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European Small Business Finance Outlook

June 2017

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Executive summary¹

This European Small Business Finance Outlook (ESBFO) provides an overview of the main markets relevant to EIF (equity², guarantees, securitisation, microfinance). It is an update of the ESBFO December 2016.

We start by discussing the general market environment, then look at the main aspects of equity finance and guarantees/SME Securitisation (SMESec)³. Finally, before we conclude, we briefly highlight important aspects of microfinance in Europe.

Market Environment:

- The global economy continues its gradual path towards recovery, which is reflected in the most recent growth forecasts. Also investment and inflation are expected to pick up in 2017.
- Borrowing costs remain historically low, although differences between small and large loans persist.
- Outstanding loan volumes show first signs of a slight recovery.
- The most recent waves of the ECB's BLS and SAFE surveys consistently brought to light that the financing situation of SMEs improved, although large country heterogeneity exists.
- SMEs in countries that suffered the most from the crisis, such as Greece, Italy, Portugal and Ireland, continue to report difficulties in accessing external finance sources.
- Despite significantly increased public support for SMEs, including by the EIB Group, SMEs continue to perceive a lack of public support in access to external finance.

Private equity:

- The severe crash of the European private equity (PE) activity in 2008/2009 was followed by a partial rebound, although the recovery has shown some setbacks. Fundraising, investments and divestments have not reached their pre-crisis levels.
- In 2016, investments by PE funds in European portfolio companies declined moderately by 2% to EUR 52.5bn, according to Invest Europe statistics. While buyout and growth capital investments declined, investments in the venture capital (VC) market segment, which is of particular importance for the financing of young innovative companies with high growth potential, increased by 2% to EUR 4.3bn. While the VC activity levels are still far below their pre-crisis highs, some of the remaining gaps have been filled by business angels.

¹ This paper benefited from comments and inputs by many EIF colleagues, for which we are very grateful; we would like to express particular thanks to Alicia Boudou, José Cabrita, Per-Erik Eriksson, Giovanni Inglisa, Carsten Just, Pablo Millán Cantero, Marco Natoli, Christine Panier, George Passaris, Simone Signore, Arnaud Vanbellingen and Johannes Virkkunen. We would also like to thank colleagues from AECM, the ECB, EMN, Euler Hermes, GEM, the Invest Europe research team, Go4Venture Advisers, Leaseurope and the UEAPME study unit for their support. All errors are of the authors.

² We are using the term "equity finance" to combine semantically the areas of Venture Capital and Private Equity. However, if we refer here to equity activities, we mainly consider those of EIF's investment focus, which includes neither Leveraged Buyouts (LBOs) nor Public Equity. The reader is also referred to the Private Equity glossary in Annex 1.

³ The term SME Securitisation (SMESec) comprises transactions backed by SME loans, leases, etc.

- Total amounts raised by PE funds in Europe increased strongly by 38% to EUR 73.8bn. VC fundraising rose by 17% to EUR 6.4bn. While government agencies have continued to support the market recovery in order to incentivise additional deal flow and attract further private investment, the *share* of government investors' contributions to VC funds is lower than during the crisis when it had reached record highs.
- The exit markets and company valuations have shown remarkable strength over the 2013 to 2015 period. However, political uncertainties and an expected tightening of the monetary policy, in particular in the USA, have limited the upward potential; these factors might also have contributed to the decline in PE divestments in 2016.
- Pricing/valuations and the exit environment are currently the most important concerns for the PE markets.

SME Guarantees:

- Credit guarantees continue to be “the most widely used instrument [...] to ease SME access to finance” and to alleviate related market failures (OECD, 2016b).
- AECM statistics show that Italy and France exhibit the largest volume and number of outstanding SME guarantees. Related to GDP, Italy and Portugal have the largest markets. According to the OECD (2013), guarantees are particularly relevant “in those countries where a network of local or sectoral guarantee institutions is well established”.
- For 2016, AECM reports a considerable increase in new guarantee issuance and outstanding guarantees. The growth in new guarantee activity was particularly strong in Portugal, Italy and especially Hungary.

