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## European Small Business Finance Outlook: June 2019

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# European Small Business Finance Outlook

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## Executive summary<sup>1</sup>

This European Small Business Finance Outlook (ESBFO) provides an overview of the main markets relevant to EIF (equity, guarantees, securitisation, microfinance)<sup>2</sup>. It is an update of the June 2018 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 business environment:*

- Global economic growth has slumped significantly during the second half of 2018 and the IMF revised global growth forecasts for 2019 downwards from 3.7% to 3.3%.
- Also the EU is facing new economic challenges, rooted in external factors, such as the ongoing US-China trade dispute which has negatively affected external demand for EU goods from emerging Asia; or the uncertainty of a potential no-deal Brexit which continues to weigh on EU firms' investment decisions.
- Reduced inflation forecasts decrease the likelihood that the ECB will reverse course on its current monetary policy. Key interest rates are expected to remain at their current levels for the foreseeable future.
- This continues to result in low borrowing costs for SMEs, although large country-level differences within the EU persist.
- The low cost of borrowing has led NFCs in the Euro area to increase leverage, as outstanding loans continued to increase between October 2018 and April 2019.
- The ECB's bank lending survey shows that banks report the Euro area SME financing gap to have grown in all but 5 countries.
- One in four SMEs still report severe difficulties in accessing finance. This points to significant structural credit market failures which prevents market supply from satisfying SMEs' financing demands.
- Insufficient public support for external financing markets continues to worry European SMEs.

### *Private equity:*

- Over the past 20 years, the European PE 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

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<sup>1</sup> 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 Francesco Battazzi, Alicia Boudeau, Julien Brault, Georgiana Buturoiu, Andrea Crisanti, Stephanie Descoubés, Per-Erik Eriksson, Gerard Escriba, Oscar Farres, Lauren Fradgley, Giovanni Inglisa, Carsten Just, Kristian Pal, Simone Signore, Arnaud Vanbellinghen, Virginie Varga and Will Vizard. We would also like to thank colleagues from AECM, AFME, ECB, EMN, Euler Hermes, GEM, the Invest Europe research team, the UEAPME (now SMEunited) study unit for their support. All errors are of the authors.

<sup>2</sup> 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).

financial and economic crisis from 2007 onwards. The severe crash of the European PE activity in 2008-2009 was followed by a rebound, and fundraising and investment have almost reached new record levels.

- In 2018, the PE investments in portfolio companies based in Europe increased by 7% to EUR 80.6bn. This development was mainly driven by a surge in investments in the buyout segment (+10% to EUR 58.8bn) of the PE market, but a modest increase was also recorded for growth capital (+0.4% to EUR 11.9bn). Venture capital (VC) investments, which are of particular importance for the financing of young innovative companies with high growth potential, jumped by 13% to EUR 8.2bn. Results from the *EIF VC Survey* indicate an ongoing high market activity. Business Angel investments provided additional equity capital for ventures.
- Total amounts raised by PE funds in Europe increased by 1% to EUR 97.3bn in 2018. At the same time, VC fundraising increased by 11% to EUR 11.4bn, which constitutes the third record year in a row. During and after the crisis, the European VC ecosystem benefitted substantially from market-stabilising public intervention. Since 2012, a normalisation set in, although public support still plays an important role for further market development.
- In 2018, the exit market for PE-backed enterprises suffered a sharp setback, which followed on several remarkably strong years. The decrease in the total PE divestment amount (–28% to EUR 31.9bn) was mainly due to substantially lower activity in the buyout (–34% to EUR 22.4bn) segment of the market, but also divestments in the venture (– 5% to EUR 2.0bn) and growth (–15% to EUR 5.8bn) capital segments decreased.
- According to the *EIF VC Survey 2019*, European fund managers stated the exit environment, fundraising, high investee company valuations and the number of high quality entrepreneurs to be the biggest challenges in the VC business.

#### *SME guarantees:*

- Credit guarantees “remain the most wide-spread instrument in use across countries” to ease SMEs’ access to finance (OECD, 2018b), and are particularly relevant “in those countries where a network of local or sectoral guarantee institutions is well established” (OECD, 2013).
- 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, Italy and Portugal have the largest markets.
- In the full-year 2018, despite a significant heterogeneity across countries, AECM members report on average a decrease in outstanding guarantees in portfolio and in new guarantee issuance in particular. However, this trend is largely driven by a significant decrease in the guarantee activity of one Turkish AECM member.
- Indeed, following an unprecedented increase in its 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 2018, the growth in newly-granted guarantees was particularly strong in Greece, Luxembourg and Bosnia-Herzegovina. By contrast, new guarantee activity decreased the most in Turkey, Ireland and Slovenia.

### *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 2018, Euro area SMEs state that the availability of leasing or hire-purchase has improved the most compared to other external financing sources, but SMEs still signal an increased need for it.
- 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 SMESec market in Europe is underdeveloped and still suffering from after-effects of the crisis, but enhancing. Strengthening this market is an effective way to facilitate the flow of funds to the real economy, while not creating distortion.
- In terms of new issuances the SMESec market improved in 2018. The visible issued volume of SME deals<sup>3</sup> in 2018 was - based on a strong Q4 - EUR 29.5bn (compared to EUR 14.9bn in 2017), representing 11% of the overall securitisation issuance in Europe. For Q1/2019 no new SMESec activity has been reported. By country, most of the activity happened in Belgium (EUR 9.4bn, 33%), Italy (EUR 8.5bn, 29%) and Spain (EUR 7.8bn, 27%). The retention rate remained high (92.2% in 2018).
- Despite the financial and sovereign crisis, the European securitisation market has performed well, with the SME segment showing low default rates. Downside potential stems mainly from political event risk that might lead to further economic deterioration.
- 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 - 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 01.01.2019.
- The new framework poses challenges to market participants but has the potential to significantly support the revival of the market in Europe. However, such revival depends not only on the regulatory framework, but also on the market conditions. Continued pressure on banks to manage capital efficiently drives demand for synthetic transactions. A move towards normalisation of monetary policy would be necessary to increase the appetite for funded transactions.

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<sup>3</sup> 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).

### *Microfinance and inclusive finance:*

- Microenterprises and social enterprises are important contributors to employment and social value, especially in countries with high unemployment rates.
- According to the data from the latest ECB SAFE survey, microenterprises have perceived a slight decrease in the external financing gap indicator. However, the share of enterprises which see access to finance as their most important problem 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.
- Customers, as they get rejected by or discouraged from banks, often apply for a 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 requirements. MFIs offer their clients more personal, tailor-made and simple products; MFIs “know their customers”.
- Digitalisation of microfinance operations is efficient for both lenders and borrowers, yet suppliers are only partially digitalised and poor customers often have no access to digital payments.
- 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.
- MFIs, especially non-bank MFIs, face challenges in securing funding to support growth. They also are in need of additional investment in technologies in order to stay competitive with Fintechs.

### *Fintechs:*

- The global Fintech market continued to grow at an exponential pace during 2018, but the European market did not follow course.
- The British Isles received the lion share (60%) of the market’s growth in the second half of 2018, thereby further consolidating their dominance in the European Fintech sector.
- The crowdfunding market begins to show signs of maturity, since after several years of exponential 3-digit growth figures, total business transaction volume sourced on CF platform grew by 47% between 2016 and 2017 (most recent data available), halving the growth rate that materialised one year earlier.
- With the decline of reward-based CF platforms, the market further professionalises. In addition, debt-based CF platforms continue to gain importance over equity business models.
- 2017 was the year of the retail investor, as institutional involvement in the CF market declined strongly, an evolution observed for all platform types. Direct participation makes place for other types of collaborative mechanisms, such as referral agreements, where banks refer SMEs who are not eligible to receive credit through traditional means to selected platforms.



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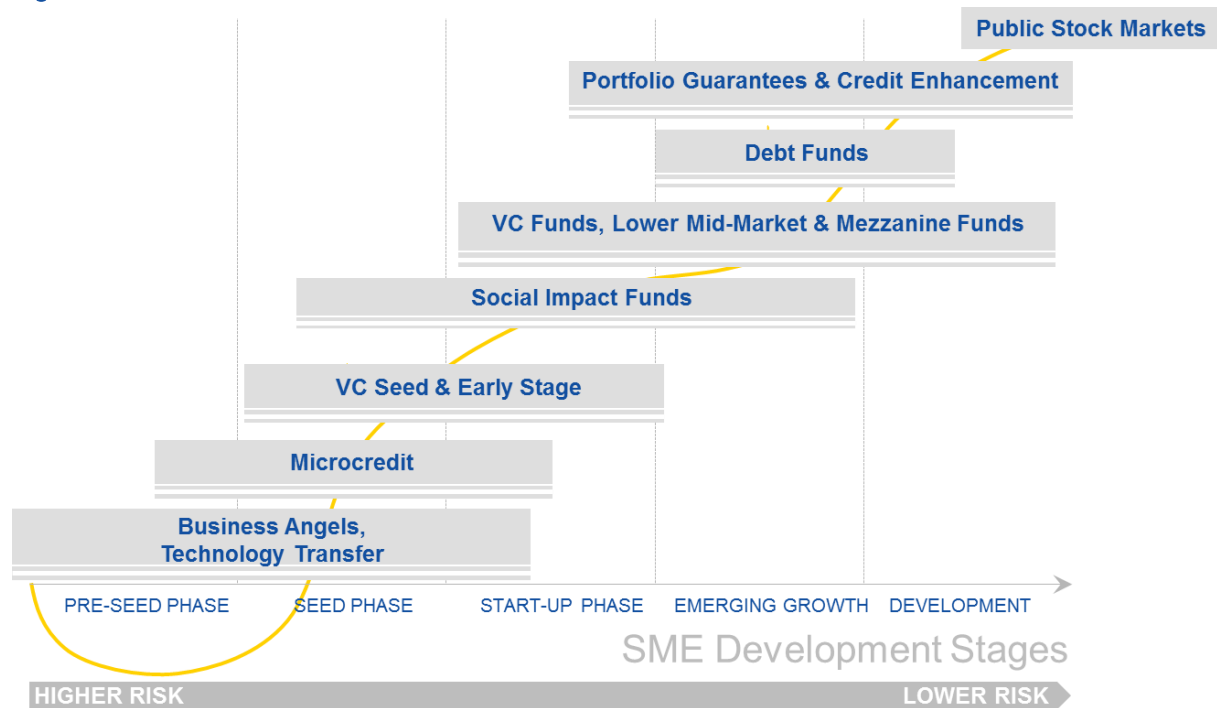
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# 1 Introduction

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 through financial intermediaries (i.e. equity instruments, guarantee and credit enhancement instruments, as well as microfinance). Figure 1 illustrates the range of EIF's activities:

Figure 1: EIF tool kit for SMEs



Source: EIF

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).

Public support to SMEs is crucial given their importance for the European economy. SMEs are defined by the European Commission<sup>4</sup> as firms having no more 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).

<sup>4</sup> Commission Recommendation 2003/361/CE of 6 May 2003.

Table 1: EU definition of SMEs

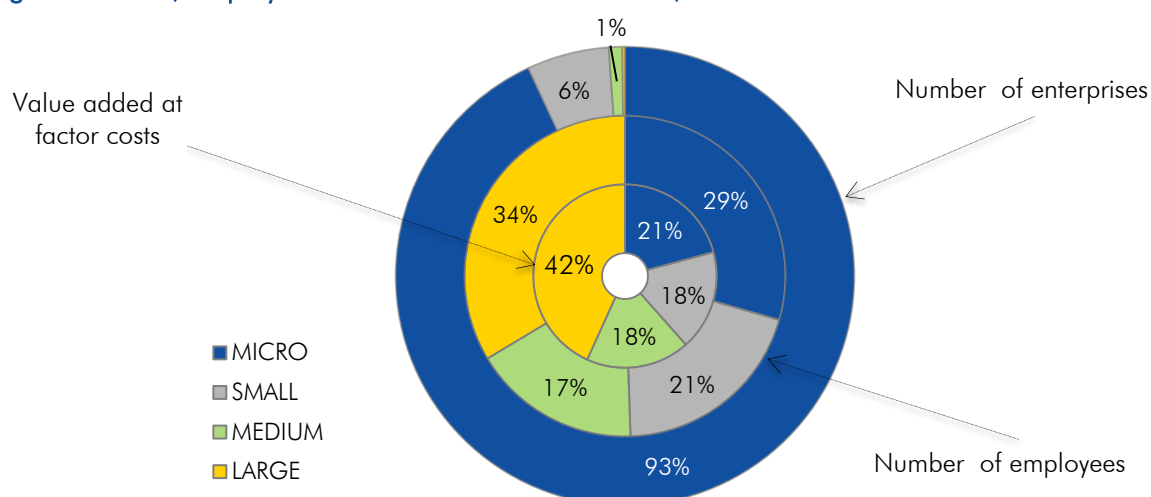
	Employees	Turnover	Balance sheet total
Micro	<10	≤ EUR 2m	≤ EUR 2m
Small	<50	≤ EUR 10m	≤ EUR 10m
Medium-sized	<250	≤ EUR 50m	≤ EUR 43m

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 (2018a)

SMEs contribute significantly to European job creation and economic growth (Figure 2). In 2017, 24.5 million SMEs in the EU 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, 2017



Source: Authors, based on European Commission (2018a)

The European Small Business Finance Outlook (ESBFO) provides an overview of the main SME financing markets relevant to EIF (equity, guarantees, securitisation, microfinance and Fintech).<sup>2</sup> The present edition is an update of the ESBFO December 2018 (Kraemer-Eis et al., 2018a).

We start by discussing the general market environment, then look at the main aspects of equity finance and SME guarantees, specifically the 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

Global economic growth has slowed significantly during the second half of 2018 (IMF, 2019a), as China's economic engine stuttered following the lingering trade dispute with the United States (US) and a series of necessary regulatory reforms to restrict the countries' rapid rise of shadow banking activities. The European economy performed worse than expected, suffering from the resulting decline in external demand, in particular from emerging Asia. For the near future, the IMF warns that risks are tilted to the downside, as further escalation of global trade tensions and the potential of a no-deal Brexit will lead to continued policy uncertainty, depressed growth prospect and tighter financial conditions, specifically in vulnerable economies (IMF, 2019a). Accordingly, global growth forecasts for 2019 were revised downwards from 3.7% to 3.3% (Table 2). Also the European Commission (2019a) decreased its 2019 growth estimates for the EU by 0.5 percentage points, from 1.9% to 1.4%.

The economic slowdown has yet to find its way to the labour market, as unemployment continued to decline in 2018 and is set to drop further in the years ahead. Even though the economy is at or near full employment, inflation remains below the ECB target level. Following the weaker than expected economic performance, inflation expectation were revised downwards significantly for 2019 and 2020. Governments continue to run budgetary deficits, although they decreased slightly in 2018 and are expected to stabilise in the years to come, hovering around 0.7% of GDP. Favourable economic conditions meant these continued deficits did not lead to a rise in gross government debt relative to GDP, which has continued its steady decline in 2018.

**Table 2: European Commission Spring 2019 forecast for the EU**

(Real annual percentage change, unless otherwise stated)				Spring 2019 estimates		
	2015	2016	2017	2018	2019	2020
GDP	2.3	2.0	2.5	2.0	1.4	1.6
Private consumption	2.1	2.4	2.0	1.6	1.6	1.7
Public consumption	1.4	1.7	1.0	1.1	1.6	1.3
Gross fixed capital formation	4.8	3.1	3.1	3.2	2.1	2.1
Employment	1.0	1.2	1.5	1.3	0.8	0.7
Unemployment rate (a)	10.2	9.4	7.6	6.8	6.5	6.2
Inflation (b)	0.0	0.3	1.7	1.9	1.6	1.7
Government budget balance (actual, % GDP)	-2.4	-1.6	-1.0	-0.7	-0.8	-0.7
Gross government debt (% GDP)	86.5	84.8	83.3	81.5	80.2	77.6
Contribution to change in GDP						
Private and Public Consumption	1.5	1.6	1.3	1.1	1.2	1.3
Investment and Inventories	0.9	0.7	0.5	0.9	0.3	0.4
Net exports	-0.2	-0.3	0.6	0.0	-0.2	0.0

(a) Percentage of the labour force.

(b) Harmonised index of consumer prices (HICP), annual percentage change.

Source: [European Commission \(2019a\)](#)

Most recent data on investment and inflationary pressure indicate that the main cause of the observed growth slowdown is not the reversal of a matured economic cycle. There was no observed over-accumulation of capital, as investment is expected to drop significantly and 2019 gross fixed capital forecasts were adjusted from 2.9% to 2.1% of GDP. The fact that inflationary pressures remained limited, leads to suspect that the EU's economic challenges are likely driven by external factors, such as the introduction of US' tariffs on EU exports, a reduction in external demand following monetary policy tightening in the largest economies outside of the Euro area (EA) (European Commission, 2019a). Other contributing factors are transport problems related to natural disasters, with record low water levels in some of Germany's most important rivers restricting important transport channels, or political country-specific developments, such as the ongoing social unrest in France or continued political uncertainty in Italy. Reduced inflation forecasts decrease the likelihood that the ECB will reverse its current monetary policy course any time soon. A recent ECB announcement indeed confirmed that the deadline for a possible rate hike has been pushed back and interest rates are expected to remain low for the foreseeable future (ECB, 2019d).

The fact that Europe's low inflation issue is taking place against a background of ongoing monetary stimuli has sparked debate amongst scholars and pundits alike. This phenomenon is definitely not unique to Euro area and has been observed across the globe, in Japan, the UK, and also the US. Potential explanations that have been put forward include deflationary pressure due to globalisation and digitalisation/automation, or the increasing importance of services in modern day economies (ECB, 2019a). Regardless of what is driving inflation, or rather, the lack thereof, it is becoming increasingly clear that the European economy will be facing a prolonged period of negative interest rates.

The current Euro-zone's low growth and low inflation equilibrium has led some to draw parallels with Japan's lost decade. Whether the Japanification of the Euro area's economy is set to continue remains to be seen, but Brzeski and Fechner (2019) argue that several commonalities indeed justify such a comparison, such as an ageing population, the challenges faced by the financial sector, consecutive years of government budget deficits, and the collapse of the wage-price spiral due to automatisisation and a rise in retirement age. Moreover, the heterogeneity of the EU society could pose an additional thread, as it complicates the design of a unified fiscal response to the current economic challenges. However, there are also some important differences that differentiate the Euro area from Japan in a positive manner. Euro zone governments, for example, have been thus far able to maintain public debt at levels well below GDP (see Table 2). Also the growth of the ECB's balance sheet has been more moderate, leaving more room for future policy action.

The pending reversal of the economic cycle has halted the growing enthusiasm of EU SMEs (Figure 3). The EU-wide SMEunited business climate index, while still at its highest level since the beginning of the crisis, stagnated during the second half of 2018 and is projected to decline sharply during the first semester of 2019. Declining sentiment among SMEs in the countries from the South/Vulnerable<sup>5</sup> regions drove the stagnation. At the same time, SMEs from the North/Centre, but also the Brexit

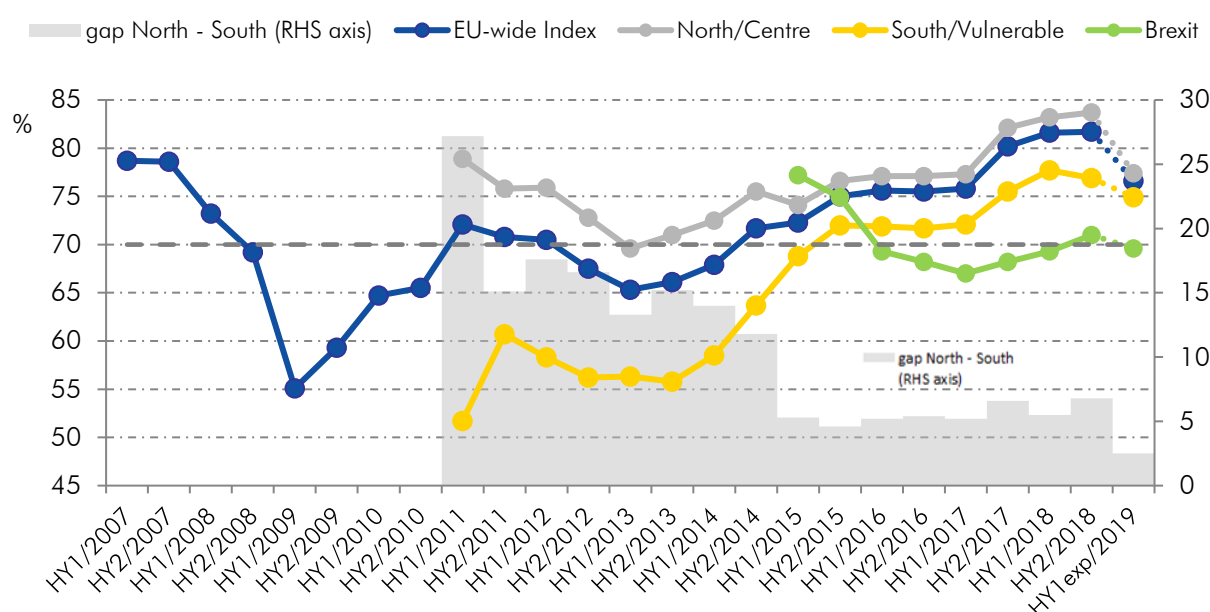
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<sup>5</sup> Croatia, Cyprus, Greece, Ireland, Italy, Malta, Portugal, Slovenia and Spain.

region, were able to maintain their level of optimism, although they are projected to follow suit in the first semester of 2019.

This reduced sense of optimism among EU SMEs is rooted in several factors. Figure 4 illustrates SMEs' perception<sup>6</sup> on a series of economic indicators contained in the Barometer, such as the overall economic situation, turnover, employment, prices, investments and orders. SMEs' stagnating sentiment seems to have been caused mainly by a reduction in incoming orders, a trend which is expected to continue throughout HY1/2019, reflecting SMEs' concern about the ongoing global political tensions and their impact on the international trade relationships.

**Figure 3: The SMEunited business climate index**



Source: Authors, based on SMEunited Study Unit (2019)

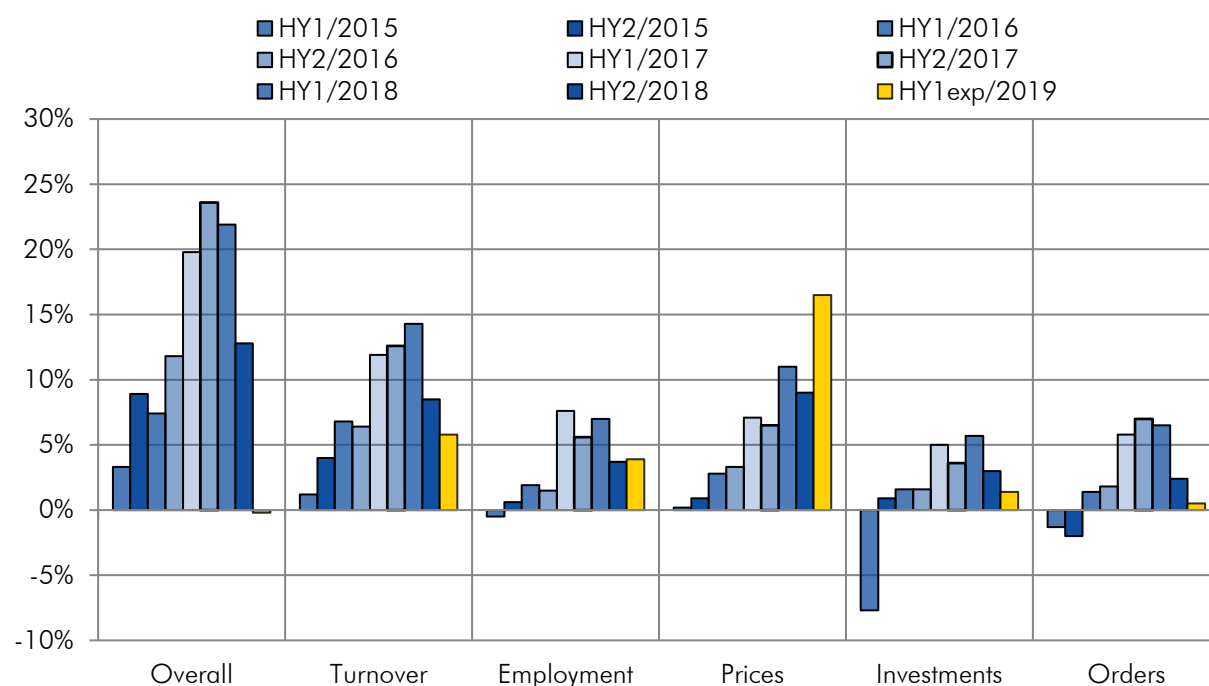
The slowdown in the economic recovery has impacted the evolution of European insolvencies. Where in 2017 bankruptcies were declining across Europe (Figure 5, page 6), the overall picture for 2018 is rather mixed (Euler Hermes, 2019). In Western Europe as a whole, insolvencies started to rise again after five consecutive years of decline, at a moderate rate of 0.4%. Business failures rose strongest in the UK. Interestingly, also the Scandinavian countries saw a significant rise in insolvencies. In Central and Eastern Europe, on the other hand, the economic slowdown has not yet been reflected in the evolution of insolvencies, as they continued to decline.<sup>7</sup> Not all Eastern European countries fared equally well, as insolvencies rose in Poland and Bulgaria. This mixed picture is expected to carry through to 2019.

<sup>6</sup> Figure 3 plots the net responses, which are calculated as the share of positive minus negative responses.

<sup>7</sup> Although this is in part driven by administrative factors, for example in Lithuania, where insolvencies dropped sharply after a normalisation after an administrative alteration in the procedure that governs the collection of insolvency statistics. For Slovakia, the strong increase was driven by administrative changes in insolvency legislation or data collection.

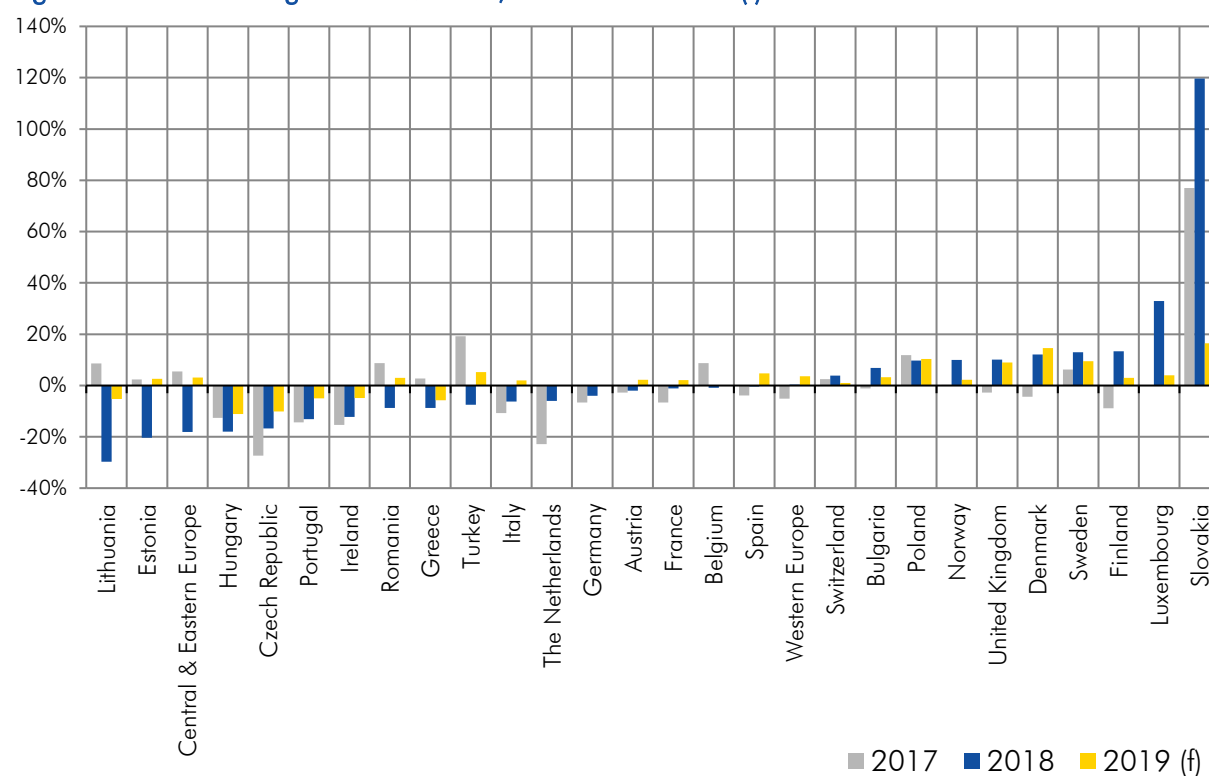


Figure 4: Main results of the EU craft and SME barometer HY2/2018



Source: Authors, based on SME Study Unit (2019)

Figure 5: Rate of change in insolvencies, 2017-2018-2019(f)\*



\* 2019 values are forecasted

Source: Euler Hermes (2019)

## 3 SME business environment

### 3.1 The EIF SME Access to Finance Index (ESAF)

The discussion of the SME business environment is introduced by the EIF SME Access to Finance (ESAF) Index. The ESAF Index is a composite indicator that summarises the state of SME financing for the EU28 countries. It was first introduced in the ESBFO edition of June 2016 (Kraemer-Eis et al., 2016a) and gets updated on an annual basis.<sup>8</sup> The index contains four subindices, three of which are related to different financing instruments (loans; equity; credit and leasing), while the fourth covers the general macro-economic environment (see Box 1). The methodology underlying the construction of the index is detailed in Gvetadze et al. (2018a).

The main ESAF results for 2018 are presented in Figure 6. The updated version of the ESAF is now lead by Sweden, with Germany and Finland completing the top 3. Greece lags the ESAF ranking for the sixth consecutive year in a row, preceded by Cyprus and Romania.

#### Box 1: The four ESAF subindicators

##### Loans:

- Percentage of SMEs using bank loans in last 6 months
- Percentage of SMEs using grants or subsidised bank loans in last 6 months
- Percentage of SMEs not applying for a bank loan because of possible rejection in last 6 months
- Interest rate for loans under EUR 250k (floating rate with IRF up to 1 year)
- Interest rate spread (under EUR 250k vs over EUR 1m for floating rate with IRF up to 1 year)

##### Equity:

- Venture Capital Investments / GDP
- Value of IPO market / GDP
- Percentage of SMEs using equity capital in last 6 months

##### Credit and Leasing:

- Percentage of SMEs using bank overdraft, credit line or credit card overdraft in last 6 months
- Percentage of SMEs not applying for the above because of possible rejection in last six months
- Percentage of SMEs using leasing or hire-purchase in the last 6 months
- Median interest rate charged to SMEs for credit line or bank overdraft application in last 6 months

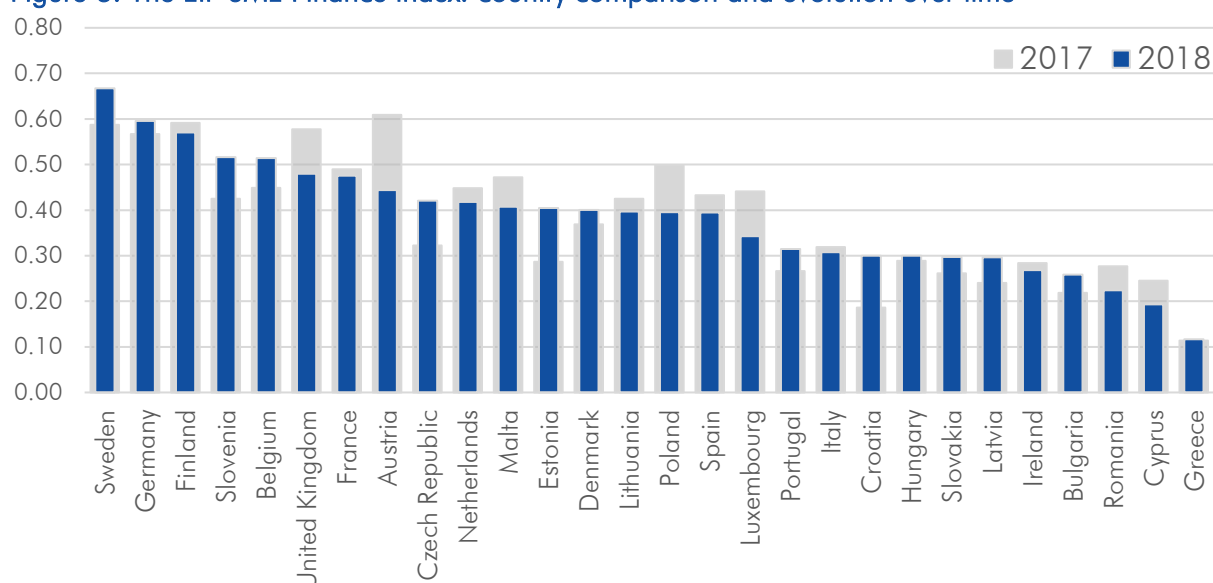
##### Macro Factors:<sup>9</sup>

- Gap between actual and potential GDP
- Bank non-performing loans to total gross loans
- Percentage of SMEs "feeling that there are no financing obstacles"

<sup>8</sup> The previous update is detailed in Torfs (2018).

<sup>9</sup> Due to the discontinuation of the indicator 'availability of financial services', formerly contained in the macro-subindex and sourced from the World Economic Forum's competitiveness report (WEF, 2018), the entire set of indicators has been re-evaluated and the decision has been made to exclude three other indicators to ensure continuity in future updates. The 'strength of legal rights index' and 'depth of credit information index' were omitted from the macro subindex and the 'venture capital availability index' was omitted from the equity subindex. The impact of these changes on the aggregate ESAF outcome is discussed in Torfs (2019).

Figure 6: The EIF SME Finance Index: country comparison and evolution over time



Source: Torfs (2019)

The 2018 updated brought about some significant changes for a number of countries. Most notably for Austria, who experienced the biggest drop in its access to finance index, both in absolute as in relative terms (-27%). This was caused by a deteriorating equity environment (Figure 7). The decline in access to finance conditions happened despite of high score on both the Loans and Credit & Leasing subindex, as well as a significant improvement in Austrian Macro conditions.

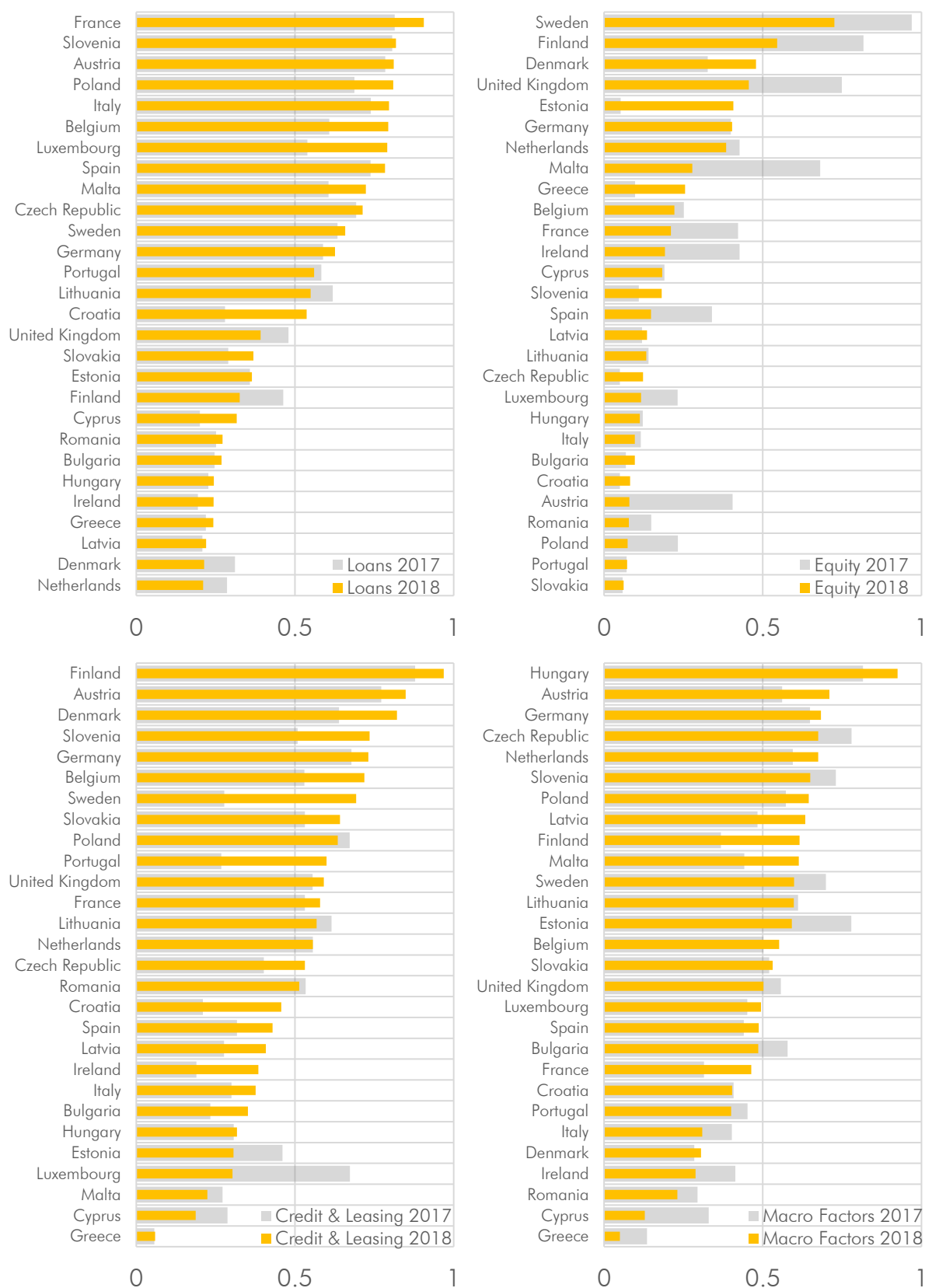
Also in the United Kingdom SME access to finance conditions appear to have deteriorated substantially, following its unexpectedly good performance one year earlier. Unlike the Austrian case, the UK's evolution is rooted in a deterioration across several markets, as both the Loans, Equity and Macro subindexes declined (Figure 7).

In addition, notable deteriorations were observed in Luxembourg, which has experienced a decline in its ESAF ranking for three consecutive years; Poland, which similar to Austria scored poorly on the Equity subindex and consequently dropped nine spots in the ESAF ranking and Malta, where improvement in Loan conditions and a better overall Macro environment could not compensate for a worsening of conditions on the Credit & Leasing and especially Equity markets.

SMEs' external financing conditions improved markedly in Sweden, Slovenia, Belgium, Czech Republic, Estonia and Croatia. In terms of ranking spots, Slovenia (10), Czech Republic (7) and Croatia (7) gained most.

For an elaboration on the 2018 update, and more background information on the most important evolutions between 2017 and 2018, readers are referred to Torfs (2019).

Figure 7: The ESAF subindices: Equity, loans, credit & leasing and the macro environment

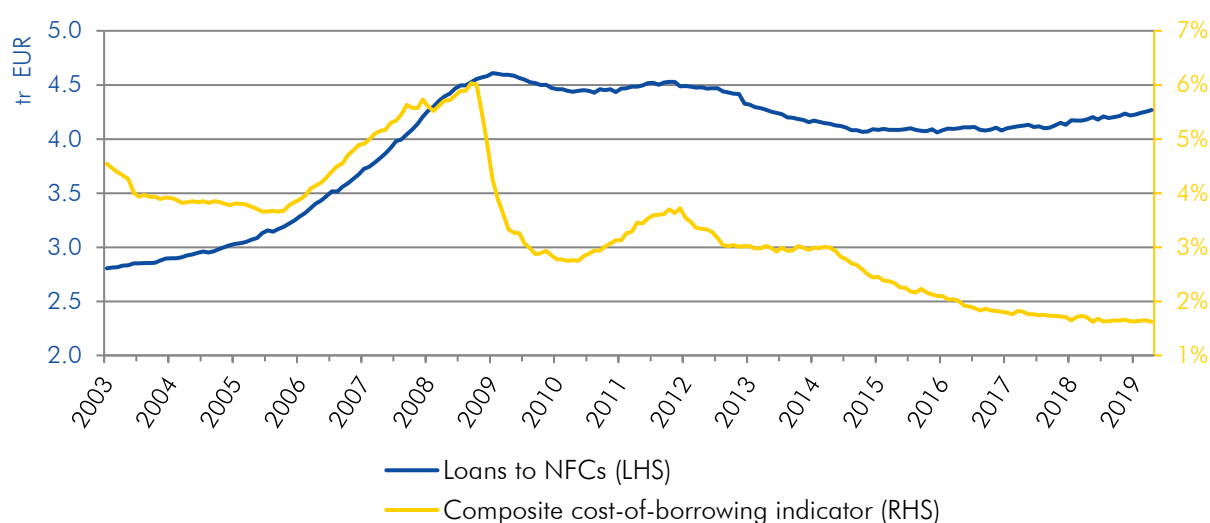


Source: Torfs (2019)

### 3.2 Loan volumes and borrowing costs

Borrowing costs for NFCs remain historically low: In April 2019, the ECB's composite borrowing cost indicator<sup>10</sup> decreased to 1.62%, matching the previous record low of May 2018 (Figure 8). They are expected to remain low for the foreseeable future, following the ECB's recent monetary policy announcement (see section 2). This low rate environment has led total outstanding loans to NFCs to rise further by 1.33% between October 2018 and April 2019, an increase of about 5.1% since the bottom of late 2015. The deleveraging process that lasted for nearly a decade seems to have been reversed as outstanding loans have been increasing consistently for over two years now.

**Figure 8: Outstanding loans and composite cost-of-borrowing indicator for non-financial corporations in the Euro area**



Source: Authors, based on ECB Data Warehouse

The SME lending market<sup>11,12</sup> further expanded during the final months of 2018 and the first quarter of 2019, totalling EUR 37bn in September 2018<sup>13</sup> (Figure 9). Following the crisis, SME lending initially contracted, after which it picked up pace early 2014 and has been on the rise ever since. The graph also depicts the share of small loans in total lending to illustrate how the SME specific segment diverged from the overall lending market. During the pre-2014 contraction, the share of small loans in total volumes also dipped. This implies that the credit contraction caused by the financial crisis was more intensely felt by SMEs. However, during the recovery thereafter, the share of small loans in total lending increased significantly, stabilising at about 17% by the end of 2017. Recently, the share of small loans started to decline again, reaching 16.3% in April 2019. This could

<sup>10</sup> The composite borrowing indicator is a volume weighted average of borrowing cost of loans from different maturities. For an elaborate description of the methodology, see ECB (2013). It was constructed "to assess the effectiveness of the monetary policy pass-through across the Euro area countries".

<sup>11</sup> Hueriga et al. (2012) show that small loans are a good proxy for the SME lending market.

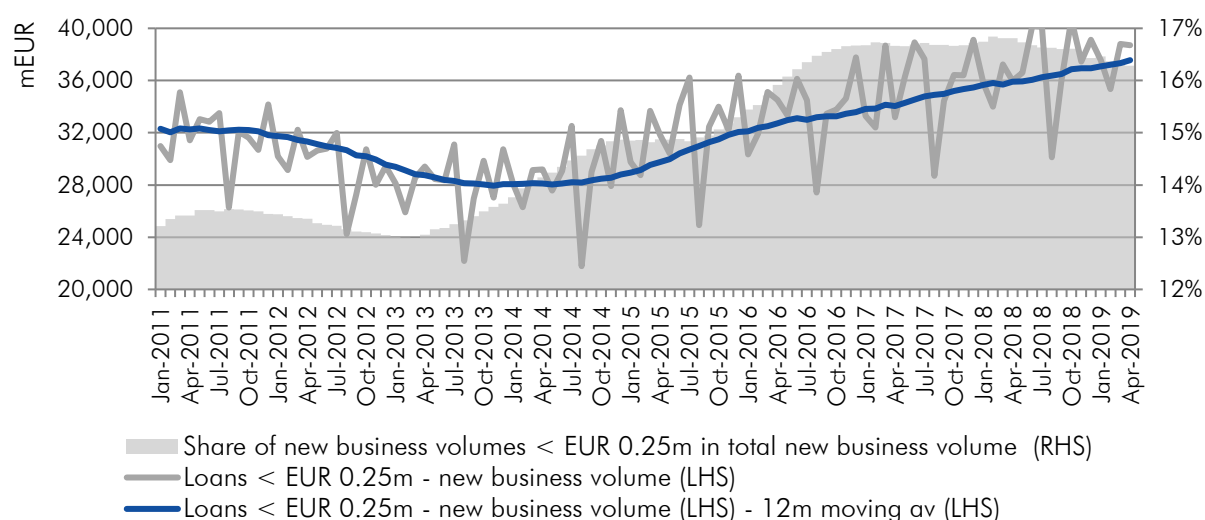
<sup>12</sup> To better reflect lending conditions to SMEs specifically, rather than small loans in general, the data excludes interest rates on revolving loans and overdraft, since these instruments are used independently of firm size.

<sup>13</sup> Calculated as a 12 month backwards moving average to abstract from the strong monthly fluctuations typically found in lending new business volumes.

imply that the current reversal in the Euro area's economic recovery impacts SMEs more strongly than the general population of firms.

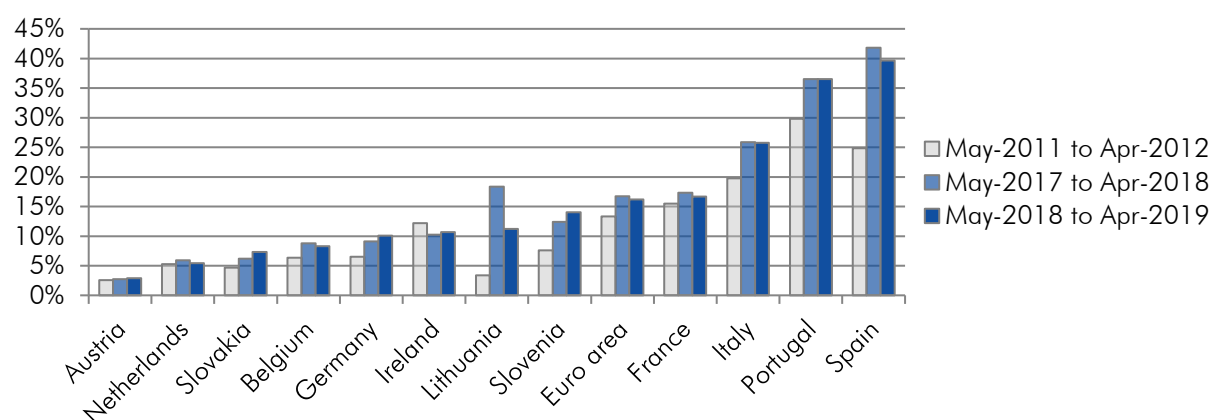
The Euro area aggregate of the share of small loans hides a significant amount of country-level heterogeneity (Figure 10). Small loans are relatively more important in the credit market of vulnerable countries. In Spain and Portugal, for example, small loans make up 40% and 35%, respectively, of new loans granted to NFCs. Also in Italy this share is relatively high at 25%. In Austria, the Netherlands, Slovakia, Belgium and Germany, the proportion of small loans in total new business volume is much smaller and does not exceed 10%. Compared to one year earlier, the relative importance of small lending decreased most in Lithuania, where it fell by about 7 percentage points. For the remaining countries, the small lending share stayed roughly constant. Only in Slovakia and Slovenia it rose by more than 1 percentage point.

**Figure 9: Small loans to NFCs (< EUR 0.25m), new business volumes in the Euro area (12m backward moving averages)**



Source: Authors, based on ECB Data Warehouse

**Figure 10: Small loans (< EUR 0.25m) as a share of total NFC lending (NBV), by country\***

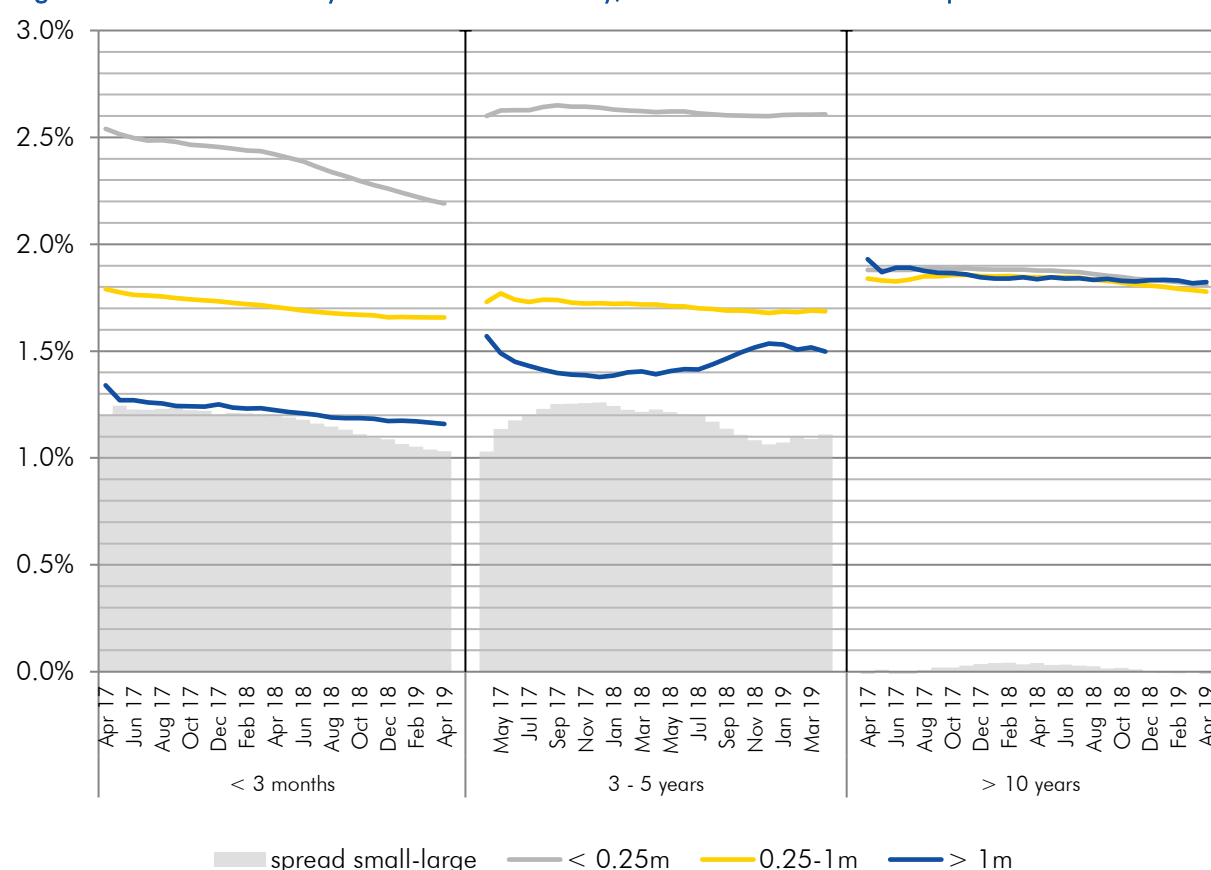


\* NBV: New business volume, 12 month backward moving average.

Source: Authors, based on ECB Data Warehouse

Borrowing costs are an important driver of loan demand. Figure 11 illustrates the evolution of borrowing costs for three different loan size categories: small loans (<EUR 0.25m), medium-sized loans (EUR 0.25m – EUR 1m) and large loans (>EUR 1m). Interest rate data are further subdivided according to loan maturity, where interest rates on loans with a maturity less than three months serve as a proxy for short term lending, 3 to 5 years for medium term lending and 10 years and more for long term lending. The latter maturity segment arguably is most relevant proxy for the cost of durable investments, both for SMEs and for larger firms. Figure 11 also depicts the interest rate size spread for the different maturity classes, defined as the excess interest rate charged on loans smaller than EUR 0.25m 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. The data show that the discussion on the aggregate costs of borrowing earlier in this chapter conceals divergent interest rate evolutions on most market segments.

