policy Recommendations for Financial and Social Inclusion” (funded by the EIB Institute). The paper was conducted by researchers from Università Cattolica del Sacro Cuore, Università di Parma and Microfinanza S.r.l..

The paper introduces and applies - in the form of case studies - a specific methodology, SROI, to measure the impact of microfinance on financial and social inclusion. As such it provides useful guidance and ideas for microfinance practitioners who want to analyse non-financial returns.

The overall SROI value stems from a progressive analysis organised in three levels. This first-level SROI is based on variables which measure directly the monetary return on the inputs used by microcredit activity. Level-2 SROI, in addition to those monetary outcomes, includes economic outcomes that are not directly stated in monetary terms. They are the number of employees working in the borrowers’ enterprises and the improvements in the borrowers’ accommodation. The third level of SROI includes non-economic outcomes. It requires an estimate of the monetary value of the changes in financial inclusion, risk of social exclusion and quality of life and life satisfaction.

The table below shows that Level-3 SROI is above two for all the MFIs analysed meaning that every euro invested generates at least two euros of social return. For privacy reasons, MFI names are replaced by their country: ESP1 and ESP2 are the two MFIs operating in Spain; ITA indicates the MFI operating in Italy; BIH replaces the name of the MFI based in Bosnia-Herzegovina.

SROI results by level

	ESP1	ESP2	ITA	BIH
Level-1 SROI (Monetary changes)	1.74	1.35	0.66	0.11
Level-2 SROI (Level-1 + employees)	3.36	3.51	1.26	2.87
Level-2 SROI (Level-1 + employees + accommodation)	3.69	3.63	1.23	2.96
Level-3 SROI (Level-2+ non-economic changes)	6.97	6.63	2.33	3.50
Total benefits (Level 3)	EUR 4,623,287	EUR 633,613	EUR 1,593,432	EUR 28,131,921
Total inputs	EUR 663,106	EUR 95,537	EUR 683,280	EUR 8,033,009

Box 6 continued:

The final result is above 6 for ESP1 and ESP2 (6.97 and 6.63 respectively), and above 3 for ITA and BIH. For example, ESP1 SROI means that every euro invested in the credit line analysed generates 6.97 euros of impact. Nevertheless, if the analysis is limited to Level-1 SROI, the benefits generated by ITA and BIH are observed to be below 1 for each euro invested. It means that the results in income, social contributions, taxes, and social benefits do not fully counterbalance the investment made to generate the loans. By comparing Level-1, Level-2, and Level-3 SROI, it becomes evident which results drive impact. For example, employing workers boosts the ratio much more than the results in terms of accommodation.

For ESP1, the SROI value increases by more than three units (from 3.69 to 6.97) moving from Level-2 to Level-3 outcomes. This means that their impact on financial inclusion, social inclusion, and life satisfaction is particularly significant. This result is by the supplementary focus group analysis, which revealed that the MFI targets the most deprived suburbs where residents have no access to alternative welfare tools. Similar to ESP1, non-economic impact was also significant for ESP2.

For ITA, social return exceeds the investment value only after considering the new jobs created (employees), although the SROI increase is only of 0.6 units. Considering financial inclusion, social inclusion, and life improvements in the calculations (from Level 2 to Level 3) one unit is added to SROI. It means, that the greater contribution to SROI stands mainly in Level-3 outcomes. This is consistent with focus group discussions that highlighted some profitability problems in the enterprises financed, probably leading to less positive results also in Level-3 indicators compared to the other MFIs.

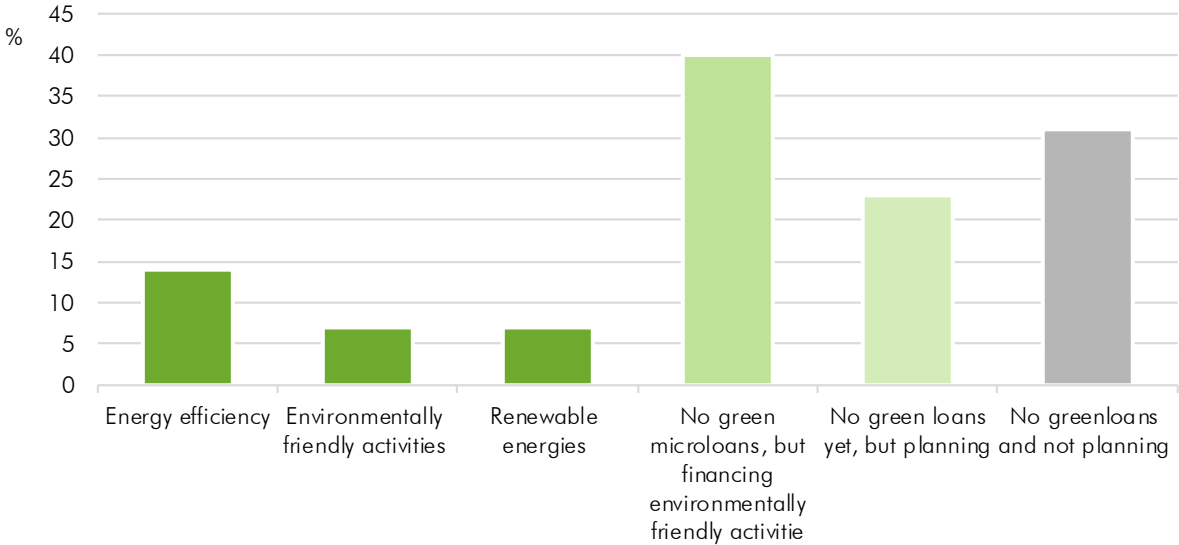
In BIH the changes in income, social contributions, taxes, and social benefits do not counterbalance the investment (Level-1 SROI is 0.11, below 1). However, these changes refer to well-established enterprises, whose situation is likely to be stable. This can explain the increase of 2.76 points (from Level-1 to Level-2 SROI) when considering employees. Compared to the other MFIs, this is the greatest increase at this level. In other words, microenterprises in Bosnia-Herzegovina generate a social return on investment mainly by employing people. Indeed, Level-3 outcomes related to financial inclusion, social inclusion, and life satisfaction contribute only partially to the final result, as already explained in the comments to the indicators.

Source: Grazioli et al. (2020)

MFIs mainly offer business loans to microenterprises (74% of MFIs), however many of them also offer personal loans (59%) or agricultural loans (42%).

There is a large interest among MFIs in supporting green finance. Green loans are offered by 21% of MFIs, specifically designed either for finance energy efficiency, renewable energies and/or for environmentally friendly activities. More than one third of responding MFIs have no specific green loans in place, however they do finance environmentally friendly activities or technologies under their usual micro lending. Almost half of MFIs (23%) do not offer any specific green microloans, however many of them are planning to offer such loans in the next years.

Figure 72: Purpose of green microloans (if offered)



Source: EMN-MFC (2020)

The majority of MFIs also provides non-financial services (for example, coaching, mentoring, and consulting) in addition to financial products and services. Most of them deliver non-financial products and services through one-on-one support in person (56%). Only a few MFIs reported to deliver non-financial services online to their clients.

MFIs are quite positive about the current situation. In general they perceive the state of their business positive, despite the fact that the survey was conducted during the COVID-19 crisis (June-July, 2020). Moreover, MFIs expect a net improvement of the state of business.

MFIs currently face many challenges, such as income volatility and financial capability of clients, but the key challenges relates to the digital capability of clients. This was of particular concern during the COVID-19 lockdowns, as imposed social distance regulations inhibited face-to-face interactions, which are traditionally of crucial importance for relationship management in the microfinance sector.

MFIs themselves are only partially digitalised. MFIs often do not offer any digital solution to their clients and do not use any digital tools to interact with their clients. “Online loan application” is the most common solution offered to clients and E-client area on the MFIs’ websites is most common way to interact with them. Only a few use more advance technologies for communication such as chats or chatbots (EMN-MFC, 2018).

Another key challenge for MFIs is the lack of access to adequate sources of debt and equity (EMN-MFC, 2020). If MFIs cannot secure their own funding, they cannot lend to their clients, who are currently facing urgent working capital and liquidity constraints due to the COVID-19 crisis.

5.4 The challenges for microenterprises to access to finance

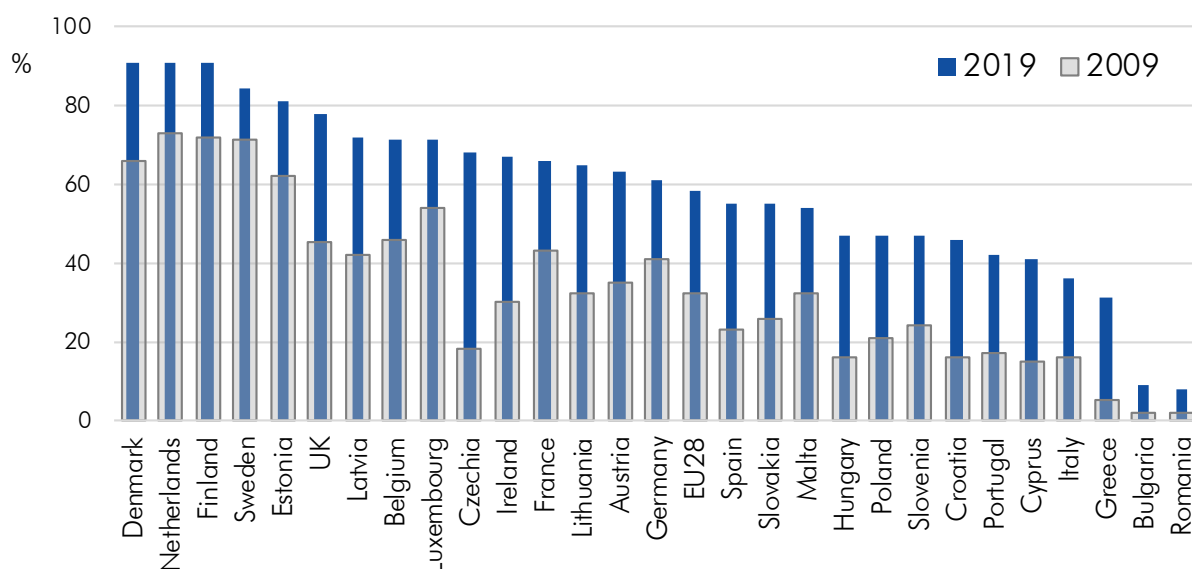
The challenges for microenterprises to access external financing are even greater than for other (bigger) types of SMEs. These are typically young firms without prior track record or formal reporting obligations. In addition, necessity-driven entrepreneurs, again by definition, are highly unlikely to meet the required collateral requirements often demanded by traditional finance market players (OECD/ European Commission, 2014). This implies that credit rationing becomes particularly relevant for this sub segment of the market. This section presents some indicators that illustrate how access to finance often is restricted for vulnerable labour market segments and microenterprises.

At its most basic level, financial inclusion starts by having access to a simple bank account. However, while the European population with banking accounts keeps growing, more than 100 million people are still left behind by the mainstream banking system.⁶⁶Digital technology increases financial inclusion. However, in many countries (especially in countries with high unemployment rates, see Source: Authors, based on Eurostat data

Figure 62), digital payments seem equally inaccessible as financial accounts (see Figure 73).

Not being digitally well equipped is particularly problematic in light of current events, since usage of financial technology has become critical during the office closures and social distancing due to COVID-19.