SME Securitisation:

- In terms of new issuances, the SMESec market is still relatively weak. The visible issued volume of SME deals in 2016 was only EUR 19.8bn, representing 8% of the overall securitisation issuance; in Q1/2017, only EUR 2bn has been issued.⁴ Retention rates remained very high (for SMESec 86% in 2016).
- Overall, the SMESec market in Europe is underdeveloped and strengthening this market can be an effective way to facilitate the flow of funds to the real economy, while not creating too much distortion.
- Despite the financial and sovereign crisis, the European securitisation market has performed relatively well, with the SME segment showing low default rates.
- With the Trilogue agreement on the securitisation package by the end of May 2017 the fog around the future regulation design has lifted – which is good in order to reduce uncertainty. However, implementation will still take time (possibly 1 to 2 years).
- Especially for SME lending, synthetic securitisations have notable potential to gain traction. The current regulatory framework focusses on true-sale securitisations but provides a window for synthetic SMESec transactions. Moreover, the new proposed regulation includes a reference to the possibility of an eventual inclusion of synthetic securitisations under the STS label.

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

Microfinance:

- Microenterprises are important contributors to employment. Especially in countries with high unemployment rates, microenterprises act as a driving force fostering job creation. However, their overall business environment remains relatively unfavourable compared to their larger peers.
- 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.
- 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. Aside the financial support, unemployed people are often in need of acquiring the necessary skills for success through coaching and mentoring.
- Microfinance is an important tool to overcome the effects of the crisis for some specific groups and in particular to support inclusive growth. Aside from these financial products and services, many European MFIs provide non-financial services as well.
- The latest EMN-MFC survey reports a remarkable growth both in the overall total value and the number of microloans provided by the surveyed Microfinance Institutions.

Table of contents



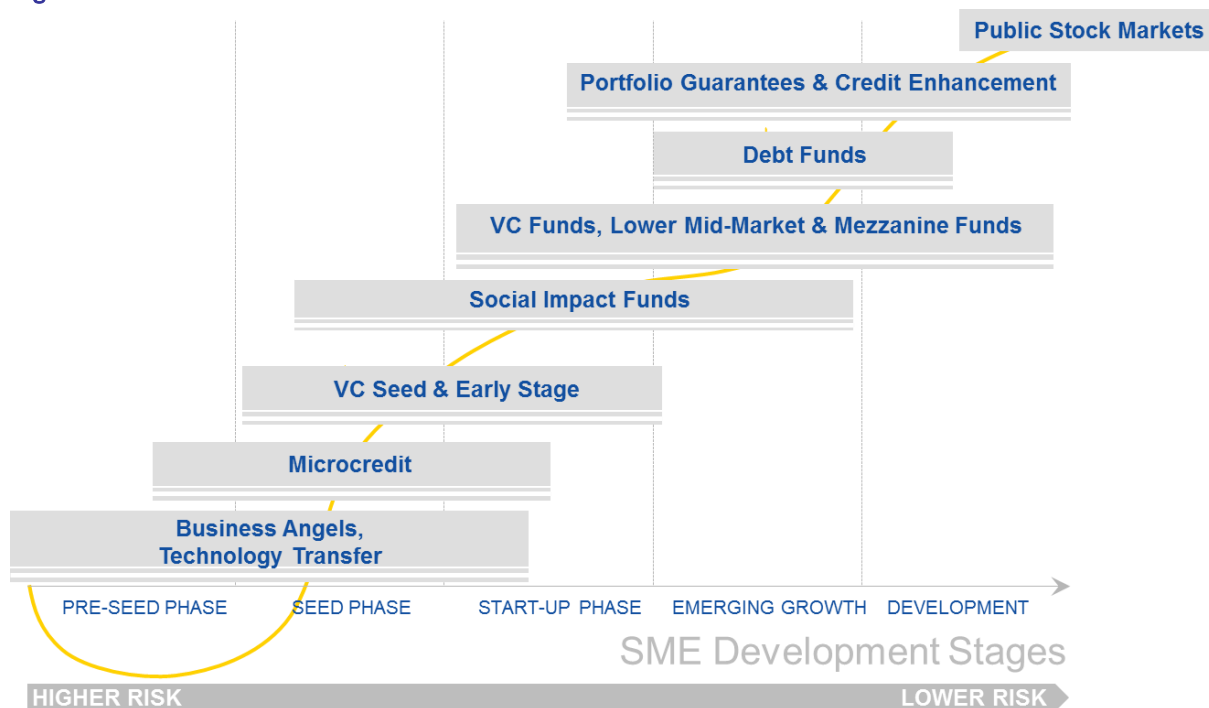
<i>Executive summary</i>	<i>iii</i>
<i>Table of contents</i>	<i>vi</i>
1 Introduction	1
2 General economic environment	2
2.1 Economic outlook	2
2.2 Financial environment.....	3
3 Small business economic environment	5
3.1 SME's economic outlook	5
3.2 SME's financial environment.....	7
3.2.1 The EIF SME Finance Index.....	7
3.2.2 Borrowing costs	12
3.2.3 SME financing from a supply perspective	15
3.2.4 SME financing from a demand perspective.....	17
4 Private equity	28
4.1 Investment activity.....	28
4.1.1 Private equity funds	28
4.1.2 Business angels	35
4.2 Fundraising activity	38
4.3 Divestment activity	43
4.4 Lower mid-market and hybrid debt/equity finance: An important market segment.....	46
4.5 PE prospects.....	47
4.5.1 Current situation, risks and market actors' concerns.....	47
4.5.2 Structural challenges affecting European PE and VC	49
4.5.3 Policy intervention in European PE and VC: Findings from recent studies	51
4.5.4 Policy intervention in European PE and VC: A practical approach	52
5 SME guarantees and SME Securitisation in Europe	54
5.1 SME guarantees.....	54
5.1.1 Market failure and policy response	54
5.1.2 Market size and activity in 2016.....	58
5.2 SME Securitisation	61
5.2.1 SMESec market activity.....	63
5.2.2 SMESec prospects.....	72
6 Microfinance market	77
6.1 Microfinance and social inclusion	77
6.1.1 What is Microfinance?	77