**Figure 11: Interest rates by loan size and maturity, and the interest rate size spread<sup>14</sup>**



\*The graph depicts the 12 month backward moving average floating interest rates charged by banks on loans to NFCs (new business volumes, other than revolving loans and overdraft).

Source: Authors, based on ECB Data Warehouse

<sup>14</sup> A general finding, arising from Figure 10 is the fact that, regardless of maturity, small loans are burdened with higher interest rates, a phenomenon referred to as the size-spread hereafter. This is somewhat surprising, as traditional finance theory suggests that, ceteris paribus, the risk of default increases with loan size (Stiglitz, 1972). A number of factors could explain why the inverse relationship between loan size and interest rate breaks down for bank lending to NFCs. First, in the presence of fixed screening costs, small loans will carry a higher interest rate. Second, smaller lenders could possess

During the six months leading up to April 2019, short term interest rates (the left panel of Figure 11) have declined consistently for all size classes. The pace of decline has been markedly faster for small loans, continuing the trend of a declining size spread. While shrinking, the size spread on the short term lending market is still significantly higher than for long term lending. Since SMEs are relatively more reliant on short-term credit, this deteriorates their competitive position vis-à-vis larger firms.

In the medium-term maturity segment (3 – 5 years), there is no generally declining trend in borrowing costs as interest rates have stayed constant for all size classes. While the interest rates on large loans (>EUR 1m) increased significantly by the end 2018, this trend reversed during the first quarter of 2019. In the long term maturity segment (>10 years), interest rates remained constant. Consequently, the same holds true for the size spread. The complete convergence of interest rates over all size classes has led to a level playing field regarding the costs of durable investments for SMEs and large firms.

Figure 12 illustrates the heterogeneity that exists for borrowing costs for small loans within the EU.<sup>15</sup> 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 Euro area SMEs, Irish SMEs also face the largest competitive disadvantage, as evidenced by the Irish size spread.

Over the 12 months leading up to April 2019, the interest rate on small loans<sup>16</sup> increased in a handful of countries: Ireland, Estonia, Finland, Lithuania and Austria (Figure 12). Also the size spread rose in these five countries, in particular in Finland and Estonia. For the latter country, this is the fifth consecutive semester of interest rate increases in the SME lending segment (see Kraemer-Eis, Botsari, Gvetadze, Lang and Torfs, 2017a, 2017b, 2018a and 2018b).

For Spain, we see a continuation of the positive evolution of the past semesters, as SME borrowing costs continue to decrease. Once more, this decrease was specific to the small lending segment. Especially in light of our earlier finding on the importance of small loans in total Spanish new business volume, this is a favourable evolution that could have a significant positive impact on the Spanish economy, as low borrowing costs stimulate SME investments and spur economic growth. Also in Italy, another economy with a pronounced importance of small scale lending, borrowing costs faced by SMEs continue to evolve favourably, with declining interest rates and a drop in the size spread.

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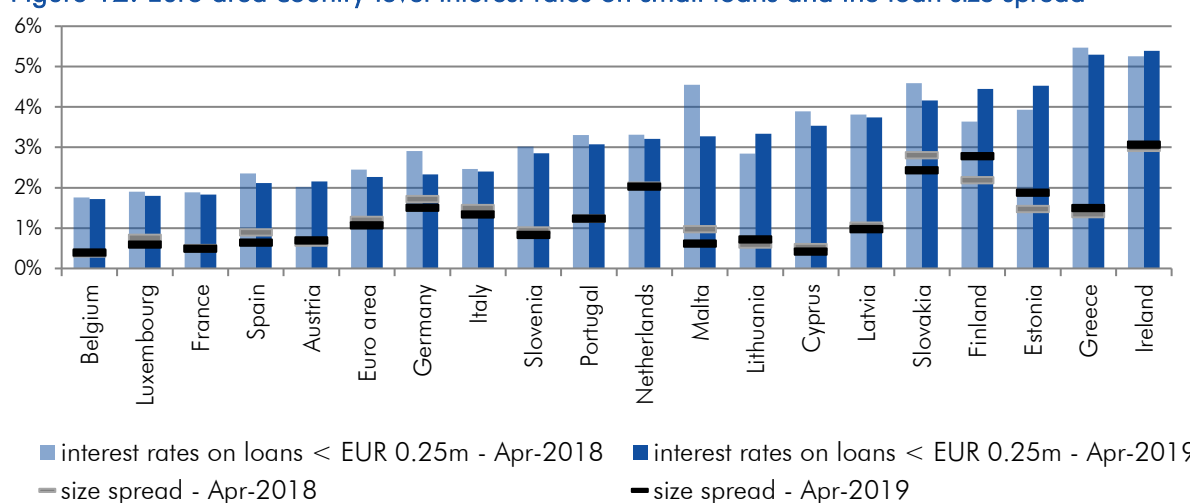
different characteristics (Moore and Craigwell, 2003), or use the borrowed funds for different financing purposes, such as funding working capital, instead of long term investment projects. The fact that the size spread is particularly high for short term loans provides some support for this argument. Third, it is 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. Figure 10 also exposes an anomaly in the maturity spread of small loans. As a general rule, liquidity decreases with loan maturity. Long term loans would therefore be expected to carry higher interest rates. This reasoning indeed holds true for medium-sized and large loans. For small loans however, short term lending is actually more expensive. This can be interpreted as evidence for the presence of a fixed lending costs element related to screening.

<sup>15</sup> 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.

<sup>16</sup> As measured by a 12-month backward looking moving average, to eliminate the influence of erratic monthly fluctuations.



Figure 12: Euro area country-level interest rates on small loans and the loan size spread\*



\* 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 Warehouse

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 institutional characteristics of the country, 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 11 and Figure 12. 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).

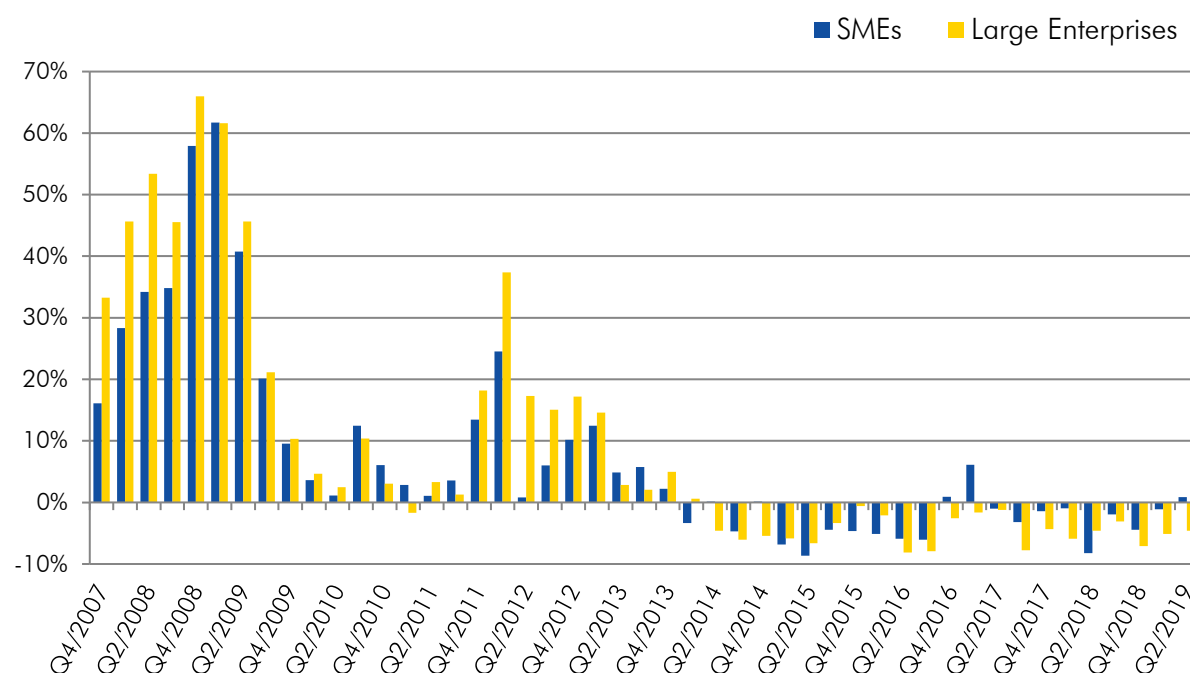
### 3.3 SME financing from a supply perspective

This section follows the perspective of the banks to provide an overview of the current state of the SME lending market, using the quarterly ECB's latest Bank Lending Survey (ECB, 2019c). Among other things, banks are asked about the credit standards they uphold towards corporate borrowers. Figure 13 plots their quarterly net change<sup>17</sup> and illustrates how banks' credit standards applied to NFC lending has changed since the beginning of the financial crisis.<sup>18</sup> A positive value indicates tightening credit standards, whereas a negative value points to an easing. For the 21<sup>th</sup> consecutive quarter, large firms faced loosening credit standards during Q2/2019. Credit standards for SMEs loosened during the first quarter of 2019, but started tightening again slightly during the second quarter.

<sup>17</sup> The net change is the difference between the percentages of banks responding "tightened considerably" and "tightened somewhat", and the percentages of banks responding "eased somewhat" and "eased considerably", for loans to firms from different size classes.

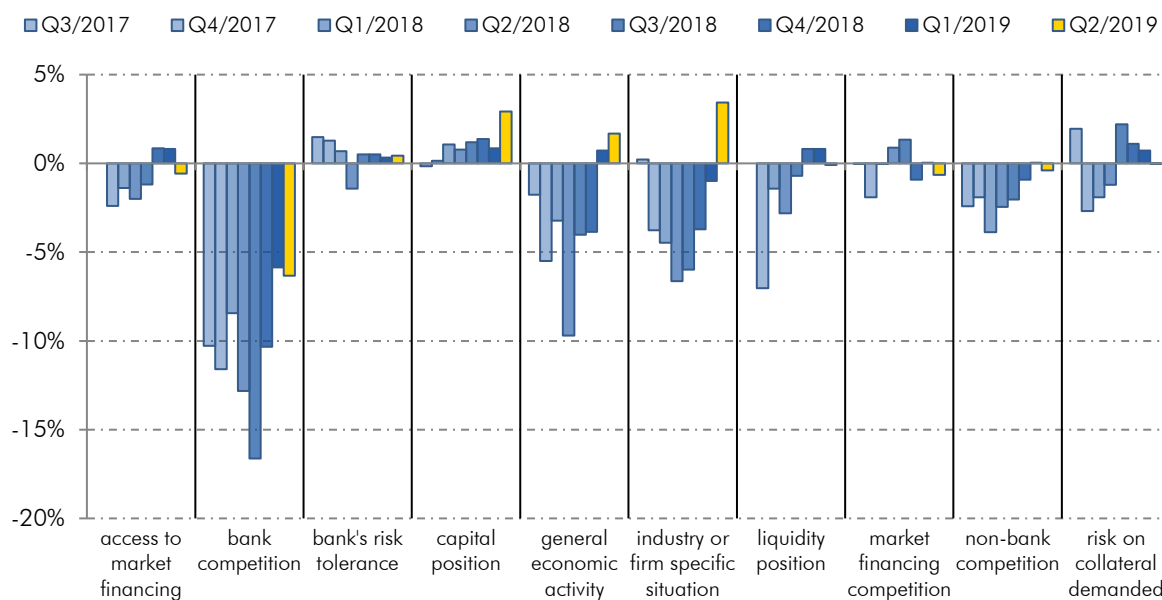
<sup>18</sup> Banks are asked the following question: "Over the past three months how have your banks' credit standards as applied to the approval of loans or credit lines to enterprises changed?"

Figure 13: Net changes in credit standards applied to the approval of loans or credit lines to enterprises (Euro area, SMEs versus large enterprises)



Source: Authors, based on ECB Bank Lending Survey (ECB, 2019c)

Figure 14: Factors contributing to changes in credit standards to SMEs\*

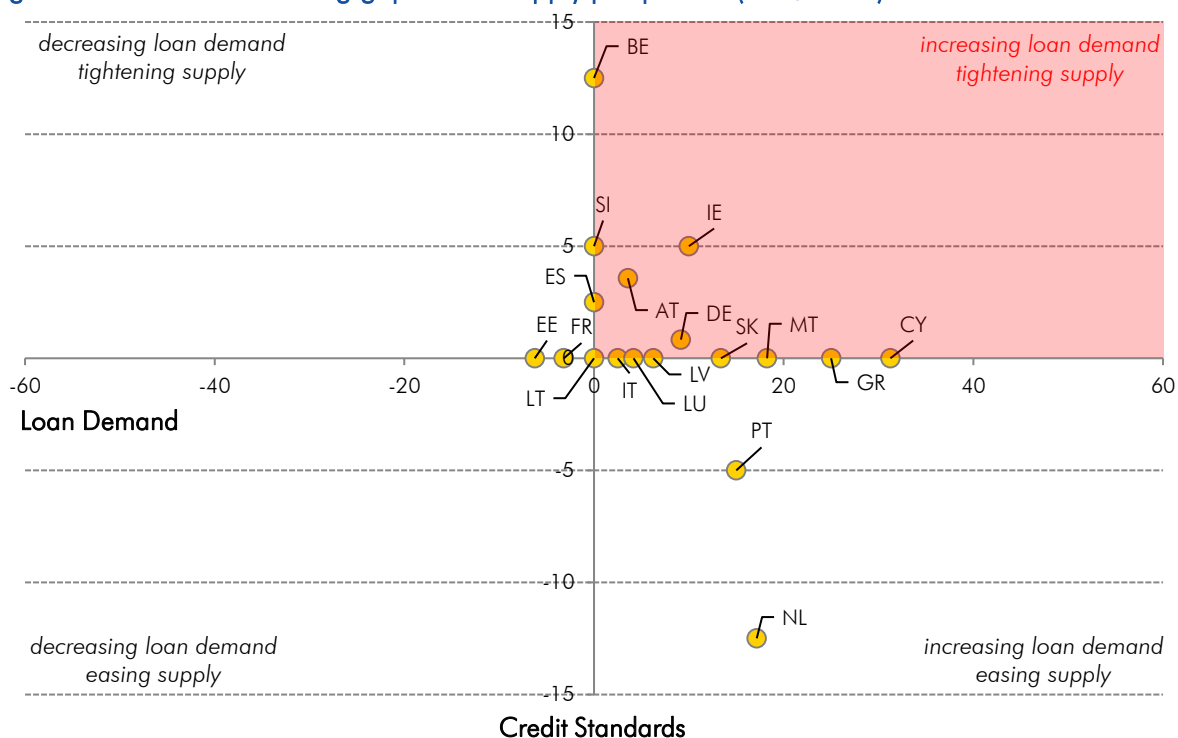


\* Banks are asked the following question: "Over the past three months, how have the following factors affected your bank's credit standards as applied to the approval of loans or credit lines to enterprises?". The graph reports net percentages, the difference between the percentage of banks reporting that a given factor contributed to a tightening of credit standards and the percentage reporting that it contributed to an easing.

Source: Authors, based on ECB Bank Lending Survey (ECB, 2019c)

Figure 14 reveals that during the first semester of 2019, it were concerns about SMEs' firm specific situation and their capital position that stopped banks from easing the supply of credit. Also banks' perspective on the overall economic situation has turned negative. On the other hand, competitive forces in the sector continue to be an important driving factor for loosening the credit supply to SMEs.

**Figure 15: The SME financing gap from a supply perspective (HY1/2019)<sup>19</sup>**



Source: Authors, based on ECB Bank Lending Survey (ECB, 2019c)

We conclude this section with a discussing of the supply side perspective on the evolution of the SME financing gap during the first semester of 2019. We do this by combining the answers of two BLS survey questions in the quadrant-plot illustrated in Figure 15. The first question asks banks to what extent they have tightened SME credit standards. These answers are mapped on the Y-axis. The values represent the net percentage of banks that tightened credit standards in a given country: a positive value implies tighter credit conditions. The second question asks banks whether they have experienced an increase or decrease in the demand for bank loans. These answers are mapped on the X-axis. A positive value implies higher loan demand.

The north-western quadrant represents a situation that is consistent with a period of economic contraction. Any point inside the quadrant implies decreased loan demand accompanied by

<sup>19</sup> For all countries but Slovakia, France, Malta and the Netherlands, the ECB's diffusion index (or DINX) measure was used. The DINX is calculated as the standard net percentage, but differs from it because more weight is given to banks that responded to have 'considerably' tightened credit standard (vis-à-vis those who responded to have 'somewhat' tightened credit standards). For Slovakia, France, Malta and the Netherlands, the ECB published only the *weighted* DINX (BDINX), where responses are weighted based on the size of respondents' balance sheets. Since the BLS is a quarterly survey, the two most recent quarters for which data was available are averaged.

tightening credit conditions. No countries were projected in this quadrant, consistent with the general economic recovery taking place in Europe at the moment (see Chapter 2).

At the opposite side of the diagram, the south-eastern quadrant represents a situation of economic expansion, where loan demand increases and credit conditions loosen. Portuguese and Dutch banks are currently experiencing such a period of simultaneous credit supply and loan demand expansion. Since the BLS does not provide quantitative information, predictions on the direction in which the SME credit gap evolved are impossible for countries in this quadrant, as it depends on the relative magnitude of both forces. However, for SMEs operating in countries situated in the South-Western and North-Eastern quadrants, or on the bordering axes, it is possible to infer predictions on the direction in which the financing gap is evolving.

The south-western quadrant, for example, represents a situation where decreased (or constant) loan demand goes hand in hand with loosening (or constant) credit supply, which implies a shrinking financing gap. On the northern edge of this quadrant we find Estonia and France, where banks reported a minor decrease in loan demand at constant credit standards and hence a shrinking financing gap.

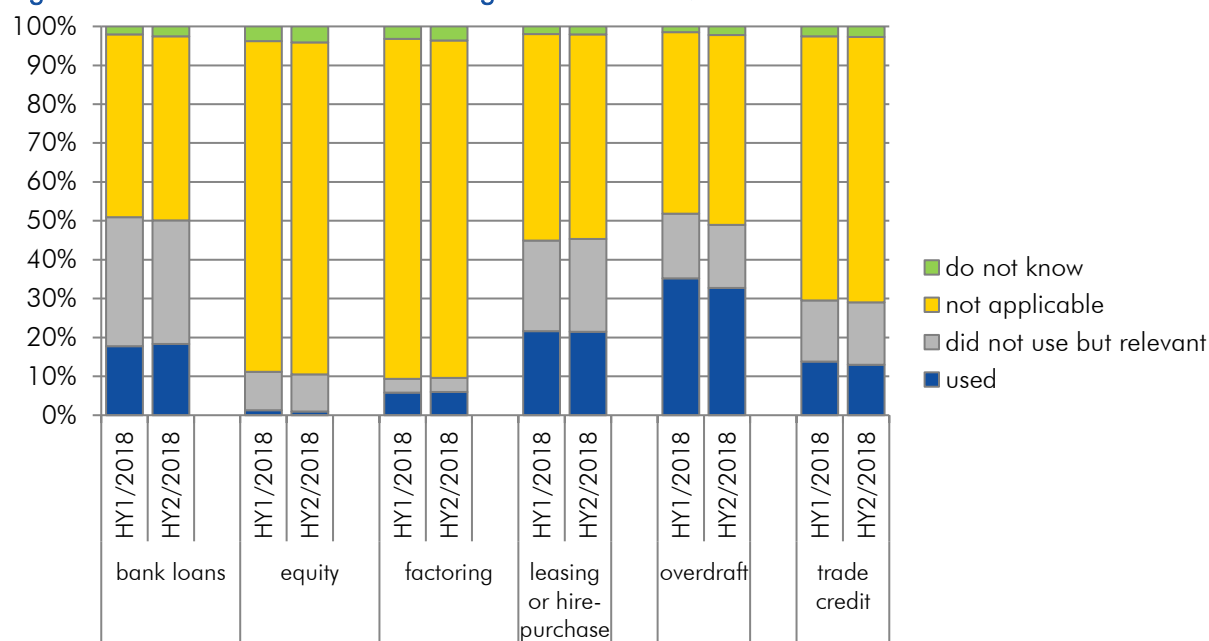
In all other countries, the loan financing gap appears to have increased. In Ireland, Austria and Germany (north-eastern quadrant), banks tightened the supply of credit to SMEs while facing increased loan demand. Banks in Cyprus, Greece, Malta, Latvia, Slovakia Luxembourg and Italy kept credit standards constant but reported an increase in loan demand. In Belgium, Slovenia and Spain, loan demand reportedly stayed constant, but credit standards were tightened (considerably so in Belgium). All these cases imply an increase in the financing gap, from the (supply) perspective of bank.

### 3.4 SME financing from a demand perspective

This section turns to the demand side of the lending market and reports on the most important results of the latest Survey on Access to Finance of Enterprises (SAFE). The SAFE is a semi-annual survey that provides an overview of the state of SMEs' access to finance in Europe.

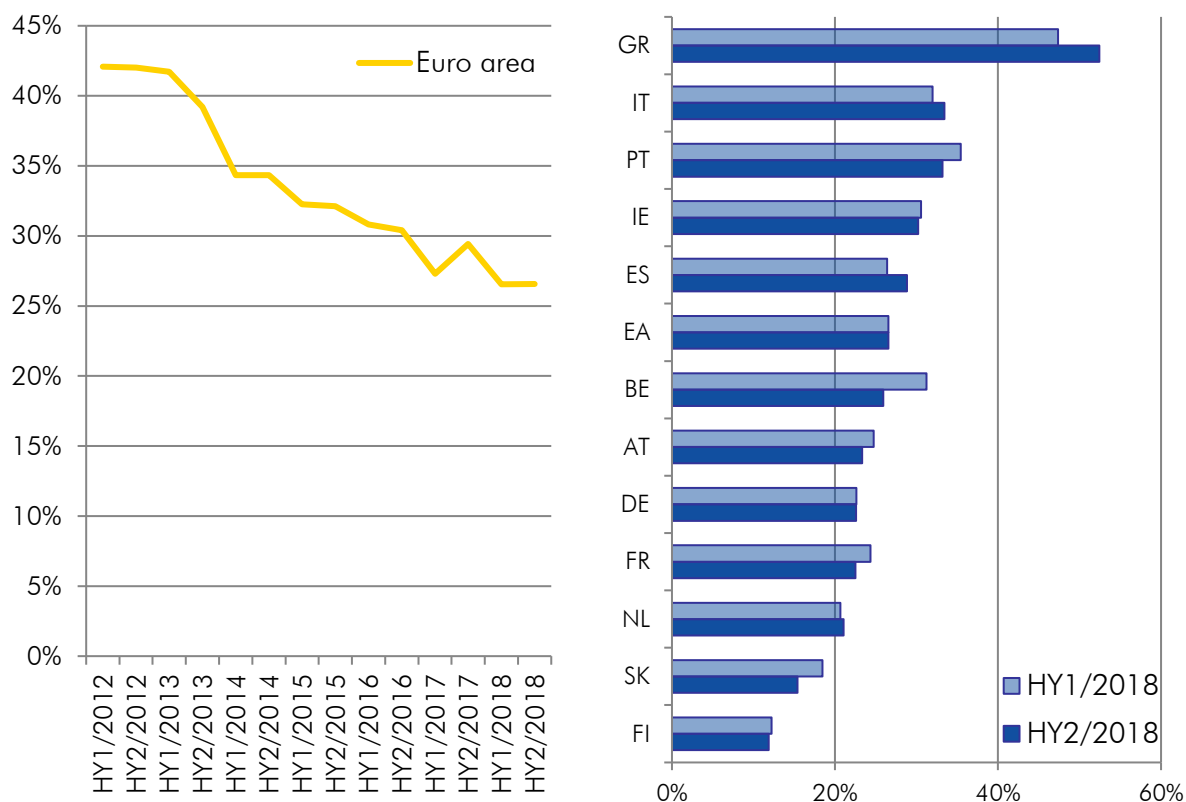
Figure 16 illustrates the relative importance of different SME financing instruments. Bank products (loans and overdraft) are by far the most popular financing instruments, followed by leasing and hire-purchase. Equity and factoring make up just a small fraction of overall SMEs' external financing needs. Unfortunately, the SAFE survey does not include alternative financing instruments, such as crowdfunding, even though they have gained popularity in SMEs' financing mix over the past years (see chapter 7 for a discussion on the growing importance of Fintechs and crowdfunding in the European SME financing landscape). In general, the financing composition of SMEs does not vary strongly over time, although we did observe a decrease in the use of overdraft, and a minor decrease in the use of bank loans and trade credit as well during the second half of 2018.

Figure 16: Sources of external financing of Euro area SMEs



Source: Authors, based on ECB SAFE (ECB, 2019b)

Figure 17: Percentage of SMEs ranking access to finance as a highly important issue

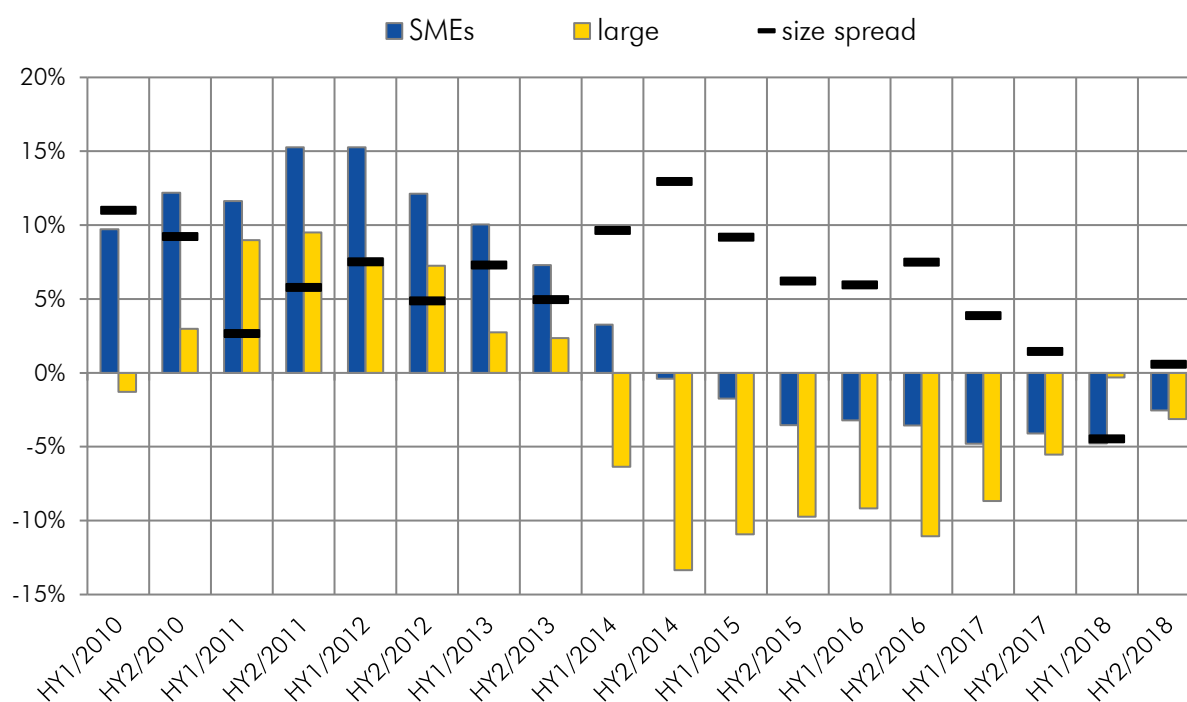


Source: Authors, based on ECB SAFE (ECB, 2019b)

The SAFE survey allows us to construct a demand-side perspective on SME financing. The share of Euro area SMEs that considers access to finance to be a highly important problem<sup>20</sup> has stayed constant at 26.6% (Figure 17, left panel). While at its lowest level since the beginning of measurement in 2012, one in four SMEs still report severe difficulties in accessing finance. This points to significant structural credit market failures which prevents markets from satisfying SMEs' financing demands.

The right panel of Figure 17 shows that the share of SMEs reporting severe issues in accessing finance varies significantly from country to country. In Greece, 52% of SMEs experienced significant problems in finding suitable finance solutions, a 5 percentage point rise compared to one semester earlier. Also in Italy and Spain access to finance issues were on the rise. In Finland, the external financing situation of SMEs was much more positive, as only 11.8% of SMEs reported such challenges, further down from 12.2% one semester earlier. The marked drop in Belgian SMEs with severe finance problems conflicts the findings from the supply side analysis, where banks reported to have tightened credit supply significantly at a constant demand for loans.

**Figure 18: Perceived change in the external financing gap by SMEs and large firms\***



\* For each of the five financing instruments (bank loans, trade credit, equity, debt securities, bank overdraft), an indicator change in a perceived financing gap takes the value of 1 (-1) if the need increases (decreases) and availability decreases (increases). If firms perceive only a one-sided increase (decrease) in the financing gap, the variable is assigned a value of 0.5 (-0.5). The composite indicator illustrating the perception of firms' financing gap is the weighted average of the financing gap related to the five instruments. A positive value of the indicator suggests an increasing financing gap. Values are multiplied by 100 to obtain weighted net balances in percentages. The size spread depicts the percentage point difference (in absolute terms) between the perceived financing gap as reported by SMEs and the gap reported by large firms.

Source: Authors, based on ECB SAFE (ECB, 2019b)

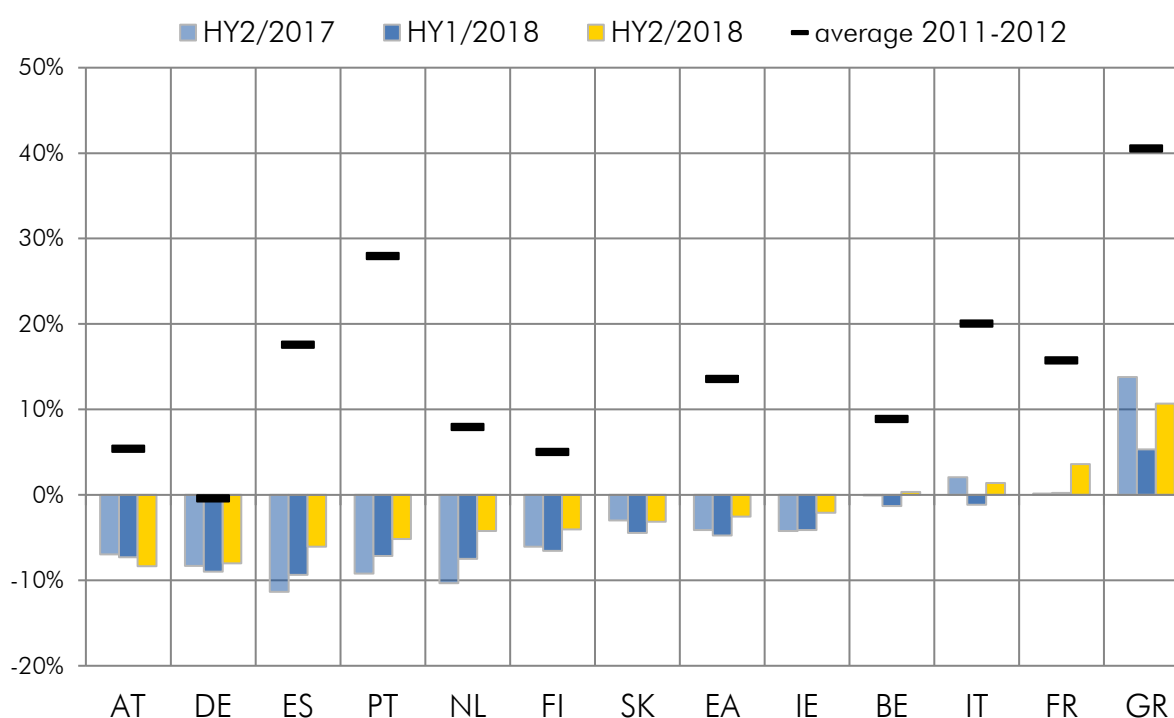
<sup>20</sup> Rating it 7 or higher on a scale of 10 for the survey item Q0b, pressingness of problems that the firm is facing.

Figure 18 demonstrates an external finance gap indicator, constructed from a demand perspective, using SAFE data. It is based on perceived changes in the need for and availability of external financing. The gap is depicted for both SMEs and large firms. A negative value of the indicator implies a shrinking financing gap. The intuition is similar to the supply side gap-diagram illustrated in Figure 15 shows how during the second semester of 2018, firms from all size classes reported a shrinking financing gap for the 9<sup>th</sup> consecutive semester.

In all but three countries, SMEs reported an improvement in access to finance (Figure 19), although the rate at which SMEs perceive the financing gap to have shrank has slowed down for all countries but Austria. Greek, French and Italian SMEs reported a growing financing gap, while for Belgian SMEs the financing gap remained roughly constant.

The SAFE survey also asks SMEs which factors they believe are driving the availability of external financing. During the second semester of 2018, SMEs turned quite remarkably pessimistic about the general economic environment (Figure 20). Insufficient public support for external financing markets, which has been a concern for several semesters, continues to worry European SMEs. All other factors considered were believed to have positively impacted the availability of external finance, although the level of optimism has generally decreased.

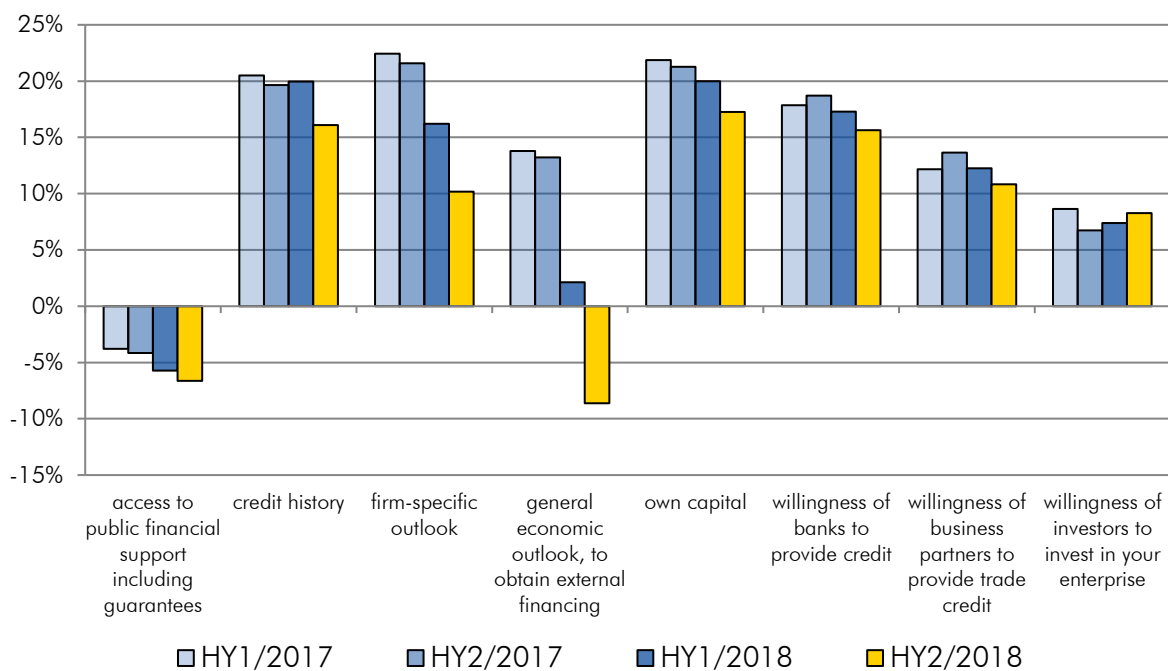
**Figure 19: Perceived change in the external financing gap by SMEs at the country-level\***



\*The marker denotes the average level of the index throughout the four semesters of 2011 and 2012, the period in the aftermath of the crisis in which SMEs reported the highest values of the perceived change in the financing gap.

Source: Authors, based on ECB SAFE (ECB, 2019b)

Figure 20: Factors driving the availability of external financing to Euro area SMEs



Source: Authors, based on ECB SAFE (ECB, 2019b)



## 4 Private equity

Private Equity (PE)/Venture Capital (VC)<sup>21</sup> 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.<sup>22</sup> 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.

Against this background, it is one of EIF’s aims to play a crucial role in establishing a sustainable VC ecosystem in Europe. We provide an overview of the European PE/VC market activity and prospects in this chapter.

### 4.1 Investment activity

#### 4.1.1 Private equity funds

Over the past 20 years, the European private equity (PE) activity exhibited booms and busts. The most famous peak periods were observed in 2000 and 2006, when the total amounts raised by PE funds located in Europe reached EUR 48bn and EUR 112bn, respectively, according to the statistics of Invest Europe (see Figure 21; Box 2 provides more information on the Invest Europe data).

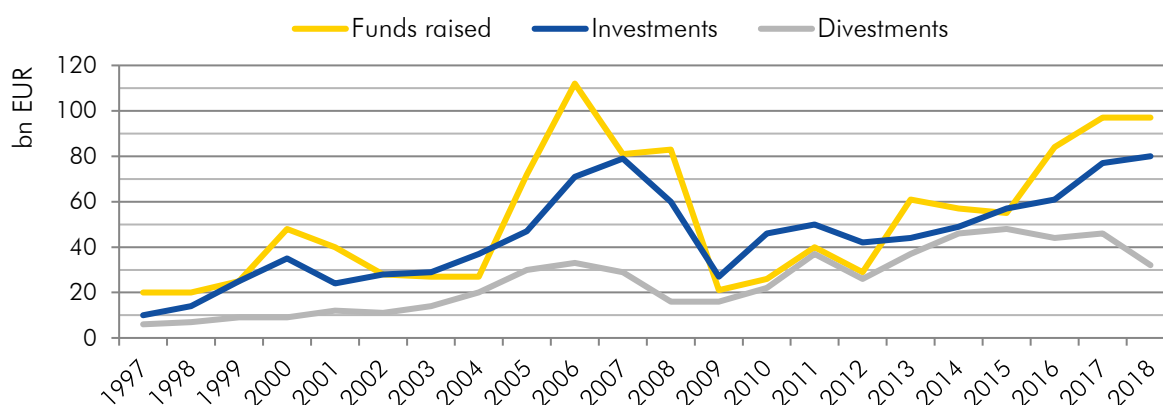
In the same years, the overall PE investment levels were at EUR 35bn and EUR 71bn (and even increased further to 79bn in 2007). However, both booms were followed by significant downturns, i.e. the “dotcom crisis” in the early noughties and the financial and economic crisis from 2007 onwards. The severe crash of the European PE activity in 2008-2009 was followed by a rebound, and fundraising and investment have almost reached new record levels.

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<sup>21</sup> In this chapter, we follow the Invest Europe approach that includes venture capital as a subcategory of private equity.

<sup>22</sup> See Section 5.1.1 for an overview of the rationale for public intervention in SME financing.

Figure 21: Fundraising, investment and divestment amounts by PE firms located in Europe<sup>23</sup>



Source: Authors, based on data from Invest Europe

## Box 2: Introductory information on Invest Europe data

In this chapter, numbers, diagrams and statements are largely built on statistics from Invest Europe (formerly EVCA, the European Private Equity & Venture Capital Association), and we would like to thank our colleagues from the Invest Europe research team for their support.

Invest Europe monitors direct private equity investment funds that primarily focus on investments in Europe. The funds included in the statistics are PE funds making direct PE investments, mezzanine PE funds, co-investment funds and rescue/turnaround funds. Please note that Invest Europe PE statistics do not include infrastructure funds, real estate funds, private debt funds, distressed debt funds, primary funds-of-funds, secondary funds-of-funds and PE/VC-type activities that are not conducted by PE funds. Also not included are activities of business angels and hedge funds as well as corporate acquisitions outside of dedicated corporate venture programmes.

Invest Europe statistics can differ from the numbers reported by other data providers for the reason just mentioned and others, like differences in methodology, definitions and interpretations of the PE fund and investment stages and geographical definitions (e.g. of “Europe”).<sup>24</sup>

With data on more than 1,400 European PE firms, the Invest Europe statistics released in May 2019 cover 89% of the EUR 688bn in capital under management in Europe. Data since 2007 was restated and complemented with additional information. To a certain extent, this resulted in revised numbers in the Invest Europe statistics and this document.

See Invest Europe (2019) for more details.

In 2018, PE investments increased considerably. PE funds located in Europe (statistics based on the “industry approach”; see Figure 21)<sup>23</sup> invested EUR 80.3bn, an increase by 5% compared to the previous year. At the same time, investments by PE funds from all over the world (including Europe)

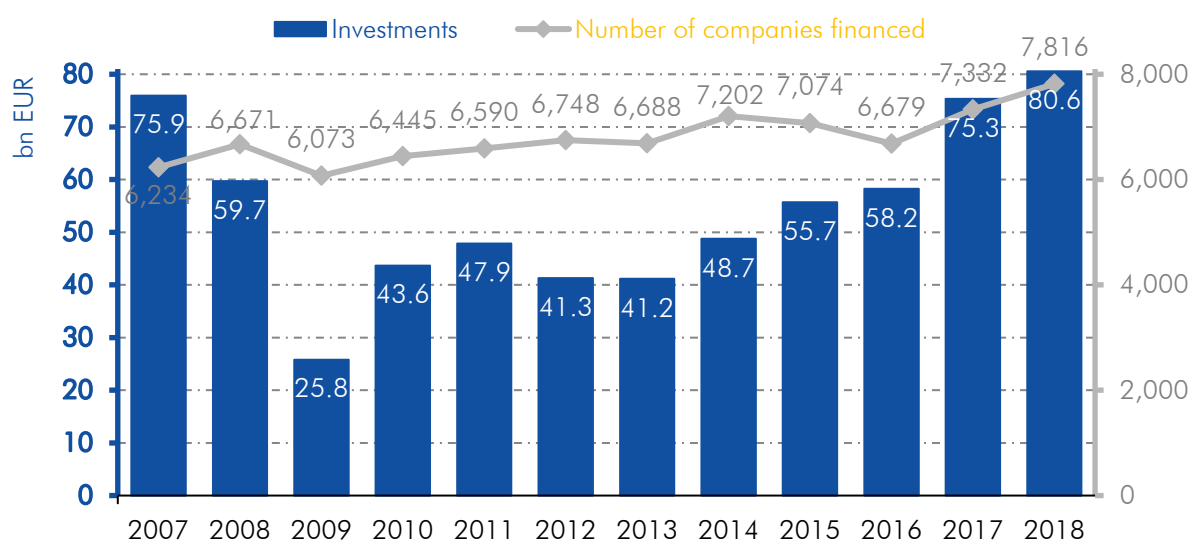
<sup>23</sup> In this diagram, investment and divestment data are based on the “industry approach” (or “office approach”), i.e. by PE firms located in Europe, in contrast to the “market approach”, which is based on the location of the portfolio companies.

<sup>24</sup> Data on the PE and VC market is scarce and sometimes inconsistent with one another when comparing different data bases. This is mainly due to a lack of data disclosure and different data collecting and compiling approaches. Therefore, it is “difficult to paint in definitive terms the level of investment activity and fund performance”, as stated by Kaplan and Lerner (2016). However, the authors also highlight that “the quality of information available has increased in recent years and can be expected to continue to do so going forward”.

in portfolio companies based in Europe ("market approach") increased by 7% to EUR 80.6bn (see Figure 22). The number of European companies financed increased by 7% to 7,816.

A differentiation by stage focus (Box 3) provides an overview of the Invest Europe investment stage definitions) reveals that investment strongly leaped in the largest part of the PE market, i.e. the buyout segment (by 10% to EUR 58.8bn), in 2018. A modest increase was also recorded for growth capital (+0.4% to EUR 11.9bn), while the smaller segments of replacement capital (–39% to EUR 1.4bn) and rescue/turnaround capital (–63% to EUR 0.3bn) decreased (see Figure 23).

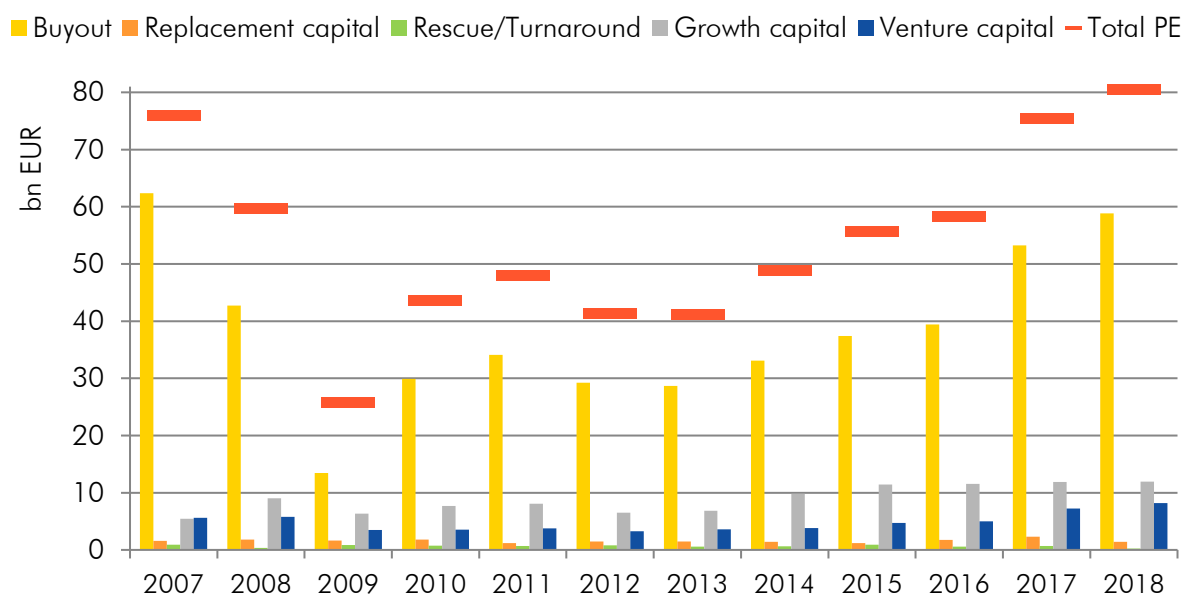
**Figure 22: PE investment in European portfolio companies**



Note: Investment activity by PE firms in portfolio companies based in Europe ("market approach"). All investment figures are equity value, i.e. excluding leverage.

Source: Authors, based on data from Invest Europe

**Figure 23: PE investments in European portfolio companies by stage focus**



Source: Authors, based on data from Invest Europe

### Box 3: Invest Europe definition of investment stages for private equity

#### Venture Capital

- **Seed:** Funding provided before the investee company has started mass production/distribution with the aim to complete research, product definition or product design, also including market tests and creating prototypes. This funding will not be used to start mass production/distribution.
- **Start-up:** Funding provided to companies once the product or service is fully developed, to start mass production/distribution and to cover initial marketing. Companies may be in the process of being set up or may have been in business for a shorter time, but have not sold their product commercially yet. The destination of the capital would be mostly to cover capital expenditures and initial working capital. This stage contains also the investments reported as “**Other early stage**” which represents funding provided to companies that have initiated commercial manufacturing but require further funds to cover additional capital expenditures and working capital before they reach the break-even point. They will not be generating a profit yet.
- **Later-stage financing:** Financing provided for an operating company, which may or may not be profitable. Late stage venture tends to be financing into companies already backed by VCs. Typically in C or D rounds.

#### Growth

A type of private equity investment (often a minority investment) in relatively mature companies that are looking for primary capital to expand and improve operations or enter new markets to accelerate the growth of the business.

#### Buyout

Financing provided to acquire a company. It may use a significant amount of borrowed capital to meet the cost of acquisition. Typically by purchasing majority or controlling stakes.

#### Rescue / Turnaround

Financing made available to an existing business, which has experienced financial distress, with a view to re-establish prosperity.

#### Replacement capital

Minority stake purchase from another private equity investment organisation or from another shareholder or shareholders.

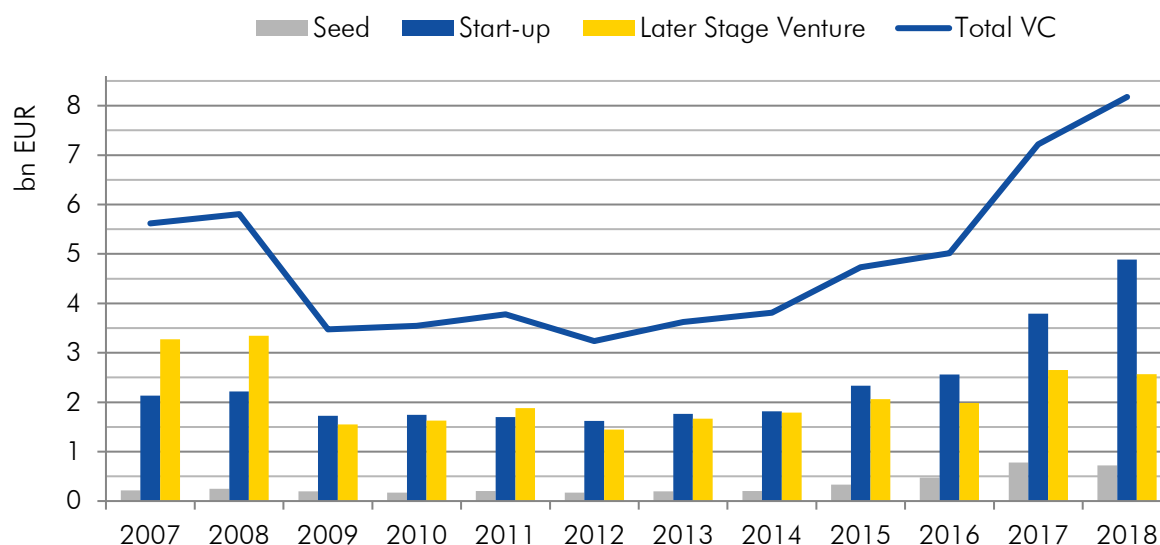
Source: *Invest Europe (2019)*

Venture Capital (VC) investments jumped by 13% to EUR 8.2bn in 2018. In terms of number of companies financed, the VC segment accounted for the majority of PE investments (4,437 out of 7,816). Within the VC market segment, investments into start-up stage enterprises surged by 29% to EUR 4.9bn (see Figure 24), while seed (–7% to EUR 0.7bn) and later stage venture investments (– 3% to EUR 2.6bn) decreased; see Box 4 for a discussion of investments at the technology transfer stage. Before the crisis, later stage venture was the driver of VC investment, but since 2009, investments at the start-up stage have been higher, on average, than later stage VC investments.<sup>25</sup>

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<sup>25</sup> Please note that the investment activities of Business Angels are not included in the Invest Europe statistics, see Box 3. As business angel financing is important for the financing of SMEs and innovation, we present more information in Section 4.1.2.

Figure 24: VC investment amounts by stage focus



Source: Authors, based on data from Invest Europe

#### Box 4: Financing technology transfer

Technology transfer (TT) is the process of transforming the results of research and development into marketable products and services. It can take place through a number of means, in particular through the collaboration between research organisations and industry, the licensing of intellectual property rights, the creation of start-up businesses or university spin-out companies.

Although TT investments in Europe are in the radar of some investors, academic research is generally considered to be 'too new' or 'too high-risk' to be transferred out of the research laboratory and financed by the traditional investors. New discoveries and technologies may fail to realise their potential unless they become attractive to industry or downstream investors.