Figure 73: Percentage of individuals using the internet for internet banking

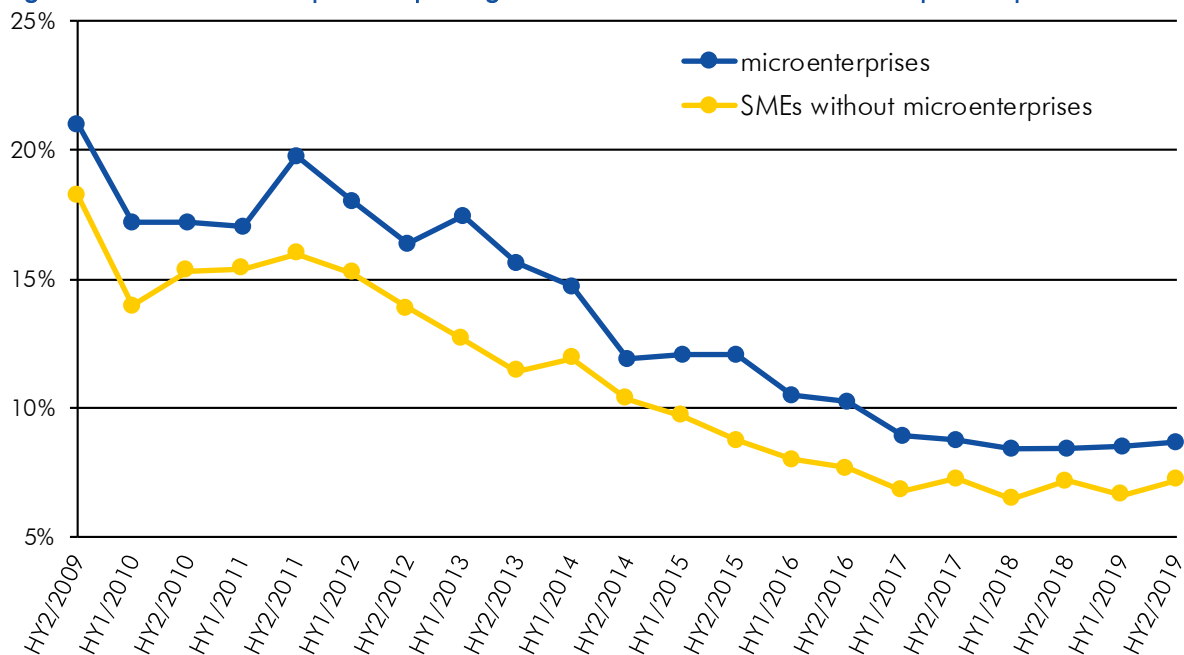


Source: Authors, based on Eurostat

The ECB SAFE survey in the Euro area (ECB, 2020) provides additional insights in the financing situation of European microenterprises. According to the latest SAFE survey, the share of microenterprises which see “access to finance” as their most important problem slightly increased and still exceeds the share of bigger SMEs facing the same problem (Figure 74).

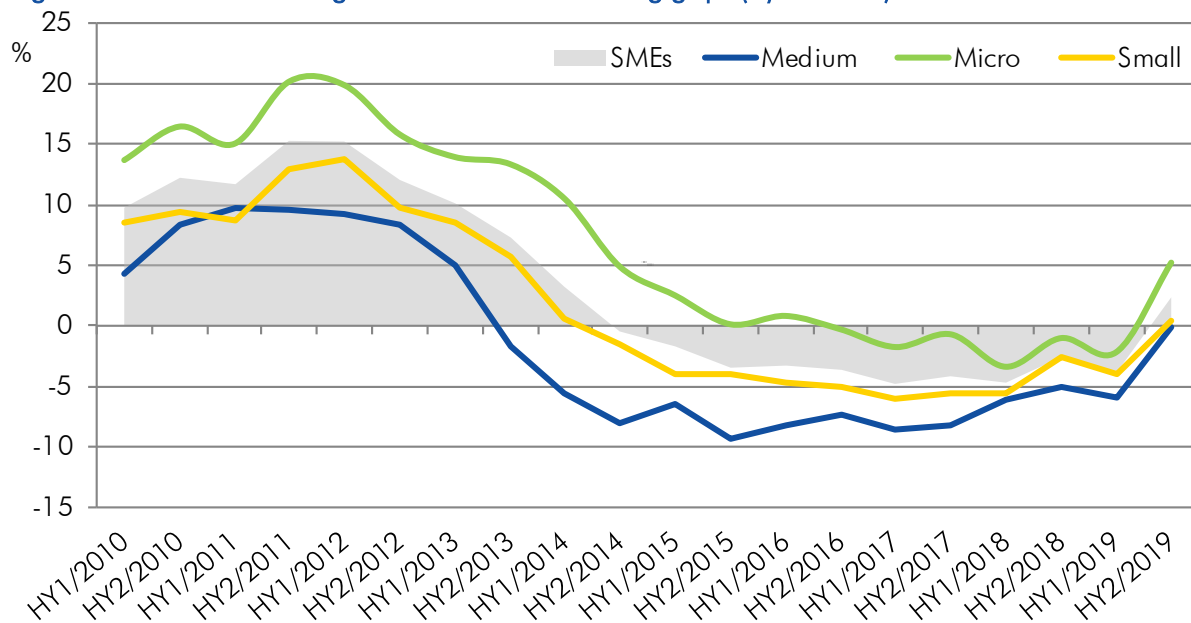
⁶⁶ <https://www.statista.com/statistics/944142/banking-population-in-europe-by-country/>

Figure 74: Share of enterprises reporting access to finance as their most important problem



Source: Authors, based on ECB SAFE data (ECB, 2020a)

Figure 75: Perceived change in the external financing gap* (by firm size)



*Note: The financing gap indicator combines both financing needs and availability of bank loans, credit lines, trade credit, and equity and debt securities at firm level. A positive value of the indicator suggests an increasing financing gap. Values are multiplied by 100 to obtain weighted net balances in percentages. A negative financing gap indicates that the increase in the need for external financing is smaller than the improvement in the access to external financing.

Source: Authors, based on ECB SAFE data (ECB, 2020a)

Figure 75 shows how microenterprises report changes in their perceived financing gap and compares this to other SME size classes. Also here, it becomes apparent that microenterprises believe they operate in a more challenging environment than larger SMEs, as they are consistently less optimistic about their financing situation.

5.5 Microfinance prospects

Microenterprises in general, and workers from vulnerable labour market segments that cherish entrepreneurial ambitions, have particularly been hit by the COVID-19 crisis. As discussed below, currently, both microenterprises and microfinance providers in Europe are facing challenges.

Affordable finance: For lenders, especially for microenterprises, not only accessibility of finance is important, but also its affordability. As we have seen above, microenterprises often do not consider applying for a bank loan, as they find interest rates too high. Lending rate ceilings are often discussed as potential solution. However, such ceilings would have to be chosen very cautiously. In fact, introducing interest rate caps can harm the poorest: disadvantaged groups, such as long-term unemployed, or workers with a migrant background are perceived as risky borrowers and lenders charge these borrowers higher interest rates. If the interest rate restrictions are too tight, those lenders are less willing and perhaps even obliged to eliminate those most deprived from their target portfolio (Zetsche & Dewi, 2018). Alternatively, one should think about ways for MFIs to reduce their fixed costs related to lending activities, perhaps via digitalisation.

Scale-ups: Microenterprises with scale-up potential are important for job creation. However, barriers for scaling up businesses are especially prominent for those from disadvantaged groups. In addition to difficulties accessing finance, they face other barriers including lack of growth motivations, lack of entrepreneurship skills and smaller entrepreneurship networks.

Digitalisation: Digitalisation helps to reduce time related to communication with the borrowers, loan processing and monitoring. Digitalisation also increases outreach: borrowers, mainly in remote areas with limited access to physical branches, may find it more efficient and time saving accessing their accounts digitally. Digital solutions can also elevate the burden of “too much paper work” discussed in the previous chapter. MFIs are aware of the benefits of digitalisation but they lack the financial resources to bring technology to their organisations (MFC, 2017). On the other hand, one success factor in small business lending is the direct contact between lenders and borrowers (“know your customer”). Digitalisation should not be used to eliminate such relationships, but to make them more efficient. Digitalisation gained urgency in the microfinance sector, as the consequences of the COVID-19 lockdown required both MFIs and microenterprises to become digitally equipped to maintain communication, which before had mostly been person-to-person.

Skills: In addition to financial support, unemployed people or clients from other vulnerable groups are often in need of acquiring the necessary skills for success through coaching and mentoring. Technical assistance is crucial for entrepreneurs to succeed and decrease the risk of default. Nevertheless, the technical assistance provided during the loan term is often limited.⁶⁷ In addition to financial products and services, many European MFIs also provide non-financial services (EMN-MFC, 2020). As such services are often free for clients (or not cost covering), it becomes a burden for MFIs without public support. That explains why state-owned banks, credit unions and NGOs provide non-financial services more often than NBFIs or private banks.

⁶⁷ Based on interim results from an ongoing research project on “Measuring Microfinance Impact in the EU”.

MFI funding needs: Non-bank MFIs are competing with traditional banks and new entrants, Fintechs. They need to scale up, offer more diversified products and introduce digital technologies to their operations. MFIs, especially non-bank MFIs, face challenges in securing funding to support growth. They are also in need of additional investment in technologies in order to stay competitive with Fintechs. If MFIs do not catch up with Fintechs, they may end up serving not only unbanked but also undigitalised clients, who typically are the poorest. Moreover, adverse selection might leave MFIs with the riskiest ones, as Fintechs are more equipped with their screening tools to select the most successful projects.

Given the current difficult conditions, support on a European level has become of central importance – via funding, guarantees and technical assistance to a broad range of financial intermediaries, from small non-bank financial institutions to banks well-established in the microfinance or social enterprise finance market– in order to build a full spectrum of the European inclusive finance sector. The EIF currently supports microfinance and social entrepreneurship under The European Commission’s Programme for Employment and Social Innovation (EaSI). EaSI offers the following three instruments: (i) the EaSI Guarantee Instrument to increase access to finance for microenterprises, social enterprises and vulnerable groups, (ii) the EaSI Capacity Building Investments Window to help build up the market via investments (e.g. scaling up or developing IT infrastructure (mobile banking), recruitment and training of staff, strengthening operational and institutional capabilities or seed financing support of newly created intermediaries with a strong social focus) and (iii) the EaSI Funded Instrument launched in the fourth quarter of 2019. Through the investment fund, the EIF provides senior and subordinated loans to financial intermediaries for on-lending to micro-borrowers and social enterprises.

In addition to the instruments listed above, the EIF and the European Commission are currently launching new COVID-19 support measures under the EaSI Guarantee Instrument (EaSI) to enhance access to finance for micro-borrowers, micro- and social enterprises.

The new measures will support micro- and social enterprises as well as individual micro-borrowers hit by the socio-economic consequences of the coronavirus pandemic. The objective of the new COVID-19 measures is to further incentivise financial intermediaries to lend money to small businesses, mitigating the sudden increase in perceived risk triggered by the coronavirus pandemic, and alleviating working capital and liquidity constraints of final beneficiaries targeted by the EaSI programme. Key features of these new measures include higher risk coverage, broadening of certain parameters, such as an increase of the maximum exposure for micro and social enterprises, and more flexible terms.

6 Fintechs

The Basel Committee on Banking Supervision defines Fintech as “Technologically enabled financial innovation that could result in new business models, applications, processes, or products with an associated material effect on financial markets and institutions and the provision of financial services”. Innovations in financial technology occur in a variety of financial subsectors or business processes, such as the payments/transactions industry (distributed ledger technology), insurance (Insurtech), corporate lending (peer-to-peer platforms, robo-advisors), compliance mechanisms (Regtech), to name but a few. The term Fintechs can also refer to *companies*, often SMEs, which pursue a business model of innovation with the aim of disrupting traditional financial service mechanisms. Per 2019, blockchain, digital payment applications and crowd lending platforms remain the dominant technologies in the global Fintech deal space (Figure 76).

Figure 76: 2019 trends in global Fintech investments (VC/PE/MA)



*Note: Text analysis of the keyword list of all 261 Fintech deals registered by PitchBook in 2019, across all deal types.
 Source: Authors, based on PitchBook data.

Technological innovations are becoming an integral part of the SME financing landscape. Fintech market actors play an important role in enhancing access to finance for SMEs. Their innovations help to reduce the pronounced asymmetric information problem in small business lending, for example, through technological advances in information processing. By revolutionising financial business processes, such as payment or data-processing technologies, Fintechs allow SMEs to compete on equal footing with larger players in the financial sector. In addition, they serve as a direct financing source for SMEs across the entire growth spectrum, through crowdfunding (CF) platforms that offer a variety of debt and equity financing.

Financial technology impacts the entire spectrum of SME financing markets, most notably through crowdfunding. Established financiers, such as microfinance institutions, business angels and venture capitalists have recognised the power of the crowd and have all been observed to co-invest with retail investors through the use of CF platforms. Also mainstream banks are entering the Fintech space, using marketplace lenders as distribution channels and acting as counterparts in SMESec transactions.

Recent years also saw the emergence of Fintech giants, established technological market players (Bigtech) such as Amazon and Paypal, who are aiming to position themselves as an alternative for the traditional financial service industry. Unlike smaller Fintechs, these giants can compete with incumbents at a much larger scale, combining big data with technology, and posing a new disruptive threat in an ever-changing financial market environment. Their entry into financial services can lead to efficiencies gains and improved financial inclusion. A recent BIS study (BIS, 2019) found the share of Bigtech in total global Fintech credit recently increased dramatically, from less than 5% in 2016 to over 30% in 2017, although this increase is driven mainly by evolutions in Asia.

Some have raised concerns that the growing Fintech ecosystem poses new risks to the global financial system, stressing the need for regulators to modernise legal frameworks to address issues like financial stability, cybersecurity, money-laundering and terrorism financing. This is where international financial organisations can play an important role, by acting as standard-setting bodies and bringing together national regulators.