6.1.2	A support tool for necessity-driven business creation	78
6.2	The demand for microfinance: microenterprises and their finance decisions	81
6.3	The supply of microfinance: a sector characterised by significant diversity	84
6.4	The microenterprise financing gap	86
6.5	Microfinance prospects	90
7	<i>Concluding remarks</i>	92
<i>ANNEX</i>		98
	Annex 1: Private Equity Glossary	98
	Annex 2: Securitisation Glossary	101
	Annex 3: List of acronyms	102
<i>References</i>		105
<i>About</i>		113
	... <i>the European Investment Fund</i>	113
	... <i>EIF's Research & Market Analysis</i>	113
	... <i>this Working Paper series</i>	113
<i>EIF Working Papers</i>		114

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 a 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 micro to medium-sized enterprises, 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).

Against this background, the European Small Business Finance Outlook (ESBFO) provides an overview of the main markets relevant to EIF (equity⁵, guarantees, securitisation, microfinance). The present edition is an update of the ESBFO December 2016.

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.

⁵ Please see footnote 2 concerning the term "equity finance".

2 General economic environment

2.1 Economic outlook

Over the past six months, the global economic outlook improved. The IMF (2017) expects global economic growth to pick up from 3.1 percent in 2016, to 3.5 and 3.6 percent in 2017 and 2018, respectively. The European Commission (EC, 2017a) shares this optimism as the most recent European Economic Forecasts for 2017 have also been revised upwards significantly. The EC now expects GDP growth in the EU for 2017 to materialise at 1.9 percent, revised from the earlier estimate of 1.6 percent. Following a dip in 2016, investments, as measured by gross fixed capital formation, are also expected to pick up in 2017 and 2018. These positive evolutions are reflected on the labour market as well, where the EU-wide unemployment rate is forecasted to decline further to 7.7 percent in 2018. While many governments within the EU are still running budget deficits, the shortage is shrinking gradually, evidencing the improved economic growth and the impact of the wave of structural reforms that were implemented following the crisis. While inflation for 2016 was still very low compared to historical standards, 2017 forecasts indicate that inflation will pick up to 1.8 percent, nearing the ECB's 2 percent target.