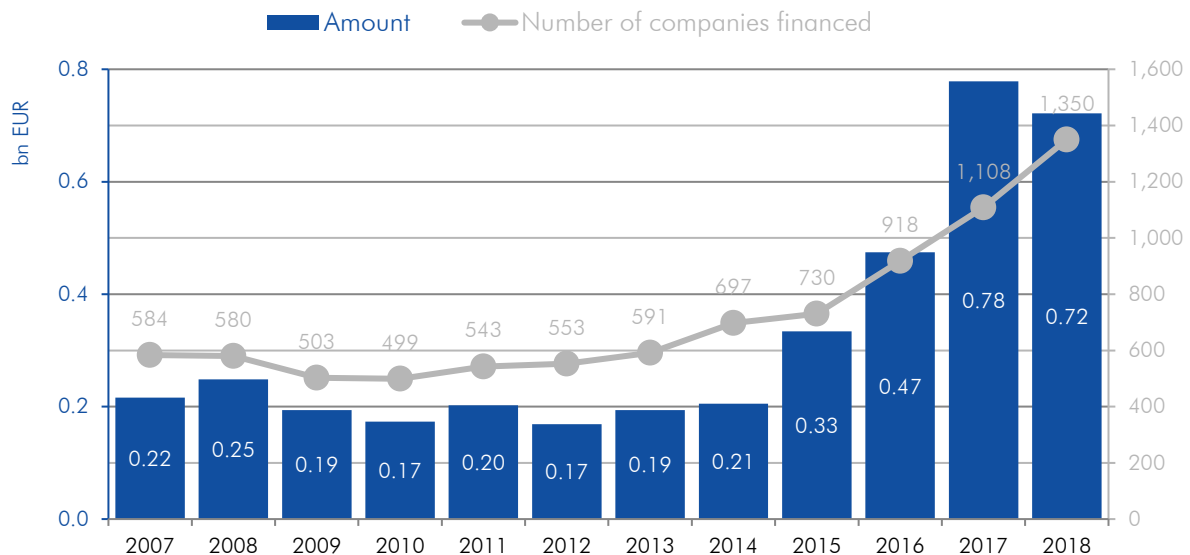
Equity investments in TT activities can contribute to reduce early-stage (pre-seed, seed and post-seed) funding gaps and sustain viable TT structures while generating financial returns for investors over time (EIF, 2016). Moreover, they contribute to ensure a strong and continuous deal flow in the venture capital market (EIF, 2017). In the field of TT and the commercialisation of research results, the EIF has undertaken a particular market development effort also in geographies with an emerging VC ecosystem, and EIF's investments in TT funds encourage private investors to look at the asset class. In 2018, the EIF encouraged the flow of research and innovation into the European marketplace by supporting seven TT transactions with a total commitment of EUR 155m (EIF, 2019).

Overall, annual seed stage VC investments<sup>26</sup> in European enterprises have more than quadrupled since 2012 and reached a record level of EUR 779m in 2017, according to Invest Europe data. In 2018, seed investments declined by 7% to 721m, while the number of 1,350 ventures financed constitutes a new record high (see Figure B4.1).

<sup>26</sup> In the Invest Europe statistics, seed stage VC transactions are defined as "[f]unding provided before the investee company has started mass production/distribution with the aim to complete research, product definition or product design, also including market tests and creating prototypes. This funding will not be used to start mass production/distribution." The seed stage goes beyond TT, but it is the earliest investment stage for which data is provided in Invest Europe statistics.

Box 4 continued:

Figure B4.1: Seed stage VC investments in European companies<sup>26</sup>



Source: Authors, based on data from Invest Europe

In the context of a cooperation with the University of Trier, EIF contributed to a research project on incubator business models in Europe; an overview is provided in a previous ESBFO issue (see Kraemer-Eis, Lang, Torfs, and Gvetadze, 2015b).

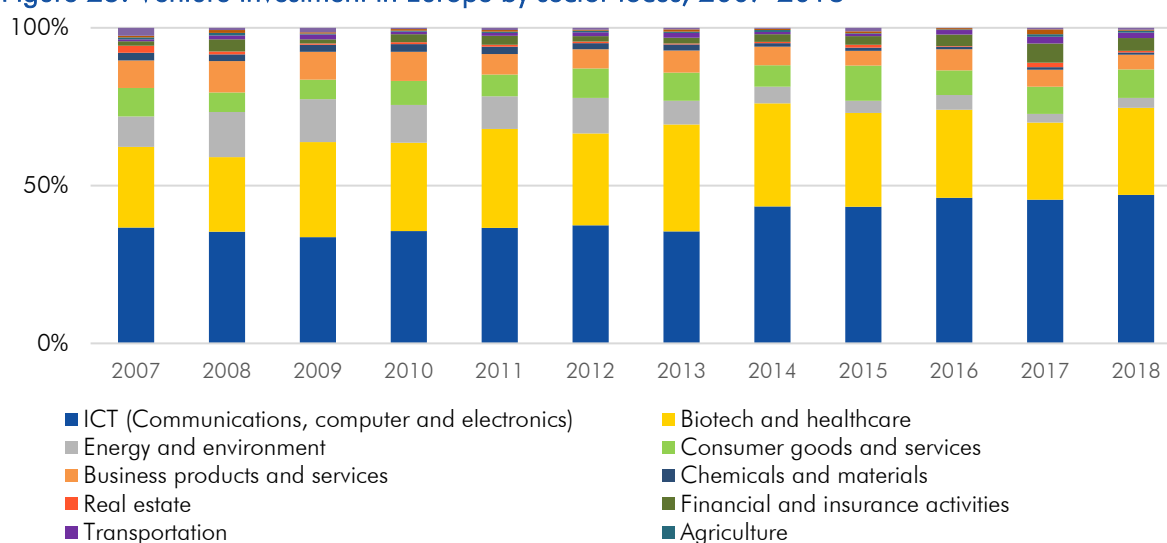
Source: EIF, 2019

Developments in venture investment by sector are shown in Figure 25. The relative importance of sectors has a certain stability over time: ICT (communications, computer and electronics) and biotech & healthcare have remained by far the most relevant industries for venture investment in Europe since 2007. Over the past decade, the share of ICT in total VC investment activity even increased, from 34% in 2009 to 47% in 2018. In contrast, the share of investments in the energy and environment sector decreased from 14% in 2008 to 3% on average in the past two years.<sup>27</sup> Moreover, the developments in the ICT sector had a substantial impact on structural changes in the VC market. Chapter 4.5.2 provides a more detailed elaboration.

See, for example, Dealroom.co (2018) for a different approach, which results in higher amounts reported for seed stage investment.

<sup>27</sup> This development might be due to a re-positioning of traditional Cleantech VCs, who have stopped investing in capital-intensive companies to focus on digital solutions for energy and environment. This new strand of investments are then typically classified under ICT.

Figure 25: Venture investment in Europe by sector focus, 2007-2018



Source: Authors, based on data from Invest Europe

Furthermore, according to Invest Europe, market participants have observed a notable amount of growth stage investments as follow-on investments in venture-backed companies that are not registered in VC investment statistics (but in growth stage statistics). In 2018, about 18% of growth stage investments was received by venture-backed companies (Invest Europe, 2019). Against the background of the scale up issue in Europe (see, inter alia, chapter 4.5) this is a positive sign. However, further flagship initiatives to support risk capital – covering various investment stages and sectors – will be necessary (AFME, 2017). This will also support the creation and growth of innovative enterprises in Europe; Signore and Torfs (2017) provide more insight into the value of innovation for EIF-backed start-ups (see also Kraemer-Eis, Botsari, Gvetadze, Lang and Torfs, 2017, for an overview).

### Corporate venture capital

Corporate venture capital (CVC) has gained importance in recent years. CVC can serve both an investing corporation's financial and strategic goals, e.g. to enhance its innovative capacity or to tap into new markets. CVC can take various forms. The most common practice is that a corporate invests through a VC fund, but the number of dedicated CVC units, accelerators and other CVC manifestations has also increased over the past years (see Mawson et al., 2017). In particular large companies in innovation-intensive industries are active in this field, most prominently in the US (Brigl et al., 2016; Andonov, 2017). For example, companies like Google invest in start-ups in the fields of life science, healthcare, artificial intelligence, robotics, transportation, cybersecurity, and agriculture (Saunders-Calvert, 2017). The relatively low cost of capital has driven more corporates to become part of the game in the last years (Mankins et al., 2017). In 2018, global CVC investments reached a record high of 2,740 deals, amounting to USD 53.0bn or EUR 44.9bn (CBInsights, 2019).<sup>28</sup> Google Ventures was the organisation that was most active overall in CVC in 2018, while

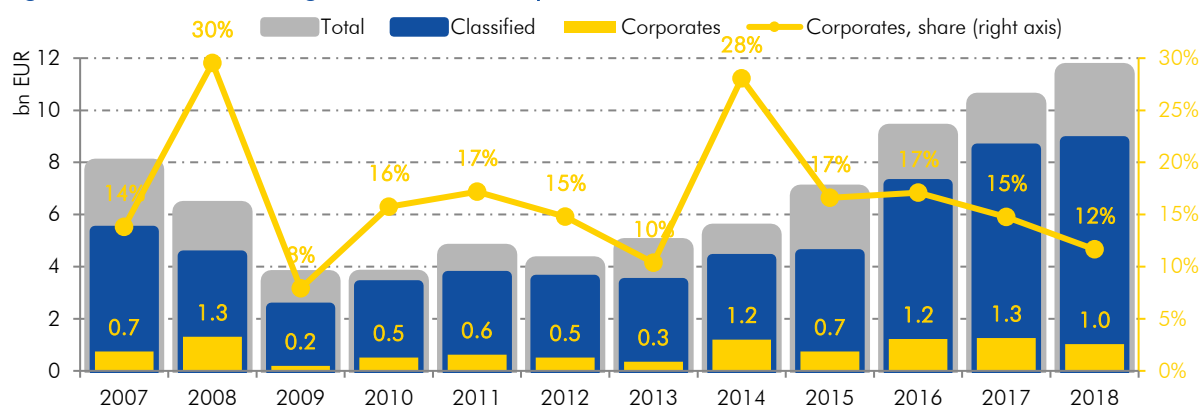
<sup>28</sup> CBInsights CVC statistics only cover investments by CVC funds, which are defined as separately demarcated corporate investment vehicles. Corporates making strategic investments directly are not included (CB Insights, 2019).

CapitalG (Google Capital) invested in the most unicorns. The share of CVC deals among all VC deals increased from 16% in 2013 to 23% in 2018.

North America continues to attract most CVC investments, but its share in the number of global CVC deals went down from 64% in 2013 to 41% in 2018 (CBInsights, 2019). At the same time, the share of Asian companies went up from 19% in 2013 to 38% in 2018. The share of European companies among all CVC deals worldwide was comparatively stable over that period and at 17% in 2018. Since 2013, the total annual CVC investment value went up from EUR 1.0bn (160 deals) to EUR 4.7bn (468 deals) in Europe. Among those deals, 26% went to companies in the UK, followed by Germany (19%) and France (12%).

Corporates are also an important investor group in European VC funds. While they accounted for 3% of the total PE fundraising amounts in Europe in 2018, according to Invest Europe data, their share is much higher in VC funds. In 2018, corporates contributed EUR 1.0bn to VC funds in Europe, which represented 9% of total VC fundraising (EUR 11.4bn) or 12% of the total classified fundraising amounts (EUR 8.8bn) in 2018 (see Figure 26). However, corporate investors' share in European VC fundraising decreased in 2017 and 2018.

**Figure 26: VC fundraising amounts and corporate investors<sup>29</sup>**



Source: Authors, based on data from Invest Europe

One of the segments not covered under the Invest Europe PE activity statistics are corporate acquisitions outside of dedicated corporate venture programmes. Since 2015, the number of corporate VC investments directly off the balance sheet is higher than investments by CVC funds. In 2018, off balance sheet CVC investments comprised 3,820 deals, compared to 2,177 deals backed by CVC funds only and 563 deals backed by both off balance sheet CVC investments and CVC funds (CBInsights, 2019).

Despite a stronger focus on contributing to the corporate's strategic goals instead of pursuing purely financial objectives, CVC investors also hold shares in European unicorns (Madhvani et al., 2017). CVC investment could indeed even more assist European companies with high growth potential in

<sup>29</sup> Incremental amounts raised during year (in contrast to final closings only). "Total" represents classified and unclassified fundraising amounts. "Corporate, share" represents the percentage of corporate investors' contributions to classified VC fundraising amounts. In the Invest Europe PE/VC fundraising statistics, the investor type "corporate investor" is defined as "corporations manufacturing products or delivering non-financial services" (Invest Europe, 2019).



becoming global leaders. However, we know that “Europe’s corporations are not benefiting from the success of European scale-ups” (Mawson et al., 2017). Despite a strong increase over the past years, there are still fewer EU corporations active in CVC than in the US and Asia. Roughly half of the deals of European CVC investors are made in Europe, while the “home bias” is much stronger in the US, where the number of domestic deals account for approximately three quarters of all investments (Mawson et al., 2017). Moreover, European tech companies are often acquired by non-EU buyers. 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). However, there are differences by sector; while US buyers are more technology-focused and mostly active in the ICT space, European buyers seem generally more specialised in Life Sciences.

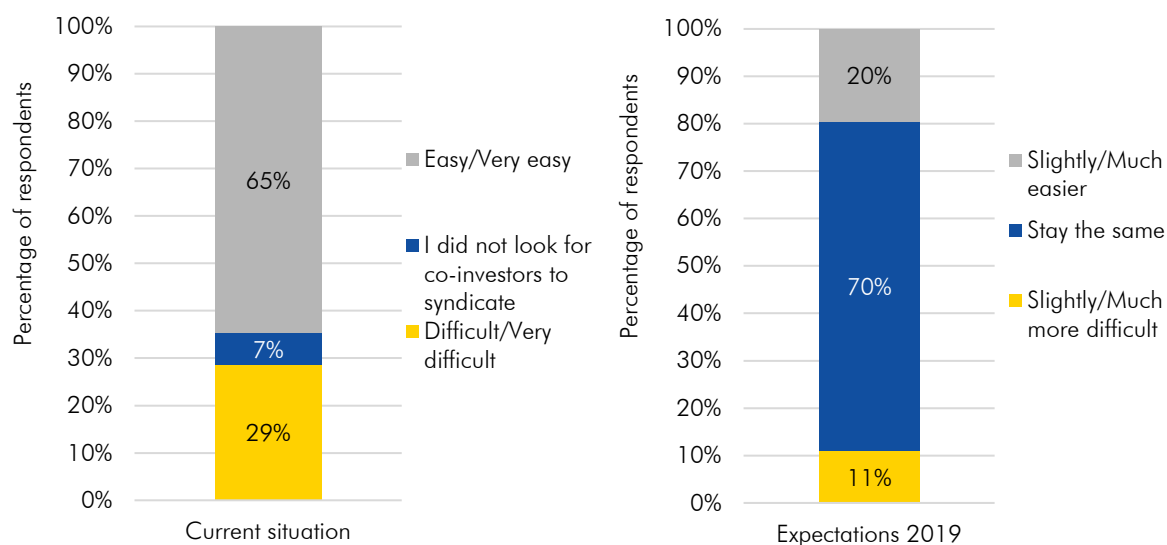
### Co-investment

Co-investment can be a useful feature of the PE/VC market by strengthening investment capacities. The availability of stable providers of co-investment capacity can be a benefit for VC fund managers when addressing potential investment opportunities. On a global level, the proportion of LPs that co-invest with GPs has risen considerably (Coller Capital, 2017). LPs also spend more time on co-investment activities than they did 5 years ago (Coller Capital, 2019). Moreover, a large majority of LPs reported “that their co-investments have outperformed their overall PE portfolios in recent years” (Coller Capital, 2016).

In the *EIF VC Survey 2019*, “finding co-investors to syndicate” was perceived relatively easy and not expected to change soon by the majority of European VC GPs (see Figure 27). However, 29% of the fund managers reported difficulties in finding co-investors. Compared to the previous survey wave, the easiness to find co-investors improved. In the *EIF VC Survey 2018*, 56% of the respondents perceived finding co-investors as easy/very easy and 39% as (very) difficult (see Kraemer-Eis et al., 2018a).

A more detailed analysis of the responses reveals significant variations across regions and industries. VC managers in France (76%) and the DACH region (74%) report greater easiness in finding co-investors to syndicate, as opposed to almost 4 in 10 VC managers in the South who found it rather difficult. Similarly, VC managers investing in Clean Technologies (48%) and Manufacturing (46%) report the greatest difficulties in finding co-investors, while the corresponding figures for ICT and Life Sciences are only 25% and 31%, respectively.

**Figure 27: Easiness to find co-investors to syndicate, current situation and expectations**



Note: Diagrams show the aggregated results for the *EIF VC Survey 2019* questions “How easy/difficult is it currently to find co-investors to syndicate?” (left-hand side) and “Over the next 12 months, how do you expect finding co-investors to syndicate to become?” (right-hand side).

Source: *EIF VC Survey 2019*

#### 4.1.2 Business angels

As already mentioned, the Invest Europe activity data cover fundraising, investment and divestment from PE and VC firms in Europe. It does not cover segments outside the definition that Invest Europe applies for the collection of its activity statistics, e.g. business angels’ activities although it has gained importance in recent years as a financing source for early-stage start-ups.

Business Angels (BAs) represent an important class of private equity investors, primarily consisting of high net-worth individuals, usually with entrepreneurial or managerial experience. BAs tend to invest their own money, either individually or in formal or informal syndicates, in businesses which are not publicly traded, commonly in exchange for convertible debt or ownership equity (see for a general description of BA financing, Kraemer-Eis and Schillo, 2011; OECD, 2011; BAND, 2016; and OECD, 2019).

In a recent European Commission survey among European BAs, the large majority of respondents were male (89%) and the average age was 55 years (European Commission, 2017b). In Central and Eastern Europe (CEE), BAs tend to be younger (average age of 43 years) and the share of female BAs is larger. The average period of respondents’ investment experience as a BA was 7.5 years, with large differences by country. Ninety-eight percent hold at least a bachelor’s degree (or equivalent) and the vast majority (87%) have experience in senior management.

BAs differ from VC funds, which primarily invest third parties’ resources (e.g. institutional investors’). Angel-financed companies are typically in earlier stages of their development (Kraemer-Eis and Schillo, 2011). BAs’ transaction costs are relatively low, which allows them to invest on a smaller scale. They are geographically more dispersed than VCs and often invest in local markets. Moreover,

BAs tend to be very ‘hands-on’ investors, providing also additional value-adding support beyond financing (e.g. mentoring, business advice and access to networks), hence they can play a central role in the start-up ecosystem, in particular for innovative firms (OECD, 2016). Moreover, entrepreneurial investors not only form the nucleus of the BA ecosystem, but possibly also the VC ecosystem at a later point in time, i.e. there is a potential to catalyse new institutional players even in relatively underdeveloped VC markets. According to several studies, BAs have a positive impact on the growth of the firms they invest in, their performance and survival (Lerner et al., 2015; OECD, 2016). The success of the investees seems to be strongly based on the support beyond financing that BAs provide (Kerr et al., 2011). There is evidence that BAs are relatively resilient to changing market cycles (OECD, 2016), and angel investments in early-stage high-growth companies tended to increase during and after the financial and economic crisis of the previous decade, as VC funds migrated to less risky investments (Kraemer-Eis, Lang and Gvetadze, 2013).

An increasing majority of BAs co-invest with other early stage investors in order to diversify risks (OECD, 2016) and/or to improve their skillset and experience (Capizzi, 2015). Sourcing channels like crowdfunding platforms are used more often by BAs – in particular by younger and less experienced ones – as tools to find investment opportunities, thereby allowing them to make investments in a wider geographical area (OECD, 2016).

However, there are difficulties in measuring the size of the business angel community, the main ones being identification and definition. BAs often stay anonymous and the details of their investments are rarely disclosed. Besides, there are “virgin” angels that have never actually invested but increase the number of BAs in the statistics. Others may have occasionally acted as angels but are no longer looking for investment opportunities. Still others may invest as entrepreneurs but do not consider themselves as being part of the “BA scene”. The so called “invisible market” makes a precise estimation of the angel market difficult. Some studies estimate that the invisible part of the market is up to seven times greater than the visible part (CSES, 2012), while others even estimate a multiplier of around ten (see, e.g., EBAN, 2014 and 2018). Such difficulties must be borne in mind when describing the market.

Currently there is no robust and consistent data available on the Business Angel market in Europe; published data can only be used as indication or very rough estimate (see also OECD, 2018b). For the visible market segment, data is collected by angel associations from angel groups and networks. Ad-hoc surveys contribute to increase the available level of information on BAs in Europe (see European Commission, 2017b). In the following, we use such statistics keeping in mind its shortcomings (see, for example, the related EBAN disclaimer that we show in Box 5). Information on angel investing in different European countries can also be found in BAE (2015).

#### Box 5: Introductory information on EBAN data

Due to its nature, the early stage investment market and especially the BA segment is difficult to quantify. An important part of the total investments is informal and not publicly reported. The estimate of the percentage of the invisible market is based on a study commissioned by the European Commission to CSES about the BA market in Europe. In some countries, the deals done through the ‘visible market’ (BANs, Federations) are not published, so in some cases the estimates may not correspond to the exact amounts invested by BAs. However, EBAN matched information from different sources, to validate the estimates for each particular market in order to have a higher degree of confidence on the data that is published.

*Box 5 continued:*

Knowing the underlying limitations, the main objective of the EBAN statistics is to provide a better understanding of the European early stage market. The latest EBAN statistics compendium comprises information collected through direct surveys from BA networks, national federations and other early stage investors. Additional data were collected from different sources, namely Dealroom, Zephyr, Crunchbase, market reports, EC and national publications, press articles and research papers, as well as other early-stage actors in Europe.

*Source: EBAN (2018)*

At a European level, the European Business Angel Network (EBAN) reported an increase in BA investment by 9%, compared to the year before, to a record amount of EUR 7.3bn in 2017 (EBAN, 2018; more recent data is not yet available). However, this number is based on the assumption that the visible market, for which EBAN reports investments of EUR 727m, represents 10% of the whole market.<sup>30</sup> The estimated number of investments increased by 3% to 39.4k. The number of BAs is estimated at 337.5k, which represents an increase by 8% compared to 2016. The number of BA networks (BANs) in Europe was at 475 in 2017. From 2003 to 2012 the number of BANs had grown at an average rate of 17%, but began to level off in 2013. Since 2013, the number has remained stable, growing only by 1.5% from 2013 till 2017, which demonstrates a certain consolidation in the market as networks became more formalised (EBAN, 2018).

Most of the BA activity within the EU is happening in the UK, Germany, France, Spain and Finland. When comparing BA investment amounts to GDP, the picture looks different, with Monaco, Estonia, Malta and Bulgaria being on top of the ranking. In 2016 only 8% of BA deals (most recent investments) targeted companies outside their home country, but a considerable share of BAs stated that they would invest abroad if legal and fiscal legislations facilitated such activities (European Commission, 2017b). In some countries BA co-investment funds, tax break or grant schemes do not support or even allow investment abroad (EBAN, 2018).

In 2017, investments per individual European angel and funding round varied between EUR 10k and EUR 500k with its average increasing by 13% to EUR 25.4k (EBAN, 2018). The average total amount invested *per company* increased by 10% to EUR 182k in 2017. This is well in line with the results of other studies (e.g., CSES, 2012), which estimated that BAs provided on average around EUR 100k to 200k per deal. In the US, investment per deal is much higher, i.e. at USD 380k (EBAN, 2018).

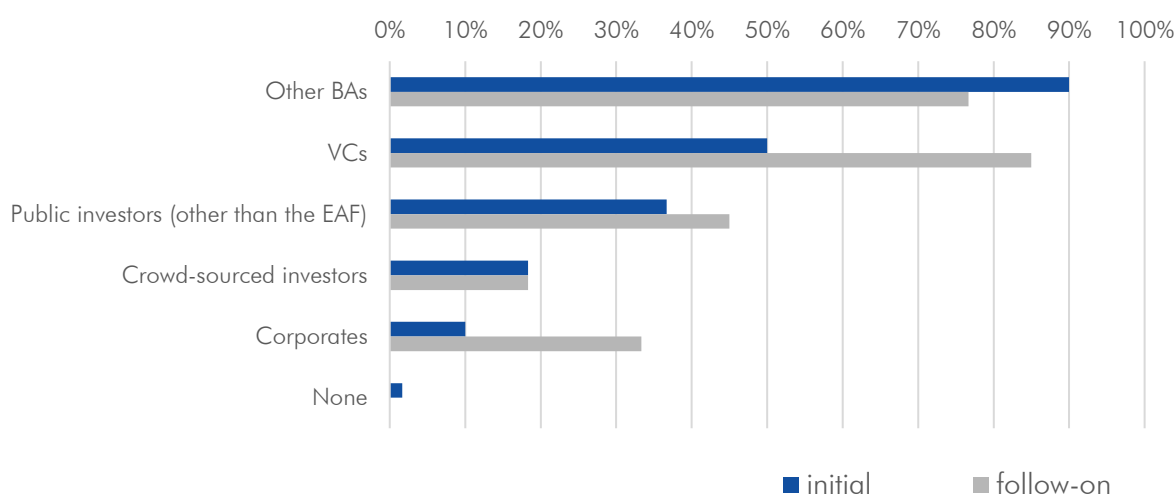
ICT and other technological sectors continued to be by far the most attractive target sector for BA deals (European Commission, 2017b). Within the Tech sector, FinTech, BioTech and MedTech receive most investments given their strong growth and scalability potential (EBAN, 2017). In line with this, Dealroom statistics show FinTech (25%), ICT (21%) and Health (16%) as the sectors that received the largest BA investment amounts. However, 26% of respondents indicated that they have

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<sup>30</sup> The assumption that visible BA investments constitute a share of 10% of the whole (visible plus invisible) BA market is based on CSES (2012) and was also used in EBAN statistics for previous years. The visible market encompasses activity undertaken by investors gathered in BA networks and having a direct relation with EBAN or reporting through a federation. It also comprises networks from which access to information is limited but its existence and activity is known by other players of the industry; additionally, databases reporting start-up investments are used (EBAN, 2018).

no specific sector focus, but mainly look at the team, the idea/team, the product or the market as their predominant investment criteria. The sector focus of BAs also contributes to the formation of specific investor communities/networks (EBAN, 2018). With regard to the investee companies' development stages, pre-seed (44%) and seed (63%, multiple responses possible) investments are most popular, while a third of BAs also goes beyond these stages (EBAN, 2018).

**Figure 28: Types of co-investors in BA investment rounds**



Note: The diagrams show the aggregated results for the EIF BA Survey 2019 question “What types of co-investors do you have in your BA investment rounds? Please specify separately for initial and follow-on rounds.”.

Source: EIF BA Survey 2019

While co-investments with other BAs are still the most common deal form, the relevance of investments alongside early-stage funds has increased (EBAN, 2018; European Commission, 2017b). In some countries, governments created such funds for co-investments with BAs. On a pan-European level, the European Angel Fund (EAF), an initiative advised by the EIF, offers a co-investment scheme for BAs investing in innovative companies (i.e. 1:1 matching of BA funding by EAF without deal-by-deal approval).<sup>31</sup> Syndication among angels has also increased, partly due to some co-investment schemes for projects in which the threshold amount is relatively high for a single BA (EBAN, 2018). In the EIF BA Survey, a survey among EIF-supported BAs under EAF conducted in spring 2019, 8% if the respondent stated to be part of a syndicate of BAs that are contractually bound to one another in order to regularly invest together, 22% stated to regularly invest together with the same (group of) BA(s), but they are not contractually bound to one another, and 69% stated not to be part of a stable BA syndicate. See Box 6 for more information about the EIF BA Survey. With regard to co-investor types, the patterns differ depending on whether it concerns initial or follow-on investment rounds (see Figure 28). In initial rounds, 90% of the respondents have other BAs as co-investors and 50% team up with VCs. In follow-on rounds, 85% of the respondents have VCs as co-investors and 77% invest alongside other BAs. Public investors (other than EAF) are more prominent in follow-on rounds (being co-investors for 45% of the respondents) than in initial rounds (37%).

<sup>31</sup> See [www.eif.org/eaf](http://www.eif.org/eaf) for more information about the EAF.

### Box 6: The EIF BA Survey

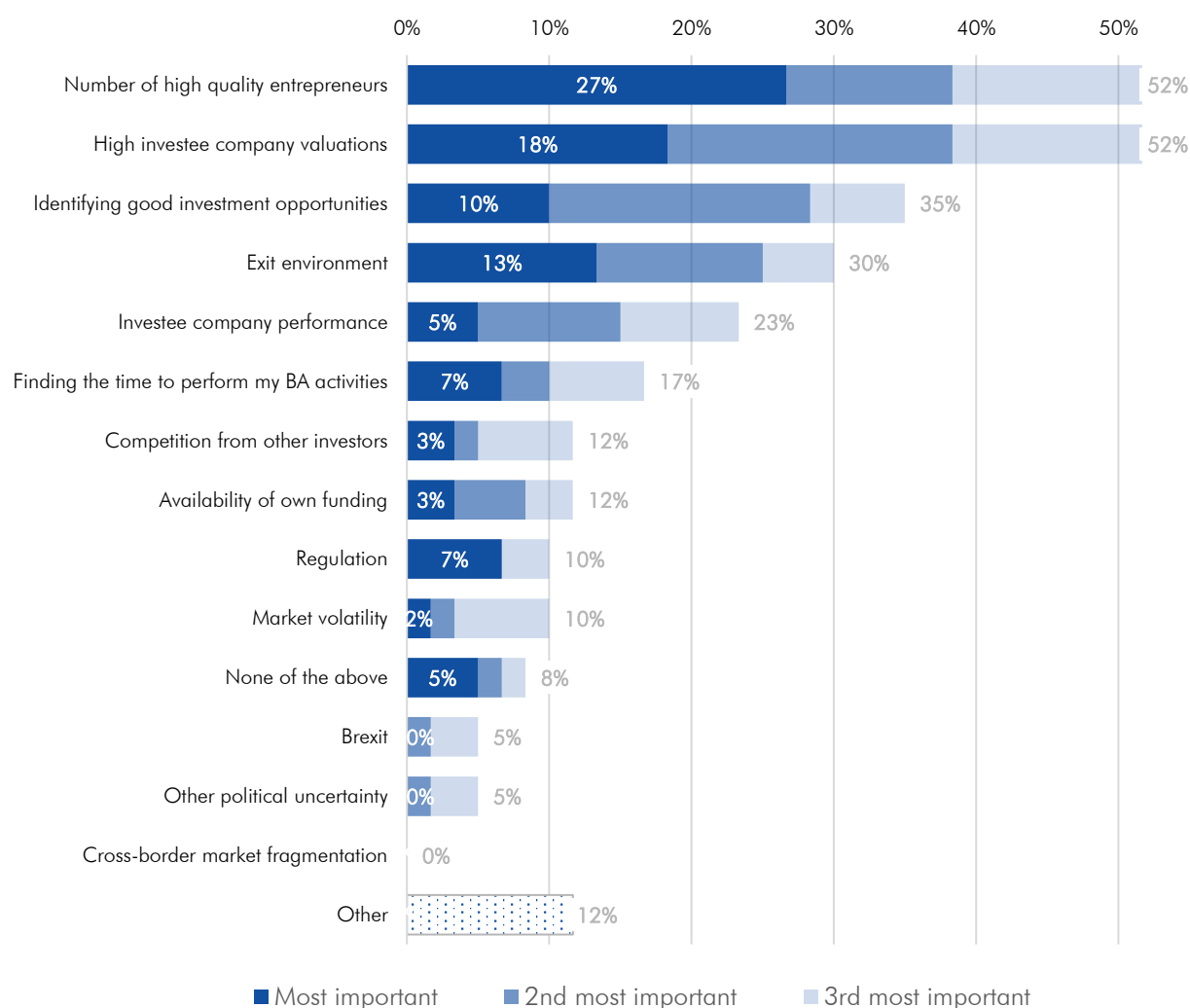
As mentioned above, the availability of data describing the European BA market is scarce. In order to improve the market information about BAs in Europe, the EIF launched a new EIF BA Survey in 2019. The EIF BA Survey is a survey among EIF-supported BAs under EAF, i.e. the results do not claim to represent the whole BA market and might represent a group of BAs that is different from those represented in the EBAN and EC studies. It is inspired, inter alia, by the successful introduction of the EIF VC Survey in 2018 (see Box 10 for more information about the EIF VC Survey). The first EIF BA Survey wave was conducted between 28 March and 10 May 2019 and comprised questions addressing the topics socio-economic characteristics of the BA, general characteristics of the BAs' activities, the added value of the EIF activities under the European Angels Fund (EAF), market sentiment, public support for BA investing, and Environmental / Social / Governance (ESG) considerations. The results of the EIF BA Survey will be published in the EIF Working Paper series, which is available online on the EIF website: [https://www.eif.org/news\\_centre/research/index.htm](https://www.eif.org/news_centre/research/index.htm)

Source: EIF

Despite the opaqueness of this market, the available evidence indicates that business angels are of high economic importance for the financing of innovative early-stage companies. Moreover, BAs' behaviour did not move in the same direction like bank lending or venture capital supply during the crisis (OECD, 2017a). Government support of this market segment can therefore help to improve the availability of financing sources for young high-growth companies (Mason and Harrison, 2013). However, policy measures have to be well targeted to the specific nature of BA investors. For example, based on the assumption that the supply of BA capital depends on investors who have already been successful entrepreneurs, Hellmann and Thiele (2017) identify a rationale for funding policies (a tax credit in their model) that allow entrepreneurs to retain a larger ownership fraction and create more entrepreneurial wealth in order to increase the future supply of capital and to create a long-term impact on entrepreneurial activity. Findings by Hellmann, Schure and Vo (2015) also suggest that public support for start-up financing should go beyond an exclusive support of formal venture capital, because additional policy measures for angel investors "would reach a different set of entrepreneurial companies that develop outside of the reach of venture capitalists". Hence, "the central role of BAs is increasingly recognised by policy makers [...], and initiatives to support angel activities have expanded in recent years as part of a broader shift towards policies that aim to make equity-type instruments more widely available for start-ups and SMEs" (OECD, 2016). According to the OECD (2016), public-private co-investment schemes are able to catalyse the private market, "but only if the existing angel market is sufficiently well developed, so that a sufficient number of investor-ready deals can be financed and the government does not have to be overly engaged in matching supply and demand for early-stage equity". However, despite initiatives for more policy support and better framework conditions, including under the CMU action plan (see Kraemer-Eis and Lang, 2017), the market is still underdeveloped. It is estimated that US BAs "invest in twice as many US companies as their EU counterparts in EU businesses" and "the size of US angels-backed transactions is approximately 1.7 times higher than EU transactions" (AFME, 2017). A recent overview of barriers to BA financing in Europe and recommendations how these could be mitigated are provided in AFME (2017). However, European angel activity is likely to increase with more successful exits observed in Europe; key actors of successfully exited companies can be expected to turn into future business angels and provide their expertise to start-ups. The recent EIF BA Survey shows, inter alia, the biggest challenges for BA activities in Europe (see Box 6 for more information on the EIF BA Survey). The number of high quality entrepreneurs was stated by 52% of the BA

respondents as one of the three most important challenges (including 27% of the respondents highlighting it as being the first most important challenge), followed by high investee company valuations, identifying good investment opportunities and the exit environment (see Figure 38). In a nutshell, the *EIF BA Survey* results show that macro-level challenges, which affect a BA's activities only indirectly (e.g. regulation, market volatility, political uncertainty), rank relatively low. In contrast, micro-level challenges that are directly related to a BA's business (e.g. valuations, investment opportunities) are mentioned much more prominently, reflecting the current market situation in/towards the end of a boom phase within the economic cycle.

**Figure 29: Biggest challenges in BA activity**



Note: Diagram shows the results for the EIF BA Survey 2019 question "Select up to three of the biggest challenges you currently see in your BA activity."

Source: *EIF BA Survey 2019*

## 4.2 Fundraising activity

In 2018, total funds raised by PE firms located in Europe further increased by 1%, compared to the year before, to EUR 97.3bn, which constitutes the highest value since 2006 (see Figure 30 and Figure 21). The increase was mainly driven by a doubling in the amounts raised by generalist funds

(EUR 10.6bn). Growth capital funds (+5% to EUR 7.8bn) and mezzanine funds (+2% to EUR 1.0bn) also increased their total fundraising volumes. At the same time, buyout funds, which represent the largest part of the PE market, raised less capital (–8% to EUR 66.5bn).<sup>32</sup>

#### Box 7: Invest Europe's definitions of fund stage focus

**Buyout fund:** Funds acquiring companies by purchasing majority or controlling stakes, financing the transaction through a mix of equity and debt.

**Generalist fund:** Funds investing in all stages of private equity.

**Growth fund:** Funds that make private equity investments (often minority investments) in relatively mature companies that are looking for primary capital to expand and improve operations or enter new markets to accelerate the growth of the business.

**Mezzanine fund:** Funds using a hybrid of debt and equity financing, comprising of equity-based options (such as warrants) and lower-priority (subordinated) debt.

#### Venture Capital

- **Early-stage fund:** Venture capital funds focused on investing in companies in the early stages of their lives.
- **Later-stage fund:** Venture capital funds providing capital for an operating company which may or may not be profitable. Typically in C or D rounds.
- **Venture fund (all stages / dual focus):** Venture capital funds focused on both early and later stage investments.

Source: Invest Europe (2019)

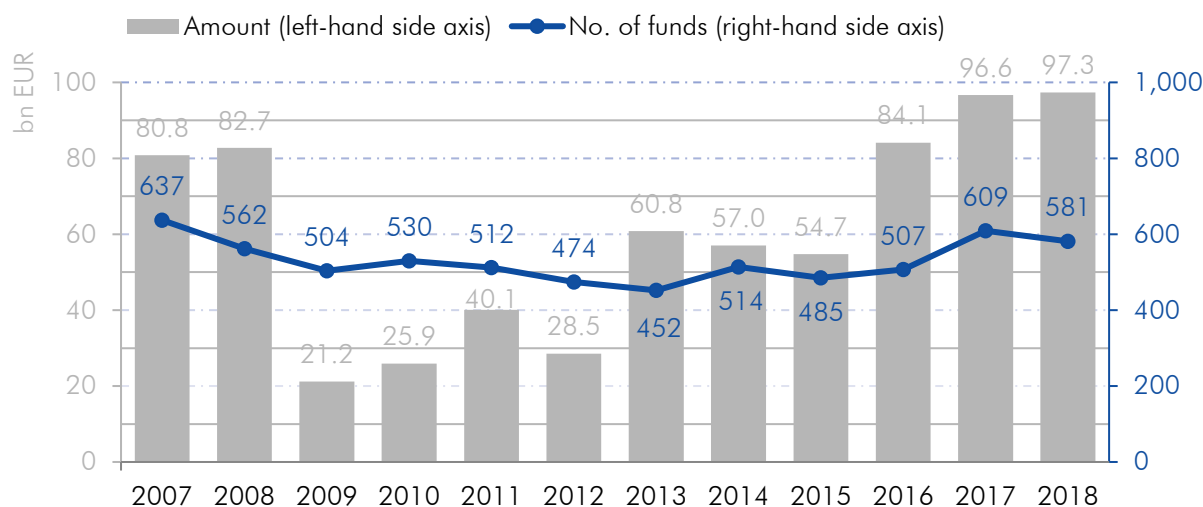
In the venture capital segment, fundraising increased by 11% to EUR 11.4bn (see Figure 31). This constitutes the third record year in a row for European VC fundraising.<sup>33</sup> Since 2013, the total annual amounts raised increased by 19% p.a., on average, according to the upwards revised Invest Europe statistics. While funds with a focus on the early stage (+67% to EUR 4.2bn) and later stage venture funds (+170% to EUR 1.9bn) raised considerably higher total volumes, venture funds with a focus on all stages (–25% to EUR 5.3bn) recorded a decrease. Final closings (total venture, amounts raised since inception) reached a new record high (EUR 8.6bn) in 2018.

<sup>32</sup> Box 7 provides an overview of the Invest Europe fund stage focus definitions.

<sup>33</sup> Invest Europe started publishing fundraising by fund stage focus in 2007.



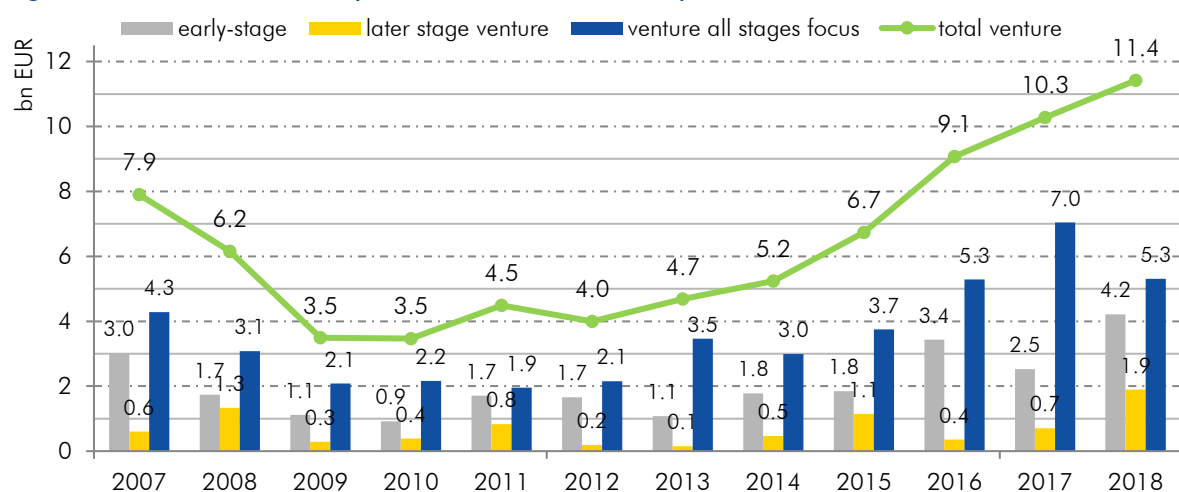
Figure 30: Private equity fundraising\*



\*Note: Amount = Incremental amounts raised during period by PE funds located in Europe. No. of funds = Number of PE funds located in Europe and raising new capital during period.

Source: Authors, based on data from Invest Europe

Figure 31: Amounts raised by VC funds located in Europe

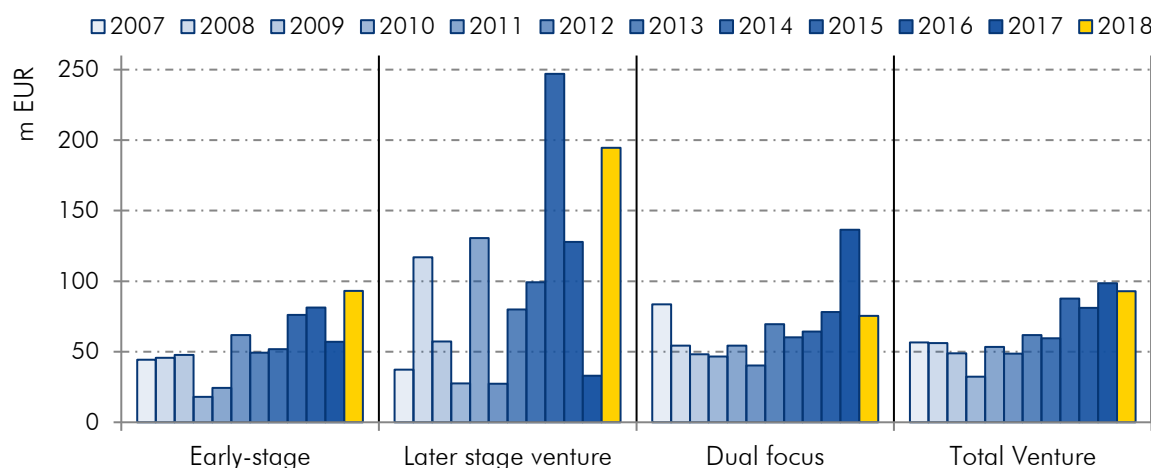


Note: incremental amounts raised during period.

Source: Authors, based on data from Invest Europe

In 2018, the average VC fund size slightly decreased by 6% to EUR 93m (see Figure 32). This amount still constitutes the second highest value ever registered in the Invest Europe statistics since 2007 and is only exceeded by the record high reached in the year before (EUR 99m). While the average sizes of funds focussing either on the early stage (+63% to EUR 93m) or on later stage venture (+489% to EUR 195m) increased substantially, those funds with a focus on all stages showed a decline (–45% to EUR 76m). The number of final fund closings increased to 93 in 2018 (61 in 2017). Final closings of funds with a primary focus on the early stage as well as venture funds with a focus on all stages increased, while the number of funds with a focus on later stage venture that were finally closed remained unchanged.

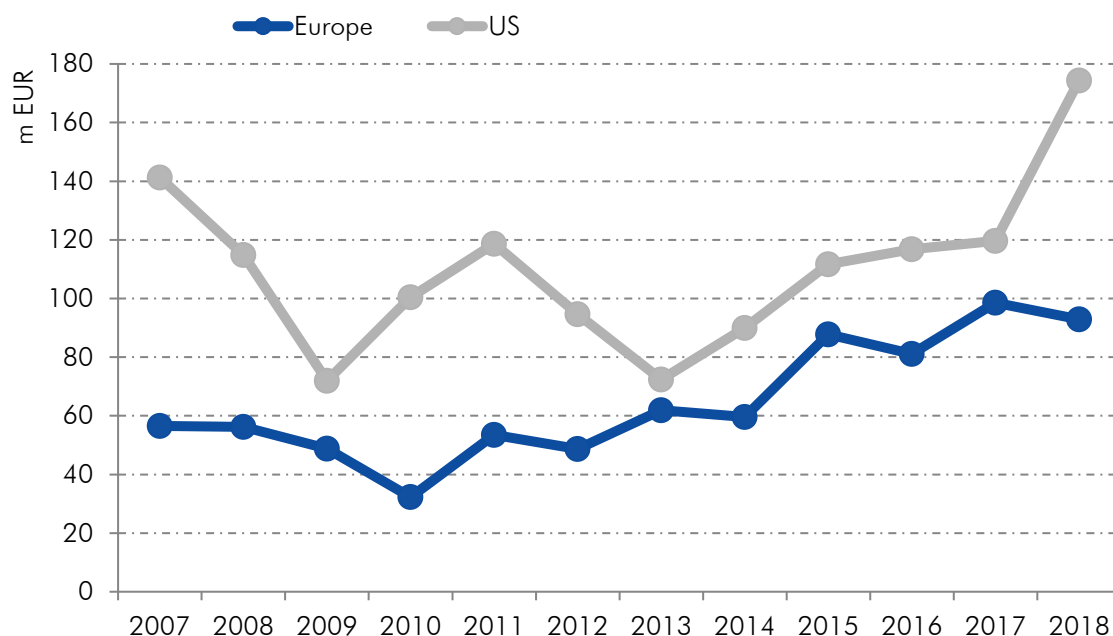
Figure 32: Average VC fund size<sup>34</sup> (at final closing; cumulative amounts raised since inception)



Source: Authors, based on data from Invest Europe

Given some evidence in previous studies, which indicated that small fund size was one of the reasons for poor European VC performance (Kelly, 2011), the high level of average VC fund sizes might mean positive news. However, the average venture fund size in the US is still larger (see Figure 33), which might be driven by a group of VC funds in the U.S. that are considerably bigger than their peers in the set of “large funds” in Europe.

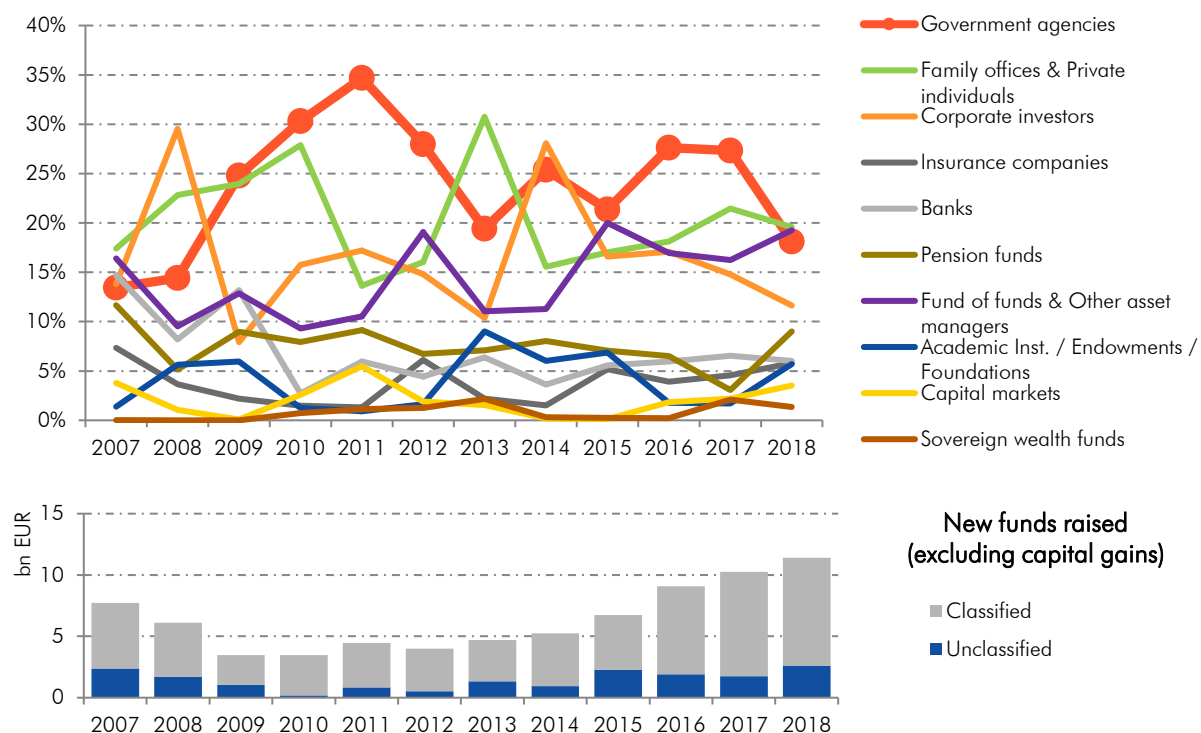
Figure 33: Average VC fund sizes in Europe and the USA



Source: Authors, based on data from Invest Europe and NVCA

<sup>34</sup> The results for 2018 are based on 93 final VC fund closings (44 funds with an early-stage focus, 7 funds with a later stage focus and 42 venture funds with a focus on all stages).

Figure 34: Investor base: Share of government agencies in VC fundraising<sup>35</sup>



Source: Authors, based on data from Invest Europe

EIF's internal analysis suggests that larger funds are often managed by teams that previously had smaller funds that performed well. Thus, the size could be a consequence rather than a cause. Larger fund size would be a sign of more successful GPs and more careful due diligence by LPs, which may indicate that achieving a larger fund size is associated with a certain market validation. Helping promising teams in demonstrating their investment skills and getting market validation in a smaller first time fund (as long as the fund size is not inefficiently small) is consequently a way to help with the next fundraising of such manager, and hence the VC ecosystem.

The European VC ecosystem benefitted substantially from market-stabilising public intervention during and after the crisis, when investors exhibited a cautious sentiment for risk capital. Since 2012, a normalisation has set in, although public support still plays an important role for further market development. These changes are visible in the variations of the investor base during the past years (see Figure 34). According to Invest Europe figures, the share of government agencies' contribution to VC fundraising increased from 13% in 2007 to 35% in 2011, before it came down again in the subsequent years. However, even if a very high importance of government agencies is unsatisfying for the long term, it is noteworthy that government agencies have played their role and supported the market in a counter-cyclical way, in particular in the times of an economic and financial crisis when total VC fundraising levels more than halved. This led almost "naturally" to an increased share of government agency fund investors. Moreover, the contributions of public investors to VC funds increased not only in relative but also in absolute terms, i.e. from an average EUR 0.7bn p.a. in

<sup>35</sup> Percentage of incremental amounts raised during year (in contrast to final closings only). Note: Excludes capital gains. Unclassified sources of funds have been extrapolated.

2007-2009 to, on average, EUR 1.3bn in the years thereafter. In 2018, the total volume contributed by government agencies to VC fundraising amounted to EUR 1.6bn, which constitutes a decrease by 31% compared to the year before. The share of government agencies' contribution to VC fundraising decreased from 27% in 2017 to 18% in 2018. It remains to be seen, however, if the numbers will be confirmed in later issues of the Invest Europe statistics, i.e. when the yet unclassified fund investors will be more properly identified.

Theoretical evidence and EIF's own research suggests that public VC support is relatively well targeted and achieves positive effects in Europe. In a study of investment patterns of different VC investor types, Bertoni, Colombo and Quas (2015) find that governmental VC (GVC) investors in Europe specialise in investments that do not attract private investors due to high information asymmetries and high failure risk, i.e. in particular in young, small seed-stage companies, and in certain sectors such as biotechnology and pharmaceuticals, in which time to market are long and new product development is very costly. This indicates that "in Europe, GVC has filled the entrepreneurial financing gap left by private VC investors".