Particular concerns are raised about the entry of Bigtech into the financial sector. These large international players could pose new threats to financial stability, data protection, and competition. In this context, it is important that regulators ensure a level playing field between incumbent firms, Bigtech, and Fintech start-ups (BIS, 2019).⁶⁸

6.1 Investment in European Fintech companies

Globally, investment in Fintech companies stalled in 2019. In particular early stage deals declined compared to one year earlier, although the high volume in 2018 was driven by a few mega-deals in Q2, and the 2019 volumes are in line with the steady long run growth trend of the past 5 years. Global volumes were supported by large deals in the M&A sphere (KPMG, 2020).

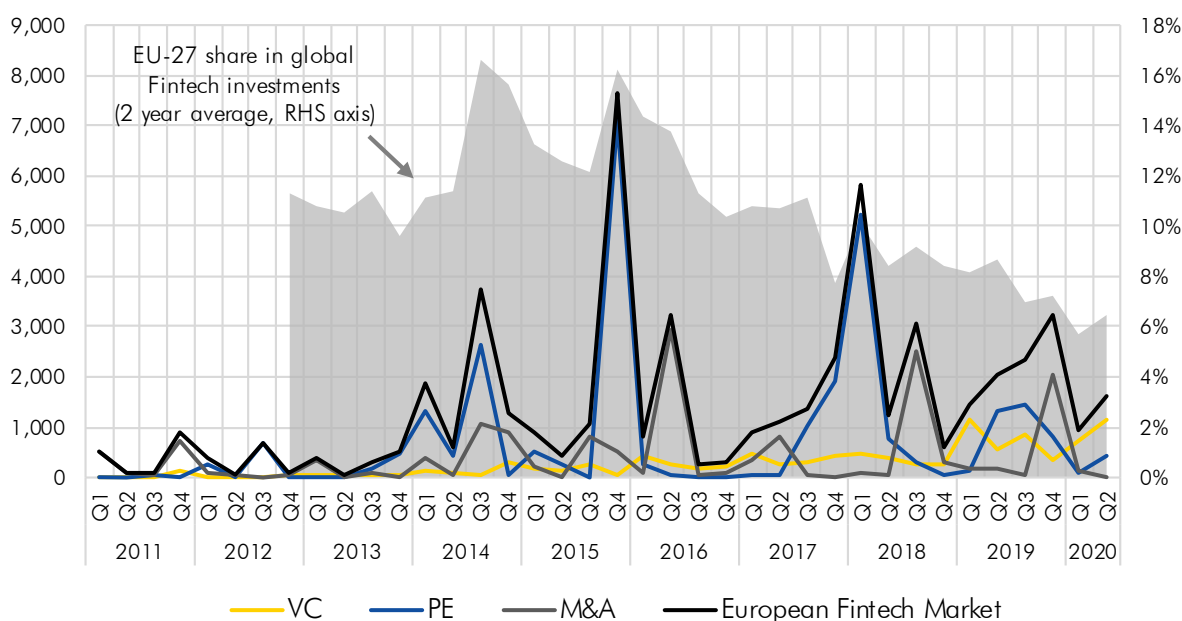
In line with global trends, investments in EU-27 Fintech companies have declined slightly in 2019, according to data gathered by PitchBook (Figure 77). Compared to 2018, investment volumes decreased by 15%, to about EUR 9bn. As a result, the European global market share declined marginally.

While global investment volumes were supported by large deals in the M&A segment, the EU-27 market was supported by robust growth in the early stage markets. Contrary to global developments, the drop in EU-27 investment volumes was driven by declining later stage markets, with drops in PE and M&A investment volumes by 18% and 15%, respectively. The VC segment, on the other hand, showed robust growth, more than doubling to nearly EUR 3bn over the entire year combined,

⁶⁸ For more details concerning Bigtech in finance, see BIS (2019).

marking the strongest year on record for VC investments in European Fintech companies. Within the VC segment, median VC deal size grew significantly across stages, indicating the market has further converged towards maturity. These contrasting evolutions have led to a rise in the relative importance of the VC market segment, which in 2019 accounted for more than 30% of total investment volumes (compared to just 13% one year earlier).

Figure 77: Investments in European Fintech companies (VC/PE/M&A), (EU-27, mEUR)



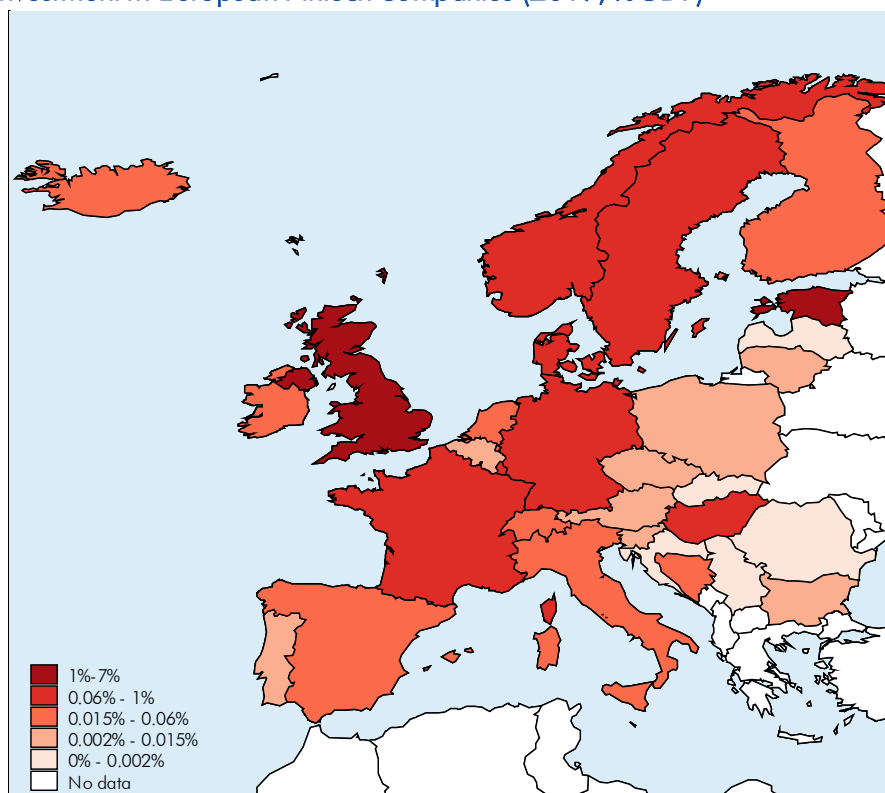
Source: Authors, based on PitchBook data.

Preliminary evidence indicates an adverse impact of the COVID-19 pandemic on investments in European Fintech companies. Although the most recent data points tend to be lower bound estimates and subject to upward revision as the database gets updated, Q1/2020 investment volumes appear to have taken a significant hit. For Q2/2020, early figures seem to suggest a modest rebound in Fintech investment volumes, although it is too early to take this trend as definite evidence for a revival.

The highest investment intensity, as measured by total Fintech investments as a share of GDP (Figure 78), is found in Estonia. This was driven by a large EUR 1.88bn deal in the M&A sphere, which led to a total investment volume of nearly 7% of Estonian GDP in 2019. Second on the list was the United Kingdom, where investment into British Fintech companies totalled 1.8% of GDP.

The EU Fintech market matured further in 2019, as median deal size increased across all deal stage segments. As some Fintech players who were previously operating in unregulated areas of the financial sector are looking to scale up their activities, they are increasingly facing higher regulatory compliance costs and more stringent capital requirements. This is expected to push median deal sizes further up in the near future. The fact that corporate investors are playing an increasingly important role in the Fintech sphere, is a further indication of a maturing market (KPMG, 2020).

Figure 78: Investment in European Fintech companies (2019, %GDP)



Source: Authors, based on PitchBook and Eurostat data.

Some notable deals in the EU-27 Fintech sphere in 2019 (KPMG, 2020) were the acquisition of digital asset trading company AliExchange (Estonia, EUR 1.88bn), as well as the buyouts of eFront (France, EUR 1.16bn) and SIA (Italy, EUR 798m). Unfortunately, the European Fintech sphere was also plagued by a high-profile scandal recently, as widespread fraudulent practices led the German Fintech company Wirecard to file for bankruptcy in June 2020, after discovering a EUR 1.9bn shortage on its account. Wirecard was consequently ejected from the German DAX index, losing the spot it had previously taken over from the German financial giant Commerzbank, one of the oldest financial institutions in Germany.

6.2 The crowdfunding market⁶⁹

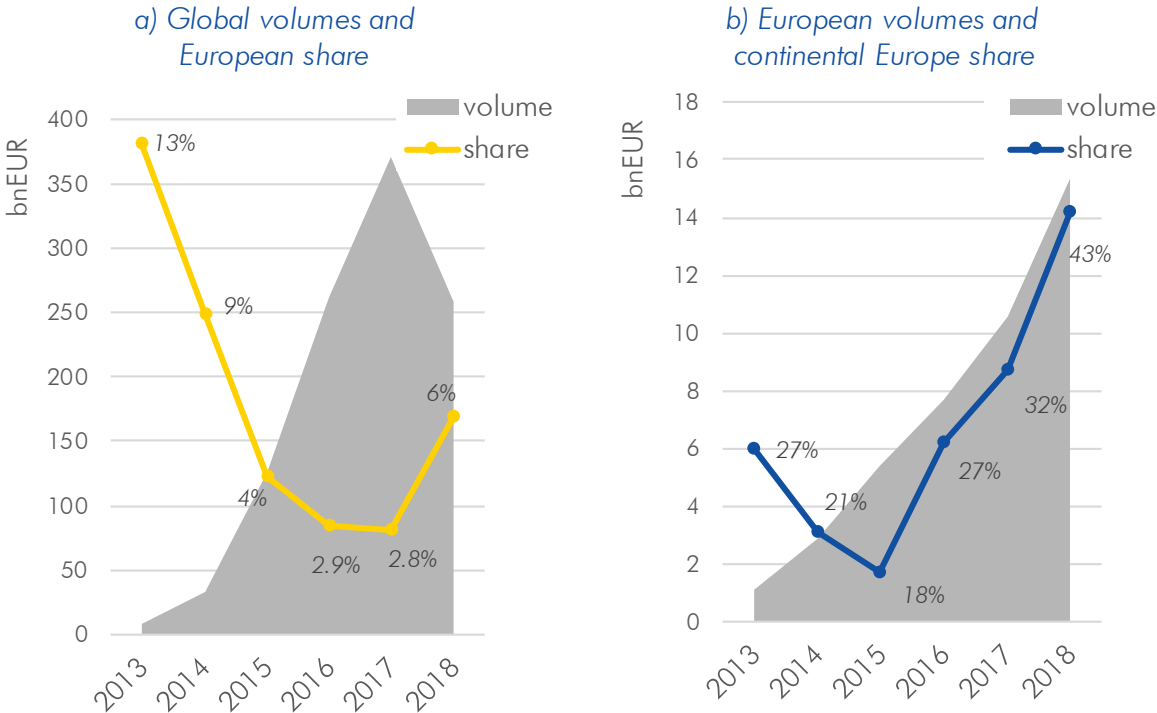
Aggregate volumes

Crowdfunding (CF) is defined as the practice of raising funds from a large number of individuals, generally through the use of an online platform. CF has grown increasingly popular in recent years, with global funding volumes exhibiting stellar growth, expanding by a factor 50 between 2013 and 2017 (Figure 79, panel a). In 2018, global funding volumes contracted for the first time since data

⁶⁹ This section relies heavily on data retrieved from the Alternative Finance Benchmarking Reports, as produced by the Cambridge Centre for Alternative Finance (CCAF, 2020). These reports rely on survey techniques to quantify the global alternative financing sector. The most recent data available at the time of writing was 2018. Reported growth rates in this chapter can deviate from those reported in the Benchmarking reports, as volumes have been transformed from USD to EUR, using the average exchange rate prevailing over the respective years. Therefore, differences may reflect exchange rate effects, the magnitudes of which are cosmetic and do not impact important trends.

collection to EUR 258bn, driven by a sharp contraction in alternative financing activity in China (Cambridge Centre for Alternative Finance (CCAF), 2020). Discarding China from the global volumes, however, reveals an opposite evolution in the rest of the world, where funded volumes continued to grow strongly in 2018, by 42% to EUR 75bn. Although China still dominates global markets, the Chinese market share in global funded volumes has consequently declined from 85% to 71%.

Figure 79: Crowdfunded volumes



Source: Authors, based on Cambridge Centre for Alternative Finance (2020) data

European⁷⁰ crowdfunded volumes continued to rise in 2018, reaching EUR 15.3b (Figure 79, panel b). The European share in global volumes also gained in 2018, after 4 consecutive years of decline (Figure 79, panel a). These strong growth numbers led to a rise in the European CF market share. In 2018, 6% of global crowdfunding was raised on European platforms, a doubling compared to one year before. In 2018, about 43% of European volumes (EUR 6.5bn) were raised within continental Europe.