In order to put EIF's activity in context, some calculations can be taken into account that were performed by Kraemer-Eis, Signore and Prencipe (2016), which shed more light on the impact of EIF on the VC ecosystem. The authors estimate that the VC investment activity backed by EIF represented 41% of total VC investments in Europe in 2014 (29% in 2007). The share directly attributable to EIF amounts to 10% (5% in 2007), which shows the significant leverage that characterises EIF-backed investments. With regard to fundraising, the authors estimate that volumes backed by EIF in 2014 amount to 45% of the overall volumes collected by European VC investors (36% in 2007), against a share directly attributable to EIF totalling 12% (5% in 2007). A summary of the study is provided in a previous ESBFO edition (Kraemer-Eis, Lang, Torfs and Gvetadze, 2016a).

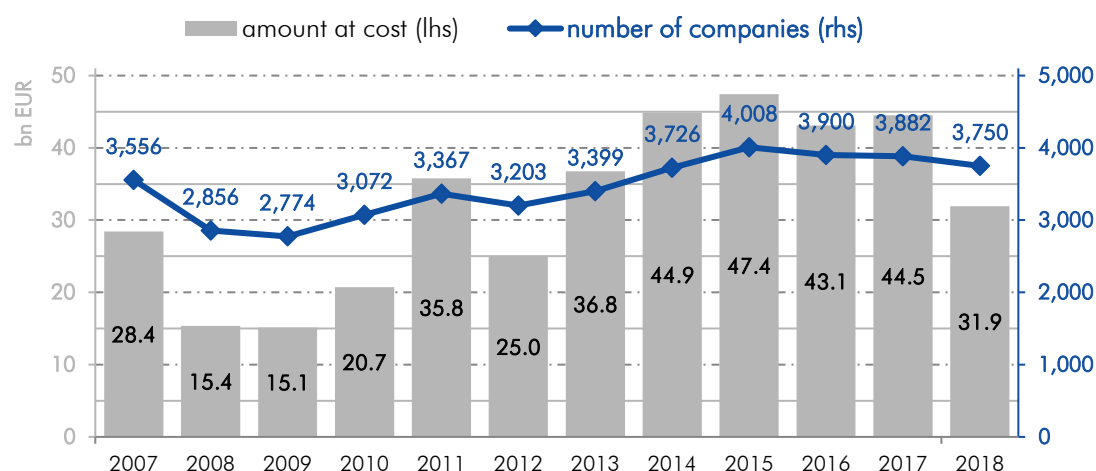
Moreover, EIF is supporting a relatively high number of first-time teams and many VC funds in which EIF invested successfully managed to close at their full target size. It is also important to see that many of the more established VC funds, pillars of Europe's VC market today, would not be there without having been kick-started by EIF. This clearly indicates EIF's catalytic role for European VC, rather than a crowding-out effect. This view was confirmed in the *EIF VC Survey*, which showed a high added-value of EIF's activities and a generally positive perception of public support in the European VC market (Kraemer-Eis, Botsari, Gvetadze, and Lang, 2018a). An Unquote Intelligence (2014) survey among General Partners (GPs) and Limited Partners (LPs) found that "the overriding benefit of [public funding bodies'] (PFB) money is the crucial role it plays in attracting other investors". Moreover, "[h]aving PFB money in a fund does not deter other LPs from committing".

### 4.3 Divestment activity

In 2018, the exit market suffered a sharp setback, which followed on several remarkably strong years. From 2013 to 2015, total PE divestments of European portfolio companies had risen to the largest amounts ever reached in the Invest Europe statistics (see Figure 21), before levelling off in 2016 and 2017. In 2018, the total PE divestment value decreased strongly by 28% to EUR 31.9bn,

the lowest level since 2012 (see Figure 35).<sup>36</sup> The number of companies divested decreased by 3% to 3,750 in 2018.

Figure 35: Total PE divestments (by amount at cost) of European portfolio companies



Source: Authors, based on data from Invest Europe

The decrease in the total divestment amount in 2018 was mainly due to substantially lower activity in the buyout (–34% to EUR 22.4bn) segment of the market, but also divestments in the venture (–5% to EUR 2.0bn) and growth (–15% to EUR 5.8bn) capital segments decreased.<sup>37</sup>

The relative importance of write-offs is still at very low levels. As regards overall PE, the percentage of write-offs over total divestment amounts decreased strongly between 2010 and 2016. Following a small increase in 2017, the share of write-offs declined again in 2018, to the second lowest level since 2007 (see Figure 36). Trade sales and sales to another PE house together account for almost two thirds of the total PE divestment amounts. The share of public offerings decreased since 2016 and came to the deepest level since ten years in 2018.<sup>38</sup> In the VC market, the relative importance of write-offs was at a record low level in 2018, while a record high was reported for the share of public offerings over total venture exits. Selected 2018 exits of European VC-backed companies included Spotify (a media services provider mainly active in the field of digital music), Alien Vault (a developer of solutions to manage cyber-attacks), Ablynx (a company engaged in the discovery and development of nanobodies, i.e. certain therapeutic proteins), and the digital payments fintech company iZettle. These examples comprise multi-billion valuation exits (with, for example, Spotify's public offering leading to a nearly USD 30bn initial market capitalisation; see Lightbown, 2018).<sup>39</sup>

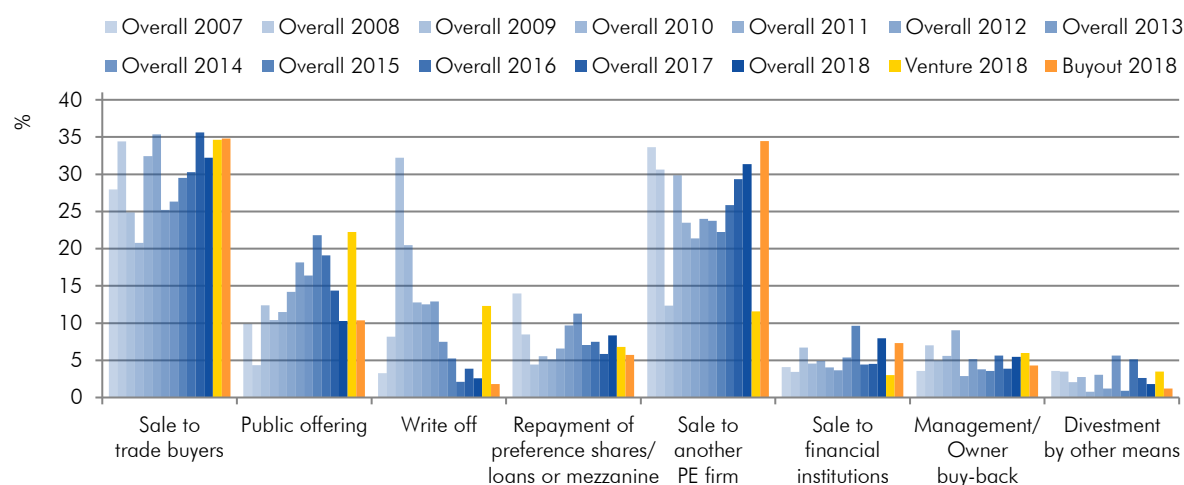
<sup>36</sup> Invest Europe statistics show divestment amounts at cost, i.e. the total amount divested is shown as the total amount that had been previously invested, not including any profit on the investment.

<sup>37</sup> The numbers for venture, growth and buyout capital divestments do not sum up to total PE divestments, as total PE divestments also include the rescue/turnaround and replacement capital market segments.

<sup>38</sup> In the Invest Europe data, the category "Public Offerings" includes first divestment following flotation (IPO) and sale of quoted equity post flotation.

<sup>39</sup> Please note that the values differ from Invest Europe divestment data, because the latter report "amount at cost", i.e. the total venture capital amount that had been previously invested, not including any profit on the investment.

Figure 36: Divestment routes (amount divested at cost; percentage of total)<sup>40</sup>



Source: Authors, based on data from Invest Europe

#### Box 8: Invest Europe definition of exit routes

**Management/ Owner buy-back:** The buyer of the company is its management team.

##### Public offering:

- First divestment following flotation (IPO): The sale or distribution of a private company's shares to the public for the first time by listing the company on the stock exchange.
- Sale of quoted equity post flotation: It includes sale of quoted shares only if connected to a former private equity investment, e.g. sale of quoted shares after a lock-up period.

**Repayment of preference shares / loans or mezzanine:** If the private equity firm provided loans or bought preference shares in the company at the time of investment, then their repayment according to the amortisation schedule represents a decrease of the financial claim of the firm into the company, and hence a divestment.

**Sale to another private equity firm:** The buyer of the portfolio company is a private equity firm.

**Sale to financial institution:** A financial institution is an entity that provides financial services for its clients:

- Depositary institutions: deposit-taking institutions that accept and manage deposits and make loans, including banks, building societies, credit unions, trust companies, and mortgage loan companies.
- Contractual institutions: Insurance companies and pension funds.
- Investment institutions other than direct private equity firms.

**Trade sale:** The sale of a company's shares to industrial investors.

**Write-off:** The value of the investment is eliminated and the return to investors is zero or negative.

Note: Recapitalisations are not considered in the divestment statistics.

Source: Invest Europe (2019)

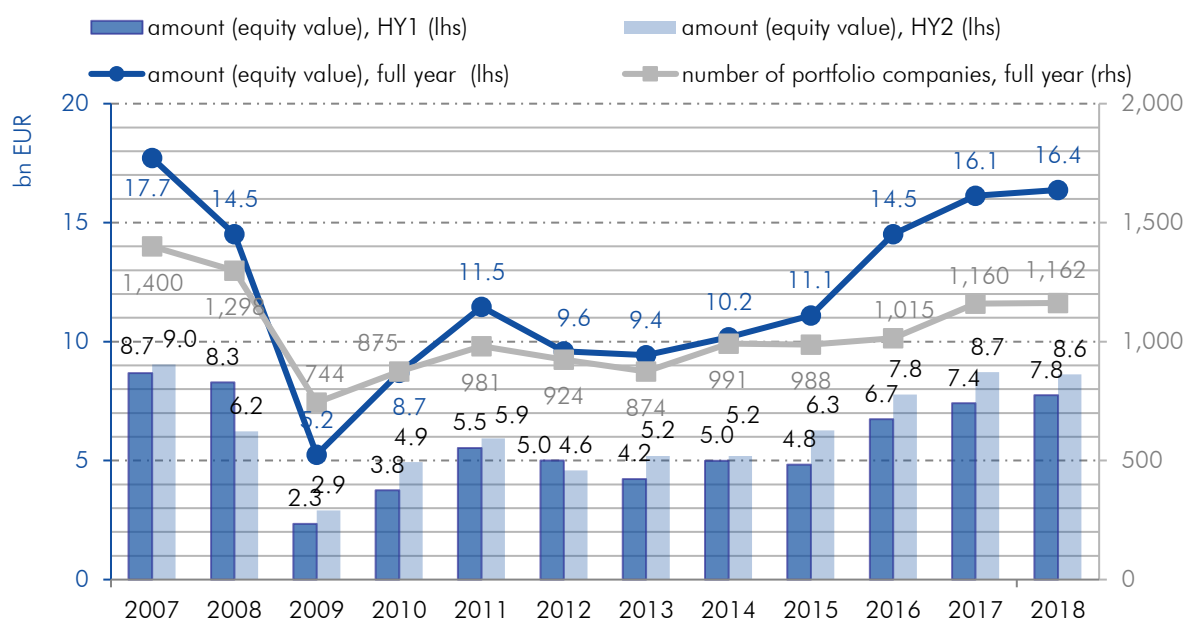
<sup>40</sup> "Overall" figures are not the weighted average of the "buyout" and "venture" figures, as they also include the growth, rescue/turnaround and replacement capital market segments.

Besides that, EIF suggests that VC fund managers tend to have a quite balanced approach, investing still in longer term buy-and-hold value creation and seizing opportunities when possible.

#### 4.4 Lower mid-market and hybrid debt/equity finance: An important market segment

Following EIF's definition (see EIF, 2019), the PE lower mid-market (LMM) covers fund strategies targeting equity and mezzanine investments at growth and buyout stages and with a particular focus on SMEs. EIF provides its core LMM products (equity, hybrid debt-equity<sup>41</sup> and private debt) as alternative sources of long-term finance to established businesses and later-stage technology companies (see Box 9 for more information on private debt financing). In the current market context, a full range of equity products combined or not with a debt component continue to prove successful, particularly for shareholding reorganisation, organic and external growth, restructuring or expansion.

**Figure 37: Small and lower mid-market buyout equity investments in European portfolio companies**



Note: In the Invest Europe statistics, buyout investment sizes below EUR 15m are defined as small buyout investments. Buyout investment sizes between EUR 15m and EUR 50m are classified as lower mid-market.

Source: Authors, based on data from Invest Europe

In 2018 the EIF has observed the continuation of the trend from the past three years insofar as the lower-mid and mezzanine markets are concerned: relatively high levels of confidence in the business climate, availability of a diverse set of investors to allocate liquidity to the private equity market, a growing deal flow and still considerably high exit activity, effectively confirming the recovery observed since 2015. Record distributions from private equity funds in recent years led to high levels of investor satisfaction, with much of the capital returned to investors being redeployed in private equity. This has led in turn, together with a backdrop of still relatively strong European macroeconomic data, to a very active fundraising environment, where managers with a sound track record are able to

<sup>41</sup> Hybrid debt-equity/mezzanine finance is a diverse asset class in between traditional senior debt and equity instruments. According to the OECD (2014), "this form of finance has not received as much public attention as venture capital or specialised exchanges for SMEs, but it holds potential to respond to [...] critical problems in SME finance."

complete the fundraising of funds in a relatively short timeframe. Nevertheless, first time teams are having difficulties fundraising, leading to capital being more concentrated.

The generally positive market environment is also reflected by the upward trend of small and lower mid-market buyout investments in European portfolio companies. Investment amounts (equity value) increased slightly by 2% to EUR 16.4m in 2018 (see Figure 37).

As mentioned in other parts of chapter 4.1, the PE market in general and the mid-market in particular continue to be prone to the risk of high valuations and potential overheating, which is caused by the still ample liquidity in the markets that increases demand for promising companies. In this environment, the Argos Index mid-market, which measures every quarter the level of private mid-market company valuations in the Euro area, further increased in 2018 and stabilised on a record high level in the first quarter of 2019 (Epsilon Research, 2019). However, experienced managers are still able to invest in less visible mid-market opportunities and to provide added value in order to have companies become more attractive and sustainable.

Besides, EIF year-end 2018 insight suggests that LMM fund managers tend to exit quicker their investments than previously, perhaps in light of more exit opportunities (increased ratio of early exits and decreased average holding period of investment above cost). Another hypothesis could be that market expectations by fund managers would justify shorter term strategy to benefit from potential overvaluation.

#### Box 9: Private debt funds<sup>42</sup>

Private debt funds have gained importance as an alternative asset class for investors and a new financing source for SMEs and mid-caps in recent years, through the so-called direct lending funds. Similar to private equity (PE), “specialised loan funds” operate through an alternative investment fund manager, which originates SME lending opportunities pursued through a fund and managed similarly to a PE operation, except that it provides funding in the form of debt, rather than equity. These managers or “alternative lenders” are a diverse and expanding group that includes established and emerging asset managers, subsidiaries of larger financial institutions, and even, more recently, marketplace or crowdfunding platforms.

Private debt has similarities and differences with bank financing. Commercial banks tend to operate on the low risk (low yield) end of the spectrum, while alternative lenders cover the entire spectrum. Private debt markets are better placed to deal with liquidity risks than banks, due to the latter’s exposure to withdrawals of bank deposits in difficult market conditions. Private debt also deals better with funding risks, through the imposition of long-term funding commitments for investors or “lock-up periods” which restrict redemption of invested funds. However, firms tend to blend these two sources of finance to close their financing gaps, indicating that banks can utilise alternative lenders to meet customers’ financing needs, still remaining focused on less capital-intensive products and services, which is an added source of revenue, as well as to retain the primary customer relationship.

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<sup>42</sup> The content of this text box is mainly based on OECD (2018), OECD (2019) and EIF market information.



*Box 9 continued:*

The private debt market which originally arose as an appendage of the PE market is now a stand-alone market section. The alternative lenders range from larger asset managers diversifying into alternative debt to smaller funds set up by ex-investment professionals (Deloitte, 2019). Several years after the start of the private debt raise, the market segmented into three main alternative asset classes: (i) Senior loans and unitranche, (ii) Mezzanine / Subordinated loans / Hybrid debt-equity and (iii) Venture Debt. Some already well established managers are also raising different funds offering products with different level of seniority (i.e., senior loans, unitranches, subordinated loans, etc.). Another product segmentation which appears more and more visible in the private debt market is the one between (i) managers targeting sponsored transactions (i.e. financing of a transaction with a financial or industrial equity sponsor) and (ii) managers targeting sponsor-less transactions (i.e. financing of a transaction without equity sponsor).

A large part of the private debt market still remains “sponsored”, which means that it is the leverage component of a PE operation containing both equity (provided by a PE fund) and debt (provided, among others, by a private debt provider). Nevertheless, the share of the European sponsor-less activity over total transactions stood at almost 20% since Q4/2017 (Deloitte, 2019). Adopting a sponsor-less investment approach could create a competitive advantage especially for those smaller-sized funds targeting SMEs.

In the last ten years, the global private debt industry approximately quadrupled in size. Between 2008 and 2018, the aggregate private debt capital, raised by the top 100 private debt fund managers around the world, amounted to USD 626bn (Preqin, 2018). Around one-third of this market consisted of “dry powder” (unused capital commitments), meaning that substantial funds for new investments are at hand. This market has expanded steadily since 2006, with no visible slackening during the crisis. In this context, competition has become very aggressive on pricing of sponsored unitranche issuances towards mid-market companies.

The most developed and largest single market is the US, but Europe exhibits the fastest growth, as its world market share has grown fast and averaged around 30% over the 2011 to 2017 period. As at August 2018, funds with a primary focus on Europe accounted for 34% of the aggregated target capital of private debt funds in the global market (Preqin, 2018). Moreover, in a survey among global institutional investors, 60% of the respondents seeking opportunities to invest in private debt funds stated Europe to be the region targeted by their private debt investment in 2019 (Preqin, 2019b).

According to a recent survey, approximately half of the global committed private debt is allocated to SMEs and mid-market borrowers, with expectations for a further increase, in particular by European private credit managers. Smaller private credit managers allocate, on average, a higher share to SMEs/mid-market (ACC, 2018). Within Europe, the largest market is the UK, but substantial activity is also observed in France and Germany; some growth has recently also been observed in Italy and Spain, although the activity remains relatively sparse. The growth of this market segment has greater significance for the supply of capital to SMEs in Europe than in the US, where several channels for alternative debt are already operating. For similar reasons, Italy and Spain can be seen as markets with better than average prospects for expansion.

In Europe, the EIF aims at enhancing the access to finance of SMEs, inter alia through debt funds. See Kraemer-Eis (2014) and Box 2 in Kraemer-Eis, Lang, Torfs and Gvetadze (2016a), as well as the EIF website, for more information on this topic.

## 4.5 Prospects

### 4.5.1 Current situation, risks and market actors' concerns

Following the severe crisis of European private equity and venture capital markets in the years 2008-2009 and beyond, remarkable positive developments have been observed in the recent past. However, it remains still an open question if a sustainable longer-term positive trend will become prevalent, and if Europe will be able to catch-up with its global peers. While in many cases an improvement in activity has indeed been driven by fundamental economic value, part of the upside performance may also be due to higher demand caused by the still ample liquidity in the markets. It is therefore important to support those companies in their continued growth that have well-developing economic fundamentals, and to also help, through the support of financial intermediaries, additional and complementary businesses to maintain and strengthen the backbone of the European VC market, i.e. a strong and continued supply of new innovative companies. The VC ecosystem is developing, including the emergence of more and more successful incubators and accelerators. Should these trends continue, the potential returns of early-stage companies would have significantly positive impacts on the performance of VC investing. Moreover, Europe is perceived as a global leader in several areas, in particular in its commitment to sustainability and the environment and transport infrastructure, according to a recent international investment decision makers' survey (Invest Europe, 2018). Compared to the previous survey wave, the perceived attractiveness of Europe as an investment destination has even increased, primarily due to increased innovation and returns on investment.

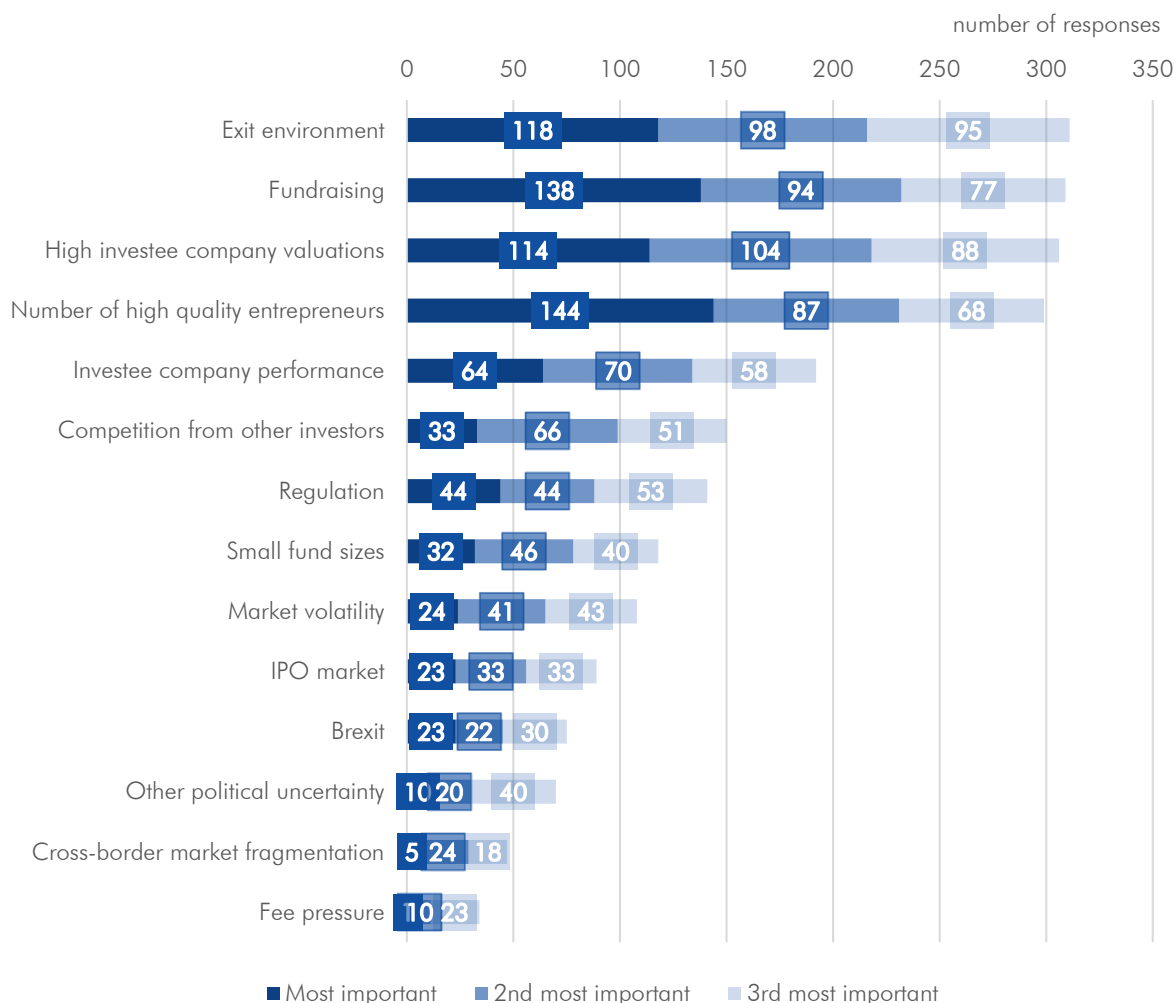
The recent favourable developments in the PE/VC market might, however, become contested by risks related to the economic, monetary and political environment. According to a recent Preqin worldwide survey among institutional investors, valuations were (again) perceived as the biggest challenge that investors into PE are facing (Preqin, 2019a).<sup>43</sup> Warning voices of possible overheating have been uttered since some time, because of the still relatively expansive monetary policy stance that has led to ample global liquidity and low interest rates. In the recent Preqin survey, 21% of the interviewed institutional investors perceived the global equity markets still to be in their recovery/expansion phase and, hence, see further upside potential. However, the majority of the investors (61%) believe that the equity markets have peaked already (Preqin, 2019a).

In the *EIF VC Survey 2019*, European fund managers stated the exit environment, fundraising, high investee company valuations and the number of high quality entrepreneurs to be the biggest challenges in the VC business; see Figure 38; see Kraemer-Eis, Botsari, Gvetadze, and Lang, 2018a, for the *EIF VC Survey 2018* results. See Box 10 for an overview of the *EIF VC Survey 2019*.

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<sup>43</sup> The latest issue of the "Preqin Investor Update: Alternative Assets" is mainly based on a survey of more than 400 institutional investors from around the world. The interviews were conducted in November 2018 (Preqin 2019a).

Figure 38: Biggest challenges in VC business



Note: Diagram shows the results for the EIF VC Survey 2019 question “Select up to three of the biggest challenges you currently see in venture capital business.”

Source: EIF VC Survey 2019

### Box 10: The EIF VC Survey 2019

The *EIF VC Survey* is a survey among venture capital general partner (GP)/management companies targeting VC investments in Europe. The surveyed population includes companies in which EIF invested as well as companies in which EIF has not invested.

The first *EIF VC Survey* survey wave was conducted in November/December 2017. The questionnaire covered three areas: (i) the VC market sentiment, (ii) market weaknesses and public intervention, (iii) the value added, products and processes of the EIF. The results of the first two parts are provided in Kraemer-Eis, Botsari, Gvetadze, and Lang (2018a) and summarised in Kraemer-Eis, Botsari, Gvetadze, Lang, and Torfs (2018c). The results of the third part are presented in Kraemer-Eis, Botsari, Gvetadze, and Lang (2018b), which was published in September 2018. That study provides detailed insights into the fund managers’ perception of the value added of the EIF, including its impact on the funds’ investor base, the fundraising process, the fund structure and the VC market altogether. Moreover, the study gives a detailed overview of the fund managers’ assessment of the EIF’s products and procedures, including a comparison with other limited partners (LPs).

*Box 10 continued:*

The second EIF VC Survey wave was conducted in February/March 2019. The questionnaire covered the areas market sentiment, VCs' socio-economic characteristics, Environmental/Social/Governance (ESG) considerations and impact investing, policy recommendations (in particular related to regulation and taxation) and EIF product and mandate development. The detailed EIF VC Survey 2019 outcomes will be published in the EIF Working Paper series; we present selected results in this issue of the European Small Business Finance Outlook.

The EIF VC Survey project complements both recent and future quantitative analyses of the economic impact of the EIF's VC operations. Furthermore, the EIF VC Survey is going to be repeated on a regular basis in order to derive robust results and implications. As such, future waves will include additional policy implications and improvements in the EIF's processes and products, as well as a comprehensive market overview of the VC landscape including a European VC Market Sentiment Index over time.

*Source: EIF*

#### **4.5.2 Structural challenges affecting European PE and VC**

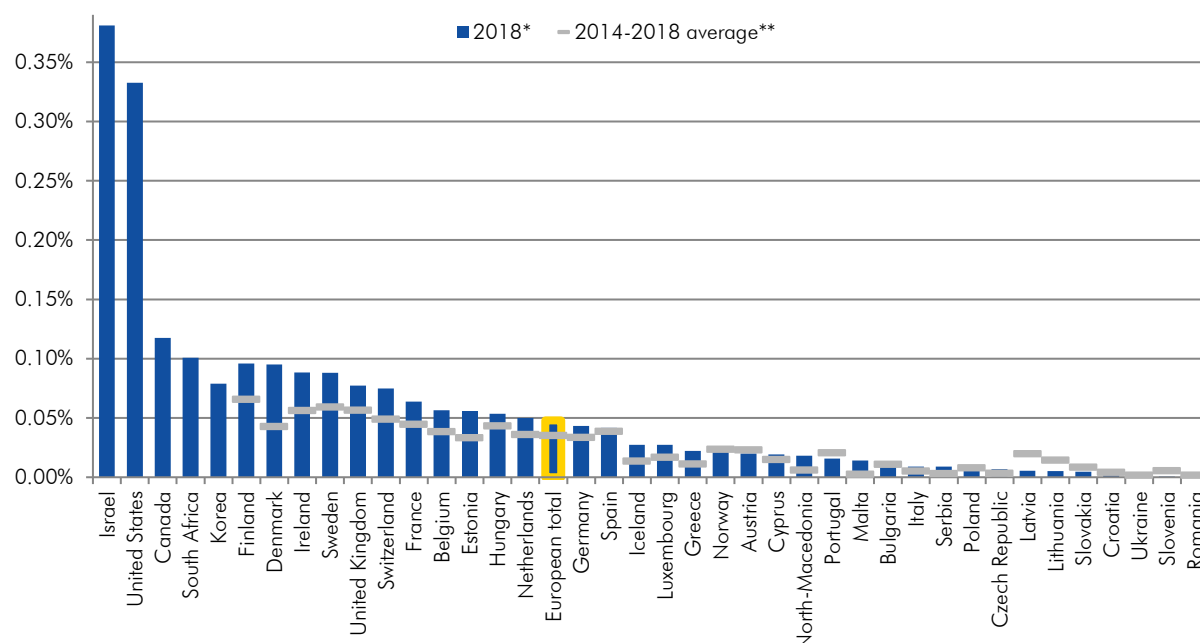
The PE and VC markets are challenged by economic developments of the last years that resulted in significant structural changes in the global and European economic landscape. The digitalisation of the economy has led to a differentiation of market segments. On the one hand, companies in research-intensive sectors continue to follow more traditional growth models with capital-intensive development stages at the beginning of their life. On the other hand, companies in the digital space are able to start their activities with very limited resources but are exposed to unprecedented needs for funding in globalisation of their business models. As a result, depending on the sector and the business models of the companies, time-spans from start-up to global leader have shortened considerably and require companies to scale quickly to overcome the risk of seeing their business model being out-dated before they capture a significant market share. In Europe, too few start-ups survive beyond the critical phase of 2-3 years. Compared to the US, a much larger share of firms remains static and fewer companies manage to grow into large firms (European Commission, 2016; Bravo-Biosca, 2011).

On a global level, the VC market has adapted to the new diversity of its target sectors. This has led to a bifurcation of the market between relatively small funds aiming at scouting emerging business models and a new class of giant VC funds that expanded globally from the US, providing large scale capital to businesses in their worldwide market expansion. In the large scale technology growth capital market, Europe has still too few established players. However, it is expected that more large-scale funding rounds will happen in Europe as well (Atomico, 2018).

In the shadow of companies driving or directly affected by the "digital revolution", SMEs and mid-caps in traditional industries are reshaping their strategies for competing in a rapidly changing economic environment and are in need of flexible funding instruments with growth equity, mezzanine debt and hybrid debt to classical debt features. EIF market insight shows that growth-stage companies are experiencing a serious lack of growth (follow-on) funding in order to accelerate their international expansion and to strengthen their position against global competitors (see also McGrath, 2017, for a related overview).

A comparison of PE/VC statistics confirms that the gap between the VC markets in the US and in Europe is particularly high at the later stage (AFME, 2017; Echiksone 2017). In the growth capital segment, the amounts invested in the US exceed those in Europe by 3 times. These differences are also reflected by substantial distinctions in fund and deal sizes: while at the start-up stage there is relatively little difference in terms of fund size (US vs Europe), US companies are funded by significantly larger funds at the scale-up stage. Furthermore, the average VC-backed US company typically receives higher amounts than its EU counterpart (details are provided in AFME, 2017, and Kraemer-Eis and Lang, 2017). Duruflé, Hellmann and Wilson (2017) identify the main elements of a strategy to help Europe catch up to the US in terms of scale-up funding: creation of larger venture funds and a venture debt market<sup>44</sup>, reinvigoration of tech IPOs, improved markets for secondary shares and avoiding to sell companies too early.

**Figure 39: VC investments by country of portfolio company, percentage of GDP, 2018\***



\*2018, or latest available year.

\*\*2014-2018 average, if available.

Source: *Invest Europe*, OECD (2018b)<sup>45</sup>

### The geographical fragmentation of the European VC market

The European VC market has remained fragmented. Whilst the traditional core markets in Europe (e.g., the UK and Scandinavia) still have a relatively high market activity after the crisis and others have recently caught up (e.g., Spain), other countries continue to struggle with the size of their

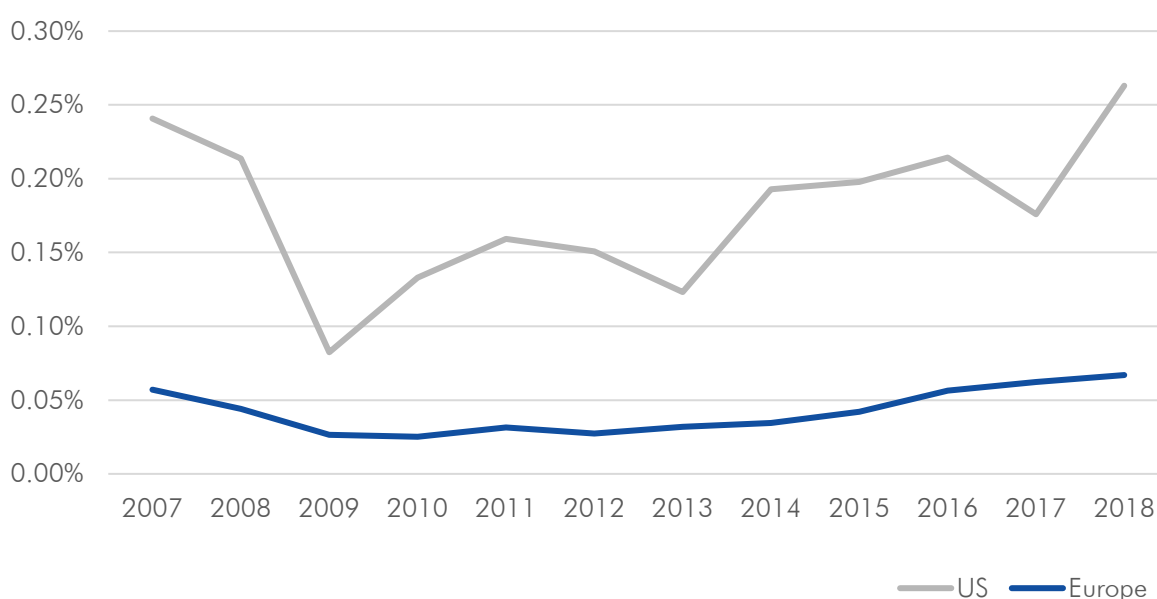
<sup>44</sup> See Kraemer-Eis, Botsari, Gvetadze, Lang, and Torfs (2018c) for a brief summary of venture debt developments in Europe; chapter 4.1 includes an overview of corporate venture capital, which can also be a tool to improve the financing for scale-ups.

<sup>45</sup> Source for "Europe": Invest Europe. "Europe" as covered by Invest Europe (i.e. EU minus Cyprus and Malta, but plus Norway, Switzerland, Ukraine, and those Balkan countries that are not part of the EU). See OECD (2017b) for an overview of the international comparability of VC data.

domestic VC market which is in no relation to their share in the aggregate GDP of the EU (e.g. Italy); Figure 39 (page 50) provides an overview of VC investments as a share of GDP for European and selected OECD countries as well as a European average. Sizable differences in the development of the VC markets prevail and several markets not only suffer from subcritical size but from an institutional investor base that is not sufficiently ready to invest in this asset class (see Kraemer-Eis, Botsari, Gvetadze, and Lang, 2018a).

However, when looking into the geographic dispersion of European VC activity in more detail, the picture becomes more complex. It seems that VC investors tend to target tech “hubs” rather than certain regions, based on the expertise developed in those hubs. A start-up’s location is likely to have a major influence on the amount of venture capital that the enterprise receives as well as the number of funding rounds it goes through (Nepelski et al., 2016, who provide a detailed overview of European VC-backed start-up hotspots). EIF research has shown that European hubs, and in particular those backed by EIF investments, act as the beating heart of a complex network of national and international investments. This claim is supported by data on investment amounts originated by hubs: 23% of these remains in the hub, 40% reaches out to other in-country locations and the remaining 37% travels beyond the national frontier (Kraemer-Eis, Signore and Prencipe, 2016). Since higher cross-border investments can be interpreted as the signal of a deeper integration of the European VC market, EIF may hold a vantage point in fostering the consolidation of a European-wide VC ecosystem. In addition, cross-border VC investments have been facilitated to a certain extent by EU-wide overarching rules and regulations. However, there is still much disintegration in terms of company structure, legal system, regulation, taxations etc. Another reason for improved cross border investments is that the main hubs have attracted talents from different countries who retain links to their home countries and in turn attract additional human capital and/or companies to the various hubs. This provides insight for more cross border activities and fosters an international VC ecosystem for investment.

**Figure 40: VC fundraising Europe and US, percentage of GDP, 2007-2018**



Source: Invest Europe

The comparison of VC investment data between Europe and the US or other countries outside Europe is not straightforward for several reasons (see OECD, 2017b, for an overview). For example, data for the US often does not separate out what share of capital is invested by formal VC/PE funds, which leads to US investment figures being higher than the related fundraising. See Figure 40 for a comparison of VC fundraising as a share of GDP in Europe and the US from 2007 to 2018. Although VC fundraising is, on average, lower than VC investment in the US, its level is still substantially higher than in Europe and confirms the diagnosis of a comparatively small European VC market.

#### 4.5.3 Policy intervention in European PE and VC: Findings from recent studies

Some of the challenges described in the preceding two chapters continue to weigh on the access to funding in the European VC market. This supports a view that public backing is needed in order to strengthen the market, which is particularly true for new funds that typically receive less private investment. We had outlined recent OECD findings on policy measures taken by governments to support seed and early-stage financing in previous issues of the ESBFO.

Besides the additional funding volumes, public investors' participation in a PE/VC fund can also have a positive signalling effect on private investors, e.g. due to perceived strong due diligence requirements and an assumed higher stability of public LPs' commitment to a fund (see, for example, Kraemer-Eis, Botsari, Gvetadze, and Lang, 2018b).<sup>46</sup> These advantages seem to outweigh the potential disadvantages of public investors' participation, like a supposed negative impact on speed and responsiveness or imposed restrictions in the investment strategy of the fund (which can be due to thorough and audit-proof due diligence processes, which are a necessary precondition for the above-mentioned signalling effect). Moreover, Bertoni, D'Adda and Grilli (2016) show that in "thin" VC markets with low supply, which might be a good characterisation for many continental European markets, governmental VCs can raise competition among investee companies by increasing the deal flow and thereby elevate expected profits of independent VCs<sup>47</sup> with purely financial investment objectives. This may attract additional investors and trigger "the virtuous cycle of VC market development".

For public policy intervention in the VC market, the relationship between private VC activities and governmental support is important. This was analysed in several empirical studies: according to Colombo, Cumming and Vismara (2014), the design of a public VC investment scheme is relevant for their impact. Governmental VC schemes seem to have been more successful when they acted alongside private investors, which would favour a governmental fund-of-funds set-up over direct public investments. Indeed, the focus of support instruments "has shifted from government equity funds investing directly to more indirect models such as co-investments funds and fund-of-funds" in OECD countries (Wilson, 2015b). Moreover, Brander, Du and Hellmann (2014), in a continuation of their 2010-study, find that enterprises funded by both governmental VC and private VC obtain more investment than enterprises funded purely by private VCs, and much more than those funded purely by governmental support.

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<sup>46</sup> A summary of Kraemer-Eis, Botsari, Gvetadze, and Lang (2018b) is provided in the previous ESBFO issue.

<sup>47</sup> Independent VC fund managers act as general partner in a limited partnership in which the fund investors invest as limited partners. This is the most common legal structure for VC funds in Europe.

There is also a positive association between mixed governmental/private funding and successful exits, as measured by initial public offerings and acquisitions, attributable largely to the additional investment.<sup>48</sup> Dubovik and Steegmans (2017) find evidence that public sponsoring of privately managed VC funds creates better exit performance than public management of VC funds. Cumming, Grilli and Martinu (2017) show a higher likelihood of a positive exit for companies backed by independent and governmental VCs together than for companies that are backed by one of the two investor groups only, based on the underlying sample. Moreover, Bertoni and Tykvová (2012) conclude “that syndicates between private and governmental venture capital investors, in which the private investor takes the lead, are the most efficient form in terms of innovation production”. However, as said earlier, public policy in the area of venture capital should go beyond an exclusive support of VC funds (see Hellmann, Schure and Vo, 2015) and aim to attract equity financing to Europe from other sources, such as angel investors and crowdfunding (see Wilson, 2015a; see also Aubrey et al., 2015, for related policy recommendations to support growth firms).

Box 11 provides a summary of a recent study to analyse the economic impact of VC investments supported by the EIF.

#### **Box 11: The economic impact of VC investments supported by the EIF**

Economists and policy makers widely acknowledge the role of young and innovative companies as net contributors to employment, innovation and productivity growth. Governments have a vested interest in supporting start-ups and promoting their success against the backdrop of, inter alia, information asymmetries and agency problems leading to market failures affecting new ventures’ access to traditional financing channels (Colombo et al., 2014).

The EIF, through its VC activity, fulfils its public policy mission to support the formation of a resilient European VC ecosystem and the emergence of new European VC hubs. Throughout the last twenty years, the EIF achieved a prominent role in the European VC ecosystem. This calls for a thorough assessment of its VC activities, to verify whether the initial policy goals were met (Kraemer-Eis et al., 2016).

To this end, Pavlova and Signore (2019) examines the impact of venture capital (VC) investments supported by the EIF on the financial growth and performance of young and innovative firms. This work contributes to the development of EIF’s “impact culture”. It constitutes the fifth volume of the working papers series entitled “The European venture capital landscape: an EIF perspective”.

To measure the impact of EIF’s VC activity, Pavlova and Signore (2019) employs a novel dataset covering European start-ups supported by VC in the years 2007 to 2014, combining data provided by Invest Europe, EIF internal data, and financial accounts from the Orbis database. The authors generate a counterfactual group of non-VC-backed firms through a combination of exact and propensity score matching, bringing in new ways and tools to study the notoriously opaque VC market. For instance, the paper uses artificial intelligence to scan through start-up business models and identify promising entrepreneurial ideas. In addition, the study employs geospatial data and airline routes to better simulate the way VC firms choose to invest.

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<sup>48</sup> Dubovik and Steegmans (2017) provide a brief overview.



*Box 11 continued:*

The results in Pavlova and Signore (2019) confirm the positive effects of EIF-supported VC investments on start-up growth, as measured through numerous financial indicators. The authors observe faster growth (in terms of assets) of start-ups supported by the EIF compared to non-VC-backed firms. This leads to higher capitalisation levels, higher revenues and higher job creation in the first five years following the VC investment. Moreover, the study finds higher investment and borrowing levels.

VC-backed start-ups appear to trade off short-to-medium term profitability against achieving the desired scale of operations. However, we find no obvious cost inefficiencies brought by the VC financing itself. VC investments merely enable treated firms to trade off higher levels of short-term profitability than they could have otherwise had, in exchange of faster growth. These findings, in line with current economic research, point to the effectiveness of EIF's policy instruments fostering SME access to VC financing.

#### **4.5.4 Policy intervention in European PE and VC: A practical approach**

Europe therefore needs an integrated portfolio of funding instruments to support the various segments of its start-up<sup>49</sup>, SME and mid-cap landscape, to unleash the full potential of EU companies' competitiveness and their contribution to Europe's economic growth and innovation. Instruments should be complementary to existing initiatives in terms of sector, stage or geographic focus. However, the dynamics of recent economic developments, e.g. in the area of the digital economy, has made the segmentation between early stage and late stage VC somewhat redundant. Policy instruments that create artificial boundaries of businesses' development stages could be prohibitive to an efficient VC market. Moreover, the EU's VC markets show different degrees of maturity and so require different policy instruments. In less developed markets, instruments may need to work strongly together with the actors of the informal VC markets (BAs, Incubators, TT Centres) and be complemented by flexible co-investment products to grow the domestic VC market. However, when it comes to companies with global ambitions, instruments investing in future industry leaders compete for investors who seek exposure to the best companies on a global scale, not with respect to a given geography. Therefore, giving flexibility to the geographic boundaries of policy instruments is not only key in retaining EU-based businesses in Europe but may attract non-EU based businesses to relocate to Europe. Based on these considerations, it appears vital to offer an array of instruments adapted to diverse market conditions in the various geographies of the EU. However, large-scale venture initiatives need to include support that helps to grow businesses to larger scale in order to make an impact on the EU's competitiveness. The provision of more growth capital could help alleviate the challenges that later-stage VC firms face when it comes to follow-on financing, particularly in the absence of established, liquid public markets. Creating larger funds will also enable VCs to accompany investee companies for longer periods, minimising the risk that portfolio companies are taken public too early, without having reached a sustainable size that would facilitate a valuation reflecting their true potential. Initiatives aimed at supporting VC firms even in the post-IPO process and at encouraging sophisticated, large crossover investors could contribute to a vibrant

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<sup>49</sup> In order to shed some more light on the relationship between VC and start-ups, Brinckmann (2015) and Raves (2017) analysed, in cooperation with EIF RMA, the effect of entrepreneurs' profiles on the performance of VC-backed start-ups. We presented key parts of the paper in a previous ESBFO issue (see Kraemer-Eis, Lang, Torfs and Gvetadze, 2015b).

VC ecosystem in Europe, enabling European VCs to compete alongside giant, internationally-expanded VC funds.

Measures aiming at regulatory simplification, harmonisation and promoting cross-border investment are steps in the right direction, as intensive policy action is needed to overcome the fragmentation of the European VC market (Bertoni, Colombo and Quas, 2015; see also chapter 4.5.2; Kraemer-Eis and Lang (2017) provide an overview of related measures under the Capital Markets Union).

Europe needs a seamless funding infrastructure to support the full corporate financing escalator, an EU equity flagship initiative to ensure a sizeable mass of home-grown risk capital finance with a long-term perspective. The issue is not only about the availability of funding; it is about the type of funding. The “growth stage trap” is very different in nature from the “early stage gap” and requires new tools and means to address it (see Kraemer-Eis and Lang, 2017). Public backing of the European VC market should aim at crowding-in private investors and catalysing private sector investments in order to support the development of an integrated European VC market, originated by venture capitalists and other market-oriented professionals, such as business angels (BAs).

In times of scarcity of private capital, the temptation grows to construct policy instruments that substitute the private sector. In fact there is a need to use public sector resources primarily to mobilise private sector capital, as clearly demonstrated by the leverage factor built in the Investment Plan for Europe (see Chapter 8 for more details) and other instruments implemented by the EIF. One way to attract private investors to the VC market is a fund-of-funds approach or having government and private investors co-invest in VC funds (Acevedo et al., 2016). This approach is also pursued by the EIF. As a reference catalytic investor in European venture and growth capital funds, EIF is providing financing solutions to boost entrepreneurship and innovation, acting as a cornerstone around whom private market players invest, taking comfort from EIF’s thorough diligence and investment and ongoing monitoring processes. In the coming years, EIF will continue to act as a cornerstone investor across the spectrum from technology transfer through venture capital to the lower mid-market and mezzanine financing. EIF’s activity in the equity sphere also includes the launch and extension of new initiatives. This will all contribute, inter alia, to the EC’s initiatives “Start-up and Scale-up Initiative”, which stated access to finance to be one of the biggest barriers to scaling-up businesses (see European Commission, 2016).

## 5 SME guarantees, SME leasing and SME Securitisation in Europe

### 5.1 SME guarantees

#### 5.1.1 Market failure and policy response

##### Information asymmetries in the credit market: the rationale for public sector involvement

As highlighted in earlier chapters, access to finance is an important issue for SMEs. SMEs face financing constraints as financial institutions are usually reluctant to extend uncollateralised credit to SMEs, even at high interest rates, in part because of the high costs of obtaining and assessing adequate information on the true credit quality of small, typically young companies. Many of these firms do not have the necessary amount and type of assets that could serve as collateral for the loan. 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: an insufficient supply of external financing to SMEs (OECD, 2006), the existence of which is driven by a market failure typical for the credit market: information asymmetries.<sup>50</sup> Information asymmetries can lead to credit rationing through either an *adverse selection* of low quality borrowers (Akerlof, 1970) or *moral hazard* problems. Adverse selection occurs when banks cannot differentiate between good and bad projects, and therefore cannot charge each a different interest rate to reflect inherent differences in risk. Higher interest rates will discourage businesses with the least risky projects to take out loans. If good borrowers self-select out of the market, this in turn implies that, for any given interest rate, inherently riskier projects will be over-represented in the loan application pool (Jaffee and Russell, 1976; Stiglitz and Weiss, 1981). Moral hazard problems occur when limited liability in the event of default provides borrowers with an incentive to take up excessive risk.<sup>51</sup> This means that in the presence of asymmetric information, banks are reluctant to use higher interest rates, because it reduces equilibrium profits. As a consequence, their rational response is to keep the supply of credit below demand, rather than to increase the interest rate charged on loans.

Credit rationing is particularly prevalent in the market for lending to SMEs, for two reasons. The first reason relates to their lack of collateral: the availability of collateral provides a way for borrowers to directly eliminate the asymmetric information problem. Pledging collateral in a loan-agreement enables firms to bindingly signal their true credit worthiness. However, firms do not always possess the required collateral, especially SMEs. The credit rationing result is therefore particularly relevant for this segment of firms, where failure to meet lenders' collateral requirements aggravates access to finance problems. In addition, the use of collateral comes with a number of drawbacks. The collateral may be worth more to the borrower than to the financial institution providing the loan, while the use of collateral increases the cost of borrowing, as it generally involves legal and other administrative procedures. The ECB Survey on the Access to Finance of Enterprises (ECB, 2019b) confirms the argument that the insufficient availability of collateral and guarantees continues to be an important

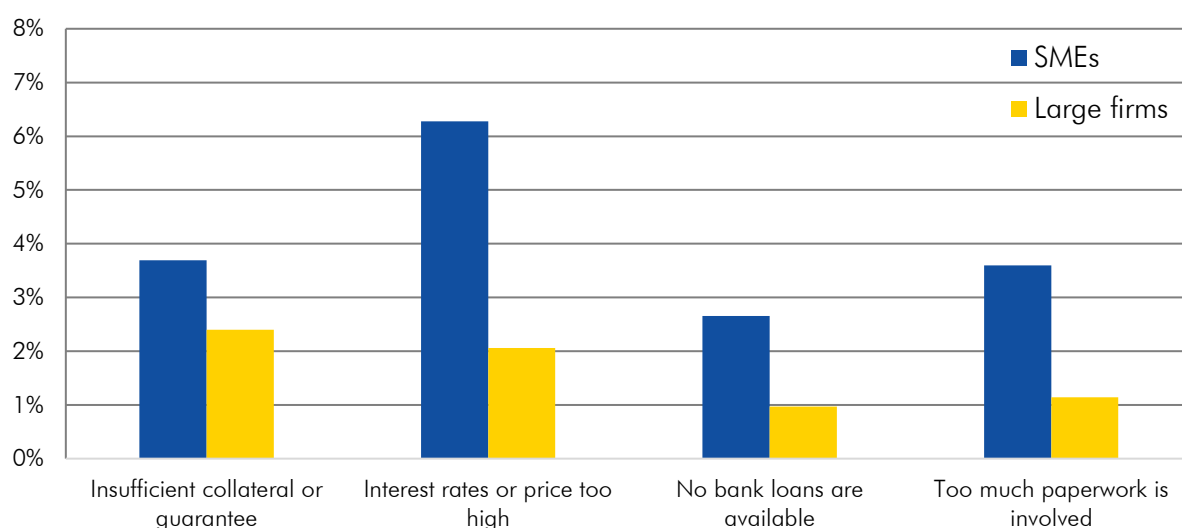
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<sup>50</sup> See OECD (2018) for an overview of market failures in SME lending and mitigation techniques.

<sup>51</sup> Both the adverse selection as well as the moral hazard argument crucially hinge on the insight that higher interest rates reduce the borrower's stake in the project underlying the loan (Tirole, 2006), which is an illustration of the typical principal-agent problem (Arrow, 1985).

reason why SMEs consider bank loans not relevant for them (see section 3.4 And Figure 41). The second reason SMEs are more affected by credit rationing than larger companies relates to the fact that credit market information asymmetries are more pronounced for small firms and that the cost of monitoring them is higher. Large firms are required to adhere to corporate norms, legal standards, formal reporting requirements etc., whereas business decision-making processes, transparency rules, dividing lines between company and personal assets are less defined for SMEs. SMEs are often young organisations, so that credit history and operational track records are, by construction, shorter compared to their larger counterparts. Market failures in the bank-lending market therefore imply that many SMEs with economically viable projects will not be able to obtain the necessary financing from the regular system of financial intermediation.

**Figure 41: Reasons why bank loans are not a relevant financing source for Euro area SMEs (HY2/2018)**



Source: Authors, based on ECB SAFE (ECB, 2019b)

Prior research has highlighted several factors that could contribute to a worsening of the SME financing gap. For example, a number of studies have put forward the conclusion that credit constraint issues are further deepened by increasing market concentration in the banking sector.<sup>52</sup> Given the strong consolidation in the European banking sector (Uhde and Heimeshoff, 2009; ECB, 2016), these observations are particularly relevant for SMEs in Europe. Furthermore, a drop in real estate prices (as was the case a few years ago) could also negatively impact the credit availability to SMEs, who often use property assets as collateral (OECD, 2012).

Information asymmetries exist to a lesser degree if a strong relationship between lender and borrower has been established. Hence, unsurprisingly, most SMEs have a close relationship with one (sometimes two) “house bank(s)” (EBF, 2015). A close relationship with a lender makes the borrower well aware of what information needs to be provided, including the amount of collateral required

<sup>52</sup> In this respect, Ryan et al. (2014) show how bank market power is associated with an increase in financing constraints, leading to lower levels of SME investment levels. This conclusion is confirmed by Chong et al. (2013) who show that lowering market concentration in the banking sector indeed alleviates financing constraints.

(support in this regard is also given by third parties like chambers of industry and commerce or chambers of skilled crafts and by guarantee societies with specific knowledge of the local SME market). In addition, it enables the lender to know well not only the hard but also the soft facts of the borrower. Thus, through due diligence/lenders' examination (screening) and by a firm's ability to signal its credit worthiness (incl. an institutional assessment or rating by an independent agency and the provision of collateral), information asymmetries can be reduced. However, this means that new or young firms with a lack of collateral and, by definition, without a track record, are the ones with the greatest degree of difficulty in accessing debt capital. Adding to this argument, innovation and digitisation increase the number of intangible projects to be financed. Therefore, the aforementioned financing obstacles can also negatively affect productivity in the economy.

Given the strategic importance of SMEs as drivers of economic growth and innovation, it is of crucial importance to address the consequences of credit market failures in order to exploit the externalities from entrepreneurial dynamism (Honohan, 2010).

### Using CGSs to alleviate the supply shortage

Credit Guarantee Schemes (CGSs) "are used widely across economies as important tools to ease financial constraints for SMEs and start-ups" (OECD, 2013), in order to alleviate the consequences of market failures in SME financing. 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 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 (e.g., fiscal income generated by the supported projects, 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). Moreover, guarantees are "increasingly targeting young and innovative firms in an effort to boost employment and value added" (OECD, 2016). While CGSs do not alleviate information asymmetries directly, and hence do not address the root of the market failure,<sup>53</sup> 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. Some studies have investigated the welfare effects of CGS policies and documented the superiority of CGSs compared to other instruments to alleviate welfare losses associated with credit market failures.

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<sup>53</sup> This would only be the case to the extent that CGSs have a comparative advantage in screening activities vis-à-vis traditional credit institutions. The way in which CGSs function in reality indicates this is likely not the case: in practice the credit appraisal of the borrower is still executed by the lender and CGSs often guarantee full portfolios of loans and therefore do not maintain a personal relationship with the borrower. However, certain guarantee schemes can form a real expertise for specific types of projects, when they are requested by banks to participate in a large number of such projects in order to analyse and identify the projects that can be financed (such as SIAGI in France for the transfer of operations of small firms).

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.

In addition, CGSs hold other advantages. First, the final lending decision stays with a market-based, private-sector entity – 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.<sup>54</sup> Third, supranational CGSs 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; a summary is provided in Kraemer-Eis, Lang, Torfs and Gvetadze, 2016b) highlight that all but one existing CGSs choose to operate within the national borders of the country they are headquartered in. This can be explained 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.

Schich et al. (2017) give an overview of evaluations of CGSs for SMEs. This study, which is based on a literature review and an OECD/EC survey, concludes that not all CGSs are properly evaluated. In case such assessments are performed at all, they 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).<sup>55</sup>

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<sup>54</sup> 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 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.

<sup>55</sup> EIF provided input to the project. A short summary of this methodological approach is provided in Kraemer-Eis, Botsari, Gvetadze, Lang and Torfs (2017).

The EIF plays an important role in alleviating problems experienced by SMEs in accessing finance. 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 Chapter 5.3), the EIF offers guarantees/counter-guarantees for portfolios of microcredits, SME loans or leases.<sup>56</sup> In doing so, the EIF manages and implements several mandates on behalf of the European Commission, but also of national and regional Managing Authorities.

A number of recent studies have investigated the impact of some of the EU guarantee programmes on the beneficiary firms. 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 from 2002 to 2016. The results from this meta-analysis (summarised in Box 12) show that guaranteed loans provided by the EIF under the CIP (Competitiveness and Innovation framework Programme) and MAP (Multi-Annual Programme for enterprises and entrepreneurship) programmes effectively boosted firm growth and increased survival chances of beneficiaries.

#### **Box 12: The economic impact of EU loan guarantees schemes for SMEs**

Credit guarantee schemes (CGSs) are an important policy instrument to alleviate the financial constraints of SMEs. CGSs provide financial institutions with a partial guarantee on the loans (or a counter-guarantee on the guarantees) granted to firms.

These schemes play a central role in the set of policies designed by the European Commission (EC) to support European SMEs since the early 2000s. In this perspective, the CIP and MAP programmes represent two iterations of the flagship EU-level credit guarantee scheme, the SME credit Guarantees (SMEG) facility. The SMEG facility co-exists with and complements a wide range of national guarantee schemes, diverse in scope and instruments (Chatzouz et al., 2017). Coordinated by the European Commission (EC), the SMEG facility is implemented by the European Investment Fund (EIF), which provides either counter-guarantees to public and mutual guarantee institutions, or direct guarantees to financial intermediaries. In turn, financial intermediaries either guarantee loans or lend to SMEs according to criteria defined by the CIP and MAP programmes, as set out by the guarantee agreement with the EIF.

However, empirical evidence on the effect of such programmes on beneficiary firms is scant. Moreover, loan guarantee programmes are often designed at the national level in a variety of ways, and the selected design is not always effective (Beck et al. 2010; Riding and Haines, 2001). While Asdrubali and Signore (2015) and Bertoni et al. (2018) make substantial steps to address the crucial task of assessing the impact of CGSs, additional evidence is still necessary to paint a comprehensive picture of the economic effect of EU loan guarantee financial instruments managed by the EIF.

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<sup>56</sup> See for more information the EIF website [www.eif.org](http://www.eif.org).

*Box 12 continued:*

To this end, Bertoni et al. (2019) contribute to this body of research by focusing on the population of SMEs located in three geographical areas within the EU – Italy, Benelux and Nordic countries (Denmark, Sweden, Finland and Norway). These regions benefitted from the guaranteed loans provided under the CIP and MAP programmes in the years 2002 to 2016. Bertoni et al. (2019) analyse the effects following the granting of 174,107 loans, corresponding to a total loan amount of EUR 15.58bn. In line with its predecessor studies, Bertoni et al. (2019) estimate the economic impact of credit guarantees via a combination of coarsened exact matching, propensity-score matching, and *difference in differences* estimation. Bertoni et al. (2019) find that, after receiving a guaranteed loan, beneficiaries grew more rapidly than comparable non-beneficiaries in terms of assets, sales and employment.

The additional evidence in Bertoni et al. (2019) generates the need to consolidate and synthesise the now significant body of research on the effect of CGSs across Europe. Against this background, 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. The meta-analysis covers over 360,000 loans guaranteed by the SMEG facility under MAP and CIP from 2002 to 2016. These guaranteed loans add up to a total amount of EUR 22bn, in 19 European countries – approximately 60% of all loan amounts guaranteed under these programmes. For easiness of exposition, countries are grouped in the following five macro-regions: France, Italy, Benelux, Nordic countries, and Central, Eastern and South-Eastern Europe (CESEE).

Loans guaranteed by the SMEG facility under MAP and CIP positively affected the growth of firms' assets (by 7 to more than 35%), the share of intangible assets (by one third of the initial share in Italy and the Nordic countries), sales (by 6 to 35%), employment (by 8 to 30%). It also lowered their probability to default (by 4 to 5%). The effects on profits were mixed, with typically no significant effect in either direction, except for negative effects in France and the Nordics. These could be explained by intermediaries granting more long-term investments, which generate short-to-medium terms losses that are recovered in the long term. A similar trend applies in the case of productivity: SMEs experienced a short-run dip, a medium-run recovery, and a long-run positive impact (note: long-run effects were assessed only for the case of French SMEs).

The economic effects were the highest in Benelux, then Nordics, then CESEE, then Italy and France. However, differences in the results across the macro-regions can mostly be attributed to the diverse characteristics of the pool of beneficiary SMEs within each geography. After accounting for these differences, the spread in the magnitude of the policy impact across macro-region is sharply reduced. For instance, the magnitude of the higher economic effects on sales and employment observed in the Nordic countries compared to Italy is greatly – although not completely – reduced, while differences in the effect on assets are cancelled out.

Overall, the meta-analysis shows that guaranteed loans provided by the EIF under the MAP and CIP programmes effectively boosted firm growth and increased survival chances of benefitting SMEs. The effects are particularly visible for smaller and younger SMEs, i.e. those that, as predicted by theory, are the most likely to face credit rationing.

*Source: Bertoni et al. (2019)*



### 5.1.2 Market size and activity in 2018

Market information concerning CGSs in Europe is gathered by AECM, the European Association of Guarantee Institutions.<sup>57</sup> In the following, based on data from the “AECM Statistical Yearbook 2018”, 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.

According to the OECD (2013), guarantees are particularly relevant “in those countries where a network of local or sectoral guarantee institutions is well established”. Key figures based on *outstanding guarantees* on SME loan portfolios (as at 31 December 2018) are presented in Table 3 (see page 64).

In terms of total *volumes* of guarantee activities, the core countries are Turkey (EUR 38.1bn), Italy (EUR 35.6bn), France (EUR 22.3bn), Germany (EUR 5.5bn) and Spain (EUR 4.1bn). Italy and Turkey also have the highest total *number* of outstanding guarantees (1,076,104 and 979,497 respectively), followed by France (729,635).

The total number of SME *beneficiaries* in the portfolios of the AECM members amounts to 3.1m, nearly half of which (more than 1.3m) are located in Italy.

The highest *average size* of outstanding guarantee in portfolio was documented in Austria (EUR 178.5k), followed by Latvia (EUR 168.6k), Croatia (EUR 144.1k) and Germany (EUR 128.6k). Italy and France, despite exhibiting two of the highest volumes of outstanding guarantees in portfolio, have relatively small average sizes of guarantees (EUR 33.1k and EUR 30.6k, respectively), reflecting the presence of large populations of SMEs borrowing small loans in their portfolios.

In the second semester of 2018, the guarantee activity of AECM members has, on average, decreased both compared to the previous semester (–4.2% relative to HY1/2018) as well as compared to the same semester a year ago (–0.5% relative to HY2/2017). It needs to be noted however that this trend is largely due to a significant decrease in the guarantee activity of one Turkish AECM member which holds the highest share (almost one third) of total AECM outstanding guarantees.<sup>58</sup> In fact, excluding the statistics of this AECM member, outstanding guarantee volumes in HY2/2018 exhibit a marginal increase of 0.3% (instead of the decrease of –4.2%) compared to the previous semester (HY1/2018) and a significant increase of 6.1% (instead of the decrease of –0.5%) compared to the previous year (HY2/2017). Notably, more than 70% of this latter increase derives from five new members that joined AECM in the course of 2018.

Relative to the previous semester (HY1/2018), the outstanding guarantee value decreased the most in Romania (–23.2%), Turkey (–13.6%), Ireland (–11.9%) and Bosnia-Herzegovina (–8.8%). By contrast, the highest growth rates were recorded in Greece (an increase by more than 7 times, due

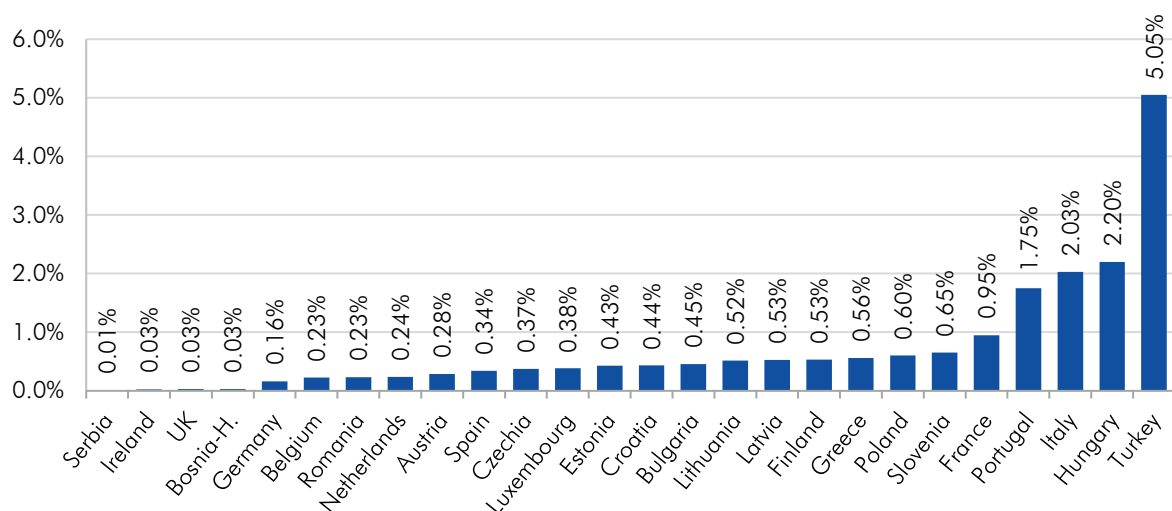
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<sup>57</sup> We thank our colleagues from AECM for their support. AECM currently has 48 members in 23 EU Member States plus Azerbaijan, Bosnia and Herzegovina, Kosovo, Russia, Serbia and Turkey. In the AECM member countries, the AECM members cover 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.

<sup>58</sup> Outstanding guarantee volumes of the Turkish AECM member in question showed a 13% increase when accounted for in Turkish Lira, which was however turned into a Euro loss due to the 25% fall of the exchange rate of the Turkish Lira with respect to the Euro.

to a new member joining AECM and providing data for the first time in December 2018), Austria (+11.1%), Hungary (+10.8%) and Croatia (+9.8%).

**Figure 42: Volumes of outstanding guarantees in portfolio scaled by GDP\***

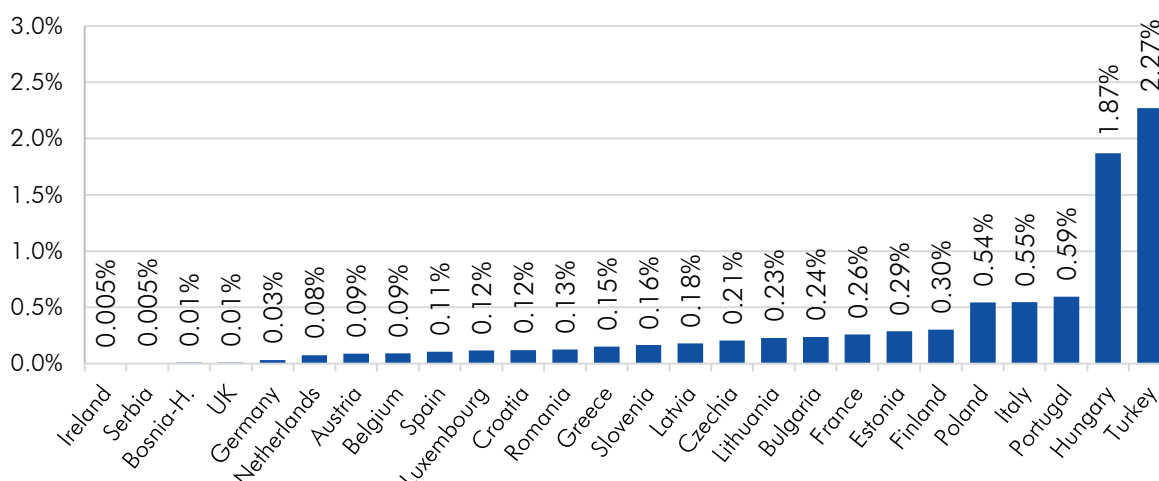


\*At 31 December 2018 or latest available data.

Sources: Authors, based on data from AECM and Eurostat

As shown in Figure 42 and for the reasons outlined above, Turkey leads the ranking in terms of the relative importance of guarantees compared to the value of economic activity (5.05% of GDP). The top three is completed by Hungary (2.20%) and Italy (2.03%). Relative to GDP, Turkey also recorded the highest amount of *new guarantees* in 2018 (2.27%, see Figure 43), followed by Hungary and Portugal (1.87% and 0.59%, respectively).

**Figure 43: Volumes of guarantees granted in the full-year 2018 scaled by GDP\***



\*At 31 December 2018 or latest available data.

Sources: Authors, based on data from AECM and Eurostat

Table 3: Outstanding guarantees and number of SME beneficiaries in portfolio, AECM members by country

Country	Outstanding guarantees HY2/2018				% change in Volume	
	Volume [k EUR]	Number	Implied average guarantee size [k EUR]	Number of SME beneficiaries	HY2/2018 vs. HY1/2018	HY2/2018 vs. HY2/2017
Austria	1,098,696	6,156	178.5	4,640	11.1%	20.5%
Belgium	1,014,084	(1)	n/a	(1)	2.5%	11.0%
Bosnia-Herzegovina	5,225	68	76.8	42	-8.8%	-0.7%
Bulgaria	250,832	(1)	n/a	(1)	8.2%	46.4%
Croatia	224,000	1,555	144.1	1,532	9.8%	12.2%
Czechia	772,158	11,642	66.3	8,575	2.2%	5.9%
Estonia	109,612	1,214	90.3	831	-6.4%	-16.0%
Finland	1,238,350	12,717	97.4	9,993	-0.7%	n/a
France	22,316,353	729,635	30.6	604,825	-5.4%	2.1%
Germany	5,526,718	42,983	128.6	35,444	-0.8%	-0.3%
Greece	1,030,709	100,125	10.3	32,599	788.5%	702.1%
Hungary	2,902,857	58,332	49.8	48,554	10.8%	21.3%
Ireland	86,976	3,217	27.0	3,217	-11.9%	-16.5%
Italy	35,624,291	1,076,104	33.1	1,344,911	2.2%	4.2%
Latvia	155,456	922	168.6	602	8.8%	17.8%
Lithuania	234,109	2,576	90.9	1,394	-0.9%	7.8%
Luxembourg	225,448	2,506	90.0	548	5.2%	20302.5%
Netherlands	1,858,425	18,202	102.1	16,074	-0.1%	1.9%
Poland	2,988,707	85,556	34.9	85,556	-5.8%	3.6%
Portugal	3,527,304	95,412	37.0	54,425	2.1%	1.3%
Romania	471,760	5,219	90.4	4,329	-23.2%	-13.8%
Serbia	5,350	437	12.2	424	-2.9%	-16.7%
Slovenia	299,516	2,656	112.8	2,115	4.7%	6.1%
Spain	4,149,576	74,050	56.0	130,478	0.9%	2.9%
Turkey	38,077,413	979,497	38.9	672,970	-13.6%	-13.5%
UK	674,599	9,347	72.2	8,664	-3.9%	-8.3%
<b>Total</b>	<b>124,868,523</b>	<b>3,320,128</b>	<b>37.6</b>	<b>3,072,742</b>	<b>-4.2%</b>	<b>-0.5%</b>

Notes:

- The statistics do not include the business figures of one Romanian AECM member that only has a Counter Guarantee activity and of one Hungarian AECM member for which no data were available.
  - For Italy 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.
- (1) The number of outstanding guarantees (SME beneficiaries) is only stated for countries in which *all* AECM members that reported the *volumes* of outstanding guarantees also reported the *numbers* of outstanding guarantees (SME beneficiaries).

Source: Authors, based on data from AECM

Table 4: Newly granted guarantees, AECM members by country

	New guarantee volumes [k EUR]					
Country	HY2/2018	HY2/2018 vs. HY1/2018	HY2/2018 vs. HY2/2017	Total 2018	% of outstanding	% change from 2017
Austria	161,039	-12.2%	-15.7%	344,463	31.4%	8.6%
Belgium	211,924	(2)	(2)	418,048	(1)	16.2%
Bosnia-Herzegovina	710	-14.6%	383.0%	1,541	29.5%	256.7%
Bulgaria	67,816	8.7%	n/a	130,210	51.9%	n/a
Croatia	40,533	90.9%	51.8%	61,764	27.6%	40.3%
Czechia	187,782	-21.4%	15.4%	426,584	55.2%	79.0%
Estonia	35,104	-9.9%	14.0%	74,068	67.6%	16.0%
Finland	312,372	-20.9%	n/a	707,300	57.1%	n/a
France	2,578,510	-27.4%	-27.3%	6,129,955	27.5%	-11.3%
Germany	568,317	8.0%	2.5%	1,094,650	19.8%	0.0%
Greece	280,938	n/a	780,283.3%	280,938	27.3%	32,378.4%
Hungary	1,223,017	-1.7%	15.2%	2,467,701	85.0%	20.0%
Ireland	10,235	146.9%	-54.3%	14,380	16.5%	-90.1%
Italy	4,648,131	-5.8%	-1.0%	9,580,996	26.9%	1.7%
Latvia	30,023	29.4%	48.6%	53,233	34.2%	24.4%
Lithuania	59,294	35.4%	(2)	103,091	44.0%	(2)
Luxembourg	31,725	-13.5%	9,939.6%	68,417	30.3%	13,288.8%
Netherlands	276,521	-10.5%	n/a	585,632	31.5%	n/a
Poland	1,315,506	-4.8%	7.2%	2,697,187	90.2%	8.2%
Portugal	648,712	18.1%	5.9%	1,197,824	34.0%	-3.7%
Romania	72,123	-60.4%	-57.4%	254,059	(1)	11.1%
Serbia	1,458	144.2%	156.2%	2,055	38.4%	119.1%
Slovenia	38,966	6.8%	-36.8%	75,459	25.2%	-35.2%
Spain	618,355	-6.9%	0.4%	1,282,246	30.9%	8.3%
Turkey	4,815,942	-60.8%	-61.2%	17,110,095	44.9%	-64.0%
UK	112,503	1.6%	-9.5%	223,208	33.1%	-8.4%
<b>Total</b>	<b>18,347,556</b>	<b>-31.6%</b>	<b>-28.1%</b>	<b>45,385,105</b>	<b>36.3%</b>	<b>-38.5%</b>

Notes:

- The statistics do not include the business figures of one Romanian AECM member that only has a Counter Guarantee activity and of one Hungarian AECM member for which no data were available.
- (1) The share of new volumes out of total outstanding volumes is only stated for countries in which *all* AECM members that reported *outstanding* volumes also reported *new* volumes.
- (2) The percentage change in newly granted volumes vis-à-vis a previous semester is only stated for countries in which *all* AECM members consistently reported the relevant statistics for both periods.

Source: Authors, based on data from AECM

As can be seen in Table 4, the total new guarantee activity in the full-year 2018 constitutes 36.3% of the total volume of outstanding guarantees for the same period, with newly-granted guarantees amounting to EUR 45.4bn.

At first glance, new guarantee activity by AECM members shows a considerable decrease of almost 39% in 2018 compared to 2017. However, as also pointed out earlier, this is largely driven by the much lower new guarantee volume generated by one Turkish AECM member.<sup>59</sup> As a result, when the statistics of this member are excluded from the aggregate figures, new guarantee volumes in the full-year 2018 actually show an increase of 8.2% 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 64% in 2018 compared to 2017), new granted guarantees also decreased significantly in Ireland (–90.1%), Slovenia (–35.2%) and France (–11.3%). On the contrary, new guarantees in the full-year 2018 increased strongly in Greece (by more than 320 times, for the reasons stated earlier), Luxembourg (by more than 130 times<sup>60</sup>), Bosnia-Herzegovina (+256.7%) and Serbia (+119.1%).

## 5.2 Leasing: an integral part of the financing tool set for SMEs

An important element of SME finance is not directly provided by banks through traditional loans but rather by leasing or factoring companies. Indeed, leasing is an additional instrument to facilitate access to short- and medium-term financing for SMEs, thereby also mitigating market weaknesses in SME lending.

Based on the ECB SAFE surveys for the Euro area over the last six years, while bank-related products (bank overdrafts and bank loans) have traditionally remained the most widely used sources of external SME financing, leasing or hire-purchase ranks second, with approximately 1 in 5 Euro area SMEs stating that they have indeed used leasing or hire-purchase over the six months preceding the survey (see Figure 44).

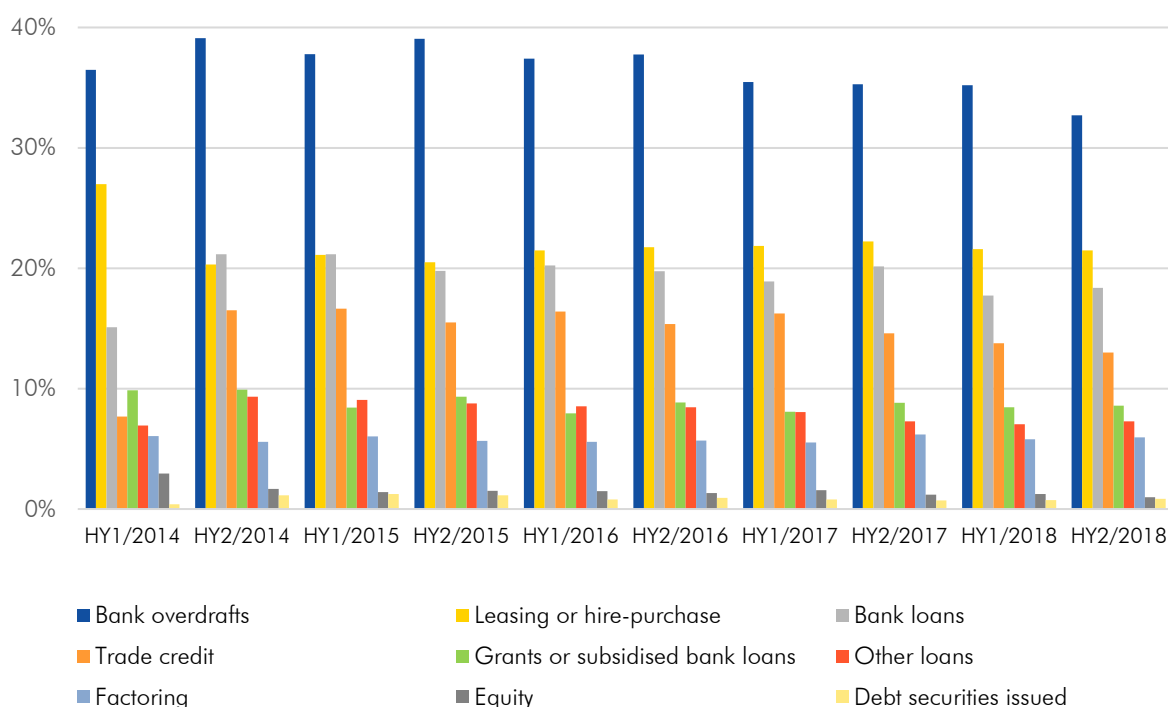
According to the latest ECB SAFE survey wave (October 2018 – March 2019), Euro area SMEs state that the current availability of leasing or hire-purchase has improved (net balance) the most over the past six months compared to other external financing sources (see Figure 45). Survey respondents expect that the availability of leasing will further improve over the next six months, more than all other external financing sources. Despite this positive evolution, the same ECB SAFE survey wave revealed that leasing is the financing source with the highest proportion (net balance) of SMEs signalling an increased need for it.

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<sup>59</sup> Indeed, the Turkish AECM member in question experienced an unprecedented increase in its guarantee activity during 2017.

<sup>60</sup> The reason for this impressive increase is twofold: first, an existing AECM member increased the maximum amounts for guarantees; and second, a new member joined AECM in the course of 2018.

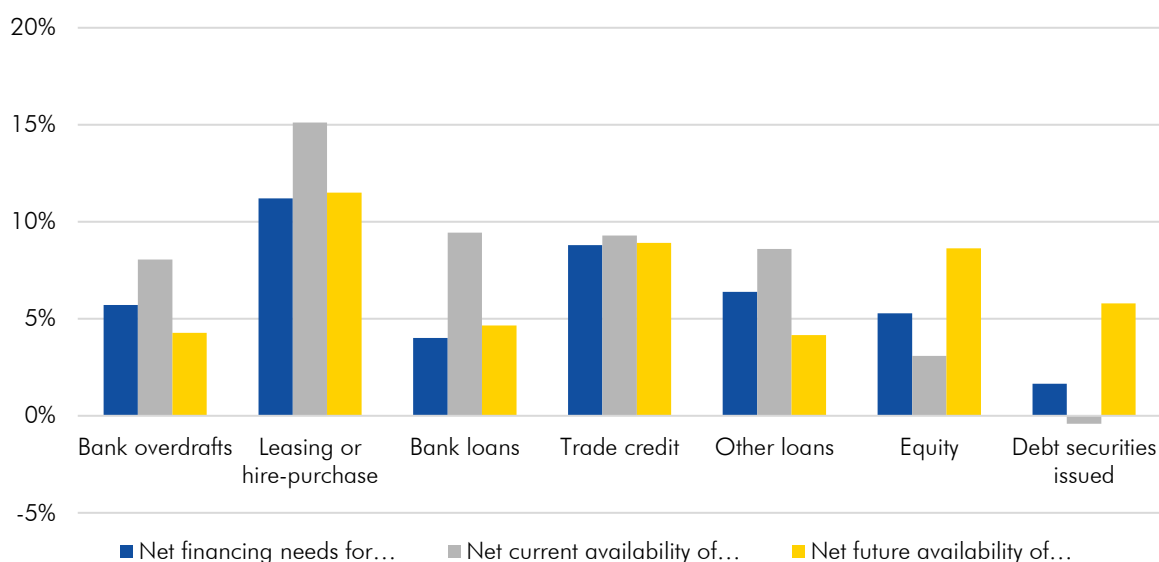
Figure 44: Use of external sources of financing by Euro area SMEs



\*Note: percentage of respondents (weighted results) stating that they have used the respective financing source over the past six months.

Source: Authors, based on ECB SAFE (ECB, 2019b)

Figure 45: Financing needs and availability of financing sources for Euro area SMEs (HY2/2018)

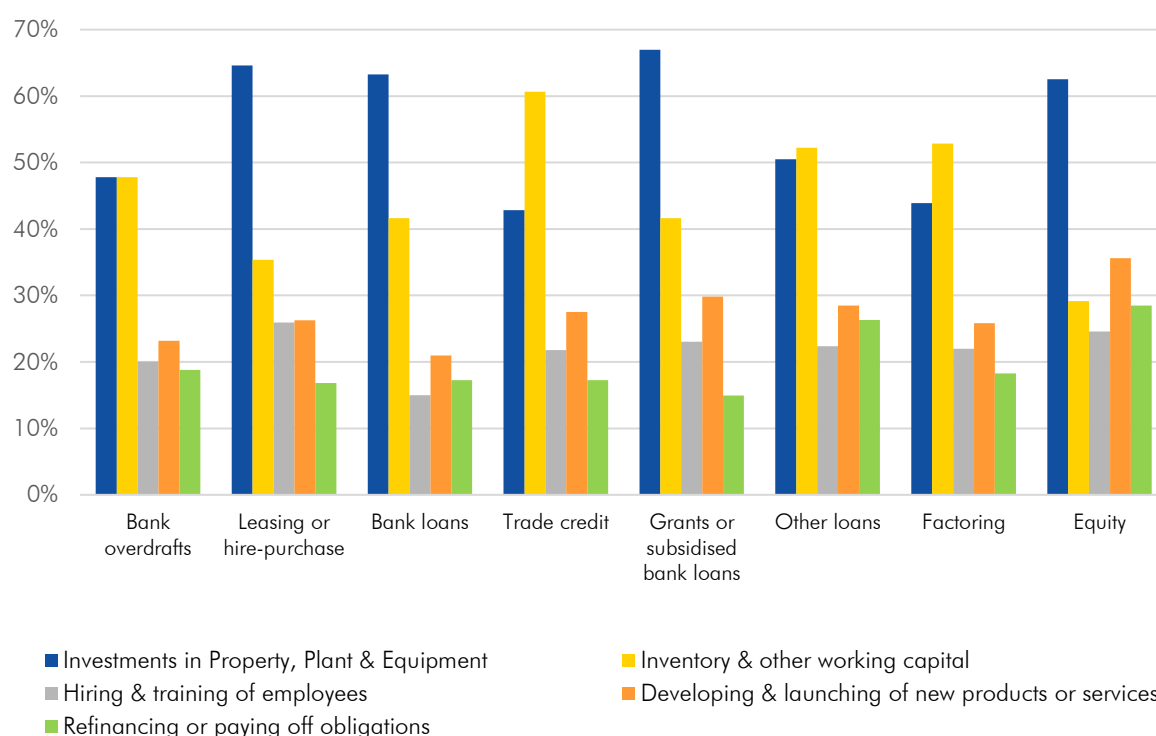


\*Notes: "Net financing needs" reflects the percentage of respondents stating that their needs for the respective financing source have increased over the past six months minus the percentage of those stating a decrease; "Net current (future) availability" reflects the percentage of respondents stating (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, 2019b)

Looking at the purpose for which financing is used by Euro area SMEs (see Figure 46), leasing is mainly used for investments in property, plant or equipment. Moreover, the percentage of SMEs who use leasing for fixed-asset investments is the second highest (following grants) among SMEs who use other sources of financing for the same type of investment. Leasing is also the most commonly used financing source for the hiring and training of employees.

**Figure 46: Purpose of financing by source of financing used, Euro area SMEs (HY2/2018)**

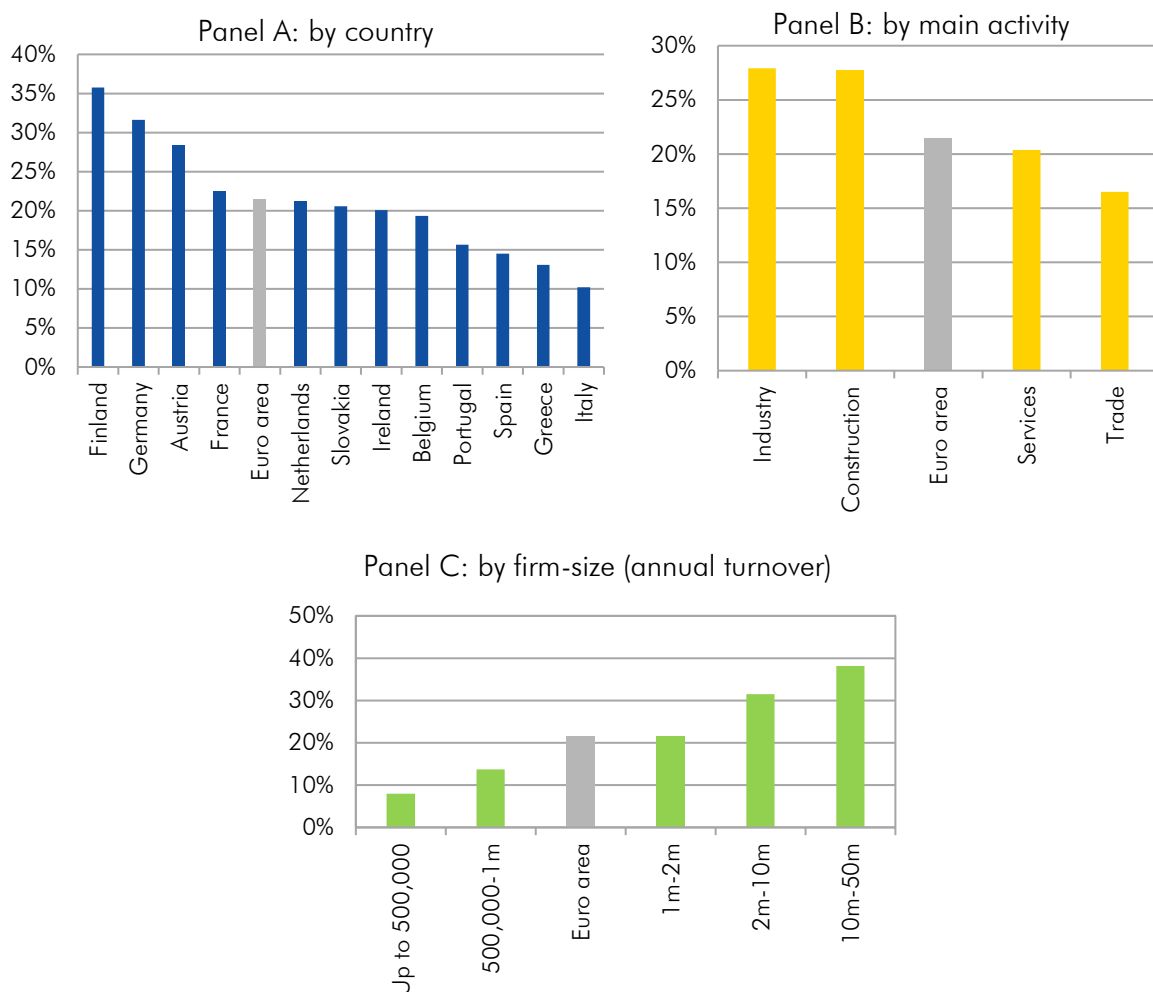


\*Note: percentage of respondents (weighted results) stating that they have used the respective financing source for the various investment purposes over the past six months.

Source: Authors, based on ECB SAFE (ECB, 2019b)

There is a wide heterogeneity in the use of leasing, across countries, industries and firm-sizes. A country-by-country analysis (see Figure 47, 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 47, Panel B), leasing as a financing source is more prevalent among industrial 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 47, Panel C.

Figure 47: Use of leasing or hire-purchase by Euro area SMEs – across countries, industries and firm-sizes (HY2/2018)



\*Notes: 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, 2019b)

### 5.3 SME Securitisation<sup>61</sup>

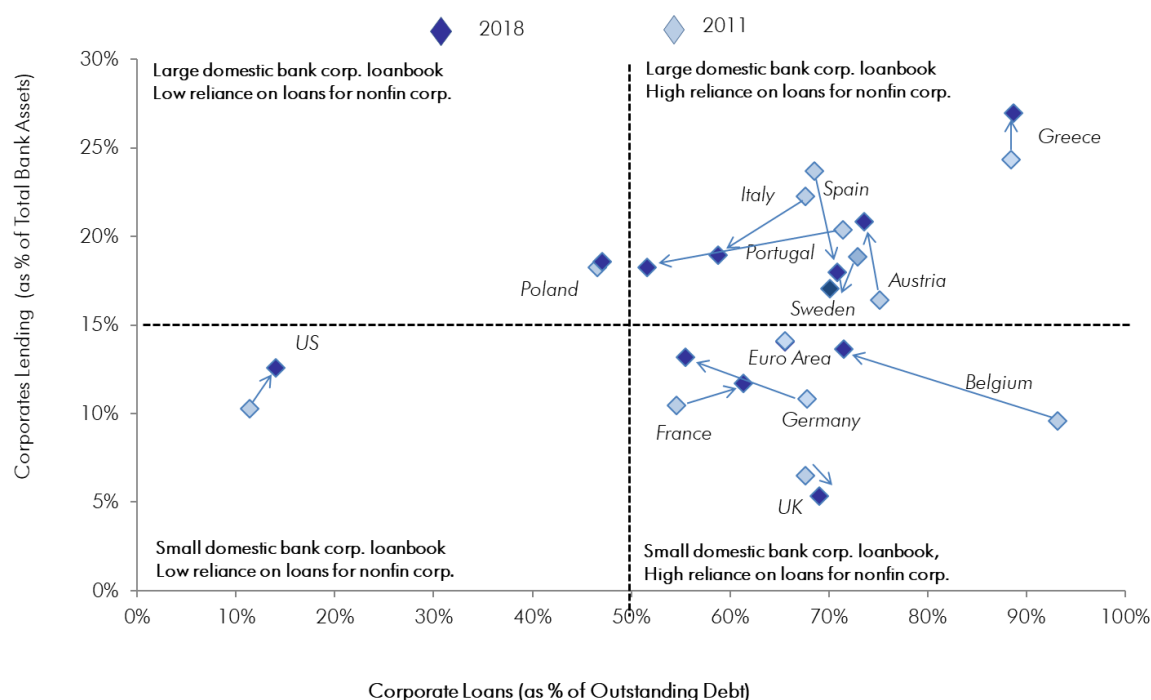
European SMEs rely heavily on bank lending; Figure 48 provides an indication of the different levels of bank reliance for various countries. The ratio is moving towards more capital market action. Court-Thimann and Winkler (2013) state that external financing of the non-financial corporate sector (financing other than retained earnings) is dominated by bank financing (in the Euro area); however, as the authors point out, this split refers to the stock; in terms of flows the figures fluctuate significantly, in particular as the corporate sector can to some extent substitute bank lending with other sources of finance. For SMEs, this possibility exists only to a very limited extent (and the EC's CMU initiative is trying to diversify the financing options for SMEs). During the crisis, part of the declining bank

<sup>61</sup> 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).



lending was offset by an increase in capital market funding (see Figure 49): debt securities issued by corporations (but also quoted shares issued) increased. But, “such substitution is primarily possible for large corporations; it is less so for small and medium-sized firms, which constitute the bulk of employment and activity in the Euro area” (Cour-Thimann and Winkler, 2013).

**Figure 48: Reliance on bank financing by non-financial corporations (in percent)**

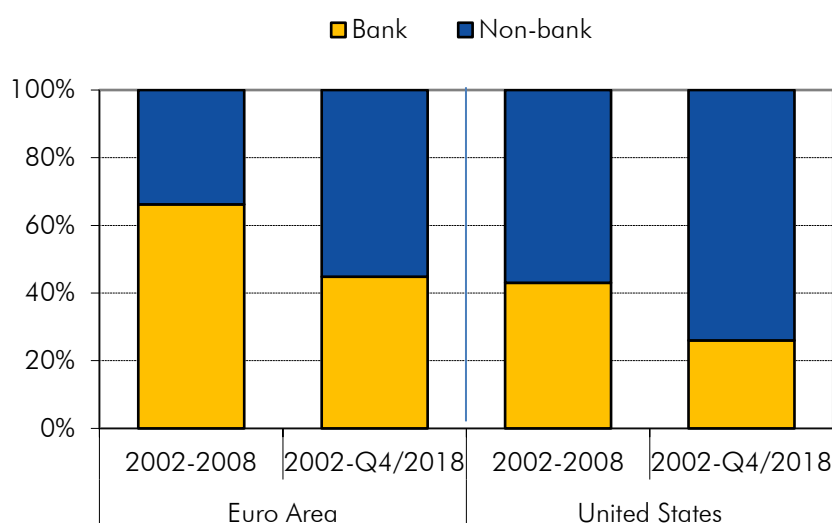


Source: Authors, based on IMF (2012) and updated information (per 2018/latest available information)

Given that SMEs have no direct access to the capital markets, a functioning securitisation market can transform illiquid loans to SMEs into an asset class with adequate market liquidity and can provide an indirect access to capital markets for SMEs.

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). A well-functioning securitisation market can be a promising tool to enhance funding options for SMEs (Lagarde, 2019). Kaya and Masetti (2018) analyse the impact of securitisation on access to finance to SMEs in the Euro area, based on firm-level survey data on SME financing conditions. They find 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.

Figure 49: Funding of non-financial corporations in the Euro area and the United States (shares in accumulated debt transactions)



Source: Authors, based on Cour-Thimann and Winkler (2013), with updated data (as per end of 2018)

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 out that, in the run up to 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.

As we stated already in our previous publications: securitisation per se is not good or bad - it is a toolbox, an instrument, a technique. As such it is value-free but its aggressive, opaque, and overly complex use by some market participants has negative consequences for both, issuers and investors. Negative repercussions are however 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”.

On the contrary - loans to SMEs are a key driver for the functioning of the economy and, properly applied, the securitisation technique is a replicable tool that can enhance access to finance for SMEs. By using this instrument in developed capital markets, the 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).

The ECB is also 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 Eurosystem. Thirdly, this technique can transfer risk away from the banking sector, which may support monetary policy.

The reputation of the SME securitisation market segment is continuously improving and a de-stigmatisation is happening. 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.

### 5.3.1 SMESec market activity<sup>62</sup>

The European securitisation market has grown steadily from the beginning of the previous decade until the outbreak of the crisis. However, it is much smaller than its US peer (see Figure 50). During the 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;<sup>63</sup> then the overall market activity decreased to the 2003/2004 levels.

To date, public issuance is still hindered in particular by the adjustment of the regulatory environment (a problem that now starts to downsize), by the availability of cheap funding for banks driven by the ultra-loose monetary policy, and by ECB eligibility rules under the repo-collateral framework that favour alternative instruments, such as sovereign bonds or secured/unsecured bank debt.

Securitisation is a technique that needs significant know-how and sophisticated actors on the supply and demand side. However, in line with the shrinking activity volumes, the number of active securitisation professionals (e.g. employees at investors, issuers, agents, etc.) is also declining.

### Issuance

In 2018, the most active markets in terms of *overall securitisation issuance* were the UK (market share 22% (EUR 58.7bn out of a total of EUR 269.4bn) and Italy (18%)<sup>64</sup>, followed by the Netherlands (11%) and France (7%). The overall market activity in 2018 (EUR 269.4bn) was 15% higher compared to 2017 (EUR 235bn), see also Figure 50. 2019 started slowly with an issuance of only EUR 32.4bn in Q1 (compared to EUR 58.5bn Q1/2018).

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<sup>62</sup> If not flagged otherwise, the data source is AFME, the Association for Financial Markets in Europe (i.e. AFME, 2019a and b).

<sup>63</sup> The ECB's asset repurchase or "repo" facility allows (among other assets) Asset Backed Securities to be used as collateral for funding.

<sup>64</sup> In Italy, the main driver for the recently increased activity is the government's guarantee scheme to the benefit of senior securitised notes backed by nonperforming loans (GACS, Garanzia sulla Carolarizzazione delle Sofferenze). The scheme facilitates banks' securitisation of bad loans. According to Moody's (2019b) there were (until March 2019) 21 transactions with a volume of EUR 62bn. The programme expired on 06.03.2019 but the government renewed it on 20.03.2019. Moody's sees the scheme as well credit positive for SMESec in Italy as fewer nonperforming loans on banks' balance sheets creates new lending capacity with reducing refinancing risk for borrowers (Moody's, 2019b).

2019 saw a slow securitisation start with issuance of EUR 32.4bn in Europe, down by 63% from Q4/2018 and by 45% compared to Q1/2018. The delay in approval by EU public authorities of key elements of the new securitisation framework<sup>65</sup> is seen as one driving factor behind this reduction (AFME, 2019b).

SMESec issuance is still suffering from the after-effects of the crisis, but improving. The overall issued (and visible) volume of SME deals in 2018 (EUR 29.5bn) was significantly higher than during in 2017 (EUR 14.9bn, see also Figure 51). 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%. We observe that total European ABS issuance volumes have roughly been stable during the past years, while the specific weights of the different asset classes have been shifting. SMESec has been decreasing year to year due to a lower origination activity and to shrinking SME stocks in the financial intermediaries' loan books.<sup>66</sup> However, based on a strong Q4 (EUR 22bn of the total EUR 29.5bn), in 2018 the share of SMESec increased to 11% again. For Q1/2019 no new SME transactions have been reported (compared to EUR 3.1bn in Q1/2018).

However, it is important to note that 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 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. Therefore, the numbers, shown here, are an underestimation of the market size and can be seen as a lower bound.<sup>67</sup>

Typical originators of SMESec 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. Current market activity is dominated by repeat originators (Moody's, 2018).

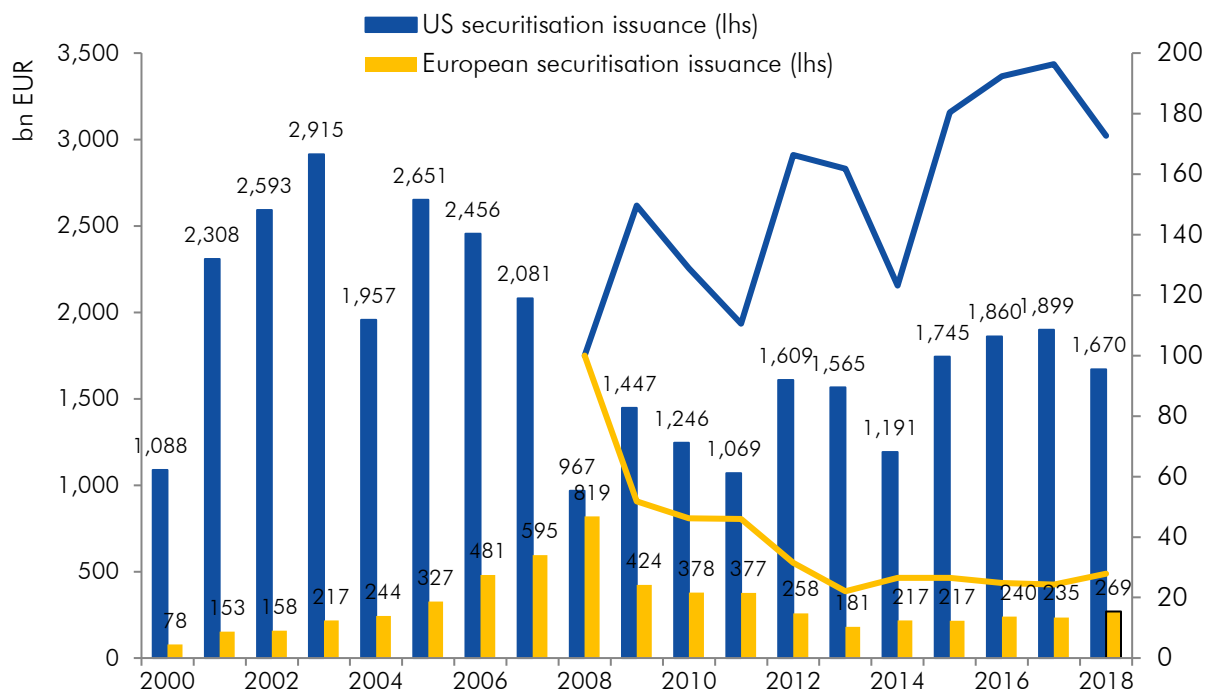
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<sup>65</sup> More information on the new securitisation framework can be found below.

<sup>66</sup> Also, 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. Rating downgrades, based on revised rating agency criteria (i.e. counterparty and country ceiling criteria, without grandfathering), on downgrades of counterparties involved in the transactions, and on negative credit trends, contributed to the overall negative market sentiment.