Within continental Europe, volumes raised on Benelux platforms exploded, growing by more than a factor 4 in 2018. They now account for 24% of all European (ex. UK) alternative finance volume, making it the biggest market within continental Europe, followed by Germany, France and the

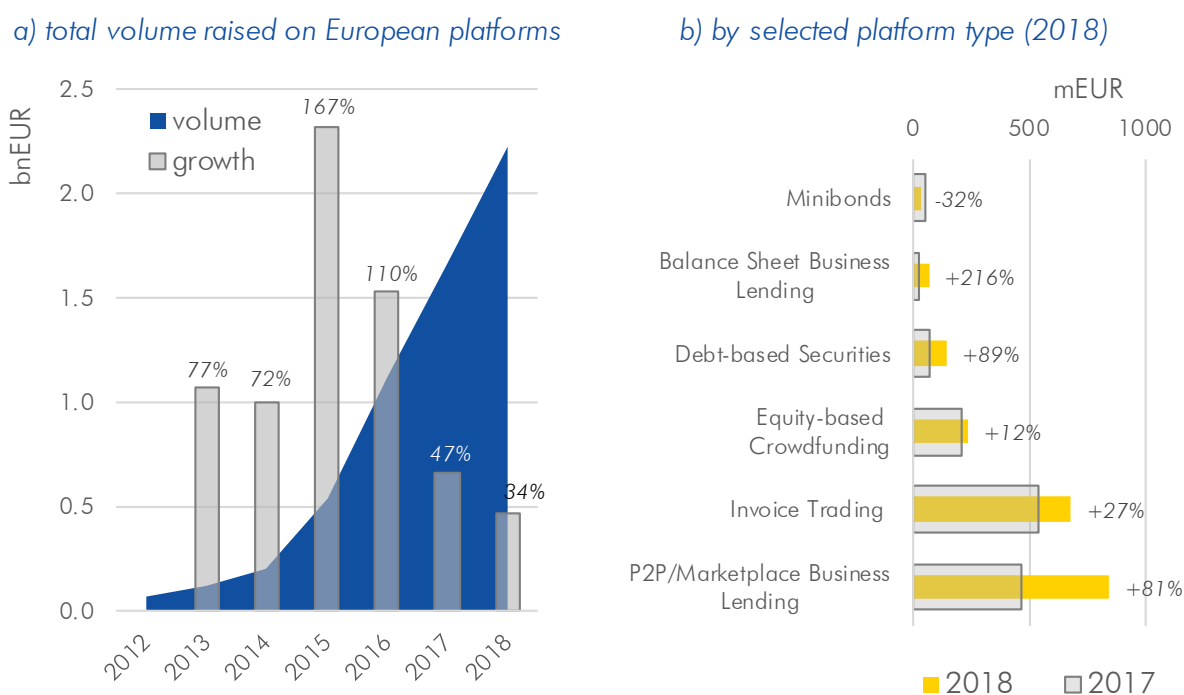
⁷⁰ The Alternative Finance Benchmarking Report reports CF volumes for the geographical aggregate ‘continental Europe’, which, apart from the EU27 (+UK) also comprises all non-EU Eastern and Central European countries. Countries included in the European aggregate are: Albania, Andorra, Armenia, Austria, Belarus, Belgium, Bosnia & Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Faroe Islands, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Isle of Man, Italy, Kosovo, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Svalbard and Jan Mayen, Sweden, Switzerland, Turkey, Ukraine.

Nordics. Although the UK remains the largest European market in terms of raised volumes, recent years saw a clear trend reversal, with continental Europe gaining importance within the European CF ecosystem. This trend can broadly be explained by the observation that while the continental market continued to develop strongly, at the same time, UK platforms sought to expand their activities overseas given growing concerns over the pending Brexit and its associated impact on regulations regarding international finance flows (CCAF, 2020).

European (ex-UK) business-focussed volumes

Within the Fintech ecosystem, Crowdfunding (CF) platforms are of particular relevance to SMEs. For 2018, European business transaction volume⁷¹ materialised at EUR 2.22bn, an increase of 34% compared to 2017 (Figure 80, panel a). While still growing at double-digit numbers, the pace of growth further decelerated, indicating a maturation of the market.

Figure 80: European (ex-UK) business focused crowdfunding



Source: Authors, based on Cambridge Centre for Alternative Finance (2020) data

Debt-based platforms continue to dominate the European business-focused CF sphere (Figure 80, panel a), further increasing their market share vis-à-vis equity-based platform types. P2P/Marketplace business lending, apart from being the largest platform type, experienced the strongest growth (+81% yoy), and accounted for nearly 40% of all business related CF in 2018. Balance sheet lending, a platform type first emerging in 2017, continued to gain popularity, with volume more than tripling one year later. Minibond volumes, mostly generated in the Netherlands and France, on the other hand, declined, after four years of consecutive growth. Growth on equity-

⁷¹ The reported volumes likely underestimate true business volumes significantly, as some platforms do not always distinguish perfectly between business focussed and other CF financing activities. Reported trends nevertheless remain valid (Cambridge Centre for Alternative Finance, 2020).

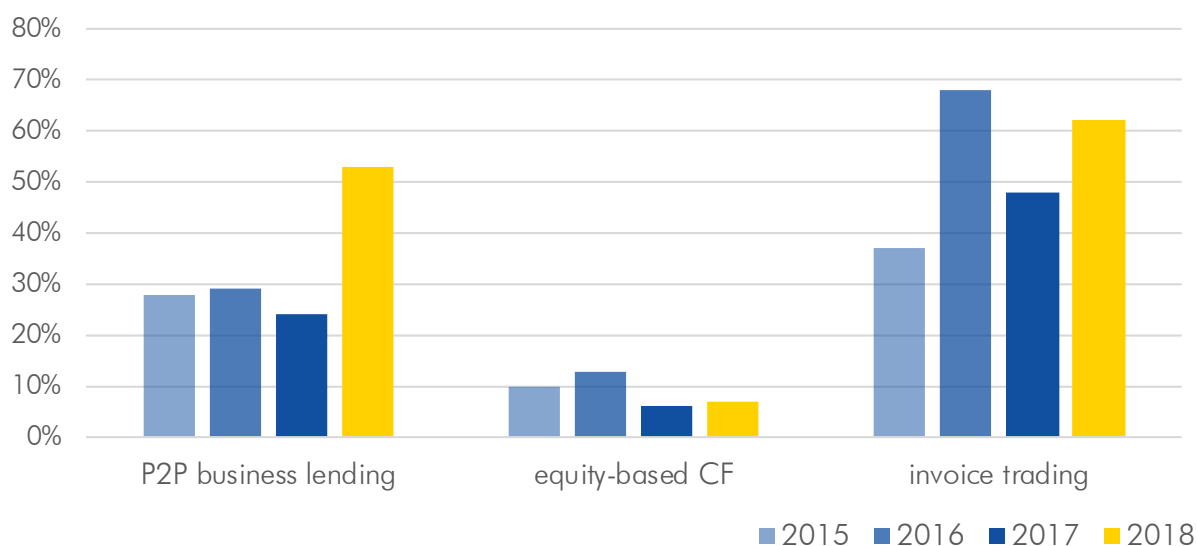
based CF platforms was more modest, resulting in EUR 236m raised in 2018, an increase of 12% compared to one year earlier.

Institutionalisation

Recent years have seen a surge in the institutionalisation of the CF ecosystem, as evidence by the rising share of funded volumes that are sourced from institutional investors. The institutionalisation of the CF sector is seen by some as a drift away from the essence of the CF concept, where large institutions crowd out retail investors. However, institutional involvement could contribute to the stability and continuity of the CF sector.

Institutional investors, sometimes also referred to as ‘the smart money’, can serve as a signal for quality, thereby attracting other investors and increasing a project’s chances to get fully funded (Lin et al., 2015). On the other hand, if institutional investors are better (and faster) at “picking winners”, they could crowd out retail investors from quality projects, leaving the crowd only with the remaining lemons. The evidence whether institutional investor portfolios outperform the crowd is mixed. While some studies have shown that institutional portfolios do not consistently outperform those of retail investors (Lin et al., 2015), others come to the opposite conclusion. Mohammadi and Shafi (2017) showed that institutions significantly outperformed the crowd. This performance gap grew larger for risky and small loans, implying that the general crowd seems to lack the investment expertise that institutions bring to the table.

Figure 81 : Institutionalisation rate for selected CF platform type (Europe, 2018)



Source: Authors, based on Cambridge Centre for Alternative Finance (2020) data

Per 2018, about half of global alternative financing was derived from institutional investors, although large geographical differences exist. In the US, for example, institutional investors dominate the system, providing almost 90% of total funds. In Europe, on the other hand, institutionalisation rates were much lower, with 71% of funds originating from retail investors.

Institutionalisation rates also vary strongly between platform types (Figure 81). Debt-based platforms tend to experience a much deeper involvement of institutional investors. For CF invoice trading and business lending, for example, more than half of the funds are contributed by institutions, while for equity-based CF is heavily dominated by retail investors, who provide more than 90% of total funding.

Recent development in EU regulation

In March 2020, the European parliament and the council of the EU published a final proposal for a regulation on European CF service providers, the main aim of which is to promote access to finance for SMEs, and contribute to the completion of the Capital Markets Union (European Council, 2020). The proposal recognises the existence of a high degree of geographical fragmentation of legal frameworks, which hampers cross-border funding flows and limits the potential for market integration.

To meet with this concern, it strives to harmonise the minimum requirements on these platforms across the EU. A common set of prudential, information and transparency requirements should ensure a high level of investor protection and promote the provision of cross-border CF operations. The proposal refers only to business focussed CF platforms, and therefore is not relevant to consumer/charity based CF activities.

In the proposal, apart from harmonising legal framework across the European CMU, the Council seeks to protect consumer interests. Therefore, the proposal contains a stipulation prohibiting any remuneration, discount or other benefit, for routing investors' orders to a particular project. Platforms are also asked to consider investors' specific risk profile, based on well-defined parameters or risk indicators.

CF Platforms should furthermore undertake a minimum of due diligence on the projects they have on offer. For example, a platform should verify whether the project owner does not have a criminal record for breach of certain financial and administrative crimes. In addition, platforms ought to ensure that the project owner is not established in a non-cooperative jurisdiction, or a high-risk third country

The proposal also suggests the introduction of obligatory risk-assessment activities, be it either for individual projects, or loan portfolios. In order to comply with these provisions, platforms will be required to have in place internal process and methodologies with regard to data collection activities. It also contain a list of minimum information requirements which should be at the disposal of individual investors upon request.⁷²

While it is clear that this proposal is essential to ensure and safeguard the further development of the European CF ecosystem, it will also entail significant compliance costs for CF service providers, which will put a strain on profitability rates, and could potentially reduce the speed at which SMEs can source funds from the crowd.

⁷² This is merely a selection of the list of provisions foreseen in the proposal. For an exhaustive overview, the reader is referred to the original text (European Council, 2020).

6.3 Fintechs in the age of COVID-19

The COVID-19 pandemic is expected to have a heterogeneous impact on the sector. On the one hand, it brought about opportunities for Fintechs. For example, the pandemic has created momentum for financial technologies that facilitate the adaption to a social distance reality. Most notably the use of contactless payment technologies, as an alternative to cash or payment cards, as well as other online payment alternatives, have surged in recent months. Checkout lender Klarna saw its net operating income increase significantly during the first half of 2020, as consumer shifted their purchasing behaviour to online platform (Altfi, 2020). At the same time, Klarna ramped up its expected credit loss reserves, to meet with a worsening macro-economic environment in the post-COVID economy.

The pandemic also poses grave challenges for other Fintech business models. For digital neobanks, the COVID-19 crisis adds further to ongoing financial challenges. In the wake of the pandemic, leading challenger banks were reported to have experienced significant declines in the number of new app downloads (Finextra, 2020). The British digital neobank Monzo, for example, reported a doubling of its operating loss in 2020, as their revenue streams had been significantly impacted by the COVID-19 crisis. The news led Monzo's market valuation to decline by 40%. Revolut, who saw losses triple already in 2019, was forced to implement a cost-saving strategy, dismissing 60 employees to cope with the imminent consequences of the crisis.