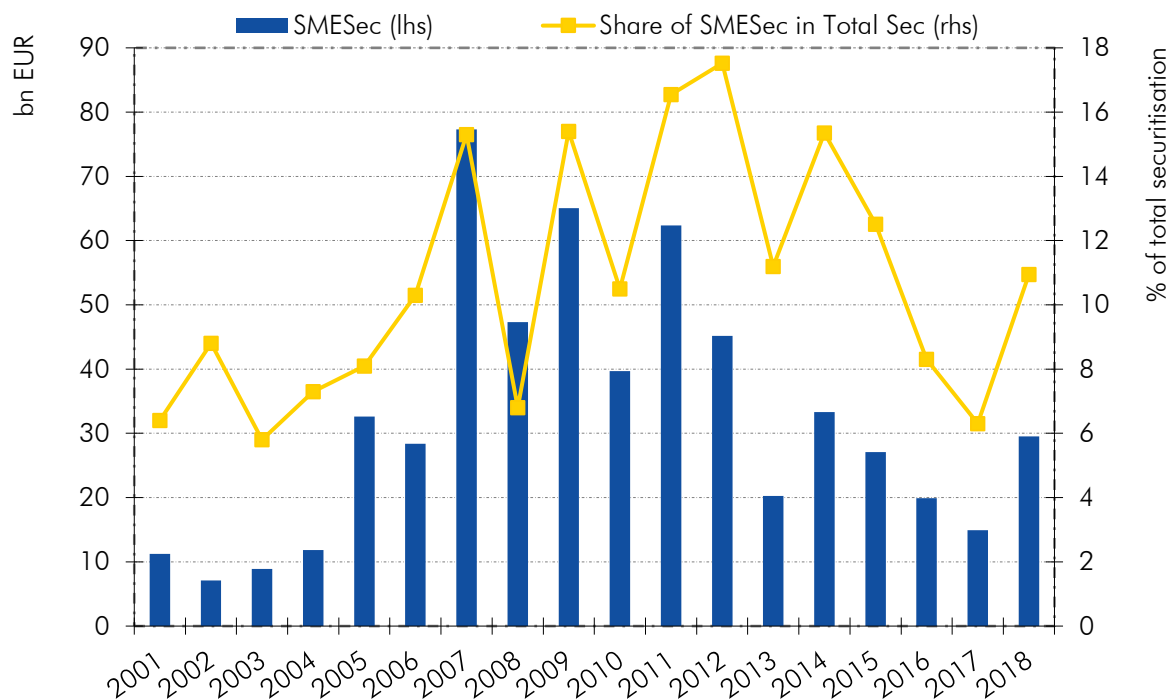
<sup>67</sup> As example: based on discussions with market participants, BoA/ML estimated that the volume of such transactions (mainly based on large diversified SME portfolios and trade receivables) might well have been in the area of EUR 60bn accumulated over the years 2015 and 2016 (BoA/ML, 2016) and the respective activity volume in 2017 could be at par with 2016 (BoA/ML, 2017). Deutsche Bank estimates even higher volumes and assumes a total new issuance volume of synthetic balance sheet transactions of EUR 94bn for 2016 (Kaya, 2017).

Figure 50: Securitisation issuance Europe versus US (annual issuance 2000 – 2018, bn EUR)



Source: Authors, based on data from AFME

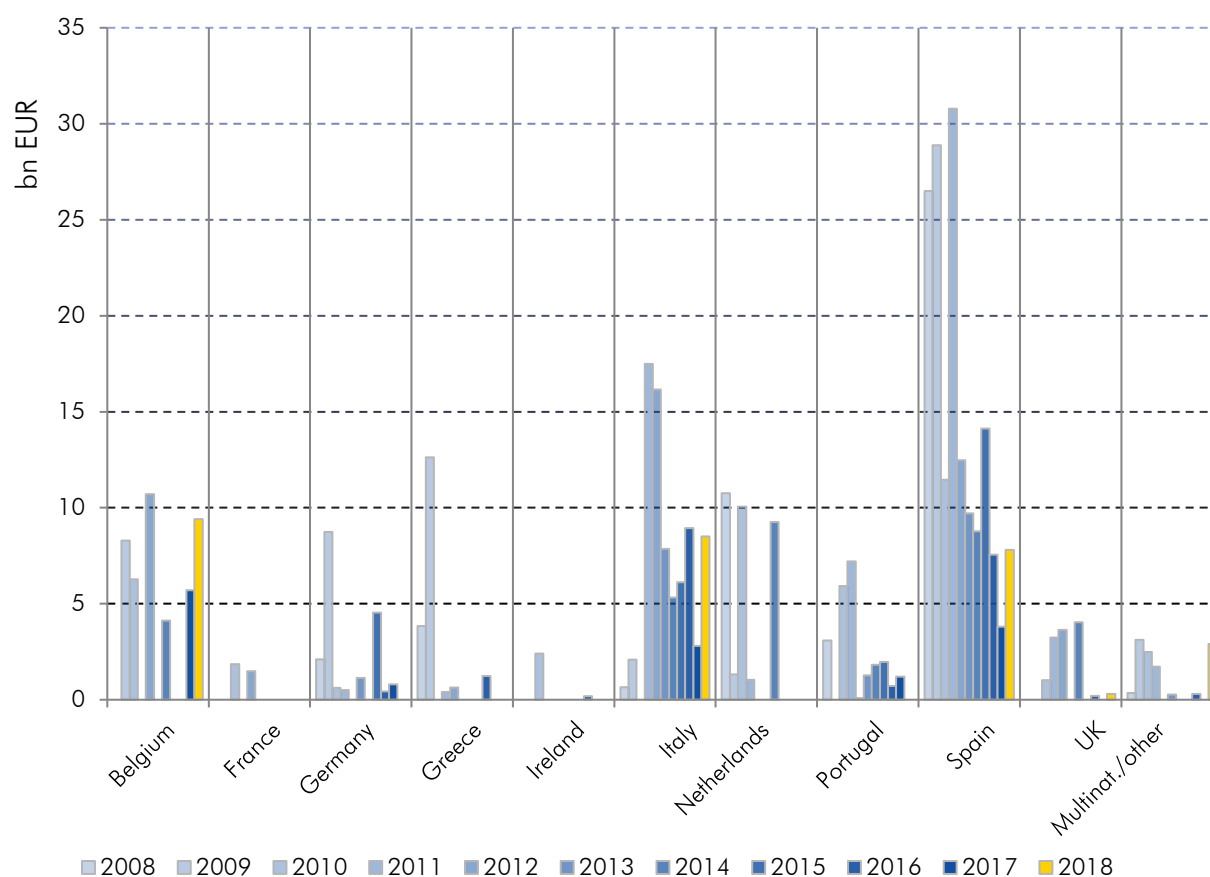
Figure 51: SMESec issuance in Europe (volume and share of total securitisation, bn EUR and %)



Source: Authors, based on data from AFME and own calculations

In terms of countries, most of the SMESec issuance in 2018 occurred in Belgium (EUR 9.4bn, 33% of total), Italy (EUR 8.5bn, 29%), and Spain (EUR 7.8bn, 27%). These 3 countries represent 89% of the SME issuance in 2018 (see Figure 52) for an overview of the SMESec issuance by country over time).

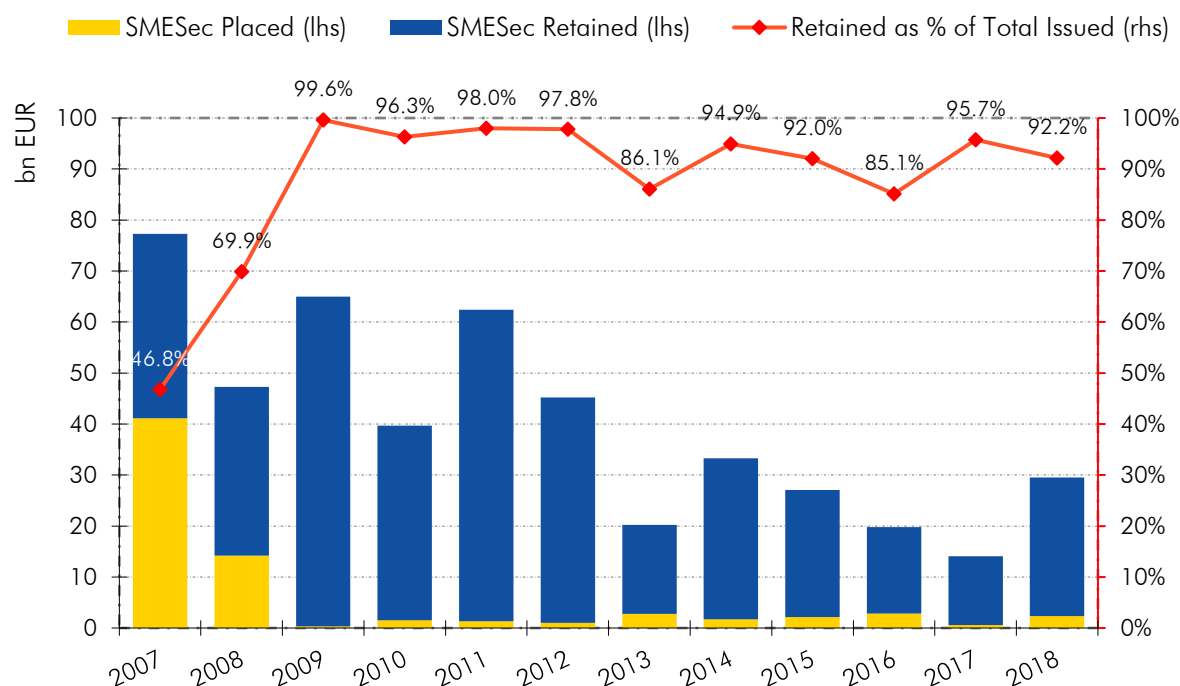
**Figure 52: European SMESec issuance (by country, in bn EUR)**



*Source: Authors, based on data from AFME*

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 53). 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.

Figure 53: European SMESec by retention (bn EUR and %)



Source: Authors, based on data from AFME

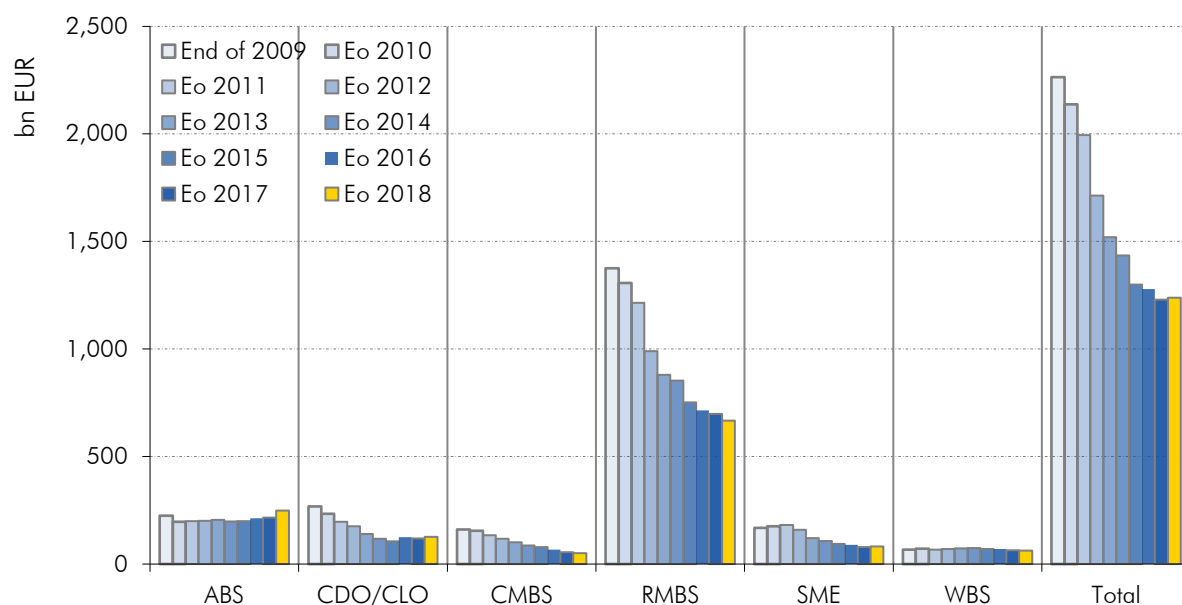
## Outstanding

Due to low new activity levels, the volume of *total outstanding securitisation transactions* (see Figure 54) is on a downward trend (negative net supply). RMBS continues to be the most dominant securitisation type (by collateral). The overall decrease of volume in total outstanding securitisation transactions since the end of 2009 (until end of 2018) is 55%.

During the same period, the volume of outstanding SMESec transactions decreased by 51%, from EUR 168bn to EUR 82.5bn (end of 2018). For the first time since 2011 the level of outstanding SME transactions increased again (from EUR 78.8bn end of 2017, +4.7%). However, due to the lack of new transactions in Q1/2019 the level of outstanding SMESec volumes decreased again to EUR 77.8bn by the end of the quarter.

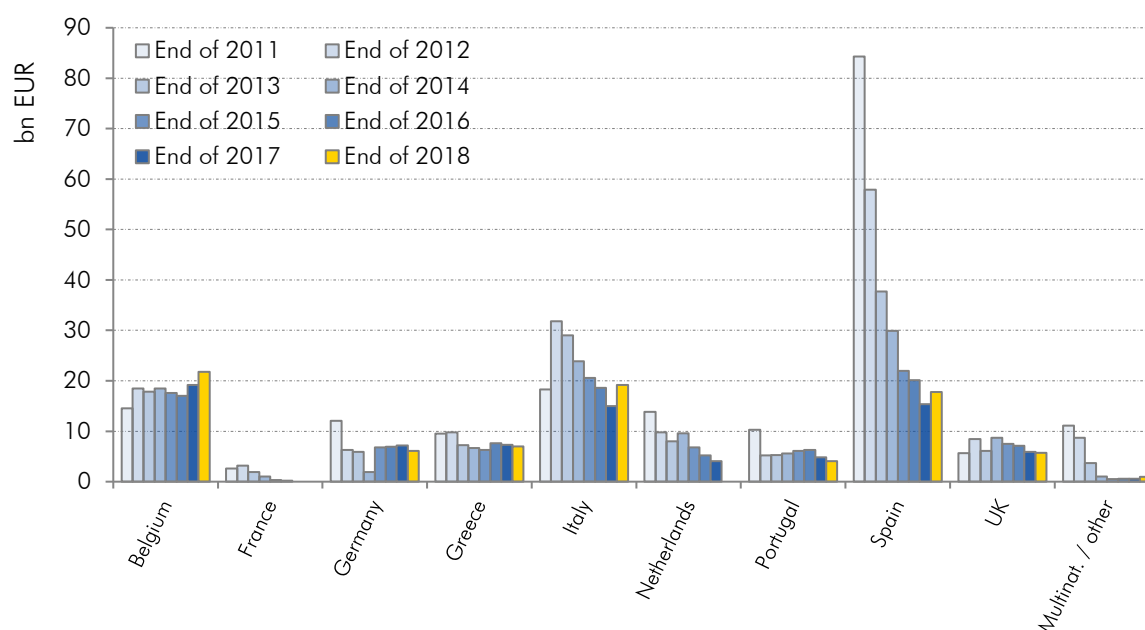
Breaking down SMESec volumes per end of 2018 by country shows that the main three countries together represent 73% in terms of outstanding: Belgium (EUR 21.8bn/27%), Italy (EUR 19.2bn, 24%), and Spain (EUR 17.8bn, 22%), see Figure 55. These countries are followed by Greece (9%), Germany (8%), UK (7%), and Portugal (5%).

Figure 54: European outstanding securitisation transactions by collateral (bn EUR)



Source: Authors, based on data from AFME

Figure 55: European SMESec outstanding volume by country (bn EUR)



Source: Authors, based on data from AFME

### SMESec performance trends

The performance of SMESec transactions depends on a number of parameters, including the structure of a transaction, SME credit risk (including recover 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.<sup>68</sup> 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).

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).

On the one hand, before the 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 could explain the good SMESec performance in Europe compared to other segments of the European securitisation market and to the US.<sup>69</sup> Figure 56 and Figure 57 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). The performance of EMEA SME ABS remains remain stable, supported by a robust macroeconomic environment, good refinancing conditions for SMEs and continued recovery in real estate markets. Downside potential stems mainly from political event risk that might lead to further economic deterioration.<sup>70</sup>

The rating transition data shows that the downgrade pressure for SME transactions persists across all tranche levels. The example below (Table 5, page 80) shows the rating migration of SME Collateralised Loan Obligation (CLO) transactions (rated by Fitch, migration since transaction closing). For example, of all the tranches initially rated AAA, 71% (by number<sup>71</sup>) have paid in full (pif), 13% are still AAA, 4% moved down to AA etc.

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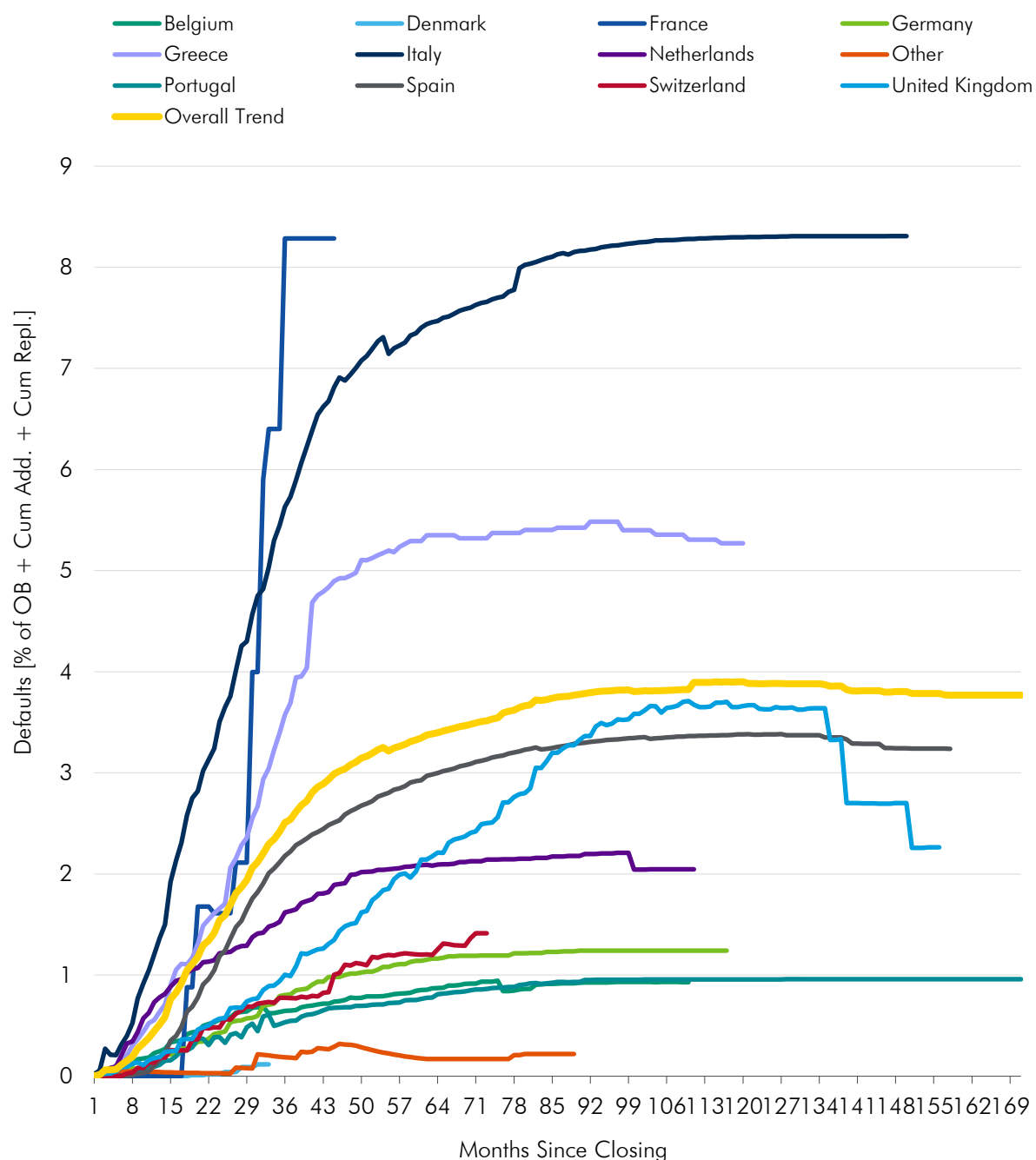
<sup>68</sup> With some exceptions, i.e. the non-granular hybrid transactions (German Mezzanine CDOs). For more details see Kraemer-Eis, Passaris, and Tappi (2013).

<sup>69</sup> 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% (even down from the 0.6% estimate 2 years before). In post-crisis vintages there have been no realised losses so far. Losses in the SME segment are low as well and mainly caused by German SME loans, originated through an "originate-to-distribute" business model, or by Spanish SME loans (Fitch, 2019b). Also other rating agencies report strong structured finance performances for Europe, see e.g. S&P (2019a) where the SME transactions are included in structured credit segment or Moody's (2019c).

<sup>70</sup> As explained in more detail in our previous working papers, the SMESec market has also 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).

<sup>71</sup> Relative to the number of tranches in a given initial rating category.

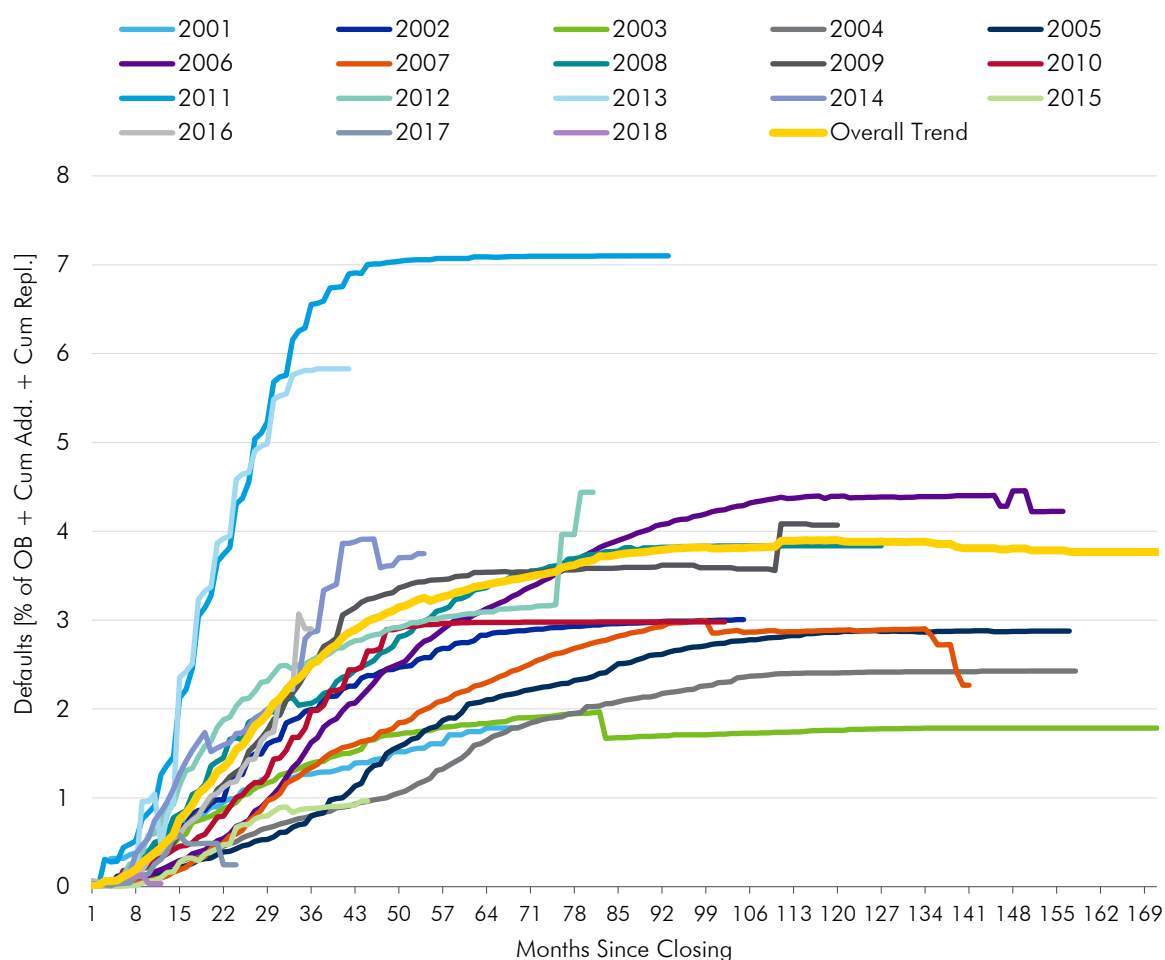
Figure 56: SME loan and lease ABS - Cumulative credit events or defaults on original balance (seasoning by country)<sup>72</sup>



Source: Moody's (2019a)

<sup>72</sup> Terminated transactions are included in the index calculation; hence, here "cumulative" curves can also show a drop. Moody's believes that this information must be included for an accurate representation of trends over time. 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. The chart differs from indices published by Moody's prior to March 2016 due to the inclusion in the denominator of Additions and Replenishments.

Figure 57: SME loan and lease ABS - Cumulative credit events or defaults on original balance (seasoning by vintage)<sup>73</sup>



Source: Moody's (2019a)

Table 5: Fitch European SMEs rating transition matrix (May 2019)<sup>74</sup>

% of tranches		Current rating									
Initial Ratings		PIF	AAAsf	AAsf	Asf	BBBsf	BBsf	Bsf	CCCsf	CCsf	Csf
	AAAsf	68%	24%	4%	4%	0%	0%	0%	0%	0%	0%
	AAsf	60%	0%	33%	7%	0%	0%	0%	0%	0%	0%
	Asf	20%	13%	7%	60%	0%	0%	0%	0%	0%	0%
	BBBsf	0%	0%	8%	23%	54%	8%	8%	0%	0%	0%
	BBsf	0%	0%	0%	11%	22%	56%	0%	0%	11%	0%
	Bsf	0%	0%	0%	13%	38%	0%	50%	0%	0%	0%
	CCCsf	0%	0%	0%	0%	0%	0%	0%	40%	20%	40%
	CCsf	0%	0%	0%	0%	0%	0%	0%	0%	50%	50%
	Csf	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Source: FitchRatings (2019a)

<sup>73</sup> The chart differs from indices published by Moody's prior to March 2016 due to the inclusion in the denominator of Additions and Replenishments.

<sup>74</sup> The addition sf indicates a rating for structured finance transactions.

### 5.3.2 SMESec prospects

#### Regulatory adjustments

In general, a well-functioning securitisation market can be essential in helping financial intermediaries broaden their funding base, achieve capital relief and ultimately, increase their SME financing. However, the SMESec market in Europe is still underdeveloped although SMESec have many advantages for banks, for investors, and – most importantly - for the SMEs (see for a detailed discussion Kraemer-Eis, Schaber, and Tappi (2010), Wehinger and Nassr (2015), Aiyar et al. (2015), Singh (2017) or the joint statement of eight leading trade associations: AFME et al. (2016)).

A recovery and development of the primary securitisation markets could play a role in ensuring sufficient credit supply for SMEs. 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 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).

As described, even many years after the start of the financial crisis, the European SMESec has still not recovered. Several indirect support measures are aiming at a market revival, amongst which are important regulatory adjustments (see Box 13 for a summary of important steps and consultations).<sup>75</sup> The new securitisation regulation entered into force on 17.01.2018 and is applicable for securitisation transactions from 01.01.2019 onwards in all Member States; some grandfathering provisions are valid. The envisaged signalling approach via simple, transparent, and standardised (STS)-labelled<sup>76</sup> securitisations (incl. SMESec) - which receive preferential regulatory treatment – is an important step and forms a building block of the Capital Markets Union (CMU).<sup>77</sup>

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 (SSPE) must be established in the EU (see for more details BoA/Merrill Lynch, 2018). Hence, future activity volumes - for securitisation in general, but in

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<sup>75</sup> Another example: 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 in general, and the SMESec market in particular, was a positive step. However, the programme has not achieved significant volumes, moreover, as it was based on publicly placed transactions, there was almost no direct impact on the SME segment on the market. On 14.06.2018 the ECB announced to reduce the asset purchases from October 2018 onwards, and then to stop the ABSPP by the end of 2018.

<sup>76</sup> We use here STS as term – in the discussion, also other terminologies were and are used in the same context, e.g. HQS (high quality securitisation) or STC (simple, transparent and comparable) securitisation, used by BCBS-IOSCO, or SST (simple, standard and transparent) securitisation, used by the European Banking Authority. The STS acronym will prevail in European regulation.

<sup>77</sup> For more information on the relation between CMU and SME financing see Kraemer-Eis and Lang (2017).

particular for STS transactions - will be dependent on the market players' ability to meet the new requirements – it can be expected that the adaptation process will still take time.

Interpreting the effects of the new regulations, it has to be borne in mind that 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 still 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.<sup>78</sup>

Implementation has started from January 2019 onwards. To obtain STS status, a transaction has to meet a set of multiple regulatory criteria – to that end, in April 2018, the EBA issued a consultation paper on guidelines on STS criteria (EBA, 2018a). The transition from current market practise to the new regime will pose many types of challenges (legal, structural, informational, IT) to market participants, i.e. issuers and investors (PCS, 2018a and b). In March 2019 the first STS compliant transaction came to the market, with more such issues in the pipeline (AFME, 2019b).

### Box 13: New regulation regime for securitisation – main aspects for SMESec

The EC proposed a framework and started a legislative process; important milestones can be summarised as follows:

- On 08.12.2016, the ECON Committee of the European Parliament voted on its compromise text for the draft STS securitisation legislation. This text was an amended version of the original European Commission text and was then brought together with the Council text agreed last December. The securitisation package, which includes STS and a revised regulatory framework for capital charges for credit institutions and investment firms originating, sponsoring or investing in securitisation products (CRR amendments) subsequently entered into a reconciliation process involving the European Commission, the European Council, and the European Parliament – the “Trilogue negotiation”.

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<sup>78</sup> In the context of the CMU action plan, the European Commission indicated in 2017 the intention to analyse the case for introducing European Secured Notes (ESNs) as new funding instrument (European Commission, 2017a). 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, 2018b). De facto, the idea is to combine elements of covered bonds and securitisation and, hence, to establish an instrument in between these two techniques. In October 2017, the European Commission sent to the EBA a call for advice as regards ESNs. On 24.07.2018, EBA published its report on the ESNs (EBA, 2018b) in which the authority explains that “SME ESNs, similar to covered bonds, could be structured as a dual recourse instrument. Due to the high-risk profile of SME exposures, the EBA suggests a more restrictive framework, especially with respect to the coverage, the liquidity and the disclosure requirements and suggests strict eligibility criteria at both loan and pool level and a minimum level of over-collateralisation of at least 30%. In terms of capital requirement, it is advised that no preferential treatment (i.e. similar to covered bonds) is granted. However, a differentiated risk-weight treatment compared to unsecured notes could be considered subject to certain considerations.” It still remains to be seen if such ESNs are going to be introduced and if so, the success will also depend on the ability of structurers to make the product economically viable for issuers (Scope, 2018). Moreover, the EBA also underlined that capital (rather than funding) is on top of the banks’ priorities, therefore setting up a framework for a new secured funding instrument (when mortgage covered bonds are already widely used) might reveal unneeded. ESNs have not been considered in the legislative package introducing a pan-European covered bond framework, as recently adopted by the European Parliament. Instead, the EC has been asked to assess the case for introducing ESNs by 2013 (S&P, 2019b).

*Box 13 continued:*

The Trilogue negotiation started in January 2017 under the Maltese Presidency of the EU Council. On 30.05.2017, the presidency of the Council of the EU reached an agreement with European Parliament representatives on the “securitisation package”, comprising STS and a revised capital charges framework for credit institutions and investment firms originating, sponsoring or investing in securitisation products (CRR amendments).

The agreement covers two regulations: The first one brings together rules that apply to all securitisations, including STS, which are currently scattered amongst different legal acts. It aims at ensuring “consistency and convergence across sectors (such as banking, asset management and insurance), and streamlines and simplifies existing rules” (Council of the EU 2017a). In addition, it establishes a general and cross-sector regime to define and set rules related to STS securitisation. It is important to highlight that the STS concept does not refer to the quality of the underlying assets involved, but to the process by which the securitisation is structured (Council of the EU 2017a).

The other part of the agreement amends regulation 575/2013 (Capital Requirements Regulation, “CRR”) on bank capital requirements. It sets out capital requirements for positions in securitisation, which aims at providing for “a more risk-sensitive regulatory treatment for STS securitisations” (Council of the EU 2017a). One of the main political issues resolved relates to the risk retention requirement.

The May 30th Trilogue agreement that followed intensive negotiations between the three parties introduced a number of changes in the securitisation regulation, amongst which:

- A reversion on the hierarchy of approaches to measuring capital requirements. The new Art. 254 of the CRR will provide the option for financial intermediaries to apply the three-tier hierarchy of approaches in the following order: SEC-IRBA, SEC-SA, SEC-ERBA<sup>79</sup>. There are however circumstances whereby the institutions will be able to keep on using the existing hierarchy order (i.e. SEC-ERBA ahead of SEC-SA), should that be more advantageous for them. Amongst the various consequences of this change, it is noteworthy pointing out the fact that non-IRB banks, by being allowed to use a formula-based approach (the SEC-SA), may be in a position to use synthetic securitisation for regulatory capital relief purposes.
- Risk retention will remain set at 5%, even though EBA/ESMA will need to provide an RTS (Regulatory Technical Standard) addressing further details of the technical implementation. The requirement will ensure that securitised products are not created solely for the purpose of distribution to investors.
- Particular emphasis has been given to securitisation transactions that would have an impact on the real economy and more specifically on the European SMEs. Agreed language under the amendments in the CRR allow synthetic securitisation transactions for SME portfolios under certain conditions, to benefit from the lower capital charges that are reserved for STS deals.

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<sup>79</sup> SEC-IRBA and SEC-SA are approaches based on formulae whose inputs refer to the underlying portfolio. SEC-ERBA is an approach predetermined, rating-dependent, risk-weights. See for an explanation of the different approaches under Basel III: Kraemer-Eis, Passaris, Tappi, and Inglis (2015).

*Box 13 continued:*

Other elements of the agreement include the creation of a data repository system for securitisation transactions, which will increase market transparency, and a light-touch authorisation process for third parties that assist in verifying compliance with STS securitisation requirements. The aim of the latter is to prevent conflicts of interest. The text makes clear that, even when a third party is involved in the STS certification process, liability for compliance with the rules remains completely with originators, sponsors, original lenders and securitisation special purpose entities (Council of the EU 2017a).

On 26th October, the European Parliament voted in favour of the STS- and the CRR-regulation. The European Council adopted the securitisation rules on the 20th November (Council of the EU, 2017b). All in all, the regime brings out important features of the future STS securitisation market segment. The fog around the future regulation design is lifting – which is good in order to reduce uncertainty. We note that the requirements of the STS regulation consist of a “light” set of high quality criteria, which in turn translates in a marginal (rather than substantial) reduction in the risk-weights.

Since end of 2017, a wave of public consultations happened (i.e. EBA, ESMA, EC) on key parts of the securitisation reform, including (see, for EBA related actions, e.g. EBA, 2018c):

- EBA significant risk transfer consultation.
- EBA draft RTS on risk retention for securitisation transactions<sup>80</sup>.
- EBA draft RTS on the homogeneity of underlying exposures in securitisation.
- ESMA draft RTS third-party firms providing STS verification services.
- ESMA draft RTS and ITS (Implementing Technical Standard) on disclosure requirements, operational standards, and access conditions.
- ESMA draft RTS/ITS technical standards on content and format of STS notification.
- European Commission, consultation on the draft Delegation Act on the LCR.
- EBA consultation on STS criteria interpretation (a key consultation to which EIF has participated, as outlined above, in an attempt to ensure that verifying the suitability of a transaction to the STS framework will be as straightforward as possible).
- EBA’s guidelines on STS criteria were finalised in December 2018 and EBA’s work on capital is in progress and will continue in 2019.
- Regarding the RTS on disclosures, ESMA published a revised proposal on 31.01.2019 (AFME, 2019a).
- On 28.05.2019 the EC formally adopted the RTS on homogeneity (to be scrutinised by the European Parliament and Council).<sup>81</sup>
- “Once adopted by the Commission, all the technical standards will then be subject to a scrutiny period by the European Parliament and the Council which will take place after the summer break”

Source: (AFME, 2019c).

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<sup>80</sup> In the context of risk retention it is important to mention that there might be a divergence of European and US rules as a liberalisation of risk retention regulations might happen in the US (Integer Advisors, 2018).

<sup>81</sup> Usually, Parliament and Council have 3 months to veto such RTS. However, this period might be impacted by the fact that the new Parliament is just incoming (Bell, 2019).

An area that still has to be calibrated is the Solvency II capital rules. 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 Commission published in 2018 a related Delegated Regulation for public consultation in order to prepare for a revision/calibration of Solvency II.

### Innovations and EIF involvement<sup>82</sup>

As mentioned above, from the perspective of direct public support, strengthening the SME securitisation market can be an effective way to facilitate the flow of funds to the real economy, while not creating too much distortion. 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 market, EIF, also in close cooperation with the EIB, plays an important role via market presence, reputation building, and signalling.<sup>83</sup>

The involvement of EIF in the ABS market in the past few years has led to several important elements:

- For each euro invested by EIF a multiple of that amount has been generated as new SME lending for the real economy.
- Revitalisation of a stagnant and stigmatised ABS market following the financial crisis of 2007-2008.
- Increase of the sophistication of the financial market whereby more complex structures nowadays are widely considered and used by EU banks. For instance, in 2017 EIF signed the first synthetic trade with a standardised bank within the new regulatory regime.
- Market appetite has been especially strong with respect to synthetic securitisation. EIF has provided guarantees to Italian, Austrian, German, French and Spanish financial intermediaries, allowing them to partially release regulatory capital absorbed by the securitised portfolios. These transactions have leveraged on EIF's expertise on guarantees and on the EIB resources provided by the European Fund for Strategic Investments (EFSI).
- Development of new markets such as Poland, Czechia and Scandinavia where EIF has engaged widely with the banking community to establish the foundations of a securitisation market.<sup>84</sup>
- New types of transactions are appearing on the market, and new initiatives are emerging, like SBOLT-2016-1 and SBOLT 2018 transactions as milestones in the area of marketplace lending securitisation (EIF providing a guarantee to KfW on their cash investment in the senior notes). These transactions in UK show that the securitisation technique can be applied to new types of

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<sup>82</sup> For more information on the use of securitisation at EIF, watch: <https://youtu.be/liDM-KPjScE>

<sup>83</sup> 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. In 2018 EIF invested EUR 2.4bn of securitisation transactions (predominantly synthetic), compared to EUR 1.4bn in 2017.

<sup>84</sup> For example: Carrying out a synthetic securitisation in a country with a less developed securitisation market in a non-Euro currency (Poland) helps to build market confidence in the implementation of synthetic securitisation across the whole of the EU. In Poland, the EIF executed guarantees on senior and mezzanine tranches for three new banks: Alior Bank, WBK, and Getin.



originators. The growth of lending in this sector might provide opportunities for further transactions in this area.

- In Italy, EIF is implementing securitisation transactions under the SME Initiative, a programme aimed at guaranteeing existing portfolios of SME loans, in exchange for the financial intermediary's commitment to lend to SMEs at a discounted interest rate.<sup>85</sup> A total of five intermediaries participated (UBI Banca, Unicredito, Intesa Sanpaolo, Banca Popolare di Bari and BCP Torre del Greco), committing to channel to Italian SMEs over EUR 1.5bn of new loans in the following three years.
- On the funding front, mezzanine transactions have dominated the scene, with EIF providing guarantees on mezzanine tranches purchased by institutional investors, including the members of the below defined ENSI platform. In general, EIF sees slightly increasing interest by private investors in the senior parts of funding transactions that come to the market, and therefore looks more at mezzanine transactions in order to support the market revival.<sup>86</sup>
- Furthermore, a platform as cooperation between EIF and National Promotional Institutions (NPIs), the EIF-NPIs Securitisation Initiative (ENSI), has been launched and is active.<sup>87</sup>

We think that the more stringent capital demands on banks and pressures to manage capital more efficiently will drive the growth of the synthetic transactions in Europe. On the funded ABS side, the market development will depend on the overall monetary policy of the ECB and related quantitative tapering. A move towards normalisation of monetary policy would increase the appetite for funded transactions.<sup>88</sup>

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<sup>85</sup> For more information on the SME Initiative Italy:

[http://www.eif.org/what\\_we\\_do/guarantees/sme\\_initiative/smei\\_italy/index.htm](http://www.eif.org/what_we_do/guarantees/sme_initiative/smei_italy/index.htm).

<sup>86</sup> EIF's ambition is to incentivise private investors and not to crowd them out.

<sup>87</sup> The ENSI partner institutions are EIF, EIB, bpifrance (FR), British Business Bank (BBB, UK), Cassa Depositi e Prestiti (CDP, IT), Kreditanstalt für Wiederaufbau (KfW, DE), Instituição Financeira de Desenvolvimento (IFD, PT), Instituto de Crédito Oficial (ICO, ES), Malta Development Bank Working Group (MT), and the European Bank for Reconstruction and Development (EBRD). For more details see: [http://www.eif.org/what\\_we\\_do/guarantees/ENSI/index.htm](http://www.eif.org/what_we_do/guarantees/ENSI/index.htm)

<sup>88</sup> "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).

## 6 Microfinance

### 6.1 Microfinance and social inclusion

#### 6.1.1 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 services<sup>89</sup>. 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 unbanked<sup>90</sup> clients, however in some European countries bankability is no longer a stressing issue. Therefore, introducing the concept of Inclusive Finance in Europe 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 (see Box 14 for an elaboration on some definitions).

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 serves also 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.

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 (for a discussion on the principles driving credit rationing, see chapter 5.1.1).

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<sup>89</sup> CGAP Definition, Consultative Group to Assist the Poor.

<sup>90</sup> 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.

## Box 14: 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. Organisations that implement the lending model of microenterprise lending tend to 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. The average volume of the provided loans is markedly higher than in the model of social inclusion lending, meant to support the start or stabilisation of microenterprises with a growth perspective. The loan sizes go up to EUR 25,000 (or even higher in some cases).

**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.

### 6.1.2 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.

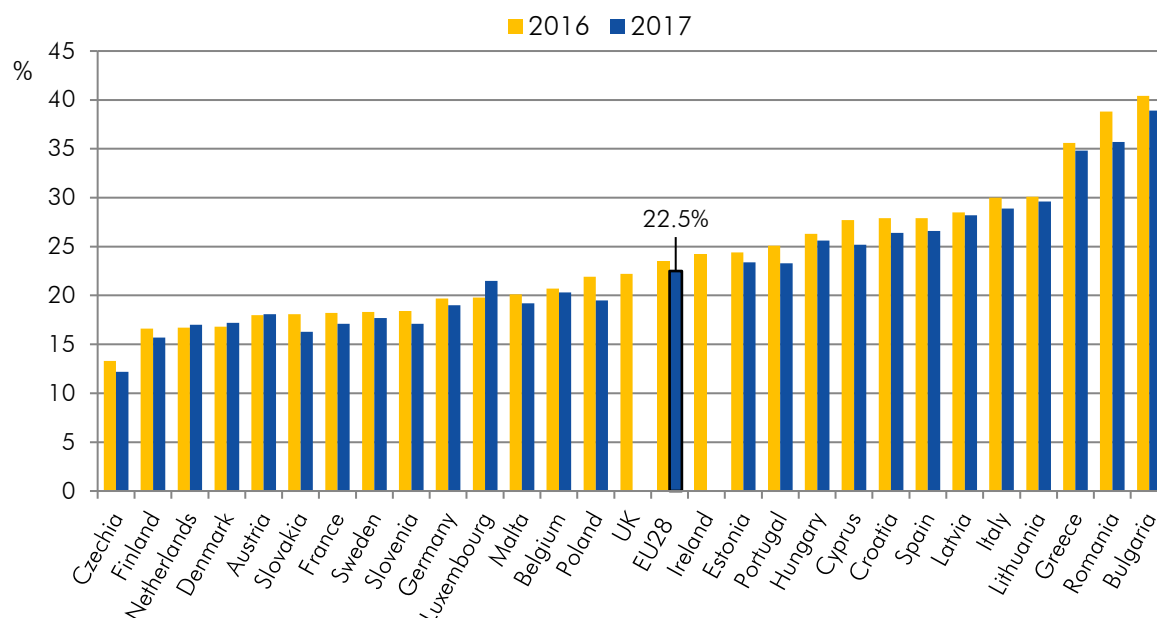
In the context of the Europe 2020 social inclusion targets, Eurostat conducts the “people at risk of poverty or social exclusion” indicator, depicted in Figure 58. The indicator corresponds to the sum of individuals who are at risk of poverty, are severely materially deprived, or are living in households with very low work intensity.<sup>91</sup> In 2017, nearly one fourth of EU28 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

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<sup>91</sup> Individuals are only counted once, even if they are present in several sub-indicators. 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). Material deprivation covers indicators relating to economic strain and durables. Severely materially-deprived persons have living conditions severely constrained by a lack of resources. People living in households with very low work intensity are those aged 0-59, living in households where the adults (aged 18-59) worked less than 20% of their total work potential during the past year. 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](http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=t2020_50).

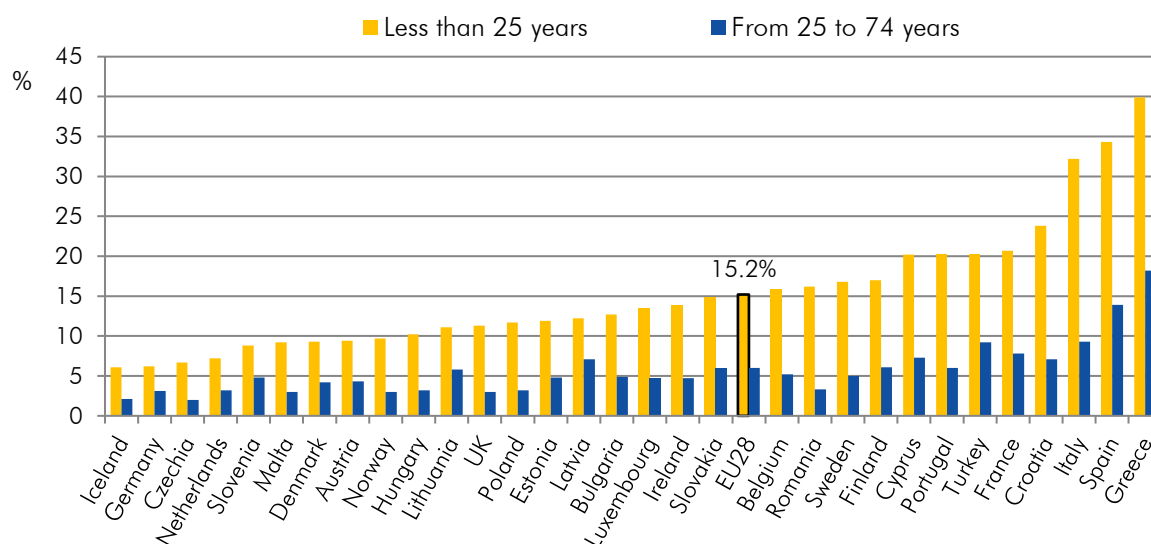
mostly Nordic and Western European countries on the other side of the spectrum (Finland, Netherlands, Denmark).

**Figure 58: People at risk of poverty or social exclusion (percentage of total population)**



Source: Authors, based on latest available data from Eurostat

**Figure 59: Unemployment rate by age groups, 2018**



Source: Authors, based on data from Eurostat

Since adverse labour market conditions are the most important driver for necessity-driven entrepreneurship, Figure 59 plots the unemployment rate for a number of European countries. While unemployment in Europe in general has recently been declining, large country-level variation exists. Youth unemployment remains at elevated levels.

### Box 15: Microfinance changes people's lives

This box presents interim results of the project “Measuring Microfinance Impact in the EU: Policy Recommendations for Financial and Social Inclusion” (funded by the EIB Institute). Using focus groups, the research investigates the mechanisms through which the involvement in microcredit operations results in positive (and negative) changes in people's lives. This project focuses on the direct experience of individuals who have used microcredit from eight MFIs in four European countries (Bosnia-Herzegovina, Hungary, Italy and Spain).

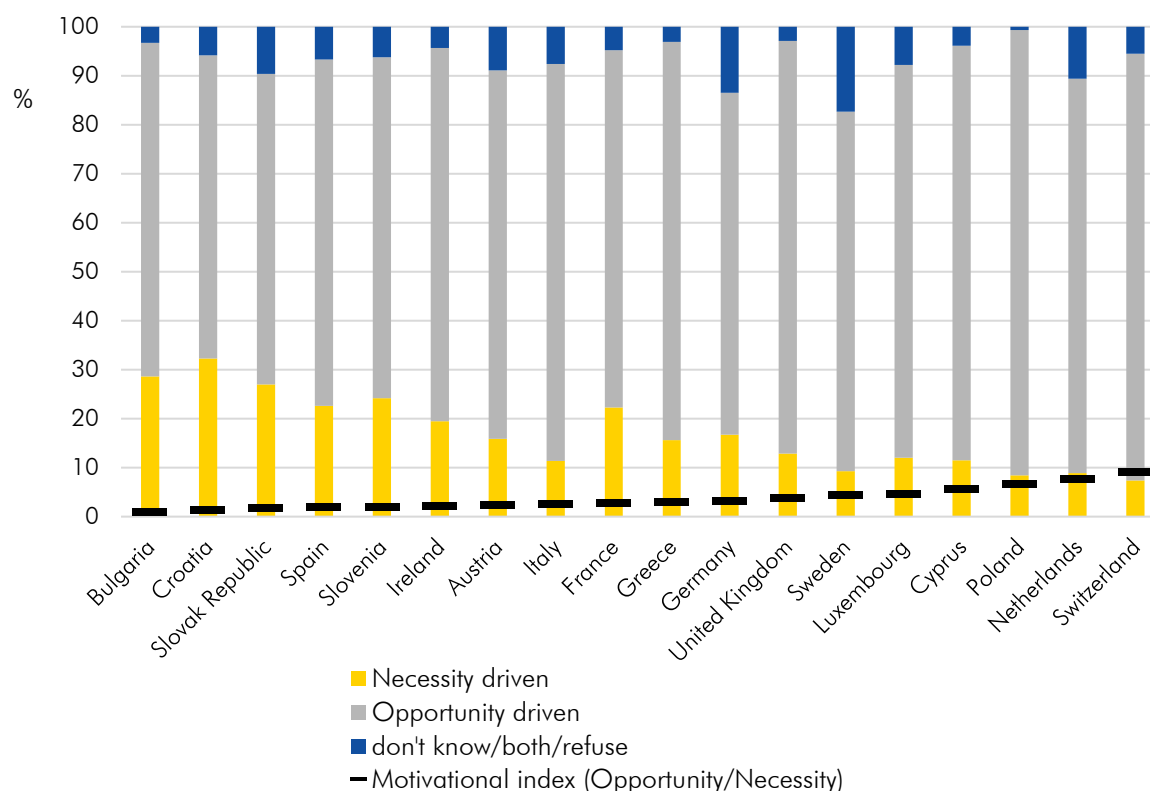
Important differences between countries emerged, both in the target of the microfinance activities considered and in the effects generated by the loans. In all countries except Bosnia-Herzegovina, participants reported that they decided to apply for a microloan because lending conditions, interest rates and procedures are generally simpler, faster and cheaper compared to the ones they find at commercial banks. On the contrary, in Bosnia-Herzegovina, interest rates on microloans are lower at commercial banks, but those loans “are not for them”, as participants are not perceived as bankable. In all countries, the initial support and the assistance during the loan term are fundamental elements for the success of microloans, not only for the most vulnerable borrowers. Effective microcredit policies should support the provision of non-financial services along with microcredit.