Similar to the rest of the economy, crowdfunding platforms are expected to experience the consequences of the ongoing crisis. Initially, some debt-based platforms were among the first to offer much needed funds to SMEs that experiences liquidity shortages during the lockdown period. While this once more underlines the potential of CF platform to fill in voids in the SME financing spectrum, this also exposed them even more to potential losses in case a U-shape recovery triggers a wave of bankruptcies across Europe. While some debt-based CF platforms have so far managed to avoid large losses, for example, by implementing strategies that temporarily relieved participating SMEs from monthly loan repayments (Techcrunch, 2020), it can be expected that the true impact of the current crisis will only materialise in the months ahead.

Equity platforms also struggled, as investors were hesitant to commit to projects in the face of significant corona-induced uncertainty. Initially, investment volumes were reported to have declined substantially in March. While volumes rebounded strongly in the month thereafter, they were still not able to recover to the level of the same period of previous year (Nextfin, 2020; Crowdsourcingweek, 2020).

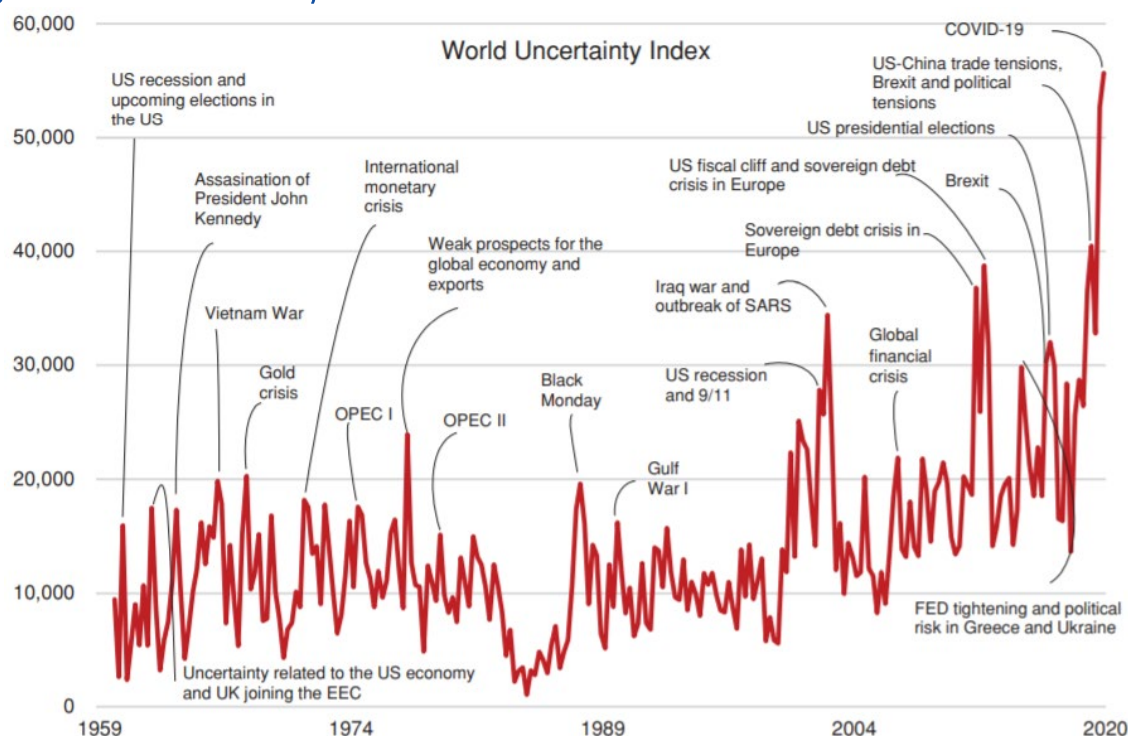
Some CF platforms cooperated with governments, to address SMEs' urgent equity needs. Seedrs, for example, participated in the UK governments' Future Fund scheme, a public scheme that wishes to activate the crowd's dry powder by matching up to 100% of the amount businesses raise from investors. Also the Commission was reported to consider an EU-wide crowdfunding project to finance recover, having held exploratory talks with various crowdfunding platforms across Europe, although no concrete plan have been announced so far (Euractive, 2020).

7 Concluding remarks

Since the previous ESBFO (December 2019), the financing outlook of European SMEs has deteriorated dramatically, driven by the global spread of the COVID-19 virus. The consequent lockdowns sent shockwaves through the global and European economy, and European output is forecasted to contract by about 8% over the course of 2020, the sharpest decline since WWII.

Even prior to the COVID-pandemic, the outlook for the European economy had already started to worsen. Growing uncertainty about the evolution of global trade disputes, as well as tensions surrounding the ongoing Brexit negotiations (Figure 82), have put a strain on corporate investments, which trapped several countries in a new low growth equilibrium.

Figure 82: World uncertainty index



*Note: The World Uncertainty Index is computed by counting the frequency of the word “uncertain” (or the variant) in Economist Intelligence Unit country reports. The index is then normalised by total number of words and rescaled by a factor 1000.

Source: *Ahir et al (2020) and Loaza et al (2020)*

Early 2020, before the pandemic struck the EU economy, this had led an increasing number of European SMEs to experience significant issues in accessing external financing sources, after several consecutive years of improvement. This trend reversal is particularly remarkable, as it occurred against a background of record-low financing costs.

Today, these problems are superimposed by the effects of the COVID-crisis. The IMF’s World Uncertainty Index shows that the level of uncertainty associated with COVID-19 exceeds that of any other crisis experienced since at least 1960, the beginning of measurement. Unmistakably, the

COVID-19 crisis will have a profound impact on the entire spectrum of European SMEs' external financing sources.

The European PE/VC ecosystem has faced and could continue to experience significant challenges in the aftermath of the COVID-19 pandemic. The EIF surveys among Business Angels, VC and PE MM investors, conducted at the outbreak of the COVID-19 pandemic, brought to light that investors' expectations for the near future of the sector have considerably worsened.

This is likely to result in the curtailing of investments in young and innovative businesses. In the absence of appropriate policy responses, the COVID-19 crisis will thus restrict the funding for technology and innovation, which would prove detrimental to Europe's competitiveness, including its ability to pre-emptively address the risk of future pandemic spreads or similar systemic shocks. Furthermore, SMEs will experience a weakening of their capital structure, resulting in a deterioration of their loss absorbency capacity and credit risk profile.

The COVID-19 pandemic also brought significant challenges to European debt markets. The intensive use of guarantee instruments, both at the national and European level, to meet with urgent short-term corporate liquidity shortages, has led to a strong rise in guaranteed lending volumes. The strong focus on short-term liquidity support has led to a decline in the share of guaranteed lending at longer maturities. This might indicate a distortion in the EU corporate debt market that could have a detrimental effect on long-term investment projects and eventually on economic growth.

Therefore, strong public support is crucial to overcome the negative economic impact of the COVID-19 crisis and to provide European SMEs with much needed financing. Already at the onset of the pandemic, the EIB Group reacted rapidly and mobilised up to EUR 40bn to address SMEs' most urgent liquidity needs.⁷³ As part of the Group's reaction to the COVID-19 crisis, the EIF is partnering with the EIB, mandators, the EU, National Promotional Institutions and Member States to put in place relevant packages to help small businesses mitigate the challenges. Currently, key COVID-19 support measures are:

- The Pan-European Guarantee Fund (EGF), jointly launched by the EU Member States and the EIB Group, offering financial instruments in order to generate new finance across participating EU countries. The guarantee fund enables the EIB Group, to deploy a number of equity, debt funds and guarantee products in cooperation with selected financial intermediaries for the benefit of SMEs and Mid-Caps, and to scale up its support to SMEs and others in the real economy by mobilizing up to EUR 200bn (see Figure 83). EGF is now operational following guarantees by EU Member States accounting for at least 60% of EIB's capital. On 31 August 2020, the EIF has launched the call for expression of interest to select financial intermediaries for the EGF.⁷⁴

⁷³ See for details: <https://www.eib.org/en/press/all/2020-086-eib-group-will-rapidly-mobilise-eur-40-billion-to-fight-crisis-caused-by-COVID-19.htm>

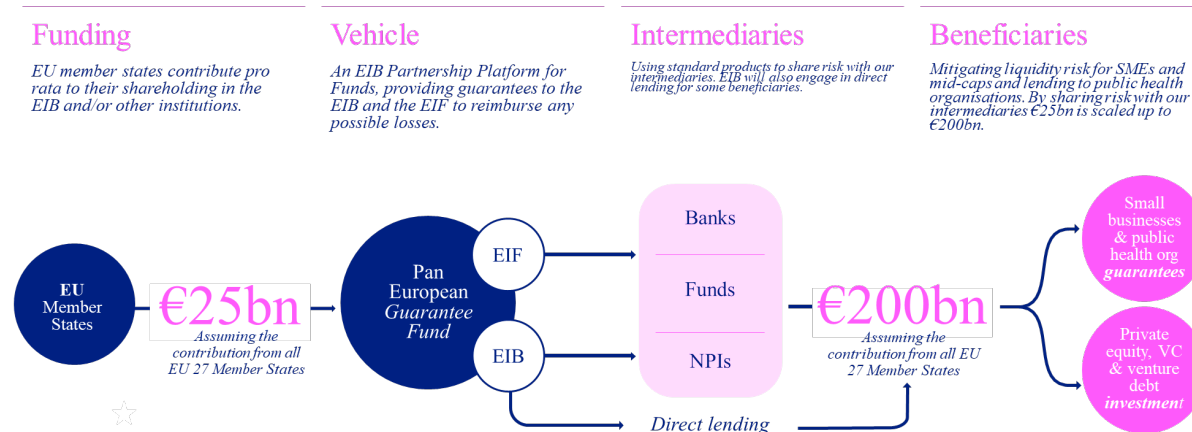
⁷⁴ For more information see: <https://www.eib.org/en/about/initiatives/COVID-19-response/index.htm> and https://www.eif.org/what_we_do/egf/index.htm

- Enhanced terms for EU mandates (increase of guarantee rate and other measures to enhance InnovFin, COSME, EaSI and CCS guarantees) to adapt existing programmes to changing market needs.
- Regional initiatives in cooperation with local governments entrusting EIF with targeted regional programs to improve access to finance on local level (e.g. the Corona Matching Facility in Germany or the Future Growth Loan Scheme in Ireland).

Figure 83: Pan-European Guarantee Fund as COVID-19 response

Pan-European Guarantee Fund

An EIB Group COVID-19 response measure



Source: EIF

On the equity side specifically, EIF's policy response entails a combination of new and existing financial instruments. These financial instruments will support both new and existing funds and are specifically aimed at addressing the key challenges brought by the COVID-19 pandemic (including more flexible terms), as evidenced throughout this chapter. In addition, the EIF will strengthen its cooperation with other institutional partners, such as National Promotional Institutions. This will ensure a deeper, coordinated outreach that would meet the financing needs of young and innovative SMEs less likely to be served by VC and PE funds.

EIF will support existing funds through top-up commitments (including through preferred shares), fund recapitalisations (e.g. continuation funds) and co-investments to ensure continuity of funding to their portfolio companies. The EIF will continue to support emerging funds via cornerstone investments throughout the difficult post-COVID-19 fundraising environment. This will ensure that the core policy goals towards the PE/VC ecosystem are maintained, but also it will allow the EIF to support strategies that could prove particularly relevant during the crisis (e.g. mezzanine funds, turnaround funds).

To address the potentially adverse post-COVID-19 exit environment, the EIF aims to expand its activities to support the strengthening of a European IPO market for innovative SMEs. Finally, new instruments are under development to support the provision of equity and quasi-equity, for example, an investor protection product that will aim to catalyse new commitments to VC and PE funds from institutional investors.

In general, for the EIF, it is a key priority to help establish a well-functioning, liquid *equity market* that attracts a wide range of private sector investors. In doing so, the EIF aims at leveraging its market assistance and seizing market opportunities in all areas of the equity eco-system which are relevant to the sustainable development of the industry. In the coming years, the EIF will continue to act as a cornerstone investor across the spectrum of Technology Transfer through venture capital (incl. impact investing) to the Lower Mid-Market and mezzanine financing. This also includes the launch and extension of new/pilot initiatives.

In the areas of *credit guarantees* and *securitisations*, the EIF cooperates with a wide range of financial intermediaries. They include: banks, leasing companies, guarantee funds, mutual guarantee institutions, promotional banks, and other financial institutions that provide financing or financing guarantees to SMEs, such as debt funds. Given that SMEs have no direct access to the capital markets, banks are typically the most important source of external SME finance. Hence, funding limitations of banks have direct impact on SME lending capacity. For loans to SMEs, a standardised, transparent and quality-controlled securitisation market could transform these illiquid loans into an asset class with adequate market liquidity.

Microfinance is an important contribution to support inclusive growth. The EIF provides funding, guarantees and technical assistance to a broad range of financial intermediaries, from small non-bank financial institutions to well-established microfinance banks to make microfinance a fully-fledged segment of the European financial sector. Moreover, the EIF intends to sustain its support of microcredit, social investments, and participation in the increasing number of social finance institutions that are being established in Europe.

Fintechs are becoming an integral part of the SME financing landscape. They are drivers of new business models, new financing channels, and not least they are often successful start-ups and SMEs themselves. Established market players have various ways to react to the Fintech challenge, i.e. they can imitate (e.g., through the introduction of dedicated own platforms), they can go for cooperation/partnerships (e.g., through joint ventures, common platforms), or they can go the M&A route and integrate such companies. New blending solutions are emerging, in particular in the fields of crowdfunding (both, lending and equity) – examples are combinations of microfinance and crowd lending, business angel/venture capital financing and crowd investing, or banks using marketplace lenders as distribution channels. Fintech market players can potentially play an important role in enhancing access to finance for SMEs, as counterparts in SMESec transactions, and as well as final beneficiaries/investee companies. Moreover, Fintechs might help to reduce the pronounced asymmetric information problem in small business lending, through technological advances in information processing, such as the increasing ability to handle and process ‘big data’, which mitigates the problem of high fixed costs for (small) loans. Given their growing importance in the financing landscape, the EIF is stepping up its involvement in Fintech transactions by investing in, or providing guarantees to, Fintech entities.

References

- AECM Statistical Yearbook 2019. AECM Publishing, Brussels. <https://aecm.eu/wp-content/uploads/2020/07/AECM-Statistical-Yearbook-2019.pdf>.
- Affinito, M., & Farabullini, F. (2009). Does the law of one price hold in euro-area retail banking? An empirical analysis of interest rate differentials across the monetary union. *International Journal of Central Banking*, 5(1), pp. 5-37.
- AFME (2017). The Shortage of Risk Capital for Europe's High Growth Businesses. Published by AFME in conjunction with Accountancy Europe, BAE, BusinessEurope, Deutsche Börse Group, eban, European Investment Fund, Euronext, European Crowdfunding Network, FESE, Invest Europe, London Stock Exchange Group, Nasdaq.
- AFME (2019). Data snapshot. AFME Securitisation: Q3:2019.
- AFME (2020a). Securitisation report. European Structured Finance. Q1:2020.
- AFME (2020b). Data snapshot. AFME Securitisation. Q1:2020.
- AFME (2020c). Data snapshot. AFME Securitisation. Q2:2020.
- AFME (2020d). Securitisation report. European Structured Finance. Q2:2020.
- AFME and BCG (2015). Bridging the growth gap - investor views on European and US capital markets and how they drive investment and economic growth.
- AFME, EBF, eurofinas, Leaseurope, DSA, efama, ICMA, Pensions Europe (2016). The importance of securitisation for jobs and growth in Europe. October 2016.
- Afonso, A., Baxa, J., and Slavík, M. (2018). Fiscal developments and financial stress: a threshold VAR analysis. *Empirical Economics*, 54(2), 395-423.
- Ahir, H., Bloom, N. and Furceri, D. (2020). 60 years of uncertainty. Our new index provides novel insights into an amorphous concept. IMF, Finance & Development. March 2020.
- Aiyar, S., Al-Eyd, A., Barkbu, B. and Jobst, A. (2015). Revitalizing Securitization for Small and Medium-Sized Enterprises in Europe. IMF Staff Discussion Note SDN/15/07. May 2015.
- Akerlof, G. (1970). The market for "lemons": Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics*, 84 (3), 488–500.
- Albertazzi, U., Bottero, M., Gambacorta, L. and Ongena, S. (2017). Asymmetric information and the securitisation of SME loans. BIS Working Paper No. 601.
- Alfi (2020). Klarna sees H1 pay-later volume soar 44% to USD 22bn, but expected credit losses grow. https://www.alfi.com/article/6984_klarna-sees-h1-pay-later-volume-soar-44-to-22bn-but-expected-credit-losses-grow.
- Anderson, J., Papadia, F. and N. Véron (2020). Government-guaranteed bank lending: beyond the headline numbers. Bruegel Blog Post, 14 July 2020. <https://www.bruegel.org/2020/07/government-guaranteed-bank-lending-beyond-the-headline-numbers/>
- Anginer, D., De la Torre, A. and Ize, A. (2014). Risk-bearing by the state: When is it good public policy? *Journal of Financial Stability*, 10, 76–86.
- Arnold, M. and Morris, S. (2020). European banks: EU watchdog hopeful most banks can absorb €380bn pandemic hit. *Financial Times*, 25 May 2020.
- Arping, S., Lóránth, G. and Morrison, A. (2010). Public initiatives to support entrepreneurs: Credit guarantees versus co-funding. *Journal of Financial Stability*, 6, 26–35.
- Asdrubali, P. and Signore, S. (2015). The economic impact of EU Guarantees on credit to SMEs. Evidence from CESEE countries. European Commission's European Economy Discussion Paper 002 and EIF Working Paper 2015/29. July 2015.
- Asdrubali, P. and Signore, S. (2015). The Economic Impact of EU Guarantees on Credit to SMEs. Evidence from CESEE countries. European Commission's European Economy Discussion Paper 002 and EIF Working Paper 2015/29. July 2015. https://www.eif.org/news_centre/publications/EIF_Working_Paper_2015_29.htm

- Axelson, U. and Martinovic, M. (2013). European venture capital: myths and facts. Working Paper, British Private Equity & Venture Capital Association.
- Bell, I. (2017). STS – the end of a long march, maybe the start of a new dawn. PCS newsletter. 26 October 2017.
- Bell, I. (2020), with input from Batchvarov, A., Linden, A., Ormezzano, V., and Gandy, S. Relaunching securitisation in the EU. Eurofi Policy Note. April 2020.
- Streitz, D. and Wedow, M. (2015). Real effects of securitisation. BAFFI CAREFIN Centre Research Paper Series No. 2015-14. June 2015.
- Berger, A. N. and Udell, G. F. (2006). A more complete conceptual framework for SME finance. *Journal of Banking & Finance*, 30(11), pp. 2945-2966.
- Bertoni, F. and Colombo, M. G. and Quas, A. (2018). The effects of EU-funded guarantee instruments on the performance of Small and Medium Enterprises: Evidence from France. EIF Working Paper 2018/52, EIF Research & Market Analysis. November 2018.
http://www.eif.org/news_centre/publications/EIF_Working_Paper_2019_52.htm
- Bertoni, F. Brault, J. and Colombo, M. G. and Quas, A. and (2019). Econometric study on the impact of EU loan guarantee financial instruments on growth and jobs of SMEs. EIF Working Paper 2019/54, EIF Research & Market Analysis. February 2019.
http://www.eif.org/news_centre/publications/EIF_Working_Paper_2019_54.htm
- BIS (2019). Innovation in finance, finance for innovation. EIB Annual Economic Conference, Luxembourg, 27 November 2019.
- BoA/Merrill Lynch (2018). European SF weekly: Smooth disruption? Bank of America/Merrill Lynch, 05 October 2018.
- Borjas G.J. (1995). "The economic benefits from immigration", *Journal of Economic Perspectives*, 9 (2), 3 22.
- Borjas G.J. (1999). "Heaven's door: immigration policy and the American economy", Princeton University Press.
- Borjas G.J. (2017). "The Earnings of Undocumented Immigrants", NBER Working Paper No. 23236.
- Botsari, A., Crisanti, A. and Lang, F. (2019). EIF VC Survey 2019: fund managers' market sentiment and policy recommendations. EIF Working Paper 2019/59, EIF Research & Market Analysis.
https://www.eif.org/news_centre/publications/EIF_Working_Paper_2019_59.pdf.
- Brander, J.A., Du, Q. and Hellmann, T.F. (2010). The effects of government-sponsored venture capital: International evidence. Working Paper 16521, National Bureau of Economic Research.
- Brault, J. and Signore, S. (2020). Credit Guarantees in the COVID-19 crisis – Relevance and Economic Impact. SUERF Policy Note No 176. June 2020.
- Brault, J. and Signore, S. (2019). The real effects of EU loan guarantee schemes for SMEs: A pan-European assessment. EIF Working Paper 2019/56, EIF Research & Market Analysis. June 2019.
http://www.eif.org/news_centre/publications/EIF_Working_Paper_2019_56.htm
- Brown, T. (2020). Villain of the last crisis, hero of this one. GlobalCapital, 06 May 2020.
- Bruhn-Leon, B., Eriksson, P.-E. and Kraemer-Eis, H. (2012). Progress for microfinance in Europe. EIF Research & Market Analysis. Working Paper 2012/013. January 2012.
http://www.eif.org/news_centre/research/index.htm.
- Carroll, J. and McCann, F. (2016). Understanding SME interest rate variation across Europe. Quarterly Bulletin Articles, pp. 60-76.
- CCAF (2020). The global alternative finance market benchmarking report: trends, opportunities and challenges for lending, equity and non-investment alternative finance models. Cambridge Centre for Alternative Finance, April 2020.
- Chatzouz, M., Gereben, A., Lang, F. and Torfs, W. (2017). Credit Guarantee Schemes for SME lending in Western Europe. EIB Working Paper 2017/02 and EIF Working Paper 2017/42.
https://www.eif.org/news_centre/publications/EIF_Working_Paper_2017_42.htm.
- Crisanti, A., Krantz, J. and Pavlova, E. (2019). The VC factor: Data driven insights about VC-backed start-ups in Europe. Joint EIF – Invest Europe study. First online 5 December 2019.

- Crowdsourcingweek (2020). The Coronavirus Impact on UK Crowdfunding. <https://crowdsourcingweek.com/blog/the-coronavirus-impact-on-uk-crowdfunding/>
- De Lange, T. (2018). Welcoming talent? A comparative study of immigrant entrepreneurs' entry policies in France, Germany and the Netherlands. *Comparative Migration Studies*. <https://doi.org/10.1186/s40878-018-0092-4>
- Dealroom and Sifted (2020). What does it take? Europe's startup ecosystem navigating the COVID-19 crisis. <https://europeanstartups.co/>
- Denton, F.T. (1971). Adjustment of Monthly or Quarterly Series to Annual Totals: An Approach Based on Quadratic Minimization. *Journal of the American Statistical Association*, 66, 99–102.
- EBA (2018). EBA report on the European Secured Notes (ESNs). 24 July 2018.
- EBA (2020a). Report on STS Framework for synthetic securitization under Article 45 of Regulation (EU) 2017/2402. EBA/OP/2020/07. 06 May 2020.
- EBA (2020b). COVID-19 is placing unprecedented challenges on EU banks. 25 May 2020.
- ECB (2020). Survey on the access to finance of enterprises in the Euro area. October 2020 to March 2020. May 2020.
- ECB (2020, 12 March). ECB announces measures to support bank liquidity conditions and money market activity. ECB Press Release.
- ECB (2020, 18 March). ECB announces €750 billion Pandemic Emergency Purchase Programme (PEPP). ECB Press Release.
- ECB (2020, 30 April). ECB announces new pandemic emergency longer-term refinancing operations. ECB Press Release.
- ECB (2020, 30 April). ECB recalibrates targeted lending operations to further support real economy. ECB Press Release.
- ECB (2020, 4 June) ECB Monetary policy decisions. ECB Press Release.
- EIF (2020). Investors' sentiment survey. June 2020. <https://www.eif.org/attachments/eif-investors-sentiment-survey-june2020.pdf>.
- EMN (2012). Bendig, M., Unterberg, M. and Sarpong, B. (2012). Overview of the Microcredit Sector in the European Union 2010-2011. *European Microfinance Network (EMN)*. 27.12.2012.
- EMN (2017). Assessing the European market potential of business microcredit and the associated funding needs of non-bank MFIs. February 2017.
- EMN (2018). Assessing the European market potential of business microcredit and the associated funding needs of non-bank MFIs. February 2018.
- EMN-MFC (2016). *Microfinance in Europe: A Survey of EMN-MFC Members*. Report 2014-2015. 2016.
- EMN-MFC (2018). *Microfinance in Europe: Survey Report 2016-2017*. December 2018.
- EMN-MFC (2021). *Microfinance in Europe: Survey Report 2018-2019*. Forthcoming.
- Euler Hermes (2020). Euler Hermes insolvency forecasts by country. July 2020.
- Euractiv (2020). Commission explores EU-wide crowdfunding project to finance recovery. <https://www.euractiv.com/section/banking-union/news/commission-explores-eu-wide-crowdfunding-project-to-finance-recovery/>.
- European Commission (2011). Social Business Initiative, COM/2011/0682.
- European Commission (2019). Annual Report on European SMEs 2017/2018 – Research & Development and Innovation by SMEs. November 2019.
- European Commission (2020a). Summer 2020 Interim Economic Forecast. A deeper recession with wider divergence. Economic and Financial Affairs. Institutional Paper 132.
- European Commission (2020b). Spring 2020 Economic Forecast. A deep and uneven recession, an uncertain recovery. Economic and Financial Affairs. Institutional Paper 125.
- European Commission (2020c) Timeline of EU Action. https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/timeline-eu-action_en