According to the research, microcredit is seen as an alternative to welfare tools that are totally lacking (Bosnia-Herzegovina), seriously insufficient (Hungary), or not suitable to the borrowers' needs (Italy and Spain). Since the four territorial case studies differ in terms of targets and operational characteristics, specific results emerge for each country. In Bosnia-Herzegovina the institution has traditionally targeted mainly Muslim women. The changes in the personal and social sphere relate mainly to higher income available for the household, self-esteem, independence (from their husbands, in case of women), and better recognized role in the society. In Spain, two institutions almost exclusively targeted immigrants and a third MFI was focused more on women with already defined business projects. Immigrant borrowers reported that not only they gained independence and improved self-esteem, but also supported families and made more friends. Regarding Spanish female clients, they feel content being able to achieve their entrepreneurial ambitions and to employ people. In Hungary, since the institution has a long-term relationship with its borrowers, microcredit is the tool that in the past allowed to reach an acceptable standard of living (through a new enterprise) and that today it is necessary to preserve it. Finally, in Italy, the main targets are young entrepreneurs and immigrants who have the opportunity to reduce their vulnerabilities. Through the creation of a new business, young entrepreneurs can gain independence from their original household. Regarding immigrants, they have the opportunity to increase their household income and to employ family members. In Italy, focus groups involved also borrowers of “social” loans (loans made mainly to cope with emergencies); these people are particularly vulnerable and rely on microcredit mainly to avoid devastating consequences such as eviction, temporary financial household imbalances, and to focus on the search for a new job.

The next step of this research project is to use all this information to create a new tool to measure the Social Return on Investments (SROI) of microfinance services in Europe. The results are foreseen to be finalised and published by the end of 2019.

People at risk of poverty and unemployed people are a potentially important group of business creators (see Box 15), 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 (see Figure 60).

Figure 60: Drivers of early-stage entrepreneurship, 2018<sup>92</sup>



Source: GEM (2019)

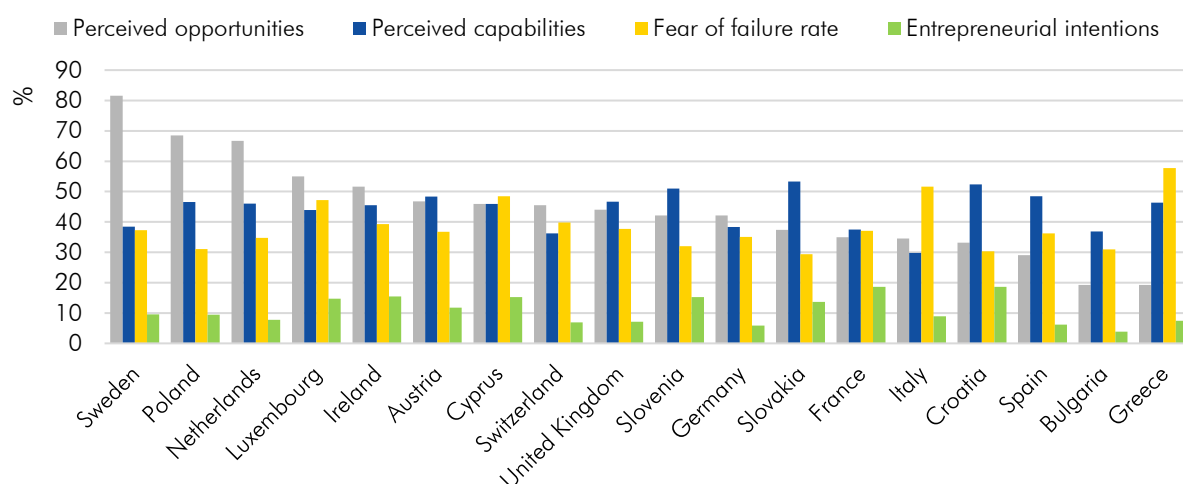
According to the GEM survey, the adult population in Europe sees good opportunities to start a firm locally, especially in high-income countries such as Sweden, the Netherlands, and Luxembourg, while the worst opportunities were seen in Greece, Bulgaria and Spain (see Figure 61). Unexpectedly, people do not seize 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 the high-income countries, mentioned above, not as many believe they have the required entrepreneurial skills and knowledge (perceived capabilities). The Slovak, Croatian and Slovenian populations were most confident about their own entrepreneurial skills, while the least confident population was found in Italy. French people perceive neither good opportunities nor do they believe to have capabilities, yet their intention to start a business within three years is among the highest.

As for the actual number of new business owners, the Netherlands, Luxembourg, and Austria are leading the list (see Figure 62). In these countries it is not immediately apparent whether or not the entrepreneurial activity was poverty-driven. For example, in the Netherlands, where the unemployment rate and risk of poverty rate are among the lowest (1.8%), early-stage entrepreneurial activity was reported to be the highest (12.3%). According to the GEM data, the Netherlands reported the highest motivational index (ratio of improvement-driven opportunity to necessity). It means that

<sup>92</sup> Total [early-stage] Entrepreneurial Activity (TEA) – Percentage of the 18-64 population who are either a nascent entrepreneur or owner-manager of a new business. Necessity-Driven Entrepreneurial Activity – Percentage of those involved in TEA who are involved in entrepreneurship because they had no better options for work. Opportunity-driven Entrepreneurial Activity-Percentage of those involved in TEA who claim to be driven by opportunity as opposed to finding no other option for work.

almost all Dutch entrepreneurs, participating in the GEM study, are improvement-driven and only a small share (lowest in Europe) is necessity-motivated. On the other hand, in Greece, where the unemployment rate is the highest, early-stage entrepreneurial activity is low (6.4%). Figure 61 shows that Greeks, despite their strong beliefs in their own capabilities, do not perceive good opportunities in their country, which perhaps discourages them to start a business. In Greece, the motivation index is low, meaning that business creation was mainly necessity driven.

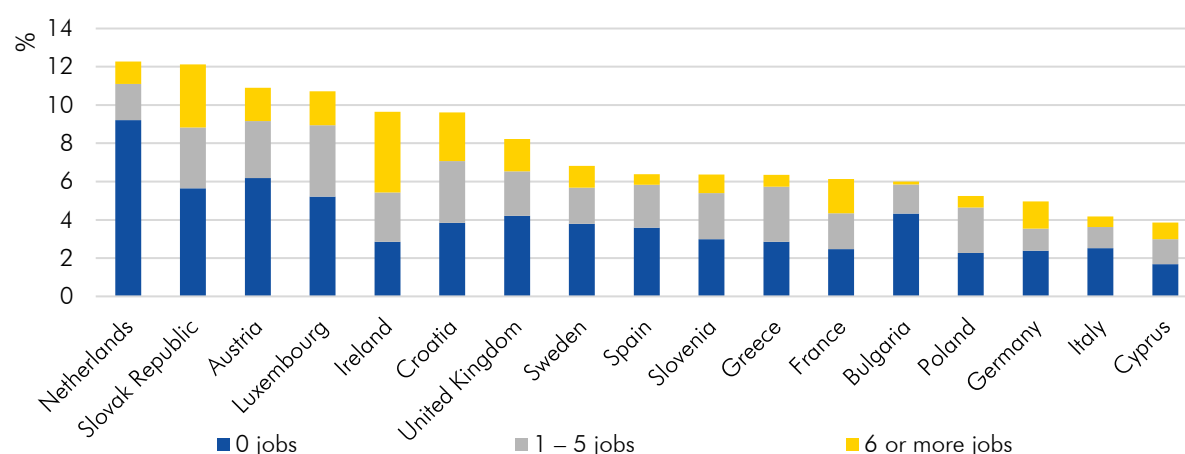
**Figure 61: Entrepreneurial intentions, % of population, 2018**



Source: GEM 2018/19 Global Report

European entrepreneurs seem to be less focused on high job creation. According to the GEM survey, only a small portion of entrepreneurs anticipates hiring six or more employees in the next five years (see Figure 62). For more information on job creation in the context of migrants, please see Box 16.

**Figure 62: Early-stage entrepreneurial activity by job creation in 5 years, % of population, 2018**



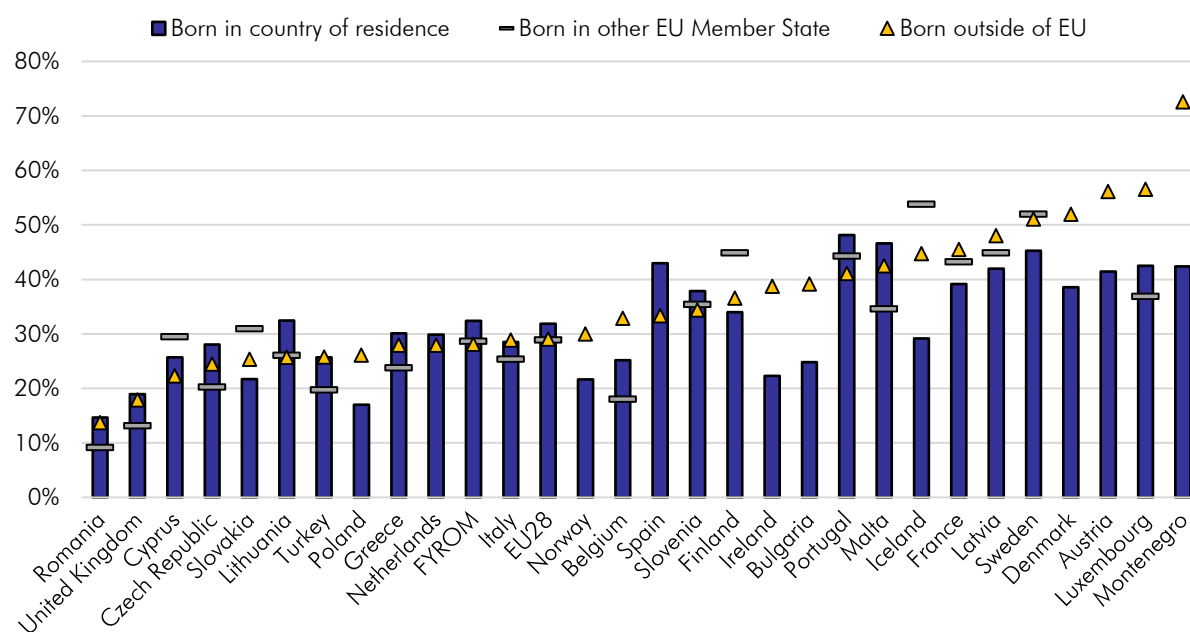
Source: GEM 2018/19 Global Report

## Box 16: 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, 2017b). 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 2018. Moreover, non-EU self-employed were more likely to create jobs than self-employed EU born migrants (29% vs. 25%). 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 (73%), in Austria (57%), in Estonia (56%) in Latvia (52%) and in Croatia (55%). 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. Non-EU nationals starting their business in many EU countries require to obtain or to renew residence and business permit. For certain professions, for instance, for dentists, accountants, cooks and more, 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. Due to all this, immigrants need specific attention to overcome the challenges and stimulate entrepreneurial activities (OECD, 2017b, EESC, 2017).

Figure B5.1: Proportion of foreign-born self-employed with employees by country, 2018



Note: Not all data points are available for all EU28 countries.

Source: Eurostat, based on own calculations

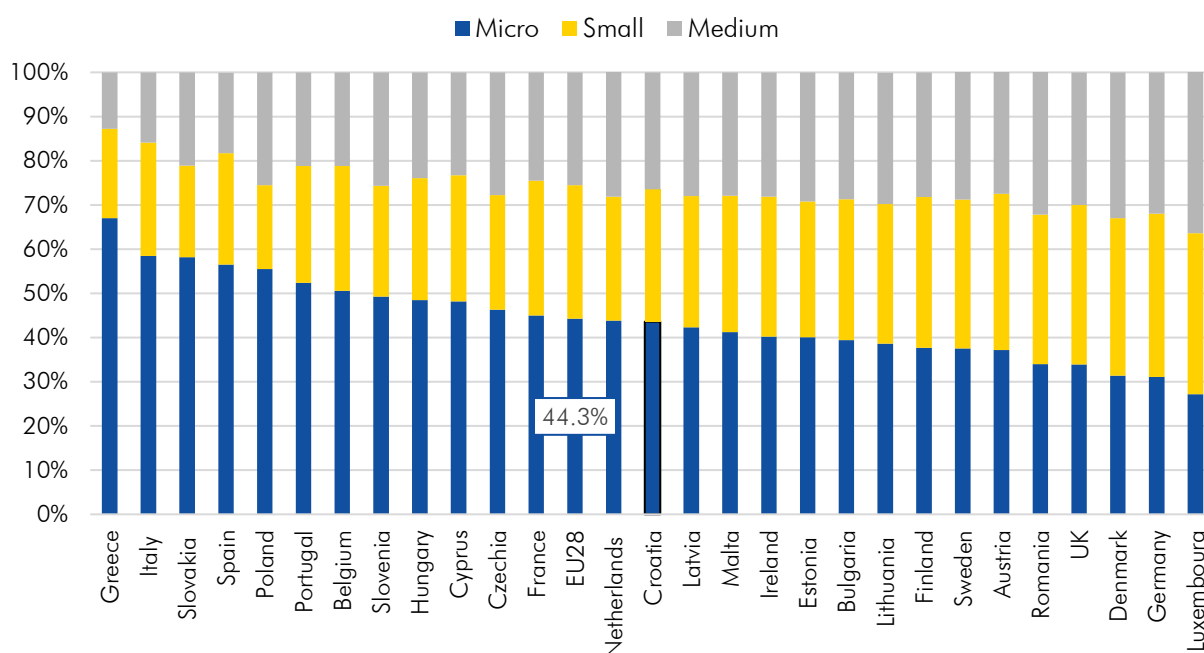


## 6.2 The demand for microfinance: microenterprises and their finance decisions

Microenterprises, making up 93% of all European businesses, are important contributors to employment as they account for 30% of total employment, (European Commission, 2018a). Micro-businesses seem to be relatively more important in countries with elevated unemployment levels. In Italy, Slovakia, Spain, Poland and Portugal employment by microenterprises accounts for more than half of total SME employment and in Greece this amounts to almost 70% (Figure 63).

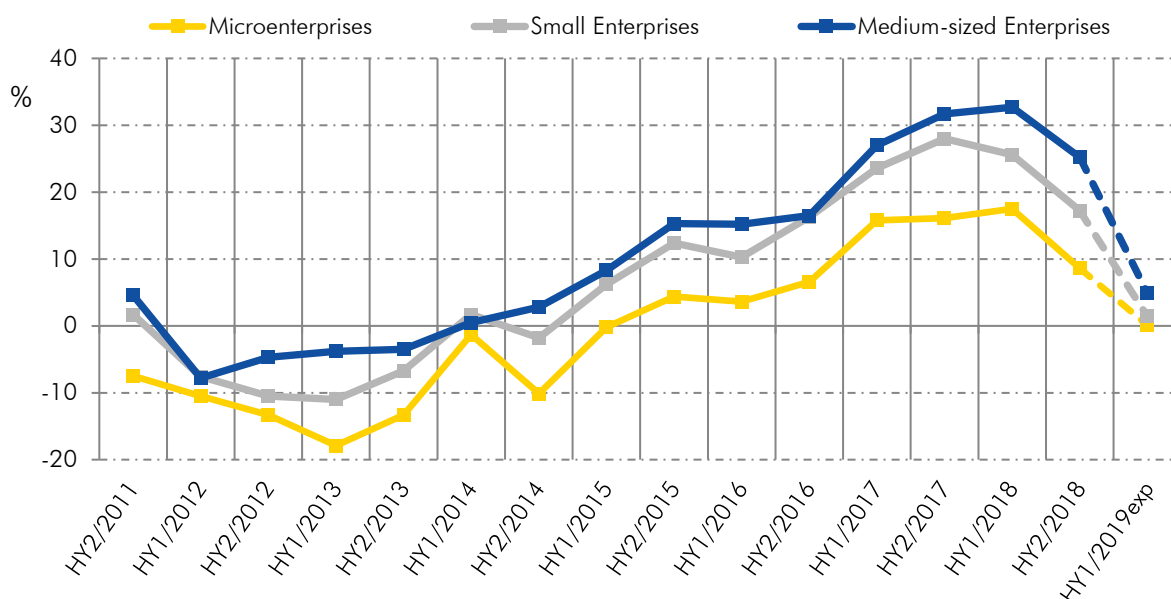
While microenterprises are an important element in the European economic fabric, they generally face more challenging conditions compared to their larger counterparts. This is evidenced by Figure 64, which illustrates microenterprises' perception about the current economic climate and compares it to larger firms' perception. For the first half of 2019, microenterprises are on balance expecting a negative change (from 8.6% to 0.1%) in their overall situation, thereby being more pessimistic than their larger counterparts are. Furthermore, the SMEunited survey reveals that microenterprises expect their investment climate to worsen (SMEunited, 2019).

Figure 63: Relative employment share by microenterprises compared to other size classes (2017)



Source: European Commission (2018a)

Figure 64: Overall situation of European microenterprises compared to other size classes

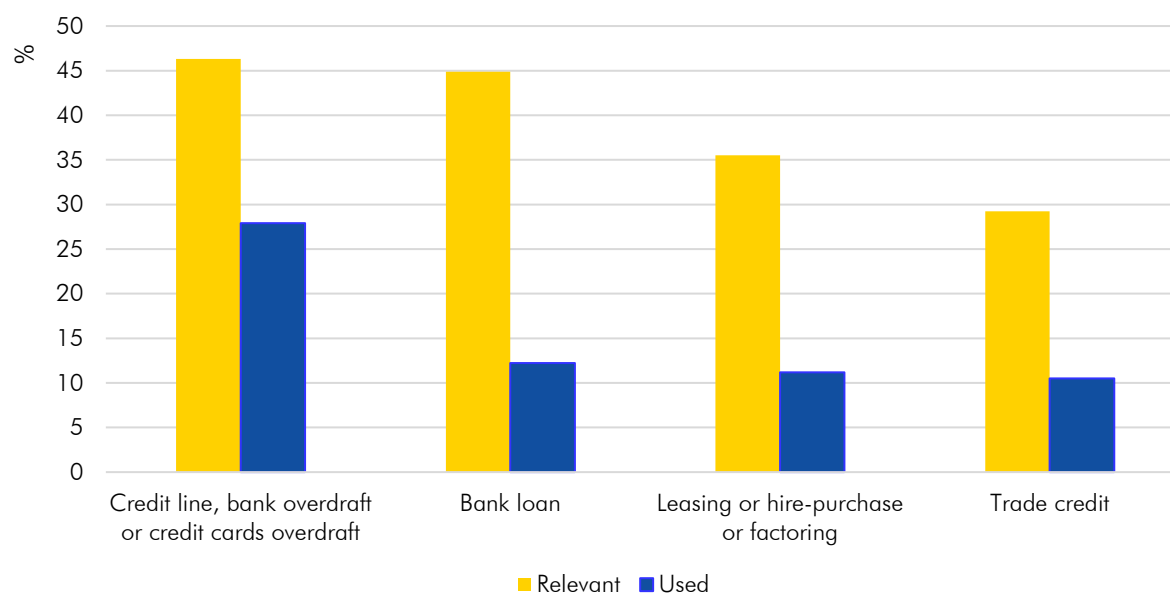


Note: The figure plots net responses, which are calculated as the share of positive minus negative responses.

Source: SMEunited (2019)

Microenterprises, in general, use less external financing instruments than their larger peers, presumably due to difficult access to finance. For example, bank loans are used by 21.4% of small companies and 26.0% of medium companies, while only 12.2% of microenterprises used bank loans. Interestingly, almost half of the microenterprises indicated that bank loans are relevant sources of financing, which is much higher than what they actually used (see Figure 65).

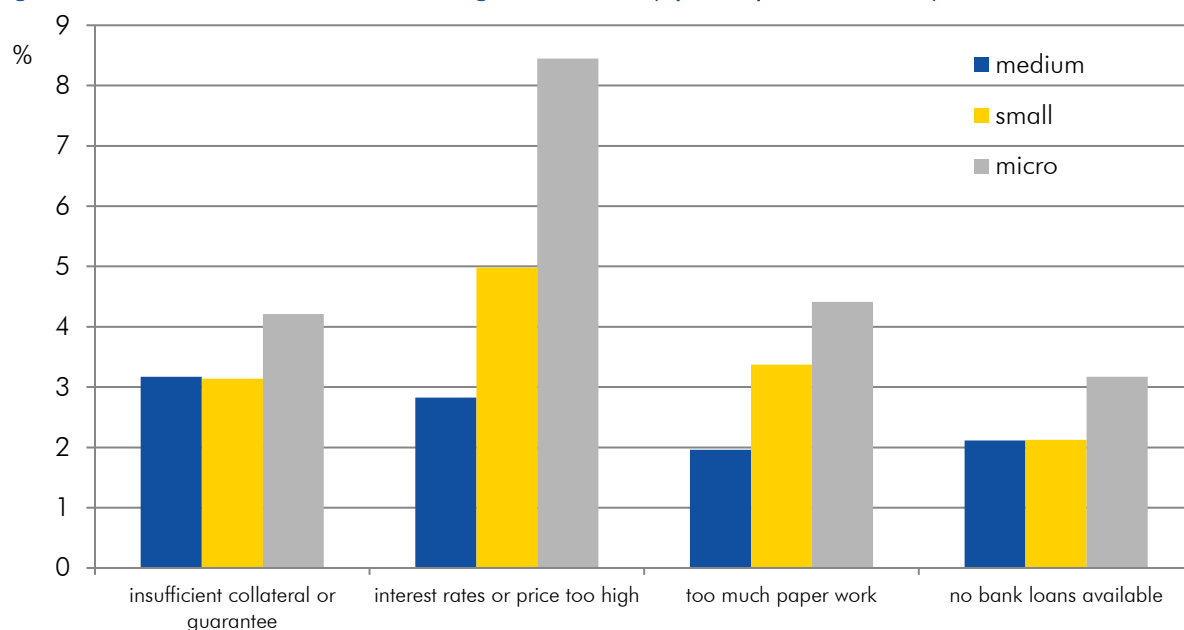
Figure 65: Relevance and use of different financing sources for microenterprises (HY2/2018)



Source: Authors, based on ECB SAFE (2019b) data

The same survey states that the bank loan rejection rate is still the highest for microenterprises (11.1%), compared to 3.1% for small firms and 3.3% for medium-sized firms. Consequently, the share of microenterprises that did not apply for a loan due to fear of rejection (discouraged borrowers) remains high at 6.2%. Forty-seven percent of the SMEs (52.9% for microenterprises) did not use bank loans because it was not a relevant source of financing. Among them, proportionally more microenterprises indicated that “interest rates or price too high” or there is “too much paperwork” involved (see Figure 66).

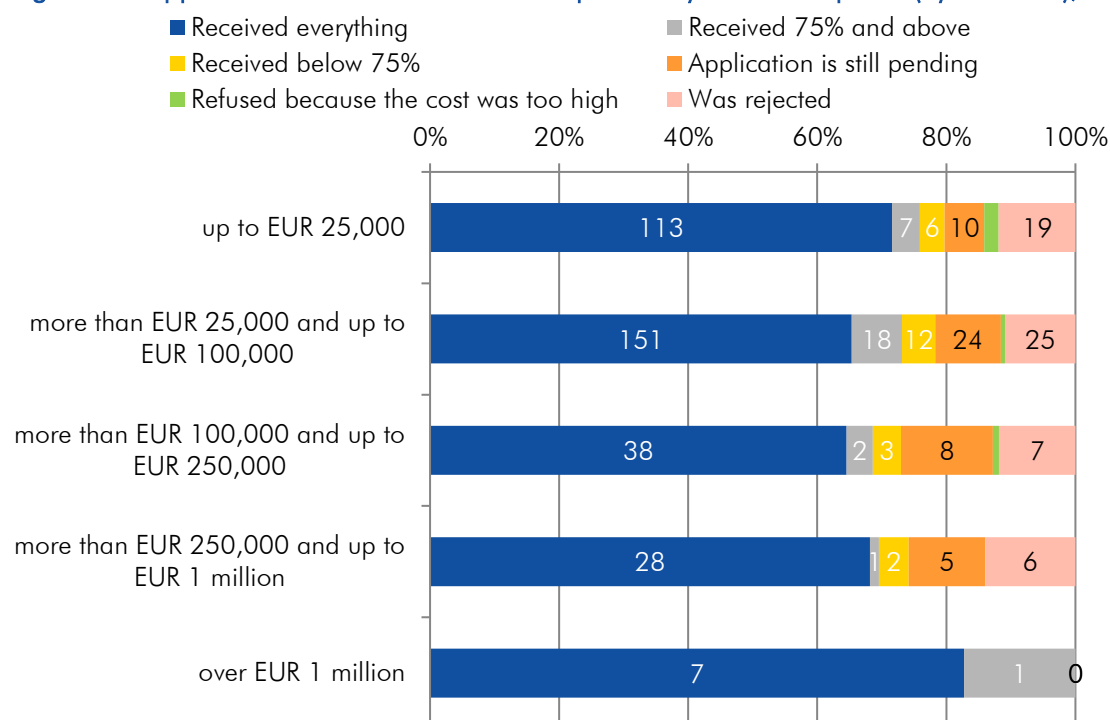
**Figure 66: Reasons for bank loans being not relevant (by enterprise size class), HY2/2018**



Source: Authors, based on ECB SAFE (2019b) 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 67).

**Figure 67: Application status of bank loans requested by microenterprises (by loan size), HY2/2018**



Note: the figure is based on responses from 504 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 (2019b) data

As discussed above, 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”<sup>93</sup>.

### 6.3 The supply of microfinance: the diversity of European MFIs

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).

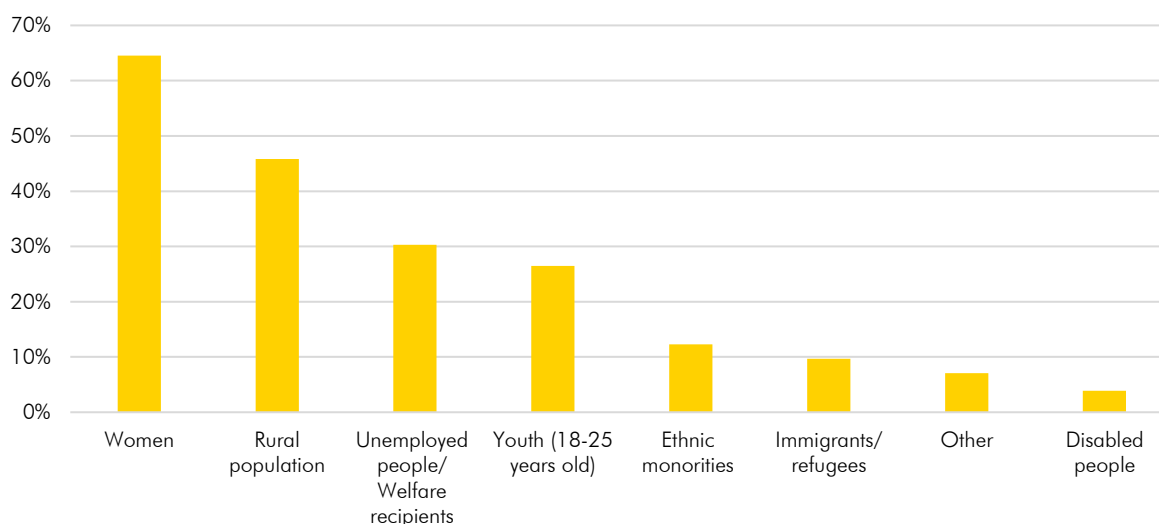
The focus of MFIs’ activities differs between Western and Eastern Europe. Most of the MFIs in Eastern Europe are mainly focused on micro-lending. In contrast, Western European MFIs provide a more

<sup>93</sup> Source: based on interim results from an ongoing research project on “Measuring Microfinance Impact in the EU”, see also Box 15.

diversified set of financial products, not only to microenterprises but to bigger enterprises as well (EMN-MFC, 2018). Moreover, the majority of Eastern European MFIs' (76%) primary mission is to increase access to financial services, while Western European MFIs (54%) consider job creation, poverty reduction and development of start-up enterprises as their primary goals (EMN-MFC, 2018).

Regarding the strategy to target specific socially and financially excluded groups, MFIs were asked about the target groups in their portfolios with the highest number of active borrowers. Not surprisingly, women are the most often targeted group, followed by rural and unemployed people (see Figure 68).

**Figure 68: Share of MFIs serving that specific target group, 2017**

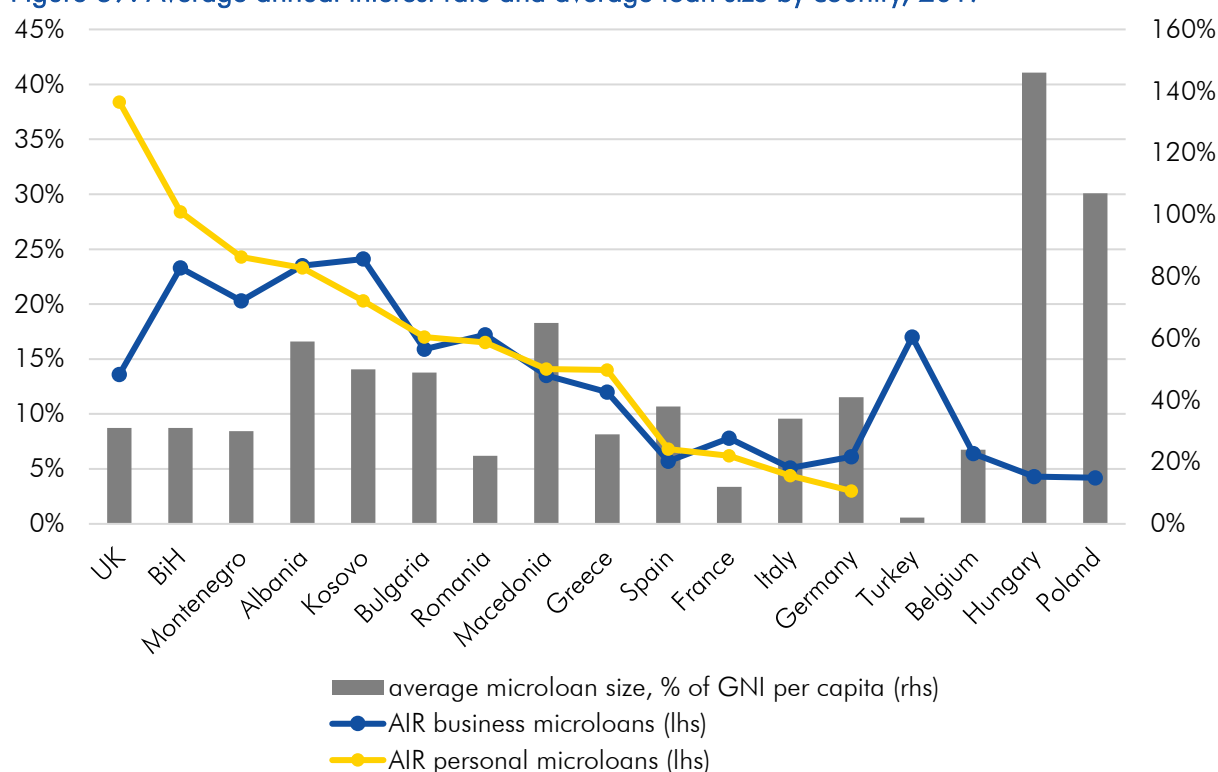


Source: EMN-MFC (2018)

The latest EMN market survey data show that, in 2017, more than 993k microenterprises and start-ups received support by the surveyed organisations, an increase of 8% compared to 2016. Over the same period, total microloan portfolio outstanding increased by 16% and reached EUR 3.1bn reported from 136 MFIs (EMN-MFC, 2018).

The interest rates, charged on microloans for business purposes, differ strongly between countries (see Figure 69). The average interest rate among the surveyed microfinance providers amounted to 10.7% in 2015, but ranged from 4% in Poland and Hungary, to as high as 16% in Bulgaria and 17% in Romania, and even higher in non-EU Balkan states (EMN-MFC, 2018).

Figure 69: Average annual interest rate and average loan size by country, 2017



Source: EMN-MFC (2018)

The differences in average interest rates are in general related to differences in the legal framework, MFI business models, pricing policies, refinancing cost, cost structure and the subsidy levels. Microloans are often offered with a special focus on social inclusion. Higher interest rates (“high” compared to “standard” lending business) for microloans typically reflect the non-subsidised, cost-covering business models (often MFIs in the central-eastern part of the EU). The lower interest rates reflect higher prevalence of social microfinance, corporate social responsibility initiatives and MFIs with subsidised, partly grant-dependent business models (often in the western part of the EU), (Zetsche & Dewi, 2018). Typically, for-profit institutions charge higher interest rates (cost coverage) and grant larger loans (economies of scale). In fact, the microloan business model, if operated on sustainable terms in the long run, inherently requires relatively high interest rates (Bruhn-Leon, Eriksson, and Kraemer-Eis, 2012).

The interest rates also differ across MFI types. For example, interest rates on business loans charged by NBFIs are on average higher than those charged by NGOs and government bodies. The level of the interest rate charged by MFIs depends on their funding structure, among other things. For example, in Poland, where the average interest rate is the lowest, 30% of funding sources came from grants, while in Bulgaria, Romania and in non-EU Balkan countries, the surveyed MFIs do not depend on grants at all but the interest rates for their clients are the highest (EMN-MFC, 2016). Similarly, Government bodies rely on grants solely, which allows them to charge the lowest interests rates (see EMN-MFC, 2018).

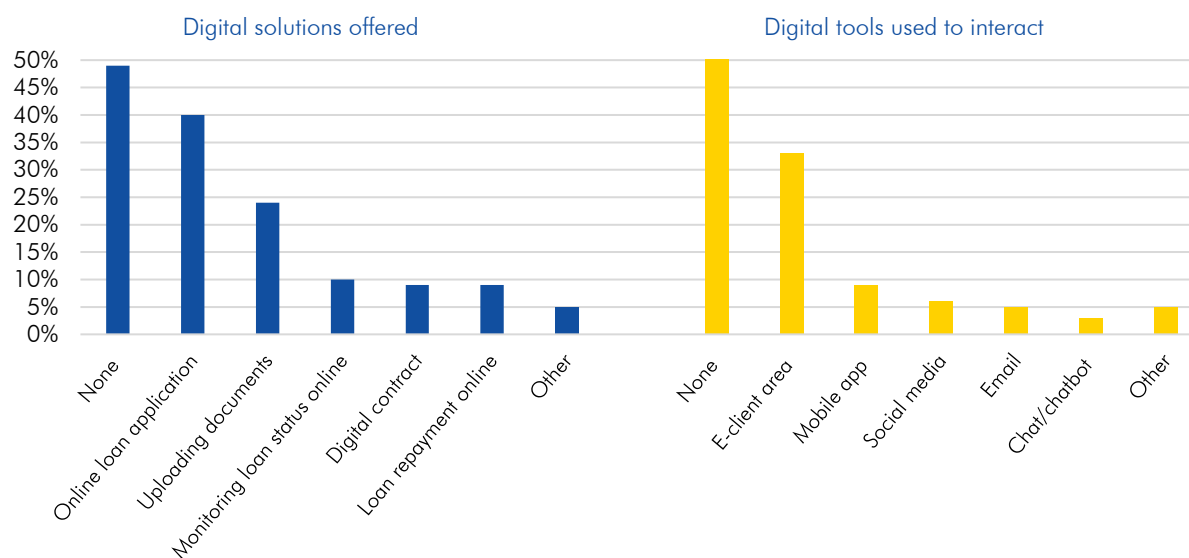
Interest rates also depend on other loan conditions including loan durations and loan sizes. The average duration of business microloans is 45 months with the average interest rate 10.9%, while

for personal microloans, it is 31 months and 17.6%. The average loan size for business loan is almost three times higher than that of personal microloans (EUR 8,913 versus EUR 3,098).

In addition to financial products and services, more than two third (68%) of MFIs also provide non-financial services. Almost all of them deliver non-financial products and services through one-on-one support in person (92%).

Almost half of responding MFIs do not offer any digital solution to their clients and more than half of them 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 of them are using more advance technologies for communication such as chats or chatbots (see Figure 70).

**Figure 70: Digital solutions offered to clients and digital tools used to interact with clients (% MFIs)**

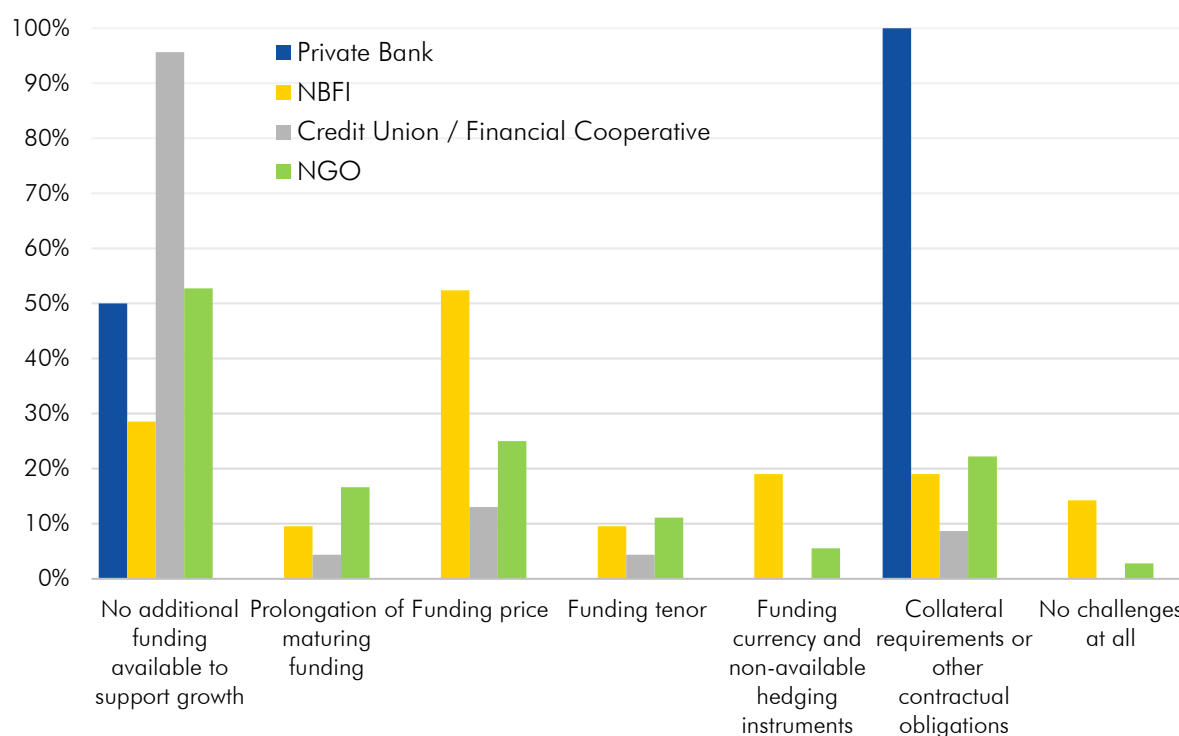


Source: EMN-MFC (2018)

According to the surveyed MFIs, digitalisation brings efficiency of operations, as it mainly helps to reduce time related to communication with their clients, loan application and loan monitoring. Because high fixed costs are one of the biggest issues in small business lending, and often one of the drivers of high interest rates, digitalisation also helps to reduce operating costs; moreover, it increases outreach. European MFIs are only partially digitalised but are ready to adopt more technology in their operations in order to increase their customer outreach, increase efficiency of its operations and stay competitive (MFC, 2017), (EMN-MFC, 2018).

Debt financing is the main funding source for European MFIs, mainly for private banks and NBFIs. As for future funding needs, debt finance still remains the most needed funding source: additional funding needed per MFI is over EUR 15m, mainly (78%) in the form of debts. The biggest challenge for MFIs is to find additional support for their growth. In addition, funding price and collateral requirement are pressing problems for MFIs (see Figure 71). MFIs need to meet the increasing demand for microfinance (EMN-MFC, 2018).

Figure 71: Challenges faced by MFIs, 2017



Source: EMN-MFC (2018)

## 6.4 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. Almost by construction, these are 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.<sup>94</sup> This section discusses 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. The Global Findex, the financial inclusion survey<sup>95</sup>, illustrates how financial inclusiveness varies strongly between countries and social groups (see Figure 72). In countries like Finland, Norway, and Denmark, 100% of the respondents reported having accounts in financial institutions, regardless of the social group they belong to. This contrasts with countries like Romania, Bulgaria and Hungary, which on average do not only have lower levels of financial inclusion, but also higher within-country

<sup>94</sup> For a full discussion on the mechanisms underlying finance market failures and credit rationing, see Section 5.1.1.

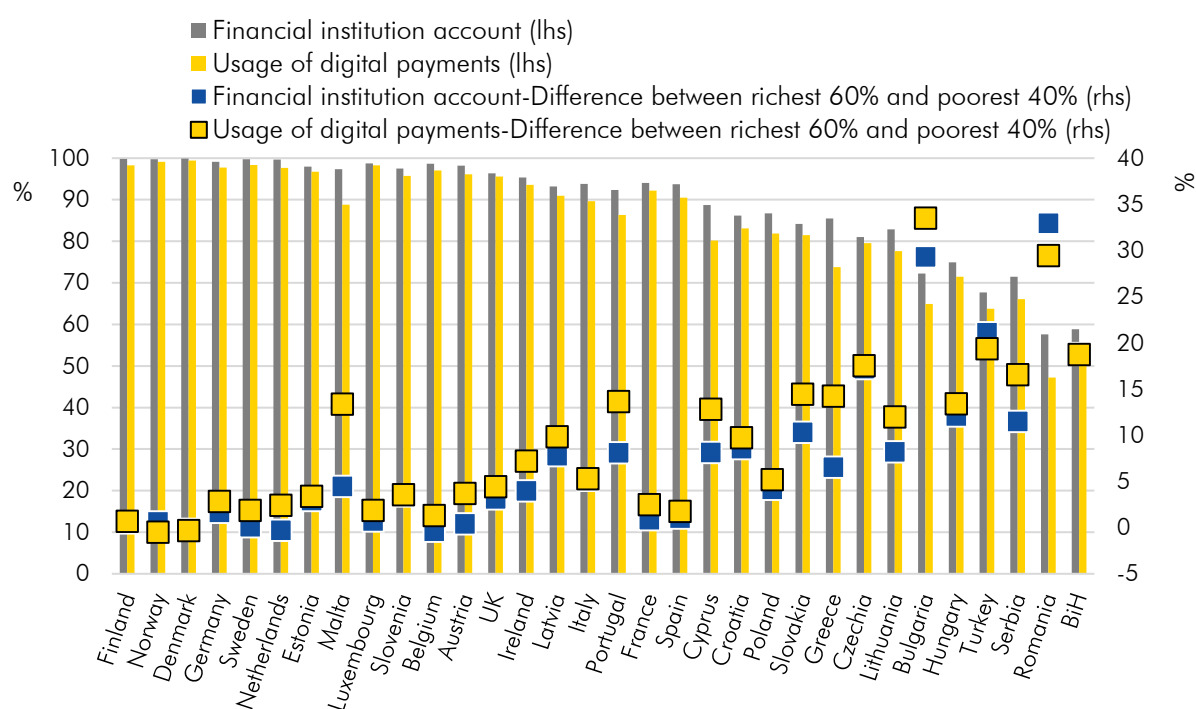
<sup>95</sup> The Global Financial Inclusion (Global Findex) database, launched by the World Bank in 2011, provides comparable indicators showing how people around the world save, borrow, make payments, and manage risk. The indicators in the 2014 Global Financial Inclusion (Global Findex) database are drawn from survey data covering almost 150,000 people in 144 economies - representing more than 97 percent of the world's population.



social disparities. The highest gap in account penetration between rich and poor was observed in Romania (32%) and in Bulgaria (29%).

A very similar pattern is observed for the use of digital accounts. For the poorest part of the population, digital payments seem equally inaccessible as financial accounts, mainly in countries with high unemployment. The most common reason why unbanked adults have no account was having too little money to use an account. Half of Hungarian unbanked adults lack trust in financial institutions. In Greece, almost two thirds of unbanked adults do not have an account because a family member already has one. Cost, distance and lack of necessary documentation are also reasons for being unbanked.

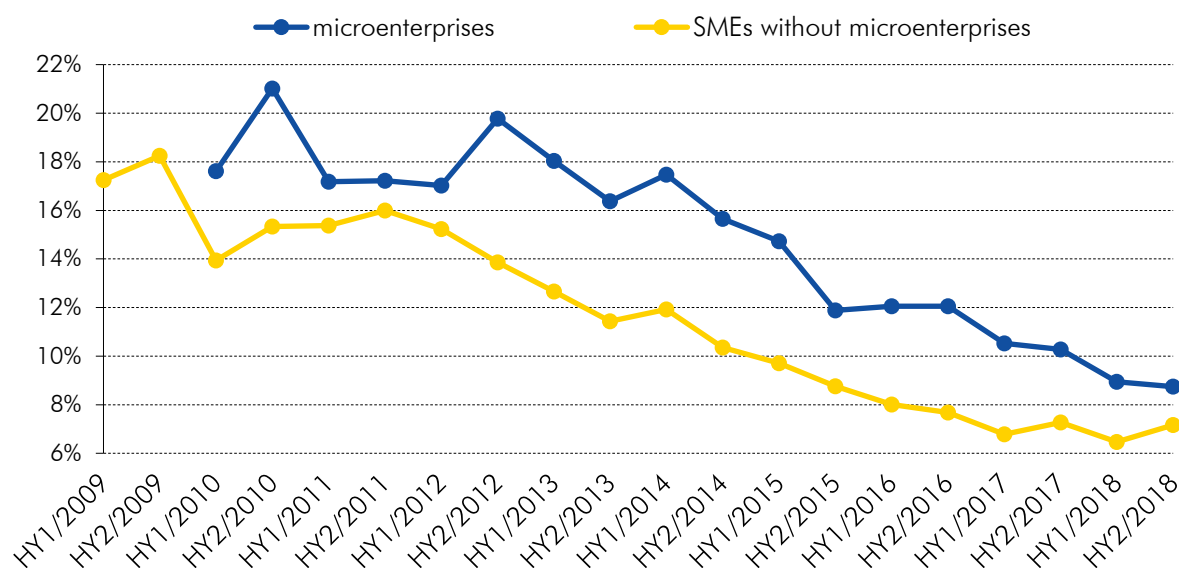
**Figure 72: Financial institution account and use of digital payments, 2017**



Source: Global Findex Database

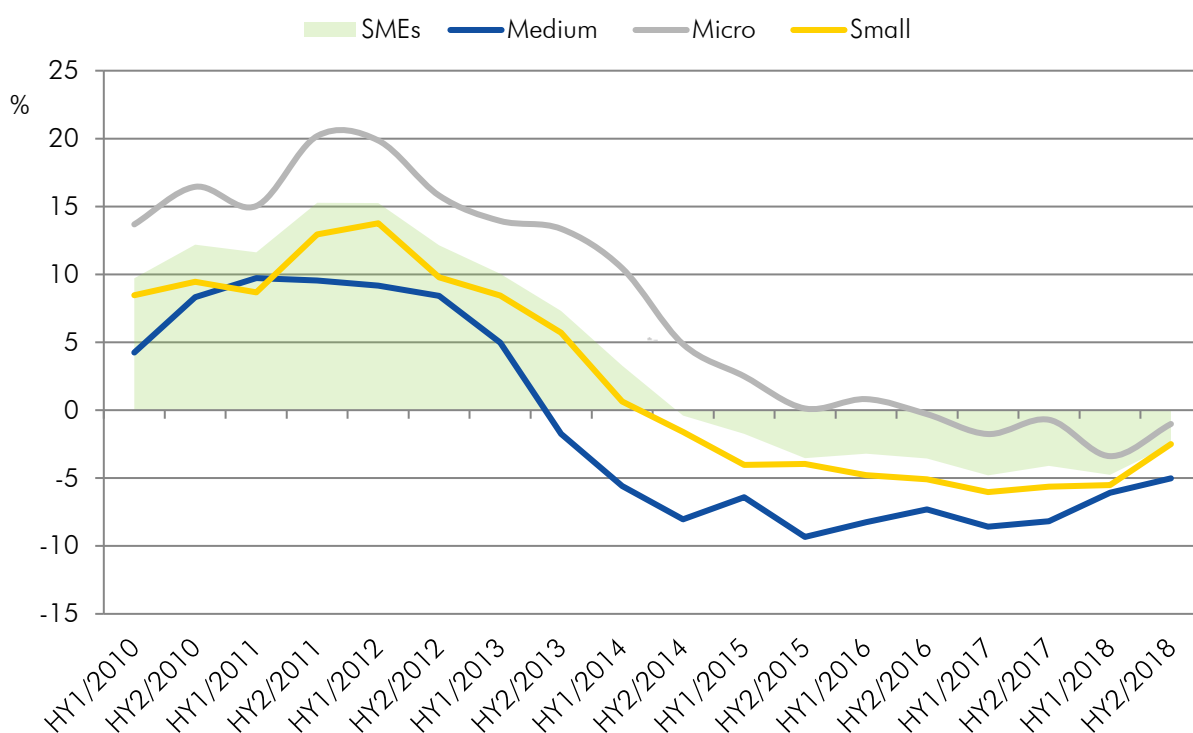
The ECB SAFE survey in the Euro area (ECB, 2019b) provides additional insights regarding the financing situation of European microenterprises. According to the latest SAFE survey, the share of microenterprises which see “access to finance” as their most important problem, slightly decreased but still exceeds the share of bigger SMEs facing the same problem (Figure 73).

Figure 73: Share of enterprises reporting access to finance as their most important problem



Source: Authors, based on data from ECB (2019b), Statistical Data Warehouse

Figure 74: Perceived change in the external financing gap\* (by firm size)



\*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 (2019b), Statistical Data Warehouse

Figure 74 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: they are consistently less positive about their financing situation.

## 6.5 Microfinance prospects

Microenterprises in general, and workers from vulnerable labour market segments that cherish entrepreneurial ambitions, are still burdened by significant difficulties in accessing financial resources from traditional credit channels. Currently, both microenterprises and microfinance providers in Europe face challenges discussed below.

*Affordable finance:* For lenders, especially for microenterprises, not only accessibility of finance is important, but also its affordability. As we have seen in the previous chapter, 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 (Zetzsche & Dewi, 2018). Alternatively, one should think about ways for MFIs to reduce their fixed costs related to lending activities, perhaps via digitalisation.

*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.

*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<sup>96</sup>. In addition to financial products and services, many European MFIs also provide non-financial services (EMN-MFC, 2018). As non-financial services are often cost-free for clients, 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.

*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

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<sup>96</sup> Based on interim results from an ongoing research project on “Measuring Microfinance Impact in the EU”.

operations. MFIs, especially non-bank MFIs, face challenges in securing funding to support growth. They also are 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 two instruments: (i) the EaSI Guarantee Instrument to increase access to finance for microenterprises, social enterprises and vulnerable groups and (ii) the EaSI Capacity Building Investments Window to help build up the market via investments. This can be by: scaling up or developing IT infrastructure (e.g. 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.

By mid-2019 EIF had signed 106 EaSI guarantee agreements covering 28 countries (including Albania, Montenegro, North Macedonia, Serbia and Turkey outside of EU28). Around 40% of the EaSI guarantee agreements had been entered into with non-banks. Over time these guarantee agreements will mobilise around EUR 2.4bn of new financing to micro-borrowers and social enterprises. By mid-2019 EIF had also signed 4 EaSI Capacity Building investments (one indirect equity transaction and three subordinated loans).

## 7 Fintechs

### 7.1 What are 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.

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, as their innovations help to reduce the pronounced asymmetric information problem in small business lending, for example, through technological advances in information processing. They develop innovations with the ability to revolutionise financial business processes, such as payment or data-processing technologies, and allow SMEs to compete on equal footing with larger players in the financial sector. They also serve as direct financing source for SMEs across the entire growth spectrum, through CrowdFunding (CF) platforms that offer a variety of debt and equity financing.

Fintechs are not a stand-alone phenomenon. Their impact is felt across 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 (“big techs”) such as Amazon and Paypal, who are dominantly positioning themselves in the financial service industry. For example, Amazon has not only been building an impressive payment infrastructure (e.g. Amazon Pay, Amazon Cash), but “from payments to lending to insurance to checking accounts, Amazon is attacking financial services from every angle without applying to be a conventional bank” (CB Insights, 2018). Other US-examples are Paypal (recently launched an SME lending initiative), Google, eBay, and Apple; examples from China are Alibaba, Baidu or Tencent.