- European Commission (2020d). European Economic Forecast, Winter 2020 (Interim). Institutional paper 121, February 2020.
- European Commission (2020e). President von der Leyen on the EU's response to COVID-19. STATEMENT/20/368. https://ec.europa.eu/commission/presscorner/detail/en/statement_20_368_on_10/06/2020.
- European Commission (2020f). Coronavirus response: making capital markets work for Europe's recovery. 24 July 2020.
- European Commission (2020g). Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) 2017/2402 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation to help the recovery from the COVID-19 pandemic. COM(2020) 282 final, Brussels 24 July 2020.
- European Council (2020). Position of the Council at first reading with a view to the adoption of a regulation of the European Parliament and of the Council on European crowdfunding service providers for business, and amending Regulation (EU) 2017/1129 and Directive (EU) 2019/1937. Interinstitutional File: 2018/0048 (COD).
- European Council (2020, 21 July). Conclusions on the recovery plan and multiannual financial framework for 2021-2027. European Council Press Release.
- European Economic and Social Committee, EESC (2017). "Assessment of the effectiveness of the EU SME policies 2007-2015".
- Eurostat (2020, June 9). GDP main aggregates and employment estimates for first quarter 2020. Newsrelease Euroindicators, 91/2020.
- fi-compass (2020). Gap analysis for small and medium-sized enterprises financing in the European Union. Final Report. December 2019. <https://www.fi-compass.eu/sites/default/files/publications/Gap%20analysis%20for%20small%20and%20medium-sized%20enterprises%20financing%20in%20the%20European%20Union.pdf>.
- Finextra (2020). COVID-19 hits challenger banks as app downloads slide.
- FitchRatings (2019). Structured Finance Losses: EMEA 2000 – 2018 Issuance. Special Report. 13 May 2019.
- FitchRatings (2020). SME CLO Compare. May 2020.
- GEM (2019). 2018/2019 Global Report. Global entrepreneurship monitor.
- Gompers, P. A. and Lerner, J. (1999). What drives venture capital fundraising? (No. w6906). National bureau of economic research.
- Gopinath, G. (2020). Limiting the economic fallout of the coronavirus with large targeted policies. Vox.eu.
- Grazioli, R., Pizzo, G., Poletti, L., Tagliavini, G. and Timpano, F. (2020) The social return on investment (SROI) of four microfinance projects. EIF Working Paper 2020/65, EIF Research & Market Analysis. https://www.eif.org/news_centre/publications/EIF_Working_Paper_2020_65.htm.
- Guerini, M. and Quas, A. (2016). Governmental venture capital in Europe: Screening and certification. *Journal of Business Venturing*, vol. 31, no. 2, pp. 175–195.
- Hale, T., Angrist, N., Kira, B., Petherick, A. Phillips, T. and Webster, S. (2020) Variation in government responses to COVID-19, BSG-WP-2020/032. May 2020. BSG Working Paper Series.
- Hepburn, C., O'Callaghan, B., Stern, N., Stiglitz, J. and Zenghelis, D. (2020). Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change? Forthcoming in the *Oxford Review of Economic Policy* 36(S1). 4 May 2020.
- HLF (2020). A new vision for Europe's capital markets. Final report of the High Level Forum on the Capital Markets Union. 10 June 2020.
- Holmstrom, B. and Tirole, J. (1997). Financial intermediation, loanable funds and the real sector. *The Quarterly Journal of Economics*, 112 (3), 663–691.
- Honohan, P. (2010). Partial credit guarantees: Principles and practice. *Journal of Financial Stability*, 6, 1–9.

- Huerga, J., Puigvert, J. and Rodriguez C., (2012). Enhancements on ECB MFI interest rate statistics. In: OECD – The statistics newsletter. Issue No. 55. March 2012.
- IHS Markit (2020a). Eurozone businesses report strongest growth for two years in July. IHS Markit Flash Eurozone PMI®.
- IHS Markit (2020b). Eurozone productivity declines moderate in June. IHS Markit Eurozone Productivity PMI®.
- IMF (2012). Global Financial Stability Report. April 2012.
- IMF (2020a). World Economic Outlook, June 2020: A crisis like no other, an uncertain recovery. IMF World Economic Outlook Reports.
- IMF (2020b) Policy Responses to COVID-19, Policy Tracker. <https://www.imf.org/en/Topics/imf-and-COVID19/Policy-Responses-to-COVID-19>
- Invest Europe (2020). Investing in Europe: Private Equity activity 2019. <https://www.investeurope.eu/research/data-and-insight/>
- Jaffee, D. and Russell, T. (1976). Imperfect information, uncertainty, and credit rationing. *The Quarterly Journal of Economics*, 90 (4), 651–666.
- Kara, A., Marques-Ibanez, D. and Ongena, S. (2015). Securitization lending standards: evidence from the European wholesale loan market. International Finance Discussion Papers 1141. August 2015.
- Kaya, O. (2014). SME financing in the Euro area. New solutions to an old problem. EU Monitor – Global Financial Markets. Deutsche Bank Research. 14 October 2014.
- Kaya, O. and Masetti, O. (2018). Small- and medium-sized enterprise financing and securitisation: firm level evidence from the Euro area. In *Economic inquiry*, June 2018.
- Kirkegaard, J.F. (2020). The European policy response to the COVID-19 pandemic. Briefing before the US House Foreign Affairs Europe, Eurasia, Energy & Environment Subcommittee, July 13th. 2020
- KPMG (2020). Pulse of Fintech H2'19 – Europe. February 2020. KPMG Report.
- Kraemer-Eis, and Lang, F. (2014). Guidelines for SME Access to Finance Market Assessments (GAFMA). EIF Working Paper 2014/22, EIF Research & Market Analysis. https://www.eif.org/news_centre/publications/EIF_Working_Paper_2014_22.htm.
- Kraemer-Eis, H. and Conforti, A. (2009). Microfinance in Europe. A market overview. EIF Working Paper 2009/001. http://www.eif.org/news_centre/research/index.htm.
- Kraemer-Eis, H. and Lang, F. (2012). The importance of leasing for SME finance. EIF Working Paper 2012/15. August 2012. http://www.eif.org/news_centre/research/index.htm.
- Kraemer-Eis, H. and Lang, F. (2014). The importance of leasing for SME financing. In *World Leasing Yearbook 2014*. Euromoney. January 2014. http://www.eif.org/news_centre/research/index.htm.
- Kraemer-Eis, H., Botsari, A., Brault, J. and Lang, F. (2019). EIF Business Angels' Survey 2019: Market sentiment, public intervention and EIF's value added. EIF Working Paper 2019/60, EIF Research & Market Analysis. https://www.eif.org/news_centre/publications/EIF_Working_Paper_2019_60.pdf.
- Kraemer-Eis, H., Botsari, A., Gvetadze, S. and Lang, F. (2018). EIF VC survey 2018 – fund managers' perception of EIF's value added. EIF Working Paper 2018/51, EIF Research & Market Analysis. https://www.eif.org/news_centre/publications/EIF_Working_Paper_2018_51.htm.
- Kraemer-Eis, H., Botsari, A., Gvetadze, S. and Lang, F. (2019). European Small Business Finance Outlook. EIF Working Paper 2019/61, EIF Research & Market Analysis. https://www.eif.org/news_centre/publications/EIF_Working_Paper_2019_61.htm.
- Kraemer-Eis, H., Botsari, A., Gvetadze, S., Lang, F. and Torfs, W. (2017). European Small Business Finance Outlook. EIF Working Paper 2017/46. EIF Research & Market Analysis. December 2017. https://www.eif.org/news_centre/publications/EIF_Working_Paper_2017_46.htm.
- Kraemer-Eis, H., Botsari, A., Lang, F., Pal, K., Pavlova, E., Signore, S. and Torfs, W. (2020). The market sentiment in European Private Equity and Venture Capital markets: Impact of COVID-19. EIF Working Paper 2020/064. July 2020. http://www.eif.org/news_centre/research/index.htm.
- Kraemer-Eis, H., Gvetadze, S., Lang, F. and Torfs, W. (2016). European Small Business Finance Outlook. EIF Working Paper 2016/37. EIF Research & Market Analysis. December 2016. https://www.eif.org/news_centre/publications/EIF_Working_Paper_2016_37.htm.

- Kraemer-Eis, H., Passaris, G. and Tappi, A. (2013). SME loan securitisation 2.0 – Market assessment and policy options. EIF Working Paper 2013/019. October 2013. http://www.eif.org/news_centre/research/index.htm.
- Kraemer-Eis, H., Passaris, G. Tappi, A., and Inglisa, G. (2015). SME Securitisation – at a crossroads? EIF Working Paper 2013/031. December 2015. http://www.eif.org/news_centre/research/index.htm.
- Kraemer-Eis, H., Schaber, M. and Tappi, A. (2010). SME loan securitisation. An important tool to support European SME lending. EIF Working Paper 2010/007. October 2010. http://www.eif.org/news_centre/research/index.htm.
- Kraemer-Eis, H., Signore, S. and Prencipe, D. (2016). The European venture capital landscape: an EIF perspective. Volume I: The impact of EIF on the VC ecosystem. EIF Working Paper 2016/34, EIF Research & Market Analysis. http://www.eif.org/news_centre/publications/eif_wp_34.pdf.
- Lagarde, C. (2019). The Euro area: creating a stronger economic ecosystem. SUERF Policy Note. Issue No 63, April 2019.
- Lewin, A. (2020). What’s happened to the angels? Sifted. <https://sifted.eu/articles/angel-investing-startups-europe-COVID/>.
- Lin, M., Sias, R., & Wei, Z. (2015). Institutional Investors in Online Crowdfunding. Working Paper.
- Loayza, N. V., Sanghi, A., Shaharuddin, N., and Wuester, L. (2020). Recovery from the pandemic crisis: balancing short-term and long-term concerns. Research & Policy Briefs No. 38. World Bank Group. 7 September 2020.
- Mason, C. (2020). The Coronavirus economic crisis: its impact on venture capital and high growth companies. Joint Research Center, European Commission. Brussels. 30 April 2020.
- Maurin, L. and Pal, R. (2020) EU firms in the post-COVID-19 environment: Investment-debt trade-offs and the optimal sequencing of policy responses. Internal EIB Note.
- Mersch, Y. (2017). Securitisation revisited. Keynote speech at the Euro Finance Week, 16 November 2017.
- MFC (2017). Digitalizing Microfinance in Europe. MFC Research Paper. December 2017.
- Mohammadi, A. and Shafi, K. (2017). How Wise Are Crowd? A Comparative Study of Crowd and Institutions in Peer-to-Business Online Lending Markets (No. 450). Royal Institute of Technology, CESIS-Centre of Excellence for Science and Innovation Studies.
- Moody’s (2017). Securitisation is a relevant source of funding for the European economy. Sector in-depth, Securitisation – Europe. 25 September 2017.
- Moody’s (2018). SME & Mid-Cap Focus. May 2018.
- Moody’s (2019). Impairment and loss rates EMEA structured finance securities: 1993-2018. 16 May 2019.
- Moody’s (2020a). SME loan and lease ABS - Europe: Performance Update January 2020. 18 March 2020.
- Moody’s (2020b). SME ABS Europe. Sector update – Q1 2020: Coronavirus fallout will challenge SME ABS asset quality. 14 May 2020.
- Moody’s (2020c). SME ABS Europe: Coronavirus-related loan guarantee schemes increase SME liquidity, but divergence of terms hampers comparison. 23 June 2020.
- Moody’s (2020d). SME ABS Europe. Sector update – Q2 2020: loan guarantee schemes and payment moratoria support short-term performance. 20 August 2020.
- Nextfin (2020). Is coronavirus having an impact on equity crowdfunding? <https://nextfin.uk/blog/is-coronavirus-having-an-impact-on-equity-crowdfunding>.
- OECD (2006). The SME financing gap. Vol. 1. Theory and evidence.
- OECD (2013). SME and entrepreneurship financing: The role of Credit Guarantee Schemes and Mutual Guarantee Societies in supporting finance for small and medium-sized enterprises. Final report. CFE/SME(2012)1/FINAL. Unclassified. 30.01.2013.
- OECD (2015). New approaches to SME and entrepreneurship financing: Broadening the range of instruments.