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, but presents as well challenges as regards financial stability, data protection, and competition. In this context it is important that regulators ensure a level playing field between incumbent firms, big techs, and Fintech start-ups (BIS, 2019).<sup>97</sup>

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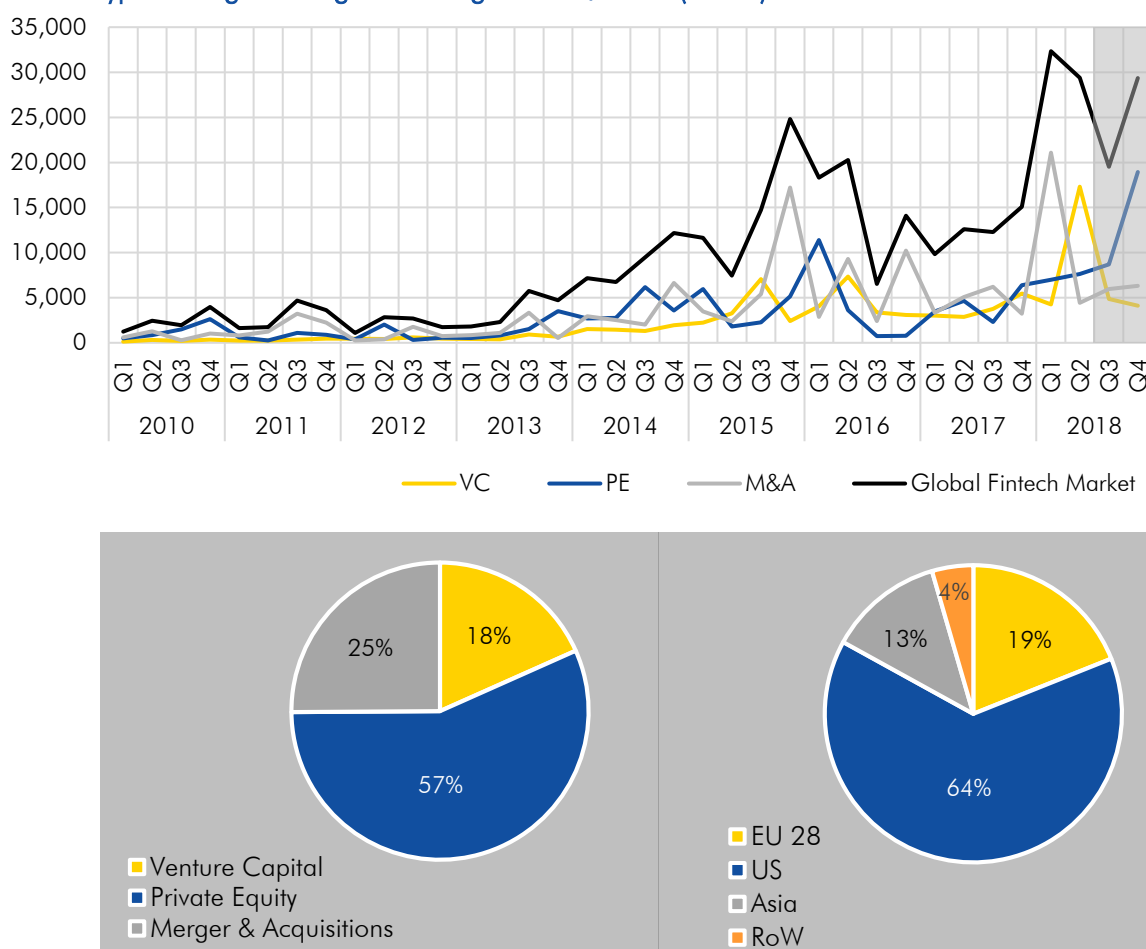
<sup>97</sup> For more details concerning big techs in finance, see BIS (2019).

## 7.2 Investments in Fintechs<sup>98</sup>

### 7.2.1 Global Fintech investments

During 2018, the global Fintech market continued to grow at an exponential pace (Figure 75). Despite of a small dip in Q3/2018, Fintech investments in 2018 more than doubled compared to one year earlier, reaching a global annual investment volume of EUR 110bn.

**Figure 75: The evolution of global Fintech investments (VC/PE/MA) and its distribution over deal types and global regions during Q3-Q4/2018 (mEUR)**

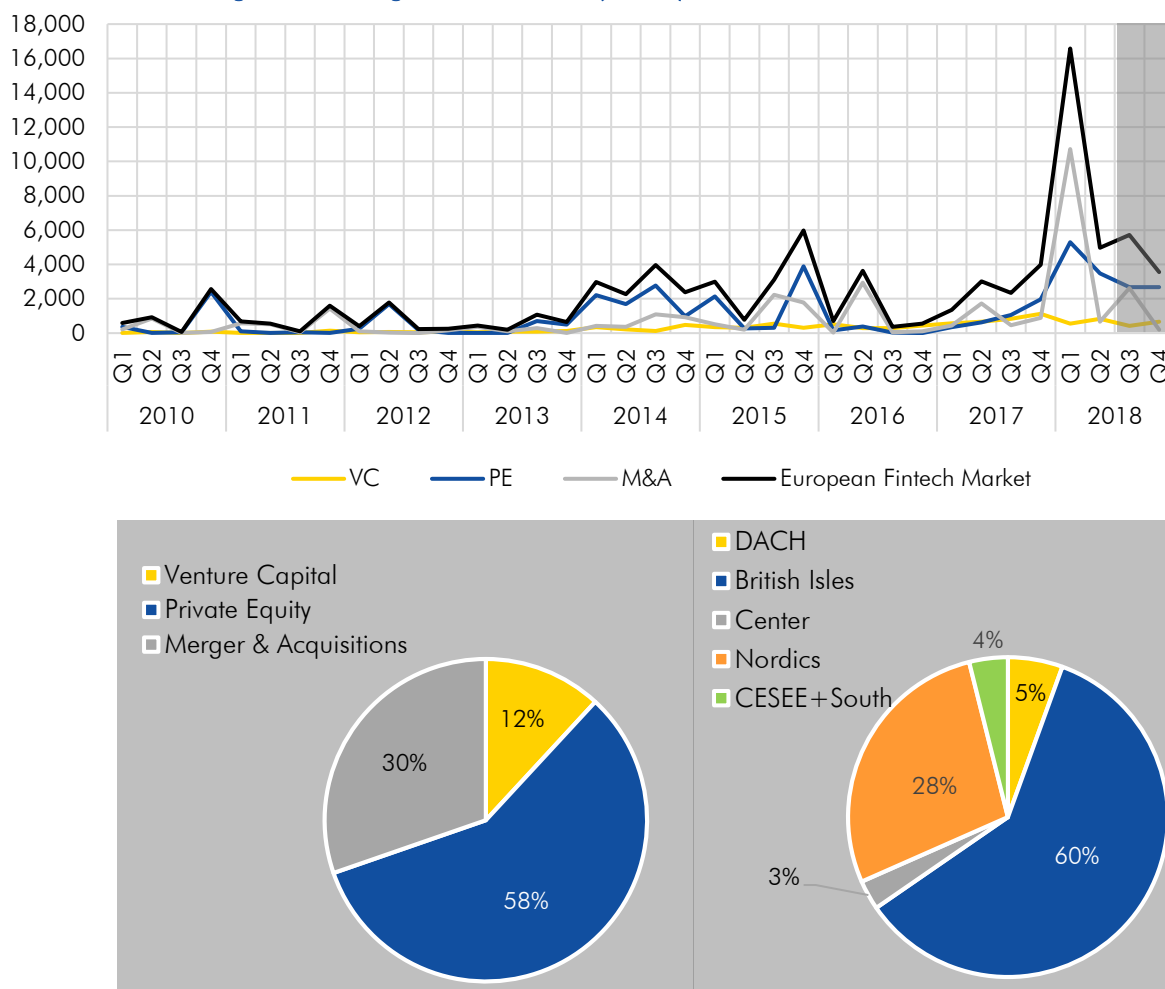


Source: Authors' calculations based on PitchBook data.

<sup>98</sup> The statistics presented in this chapter are derived from the data platform PitchBook, which identifies Fintech as "technology that uses the internet, blockchain, software and algorithms to offer or facilitate financial services traditionally offered by banks (loans, payments, investments and wealth management). Fintech also includes software that automates financial processes or addresses core business needs of financial firms." The PitchBook data platform collects information on deals in the VC, PE and M&A market. All statistics presented below refer to investments and geographical data refer to the location of the investees. Fintech investment data on the most recent quarters are subject to change, as they are continuously updated by the PitchBook platform to include the latest information that becomes available, and hence should be interpreted with some caution as they likely present an under bound of the true numbers.

PE deals drove Fintech investments during the second half of 2018, accounting for more than half of total investment amount during that period (Figure 75, bottom left panel). Investments mainly flowed to the US market, and the EU received just 19% of total investment volume (Figure 75, bottom right panel). The market is becoming increasingly globalised, as cross-border investments in the M&A sphere more than doubled compared to 2017, accounting for nearly half of total investments (KPMG, 2019).

**Figure 76: The evolution of EU Fintech investments (VC/PE/MA) and its distribution over deal types and sub-regions<sup>99</sup> during Q3-Q4/2018 (mEUR)**



Source: Authors' calculations based on PitchBook data.

While the global Fintech market thrived throughout 2018, the European market did not follow course. Figure 76 shows how the strong first quarter performance was clearly an outlier driven by a few mega-deals in M&A. Q2 and Q3 saw a stagnation of European deal volume compared to year-end 2017, and deal volume slumped in the final quarter of 2018. Year-on-year, the EU Fintech

<sup>99</sup> DACH: DE, AT; British Isles: IE, UK; Center: BE, FR, LU, NL; Nordics: DK, FI, NO, SE; CESEE: BG, CY, CZ, EE, HR, HU, LT, LV, PL, RO, SI, SK; South: GR, ES, IT, MT, PT.

market nevertheless managed to grow by a factor three. When comparing just the final three quarters, the rate of growth drops to a more modest 50%.

Historically already the focal point of the EU Fintech market, the British Isles<sup>100</sup> received the lion share (60%) of new investments in the second half of 2018, thereby further consolidating their dominance in the sector. The Scandinavian countries continued to profile themselves as the most fertile ground for Fintech development in continental Europe,<sup>101</sup> accounting for 28% of EU investment volume. The DACH region, historically accounting for 11% of investment volume since 2010, only attracted 5% of investments and the Center region only 3% (overall market share since 2010: 12%). Fintech investment activities in the more vulnerable European economies (CESEE + South<sup>102</sup>) were also relatively limited (4%).

### 7.2.2 The European Fintech Venture Capital market

A healthy VC market drives innovation and long term growth. Therefore, Figure 77 plots investment volumes for the different VC sub-segments in the EU. The European VC Fintech market experienced an exceptionally strong 2017. In particular the late stage market was marked by explosive growth, as investment volumes almost tripled throughout the year, reaching a peak of nearly EUR 700m. Subsequently, the market cooled down in 2018, although investment picked up again in the final quarter. Early stage investments stagnated and fluctuated between EUR 200m and 300m. The VC market remains dominated by the early and late stage segments, with angel, seed and accelerator investments playing only a minor role. The average deal size on the VC market stabilised in 2018 and fluctuated around EUR 4m, after rising for six consecutive quarters. This contrasts with the evolution on the US VC market, where the scaling up process continued and average deal size reached USD 12m by the final quarter of 2018 (see Figure 78).

### 7.3 Fintechs as a source of SME financing: The European CF market<sup>103</sup>

Within the Fintech ecosystem, Crowdfunding (CF) platforms are of particular interest to SMEs. CF is defined as the practice of raising funds from a large number of individuals, generally through the use of an online platform. The CF sector has grown increasingly popular in recent years. For 2017, the Cambridge Centre for Alternative Finance reported a global funding volume of EUR 370bn, an increase by 42 percent compared to 2016. While these are still impressive growth numbers, it is clear that the pace of growth in the CF market has decelerated considerably, indicating it is converging to a more mature state.

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<sup>100</sup> 54% of total investment volume since 2010, not shown in the figures.

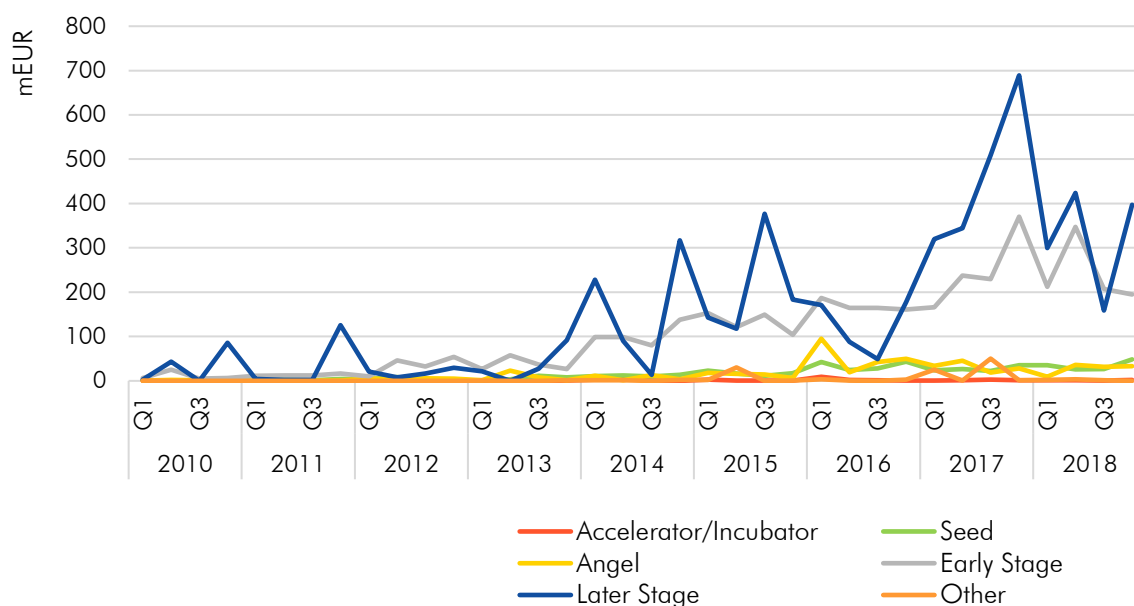
<sup>101</sup> Historically the second most important investment hub for Fintech deals, accounting for 15% of total investment volume since 2010.

<sup>102</sup> The CESEE + South region account for 8% of overall investment volume since 2010.

<sup>103</sup> This section uses data derived from the European Alternative Finance Benchmarking Report, produced by the Cambridge Centre for Alternative Finance (CCAF, 2019), which details the results of an annual survey among 269 CF platforms that reported operations across Europe (ex. UK).

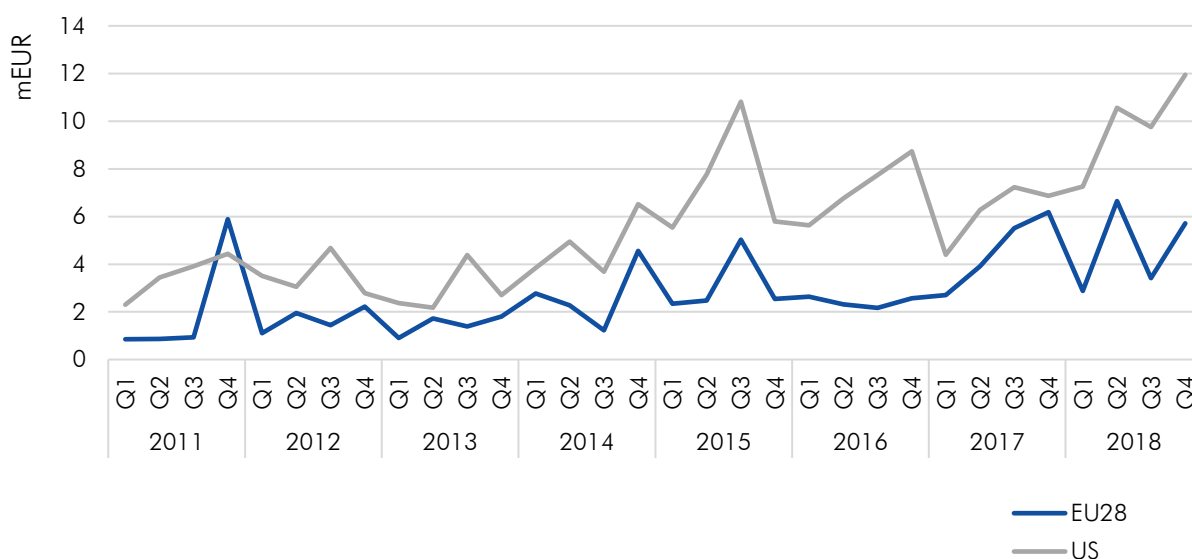


Figure 77: VC investments by subtypes<sup>104</sup> for the EU28 (mEUR)



Source: Authors' calculations based on PitchBook data.

Figure 78: Average VC deal size (mEUR)



Source: Authors' calculations based on PitchBook data

Between 2012 and 2017, European market growth was consistently outpaced by both the United States as well as China, which has led to a decreasing European market share in global funded volumes from 8.6% in 2013 to 2.8% in 2017 (down 2.9% from 2016). Within Europe, the UK still accounts for the majority of funded volumes (68% in 2017, down from 73% in 2016), but the importance of other European markets is growing. For example, German funded volume rose sharply by 85% to EUR 595m, making it the second largest market after France (EUR 661m), where the

<sup>104</sup> The 'Other' category comprises corporate investments, equity for services and grants.

growth rate was more in line with the European average (48%) and the Nordics (EUR 449m). The statistics presented in the remainder of this section focus on continental Europe and exclude the UK.

### Evolution of business focused CF activity

While the most prolific CF campaigns have been either donation- or reward-based, more recently the CF landscape saw the emergence of platform types focussing on more traditional SME funding channels that provide debt and equity to businesses through P2P business lending, invoice trading and equity-based CF. Figure 79 depicts the evolution of business-focused transaction volumes on CF platforms across Europe (excluding the UK).

In 2017, a total of 24,107 business raised EUR 1.66bn on CF platforms that were operational in continental Europe. After two years of exponential 3-digit growth figures, total business transaction volume sourced on CF platform grew by 47% between 2016 and 2017, halving the growth rate that materialised one year earlier. While still significant, this means that also the CF segment of business financing is showing signs of maturity after a fierce start a few years earlier. Interestingly, the rate of growth in number of supported businesses actually accelerated in between 2016 and 2017. This implies a reduction in scale at the level of the individual SME, as the average raised amount decreased by 13% to about EUR 70,000.

In 2017, the total volume raised on debt-based<sup>105</sup> crowdfunding platforms grew by 68% and exceeded the EUR 1bn barrier for the first time (Figure 80), thereby further increasing its dominance on the business CF market. The market share of debt-based platforms now covers just shy of 80% of the total business related transaction volume. Equity-based CF grew at a more modest rate of 12%.

### Activity on CF models most relevant to businesses<sup>106</sup>

Turning to the different platform types, invoice trading overtook P2P business lending as most prominent platform model with a total investment volume exceeding EUR 500m, more than doubling the amount raised one year earlier. While both subsegments account for the vast majority of debt-based CF growth, a variety of smaller alternative debt-based model (balance sheet lending, debt based securities and minibonds) confirmed their growth potential in 2017 and secured their spot in the business CF landscape (Figure 81). The only debt platform that did not manage to report positive growth figures was reward-based CF, a further indication the business-related CF market is converging towards a more mature state. Interestingly, after four consecutive years of growth, the total volume raised on traditional equity-based CF platforms decreased by 4%.<sup>107</sup>

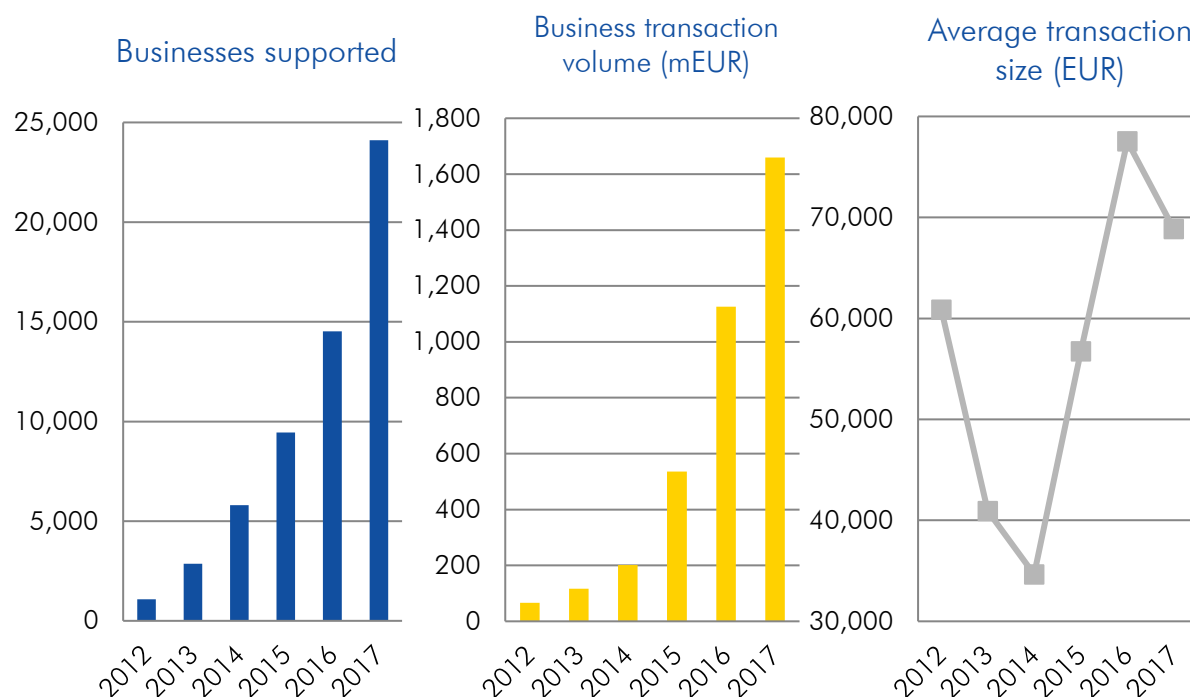
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<sup>105</sup> P2P Business Lending, Balance Sheet Business lending, Invoice Trading, Minibonds, and applicable volumes from P2P Consumer Lending, P2P Property Lending, Balance Sheet Consumer Lending and Debt-based Securities.

<sup>106</sup> While some of the models listed in Figure 81 are inherently business focused, others cater to both consumers and business. Unfortunately the statistics available do not allow to distinguish between business and consumer focused funding volumes at the level of the platform type. Hence, the statistics presented in Figure 81 and Figure 82 diverge.

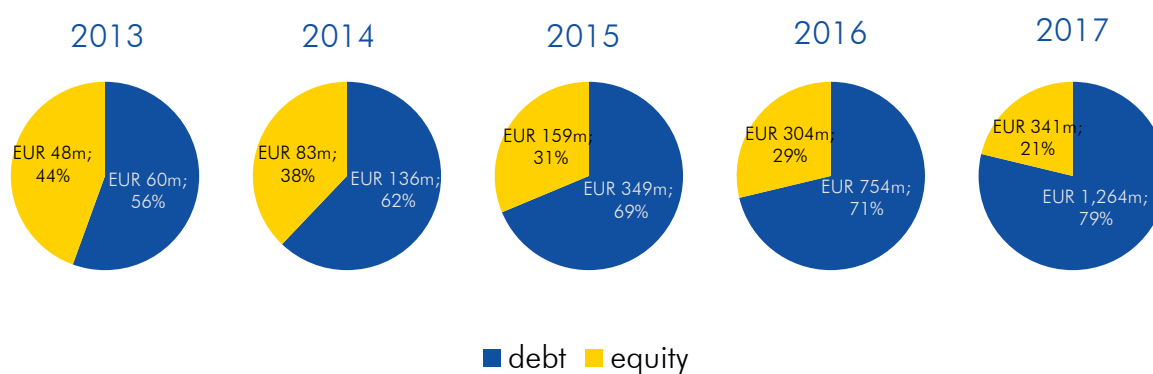
<sup>107</sup> As shown in Figure 82 in the aggregate, funding volume on equity platforms grew nevertheless, which was driven by growth on the business-related real estate CF market. The volume raised on profit-sharing platforms also decreased (from EUR 8m to 2m).

Figure 79: The evolution of business-related transaction volume<sup>108</sup> on the crowdfunding market from all platform types in Europe (exc. UK) and the number of fundraising SMEs.



Source: Cambridge Centre for Alternative Finance (2019)

Figure 80: Business financing on equity<sup>109</sup> and debt-based crowdfunding platforms: transaction volumes raised on equity vs debt-based models (mEUR)

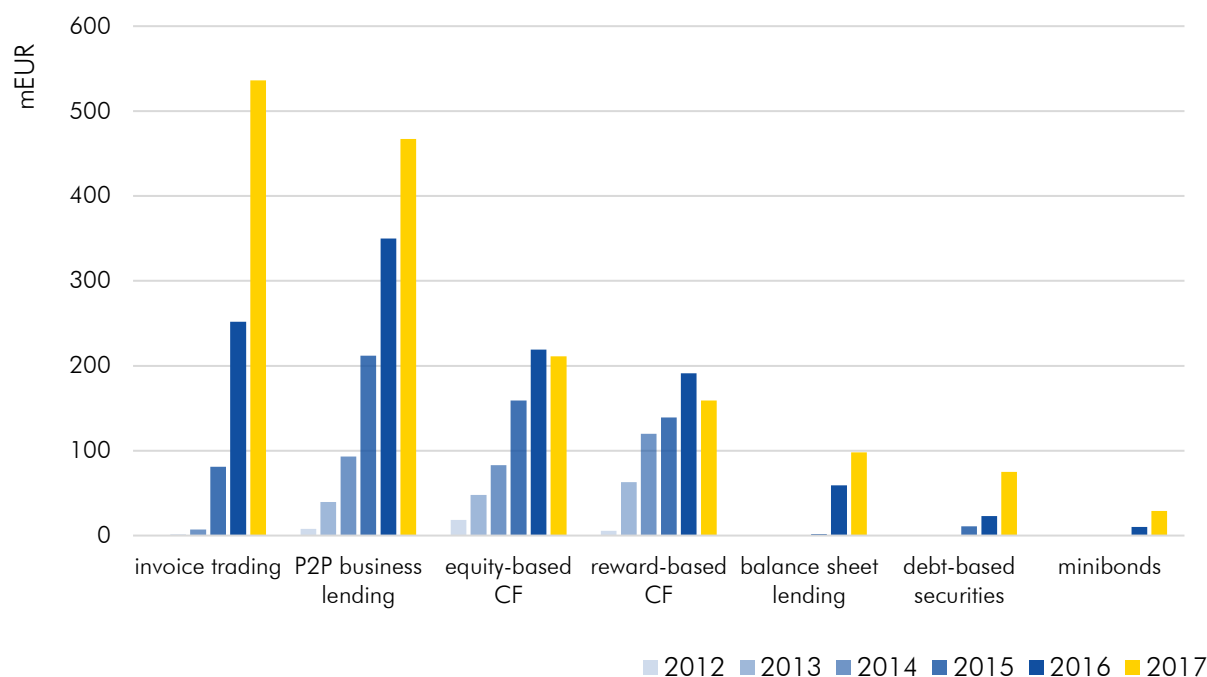


Source: Cambridge Centre for Alternative Finance (2019)

<sup>108</sup> Business-related transaction volumes are the aggregate of P2P business lending, balance-sheet business lending, invoice trading, equity-based CF, debt-based securities, profit-sharing CF and mini-bonds, alongside business-related volumes of P2P Consumer and Property Lending, Consumer and Property Balance Sheet lending, Real Estate CF, Donation-based CF and the reward-based CF models (CCAF, 2018).

<sup>109</sup> Equity-based Crowdfunding, Profit Sharing and relevant parts of real-estate CF.

Figure 81: The evolution of funding volumes on selected CF platform models (mEUR)



Source: Cambridge Centre for Alternative Finance (2019)

Average deal size decreased on most platforms. Also in 2017, they were highest for real estate CF (EUR 388,608, down from EUR 453,536), followed by equity CF (EUR 214,690, down from EUR 302,621). Expectedly, average deal sizes are significantly smaller on debt-based platforms, such as P2P Business Lending (EUR 66,455, down from EUR 111,633).

### Institutionalisation

2017 was the year of the retail investor, as institutional investors significantly decreased their involvement in the CF market, across all platform types (Figure 82). A total of EUR 452m originated from institutional investors, around 13% of total alternative finance volume. Per 2017, rates of institutionalisation were highest for invoice trading, where almost 46% of funding volume came from institutional investors, a significant drop vis-à-vis 2016. Institutional involvement dropped to nearly zero in the P2P property lending market and declined to negligible proportions on the equity-based platforms (6%). The decline in institutional involvement is a potential explanatory factor in the observed drop in average deal sizes.

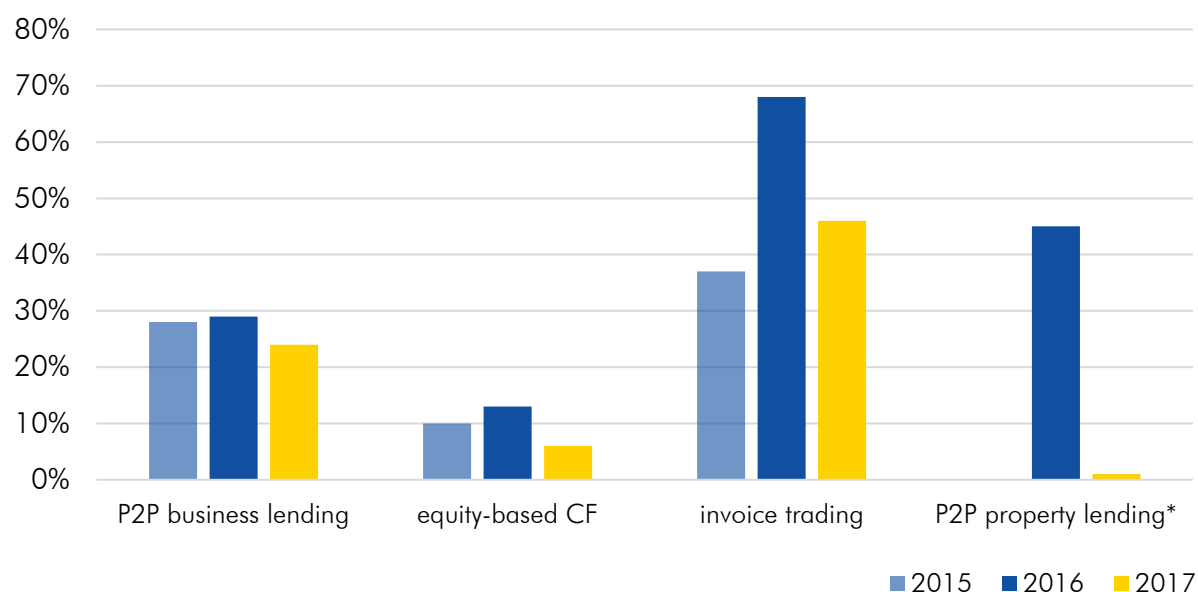
There are large geographical difference in institutional involvement. In the leading markets, institutionalisation rates of alternative finance models are insignificant and account for just 6% of funding in France and 5% in Germany. In contrast, CF platforms in Italy (45%), Ireland (43%) and the Nordics (21%) source a much higher share of funds from institutional investors.

The institutionalisation of the CF sector is seen by some as a drift away from the essence of the CF concept. However, institutional involvement could contribute to the stability and continuity of the CF sector. Institutional investors, often seen 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 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.

Other collaborative mechanisms between traditional finance institutions and CF platforms can take the form of referral agreements, where banks refer SMEs who are not eligible to receive credit through traditional means to selected platforms. This practice is most common among platform type focussing on business finance, such as balance sheet business lending, where 86% of platforms reported to have such an arrangement in place (CCAF, 2017), P2P business lending (34%) or invoice trading (23%). Also 35% of equity based CF models had referral agreements, but with VC funds or Business Angels.

**Figure 82: The percentage of institutional investments per CF platform type**



\* There was no P2P property lending in 2015, as opposed to institutionalisation rates being zero

Source: Cambridge Centre for Alternative Finance (2019)

### On-boarding and successful funding

For a project to be successfully funded, it generally needs to pass two important hurdles: first, before it gets published by a platform, the platform generally requires projects to meet certain criteria (the process of ‘on-boarding’). Once published, evidently, the project needs to attract sufficient funding for the campaign to be considered successful. The on-boarding rates are lowest for P2P business lending, where just 17% of all fundraisers is accepted on the platform (up from 12% in 2016). The subsequent successful funding rate is accordingly relatively high, with 83% of issuers successfully reaching the desired funding levels. Also debt-based securities platforms had relatively low on-

boarding rates (12%) which also in this case translated into a high successful funding rate (95%). On-boarding rates for invoice trading are much higher as they rose from 28 to 61% in 2017 (due to a high proportion of repeat borrowers). This did not negatively impact funding rates, which also rose strongly from 65 to 88%. The general increase in funding rates could partly be explained by the decline in scale on most CF platforms, as documented above.

### Internationalisation

Internationalisation rates increased significantly between 2016 and 2017. The proportion of CF platforms that focussed exclusively on the domestic market, for funding inflows or investment outflows, decreased strongly. On the inflow side, just 1 in 10 platforms relied solely on national funders, compared to 1 in 4 in 2016. Nearly 70% of platforms sourced at least 10% of total inflows from funders abroad. Considering investment outflows, CF platforms still mostly focus on the domestic market: per 2017, 4 in 10 platforms invested only in domestic beneficiaries (down from 5 in 10 in 2016). While the remaining 60% of platform did report some international investment activity, for the majority the share of international investments remains relatively limited and does not exceed 10% of total investment volume.

The increased internationalisation in the CF sector increases the economic viability of commercial CF platforms, as it allows them to attain a critical mass beyond what is achievable when operating on a domestic scale. This comes at the benefit of SMEs in smaller Member States specifically, as it contributes to the formation of the European CMU and boosts future growth prospects of the European CF sector in general. Remaining hurdles to internationalisation are predominantly rooted in legislative issues, as differences in national legislation can drive platforms' decisions to focus solely on the domestic market (Zetzsche and Preiner, 2018). A unified European regulatory framework could therefore further stimulate growth in the sector (Chervyakov and Rochol, 2019). The European Commission has recently announced a new regulatory framework for the operation of CF platforms, which aims 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 (European Commission, 2019b).

## 7.4 Fintechs: the end of the financial system as we know it?

Fintechs are often regarded as a disruptive force which poses a threat to incumbent market players, but in reality, Fintechs often serve markets that are not served by traditional market participants. Take CF, for example, which is often touted as a substitute to traditional external finance markets (D'Ambrosio and Gianfrate, 2016). In reality, however, CF tends to complement existing financing sources. This holds true both at the investor level as at the aggregate level. At the investor level, equity CF fills funding gaps at the lower end of the market (Walthoff-Borm et al., 2018) and is often used side-by-side with angel funding, where the funding of the crowd complements the investment savviness of angel investors (Hornuf and Schwiendbacher, 2016). A recent study found that the participation of qualified investors such as VCs or BAs in a funding round on CF platforms is positively correlated with companies' long term survival prospects (Signori and Vismara, 2017). Hence, participation of experienced investors can serve as a quality signal to attract the crowd at large. The observation that Fintechs complements the traditional finance market is supported by the fact that,

following the financial crisis, Fintech investment flourished primarily in markets without a major financial centre (Cumming and Schwienbacher, 2018). Especially the combination of a growing economy and an underdeveloped, uncompetitive banking system proves to be a fertile ground for the emergence of a vibrant Fintech ecosystem (Claessens et al., 2018).

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 (IMF, 2019b). This is where international financial organisations can play an important role, by acting as standard-setting bodies and bringing together national regulators.

It is clear that Fintechs are becoming a market force to be reckoned with. Their presence puts substantial pressure on incumbent market players to react, either by scaling up investments in in-house technological innovations or buying/merging with emerging Fintechs before they become a threatening competitive force. These developments have the potential to positively impact SME financing as the portfolio of financing sources enlarges and the cost of financing decreases.

## 8 Concluding remarks

The financing outlook of European SMEs has been roughly stable since the publication of the latest ESBFO in December 2018. However, since then, the outlook for the European economy has worsened and risks are tilted to the downside (for example: a further escalation of global trade tensions and the potential of a no-deal Brexit lead to continued and increased uncertainty and to depressed growth prospects). These worries about the general economic outlook are likely to weigh on firms' investment decisions.

In addition, developments in financial market conditions have been geographically unbalanced and several countries are stuck in a low growth trap. For example, new credit flows to SMEs do not improve in many countries (OECD, 2019). Reasons can be both demand- and supply-side driven. In several countries, there is still a high degree of uncertainty as regards the economic development – with a negative impact on investment behaviour. The SME financing market also remains prone to structural failures. According to the OECD (2019), more SMEs rely on self-financing for their growth: survey data suggests that a significant portion of SMEs do not apply for bank loans because they have access to sufficient internal funds. Digitalisation plays an increasing role in SME financing, as evidenced by the growing importance of new financing instruments (e.g. equity crowdfunding, peer-to-peer lending). Policies to support these developments, in particular through the adoption of appropriate regulatory frameworks, are gaining ground (OECD, 2019).

A significant proportion of European SMEs still experience barriers in access to finance. This proportion varies strongly from country to country. In general, microenterprises, start-ups, young SMEs, and highly innovative firms continue to endure finance problems. For 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, 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, EIF will continue to act as a cornerstone investor across the spectrum of Technology Transfer through venture capital 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*, 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.

Finally, *microfinance* is an important contribution to overcoming the effects of the crisis, and in particular to supporting inclusive growth. 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, 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.

An area that we now - due to its rising importance - cover regularly is *Fintech*. Fintechs are attracting considerable attention – and while it is probably too early at this stage to draw conclusions on the overall contribution to the economy of these structures, it is a fact that Fintechs are becoming an integral part of the SME financing landscape. They are drivers for 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. introduction of dedicated own platforms), they can go for cooperation/partnerships (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 not only 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’, but also to mitigate the problem of high fixed costs for (small) loans.

Given their growing importance in the financing landscape, EIF is stepping up its involvement in Fintech transactions by investing in, or providing guarantees to, Fintech entities. The developments on the Fintech market and EIF’s related involvement and support are perfectly in line with the spirit of the European Commission’s plan to establish a Capital Markets Union (CMU) and to diversify the financing possibilities for SMEs. In this context EIF observes that Fintechs are often faced with limitations in relation to their cross-border business as they are often prevented from carrying out lending activities as a result of local law licensing requirements. As part of the Capital Markets Union, allowing Fintechs to operate seamlessly within the European Union by creating a pass-porting and licensing framework would go a long way towards creating a pan-European Fintech market.<sup>110</sup>

As shown above, despite significantly increased public support for SMEs, including by the EIB Group, many SMEs continue to perceive issues in accessing external finance. In this context, the relevance of the *Investment Plan for Europe* (IPE)<sup>111</sup> cannot be overstated. The IPE is based on three pillars, mobilising finance for investment, making finance reach the real economy, and improved investment environment, see Figure 83. We briefly summarise the development and status quo:

As part of the IPE’s pillar one, the European Fund for Strategic Investments (EFSI) aimed initially at unlocking additional investments of at least EUR 315bn over a three year period by addressing market gaps and mobilising private resources. EFSI is a strategic partnership between the EC and

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<sup>110</sup> A detailed overview regarding the CMU and how it can support SME financing is provided in Kraemer-Eis and Lang (2017). A critical assessment of the current state of the CMU can be found in Lannoo and Thomadakis (2019).

<sup>111</sup> See <http://www.eib.org/efsi/index.htm> and [http://www.eif.org/what\\_we\\_do/efsi/index.htm](http://www.eif.org/what_we_do/efsi/index.htm).

the EIB Group. The EIB Group contributes EUR 5bn to the initiative alongside a EUR 16bn guarantee from the EU budget. EFSI has two components (see as well Figure 84):

- the Infrastructure and Innovation Window (IIW, EUR 15.5bn), deployed through the EIB, and
- the SME Window (SMEW, EUR 5.5bn), implemented through EIF. The financial instruments used for the purposes of the EFSI SME Window are mainly guarantees and equity investments.

**Figure 83: Pillars of the IPE**

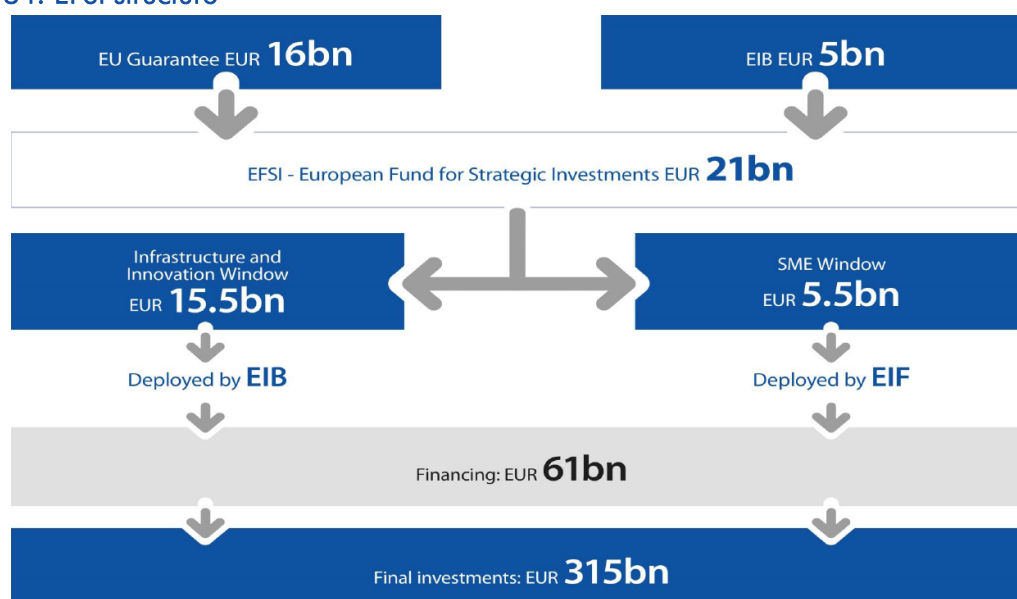


Source: European Commission

The resources under EFSI enabled the EIF to deploy its existing support for SMEs at a higher and faster rate than initially planned to satisfy strong demand of support to SME access to finance. At the beginning, initial EFSI resources under the SME Window were being used to accelerate and enhance the deployment of existing EU flagship programmes which EIF manages – i.e. COSME, InnovFin and EaSI – and to significantly increase the Risk Capital Resources (RCR) mandate for equity investments, which EIB has entrusted to EIF. Thanks to EFSI, the RCR equity mandate has been increased by EUR 2.5bn.

In addition, during 2016, the roll-out of new products started, including a new Pan-European Venture Capital Fund(s)-of-Funds programme, a guarantee for social impact and microfinance, a guarantee for cultural and creative SMEs, as well as products in relation to the new equity and securitisation platforms. Amongst those, through the EIF-NPI Equity Investment Platform, a non-binding governance framework, EIF offers the possibility for National Promotional Institutions (NPIs) to match the total budget of investments under the EFSI SME Window. In addition, through the EIF-NPI Securitisation Initiative (ENSI) – a cooperation and risk sharing platform with several NPIs – EIF aims at providing more funding to SMEs by revitalising the SMESec market while catalysing resources from the private sector. These initiatives are an opportunity for EIF and NPIs to establish a closer, more coordinated operational interaction, reflecting the spirit of EFSI aiming to achieve a much wider outreach in support of SMEs.

Figure 84: EFSI structure



Source: EIB Group

It was intended to achieve the investment objectives of the SMEW by July 2018. However, already in October 2017 the overall targets (based on approvals) have already been reached and exceeded. Given the success of the EFSI implementation, the preparation of a second phase of EFSI started during 2017 - referred to as EFSI 2.0. It includes an extension in terms of both duration and financial capacity.

The EFSI 2.0 Regulation entered into force on 29 December 2017 and the EFSI Agreement with EIB was signed on 09 March 2018. The timeline for approving transactions is extended from mid-2018 to the end of 2020, and the investment target is increased from EUR 315bn to EUR 500bn (EFSI 1 + 2, incl. SMEW). The EFSI SME Window has been increased to EUR 10.5bn, including EUR 6.5bn guaranteed by the EU under EFSI and EUR 4bn contributed by EIB (initially EUR 2.5bn).

Further discussions are now taking place with the EIB and the EC about dedicated initiatives which intend to pilot new modalities of EU interventions and thematic: SME scale-up support under "Escalator", thematic support to the digitalisation of SMEs, initiative on skills and education – aiming at increasing the supply of a skilful workforce, etc.

Based on approvals, the investment volume, expected to be triggered under the EFSI SME Window by end of April 2019, amounts to EUR 146bn (with around 950k SMEs benefitting). This entails an estimated 21-fold leverage (way above the fifteen-fold leverage), meaning that every 1 EUR spent by EIF would generate EUR 21 of investment in the real economy, at the level of the enterprises.

In Q2 the Commission proposal of InvestEU was approved by the European Parliament and the Council of Member States, setting the grounds for the next Multi-Annual Financial Framework (MFF) plans as regards financial instruments. The Commission aims at simplifying the EU budget in order to deliver efficiently to the EU priorities with a performance based outlook focusing on results. The focus shall be on exploiting complementarities and synergies among EU funding programmes (e.g. the use of a Single Rule book). InvestEU also suggests to allocate more money to support SMEs and

to create a single entry point for EU investment support in the form of loans, guarantees and equity after 2020. InvestEU would be the successor of EFSI and the financial instruments of the current MFF and would pool all centrally managed financial instruments in a single, flexible, multi-policy guarantee instrument at EU level. InvestEU shall comprise of four Windows: (1) sustainable infrastructure, (2) research, innovation and digitalisation, (3) SMEs and (4) social investment and skills. The Commission proposes to allocate EUR 15.2bn of budget, enabling the provision of a EUR 38bn guarantee for financial instruments (with the EIB Group as the main implementing partner together with others, including NPIs, which would contribute EUR 9.5bn in addition). InvestEU is expected to mobilise more than EUR 650bn of additional investment across Europe. InvestEU will also allow for simple combination with grants from the EU budget and ESIF.

## Annex

### List of acronyms

- ABCP: Asset Backed Commercial Paper
- ABSPP: Asset Backed Securities Purchase Programme
- AECM: European Association of Mutual Guarantee Societies
- AFME: Association for Financial Markets in Europe
- AIFMD: Alternative Investment Fund Managers Directive
- AIR: Average interest rate
- AMUF: Asset Management Umbrella Fund
- BA: Business Angel
- BAE: Business Angels Europe
- BAN: Business Angels Network
- BCBS-IOSCO: Basel Committee on Banking Supervision-Board of the International Organisation of Securities Commissions
- BiH: Bosnia and Herzegovina
- BIS: Bank for International Settlements
- BLS: Bank Lending Survey
- bn: billion
- bp: basis point(s)
- CDFIs: Community Development Financial Institutions
- CDO: Collateralised Debt Obligation
- CDP: Cassa Depositi e Prestiti, Italy
- CEE (countries): (countries in) Central and Eastern Europe
- CESEE (countries): (countries in) Central, Eastern and South-Eastern Europe
- CF: Crowdfunding
- CGAP: Consultative Group to Assist the Poor
- CGS: Credit Guarantee Scheme
- CLN: Credit Linked Note
- CLO: Collateralised Loan Obligation
- CMU: Capital Markets Union
- COM: European Commission (also: EC)
- COSME: Programme for the Competitiveness of enterprises and SMEs (COSME) 2014-2020
- CRD: Capital Requirements Directive
- CRR: Capital Requirements Regulation
- CVC: Corporate Venture Capital
- EAF: European Angels Fund
- EaSI: The European Commission's Programme for Employment and Social Innovation
- EBA: European Banking Authority
- EBAN: European Business Angels Network
- EBF: European Banking Federation
- EC: European Commission (also: COM)
- ECB: European Central Bank
- EFSI: European Fund for Strategic Investments
- EIB: European Investment Bank

- EIF: European Investment Fund
- EIOPA: European Insurance and Occupational Pensions Authority
- ELTIF: European Long-Term Investment Fund
- EMEA: Europe, Middle East, and Africa
- EMN: European Microfinance Network
- ENSI: EIF-NPIs Securitisation Initiative
- EREM: EIB Group Risk Enhancement Mandate
- ESBFO: European Small Business Finance Outlook
- ESIF: European Structural and Investment Fund
- ESMA: European Securities and Markets Authority
- EU28: the 28 EU Member States
- EUR: Euro
- EuVECA: European Venture Capital Fund Regulation
- EVCA: European Private Equity & Venture Capital Association
- FIRST (Initiative): Financial Sector Reform and Strengthening (Initiative)
- FLP: First Loss Piece
- FLPG: First Loss Portfolio Guarantee
- FoF: Fund of Fund(s)
- FYROM: Former Yugoslav Republic of Macedonia
- GDP: Gross Domestic Product
- GEM: Global Entrepreneurship monitor
- GNI is Gross National Income
- GP: General Partner
- GVC: governmental VC investor
- HICP: Harmonised index of consumer prices
- HQS: High Quality Securitisation
- HY: Half Year
- ICT: Information and communications technologies
- IIF: Institute for International Finance
- IIW: Infrastructure and Innovation Window
- IMF: International Monetary Fund
- InnovFin: EU Finance for Innovators
- IORP: Institutions for Occupational Retirement Provision
- IPE: Investment Plan for Europe
- IPO: Initial Public Offering
- IRB: Internal Ratings Based
- IRR: Internal Rate of Return
- IT: Information Technology
- IVC: independent VC investor
- k: thousand
- KfW: Kreditanstalt für Wiederaufbau, Germany
- Kirb: IRB capital requirements for the underlying pool of securitised assets
- LBO: Leveraged buy out
- lhs: left-hand side
- LP: Limited Partner

- M&A: mergers and acquisitions
- m: million
- MAP: Multi Annual Programme for Enterprise and Entrepreneurship
- MFC (Microfinance Center)
- MFI (in the context of ECB): Monetary Financial Institutions
- MFI (in the context of microfinance): Microfinance Institution
- MiFID: Markets in Financial Instruments Directive
- MiFIR: Markets in Financial Instruments Regulation
- NBFIs: Non-bank Financial Institutions
- NBV: Net book value
- NFC: Non-financial corporation
- NGO: Non-Governmental Organisation
- NPBIs: National Promotional Banks and Institutions
- NPI: National Promotional Institution
- NPL: Non-performing loan
- OECD: Organisation for Economic Co-Operation and Development
- PCS: Prime Collateralised Securities
- PE: Private Equity
- PFB: Public Funding Body
- pif: paid in full
- PPE: property, plant or equipment
- Q: Quarter
- QE: Quantitative Easing
- RCR: Risk Capital Resources
- rhs: right-hand side
- RMA: Research and Market Analysis
- RMBS: Residential mortgage backed securities
- RSI: Risk-Sharing Instrument for Innovative and Research oriented SMEs and small mid-caps
- SAFE: Survey on the Access to Finance of Enterprises
- SEC-SA: Securitisation Standardised Approach
- SEC-ERBA: Securitisation External Ratings Based Approach
- SEC-IRBA: Securitisation Internal Ratings Based Approach
- sf: Structured Finance
- SFA: Supervisory Formula Approach
- SIA: Social Impact Accelerator
- SME: Small and medium-sized enterprise
- SMESec: SME Securitisation (comprising transactions based on SME loans, leases etc.)
- SMEW: SME Window
- SPV: Special Purpose Vehicle
- SSM: Single Supervisory Mechanism
- SST: simple, standard and transparent
- STC: simple, transparent and comparable
- STS: simple, transparent and standardised
- TMT: Technology, Media, Telecom
- TT: Technology transfer

- UEAPME: European Association of Craft, small and medium-sized Enterprises
- UK: United Kingdom
- US: United States
- USD: US dollar
- VC: Venture Capital
- WBS: Whole Business Securitisation
- WEF: World Economic Forum



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## 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, EIF designs, promotes and implements equity and debt financial instruments which specifically target the needs of these market segments.

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