- OECD (2017). International Migration Outlook 2017.
- OECD (2018). Financing SMEs and entrepreneurs 2018. An OECD Scoreboard, OECD Publishing, Paris.
- OECD (2019). The Missing Entrepreneurs 2019: Policies for inclusive entrepreneurship. 2019.
- OECD (2020). Coronavirus (COVID-19): SME policy responses. OECD Report.
- OECD/ European Commission (2014). The Missing Entrepreneurs: Policies for inclusive entrepreneurship in Europe. 2014.
- Pavlova, E. and Signore, S. (2019). The European venture capital landscape: an EIF perspective. Volume V: The economic impact of VC investments supported by the EIF. EIF Working Paper 019/55, EIF Research & Market Analysis.
https://www.eif.org/news_centre/publications/EIF_Working_Paper_2019_55.pdf.
- PCS (2018a). Response to the consultation on the LCR Rules. 21 February 2018.
- PCS (2018b). PCS starts to provide analysis for market participants in first step to the market's transition to the new STS Regime. Press Release. 22 February 2018.
- Pitchbook (2020). COVID-19's Influence on the European VC Market. How the pandemic will affect the dynamic between startups, GPs and LPs. 17 April 2020.
- Prencipe, D. (2017). The European venture capital landscape: an EIF perspective. Volume III: Liquidity events and returns of EIF-backed VC investments. EIF Working Paper 2017/41, EIF Research & Market Analysis. https://www.eif.org/news_centre/publications/eif_wp_41.pdf.
- PwC (2012). IPO Watch Europe 2012.
- Raebel, R. (2019). ABS & Structured Credit. Asset Backed Watcher. DZ Bank. 06 June 2019.
- Raebel, R. (2020). ABS & Structured Credits. ABSPP 1Q2020. 18 May 2020.
- Ryan, R., O'Toole, C. and McCann, F. (2014). Does bank market power affect SME financing constraints? *Journal of Banking & Finance*, 49, 495–505.
- S&P (2019a). 2018 annual global structured finance default study and rating transitions. S&P Global Ratings. 28 March 2019.
- S&P (2019b). Understanding the role of European Secured Notes in funding SME and infrastructure lending. S&P Global Ratings. 21 May 2019.
- Sahut, J.M. and Braune, E. (2015). Venture Capital in Europe. In Kent Baker, H., Filbeck, G. and Kiyamaz, H., editors, *Private Equity: Opportunities and Risks*, p. 49. New York: Oxford University Press, 2015.
- Schich, S., Cariboni, J., Naszodi, A. and Maccaferri, S. (2017). Evaluating publicly supported Credit Guarantee Programmes for SMEs: Literature review and synthesis of responses to an OECD/EC survey. OECD Financial Market Trends.
- SEE (2020). Report impact of COVID-19 on Social Economy Enterprises.
- Signore, S. (2016). The European venture capital landscape: an EIF perspective. Volume II: Growth patterns of EIF-backed startups. EIF Working Paper 2016/38, EIF Research & Market Analysis. https://www.eif.org/news_centre/publications/EIF_Working_Paper_2016_38.htm.
- Signore, S. and Torfs, W. (2017). The European venture capital landscape: an EIF perspective. Volume IV: The value of innovation for EIF backed startups. EIF Working Paper 2017/45, EIF Research & Market Analysis. https://www.eif.org/news_centre/publications/EIF_Working_Paper_2017_45.htm.
- Sims, C. A. (1980). Macroeconomics and reality. *Econometrica: journal of the Econometric Society*, 1-48.
- SMEUnited (2020a). The economic impact of COVID-19 on SMEs in Europe. SME United Report.
- SMEUnited. (2020b). The EU Craft and SME Barometer – Spring 2019.
- Stiglitz, J. and Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American Economic Review*, 71 (3), 393–410.
- Stock, J. H. and Watson, M. W. (1996). Evidence on structural instability in macroeconomic time series relations. *Journal of Business & Economic Statistics*, 14(1), 11-30.
- TechCrunch (2020). Crowd-lending platform October hits pause on loan repayments. <https://techcrunch.com/2020/03/20/crowd-lending-platform-october-hits-pause-on-loan-repayments/>

- Torfs, W. (2020). EIF SME Access to Finance Index – September 2020 update. EIF Working Paper 2020/68. EIF Research & Market Analysis.
- Torfs, W. and Lupoli, M. (2017). Guaranteeing Social Enterprises– The EaSI way. Working Paper 2017/39. F
- Wagenvoort, R. J., Ebner, A., & Borys, M. M. (2011). A factor analysis approach to measuring European loan and bond market integration. *Journal of Banking & Finance*, 35(4), pp. 1011-1025.
- World Bank (2018). Toolkit for impact evaluation of public Credit Guarantee Schemes for SMEs. World Bank Group, Washington, D.C.
- Zetsche, D. A. and Dewi, T. R. (2018). The Paradoxical Case Against Interest Rate Caps for Microfinance – And: How FinTech and RegTech Resolve the Dilemma. SSRN, (December).

About ...

... the European Investment Fund

The European Investment Fund (EIF) is Europe's leading risk finance provider for small and medium sized enterprises (SMEs) and mid-caps, with a central mission to facilitate their access to finance. As part of the European Investment Bank (EIB) Group, the EIF designs, promotes and implements equity and debt financial instruments which specifically target the needs of these market segments.

In this role, EIF fosters EU objectives in support of innovation, research and development, entrepreneurship, growth, and employment. The EIF manages resources on behalf of the EIB, the European Commission, national and regional authorities and other third parties. EIF support to enterprises is provided through a wide range of selected financial intermediaries across Europe. The EIF is a public-private partnership whose tripartite shareholding structure includes the EIB, the European Union represented by the European Commission and various public and private financial institutions from European Union Member States and Turkey. For further information, please visit www.eif.org.

... EIF's Research & Market Analysis

Research & Market Analysis (RMA) supports the EIF's strategic decision-making, product development and mandate management processes through applied research and market analyses. RMA works as internal advisor, participates in international fora and maintains liaison with many organisations and institutions.

... this Working Paper series

The EIF Working Papers are designed to make available to a wider readership selected topics and studies in relation to the EIF's business. The Working Papers are edited by the EIF's Research & Market Analysis and are typically authored or co-authored by EIF staff, or written in cooperation with EIF. The Working Papers are usually available only in English and distributed in electronic form (pdf).

EIF Working Papers

- 2009/001 *Microfinance in Europe – A market overview.*
November 2009.
- 2009/002 *Financing Technology Transfer.*
December 2009.
- 2010/003 *Private Equity Market in Europe – Rise of a new cycle or tail of the recession?*
February 2010.
- 2010/004 *Private Equity and Venture Capital Indicators – A research of EU27 Private Equity and Venture Capital Markets.* April 2010.
- 2010/005 *Private Equity Market Outlook.*
May 2010.
- 2010/006 *Drivers of Private Equity Investment activity. Are Buyout and Venture investors really so different?* August 2010
- 2010/007 *SME Loan Securitisation – an important tool to support European SME lending.*
October 2010.
- 2010/008 *Impact of Legislation on Credit Risk – How different are the U.K. and Germany?*
November 2010.
- 2011/009 *The performance and prospects of European Venture Capital.*
May 2011.
- 2011/010 *European Small Business Finance Outlook.*
June 2011.
- 2011/011 *Business Angels in Germany. EIF's initiative to support the non-institutional financing market.* November 2011.
- 2011/012 *European Small Business Finance Outlook 2/2011.*
December 2011.
- 2012/013 *Progress for microfinance in Europe.*
January 2012.
- 2012/014 *European Small Business Finance Outlook.*
May 2012.
- 2012/015 *The importance of leasing for SME finance.*
August 2012.
- 2012/016 *European Small Business Finance Outlook.*
December 2012.
- 2013/017 *Forecasting distress in European SME portfolios.*
May 2013.
- 2013/018 *European Small Business Finance Outlook.*
June 2013.

- 2013/019 *SME loan securitisation 2.0 – Market assessment and policy options.*
October 2013.
- 2013/020 *European Small Business Finance Outlook.*
December 2013.
- 2014/021 *Financing the mobility of students in European higher education.*
January 2014.
- 2014/022 *Guidelines for SME Access to Finance Market Assessments.*
April 2014.
- 2014/023 *Pricing Default Risk: the Good, the Bad, and the Anomaly.*
June 2014.
- 2014/024 *European Small Business Finance Outlook.*
June 2014.
- 2014/025 *Institutional non-bank lending and the role of debt funds.*
October 2014.
- 2014/026 *European Small Business Finance Outlook.*
December 2014.
- 2015/027 *Bridging the university funding gap: determinants and consequences of university seed funds and proof-of-concept Programs in Europe.*
May 2015.
- 2015/028 *European Small Business Finance Outlook.*
June 2015.
- 2015/029 *The Economic Impact of EU Guarantees on Credit to SMEs - Evidence from CESEE Countries.* July 2015.
- 2015/030 *Financing patterns of European SMEs: An Empirical Taxonomy*
November 2015
- 2015/031 *SME Securitisation – at a crossroads?*
December 2015.
- 2015/032 *European Small Business Finance Outlook.*
December 2015.
- 2016/033 *Evaluating the impact of European microfinance. The foundations.*
January 2016
- 2016/034 *The European Venture Capital Landscape: an EIF perspective.*
Volume I: the impact of EIF on the VC ecosystem. June 2016.
- 2016/035 *European Small Business Finance Outlook.*
June 2016.
- 2016/036 *The role of cooperative banks and smaller institutions for the financing of SMEs and small midcaps in Europe.* July 2016.
- 2016/037 *European Small Business Finance Outlook.*
December 2016.
- 2016/038 *The European Venture Capital Landscape: an EIF perspective. Volume II: Growth patterns of EIF-backed startups.* December 2016.

- 2017/039 *Guaranteeing Social Enterprises – The EaSI way.*
February 2017.
- 2017/040 *Financing Patterns of European SMEs Revisited: An Updated Empirical Taxonomy and Determinants of SME Financing Clusters.* March 2017.
- 2017/041 *The European Venture Capital landscape: an EIF perspective. Volume III: Liquidity events and returns of EIF-backed VC investments.* April 2017.
- 2017/042 *Credit Guarantee Schemes for SME lending in Western Europe.*
June 2017.
- 2017/043 *European Small Business Finance Outlook.*
June 2017.
- 2017/044 *Financing Micro Firms in Europe: An Empirical Analysis.*
September 2017.
- 2017/045 *The European venture capital landscape: an EIF perspective.*
Volume IV: The value of innovation for EIF-backed startups. December 2017.
- 2017/046 *European Small Business Finance Outlook.*
December 2017.
- 2018/047 *EIF SME Access to Finance Index.*
January 2018.
- 2018/048 *EIF VC Survey 2018 – Fund managers’ market sentiment and views on public intervention.* April 2018.
- 2018/049 *EIF SME Access to Finance Index – June 2018 update.*
June 2018.
- 2018/050 *European Small Business Finance Outlook.*
June 2018.
- 2018/051 *EIF VC Survey 2018 - Fund managers’ perception of EIF’s Value Added.*
September 2018.
- 2018/052 *The effects of EU-funded guarantee instruments of the performance of Small and Medium Enterprises - Evidence from France.* December 2018.
- 2018/053 *European Small Business Finance Outlook.*
December 2018.
- 2019/054 *Econometric study on the impact of EU loan guarantee financial instruments on growth and jobs of SMEs.* February 2019.
- 2019/055 *The European Venture Capital Landscape: an EIF perspective. Volume V: The economic impact of VC investments supported by the EIF.* April 2019.
- 2019/056 *The real effects of EU loan guarantee schemes for SMEs: A pan-European assessment.*
June 2019
- 2019/057 *European Small Business Finance Outlook.*
June 2019.
- 2019/058 *EIF SME Access to Finance Index – June 2019 update.*
July 2019.
- 2019/059 *EIF VC Survey 2019 - Fund managers’ market sentiment and policy recommendations.*
September 2019.
- 2019/060 *EIF Business Angels Survey 2019 - Market sentiment, public intervention and EIF’s value*

- added. November 2019.
- 2019/061 *European Small Business Finance Outlook.*
December 2019.
- 2020/062 *The Business Angel portfolio under the European Angels Fund: An empirical analysis.*
January 2020.
- 2020/063 *ESG considerations in Venture Capital and Business Angel investment decisions:
Evidence from two pan-European surveys.* June 2020.
- 2020/064 *The market sentiment in European Private Equity and Venture Capital: Impact of
COVID-19.* July 2020.
- 2020/065 *The social return on investment (SROI) of four microfinance projects.*
August 2020.
- 2020/066 *Measuring microfinance impact: A practitioner perspective and working methodology*
August 2020.
- 2020/067 *European Small Business Finance Outlook 2020. The impact of COVID-19 on SME
Financing markets.* September 2020.