Table 1: European Commission spring 2017 forecast for the EU

<i>(Real annual percentage change, unless otherwise stated)</i>				<i>Spring 2017 estimates</i>		
	2013	2014	2015	2016	2017	2018
GDP	0.2	1.6	2.2	1.8	1.9	1.9
Private consumption	-0.1	1.2	2.1	2.3	1.7	1.6
Public consumption	0.4	1.0	1.4	1.7	1.5	1.3
Gross fixed capital formation	-1.5	2.6	3.5	2.6	2.7	3.2
Employment	-0.4	1.0	1.2	1.3	0.9	0.9
Unemployment rate (a)	10.9	10.2	9.4	8.5	8.0	7.7
Inflation (b)	1.4	0.5	0.0	0.3	1.8	1.7
Government balance (actual, % GDP)	-3.2	-3.0	-2.4	-1.7	-1.6	-1.5
Gross government debt (% GDP)	87.3	88.5	86.5	85.1	84.8	83.6
	Contribution to change in GDP					
Private and Public Consumption	0	0.9	1.5	1.7	1.3	1.2
Investment and Inventories	0	0.9	0.6	0.5	0.5	0.6
Net exports	0.2	-0.1	0.2	-0.3	0.1	0.0

(a) *Percentage of the labour force.*

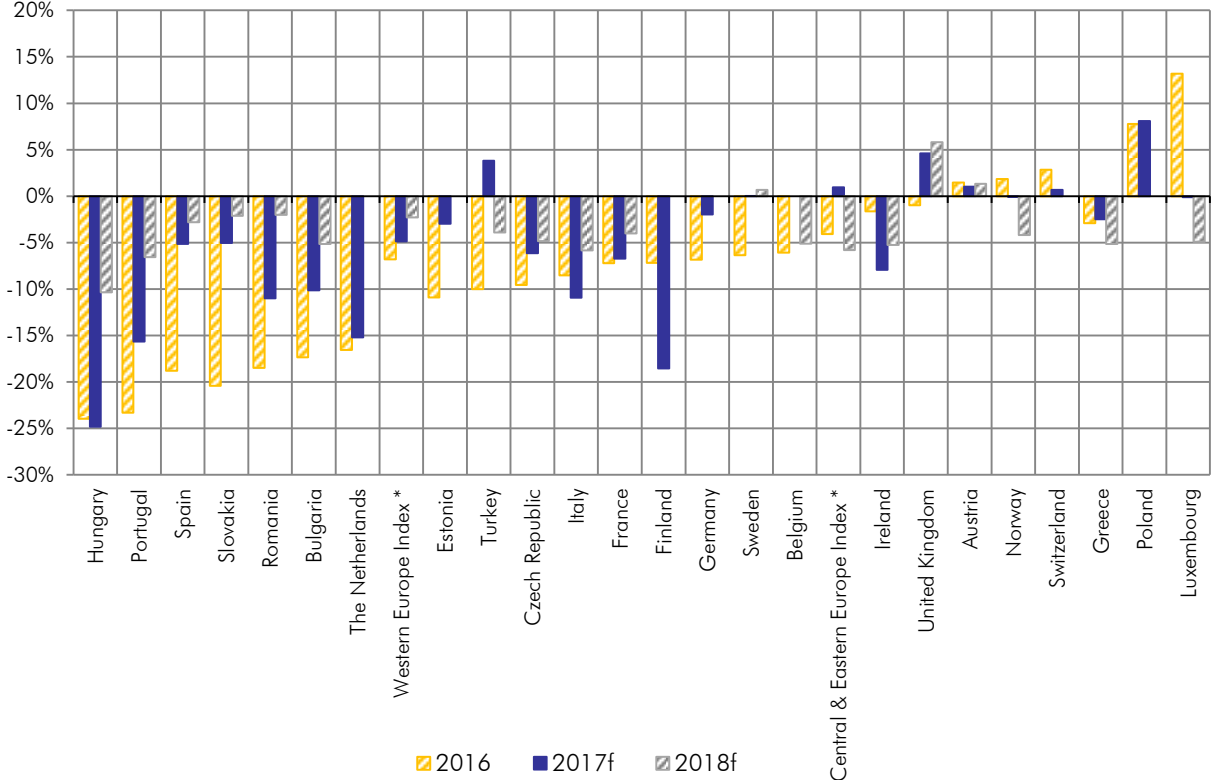
(b) *Harmonised index of consumer prices (HICP), annual percentage change.*

Source: European Commission (2017a)

The recent recovery of the European economy is also reflected in the evolution of European insolvencies (see Figure 2): per 2016, insolvencies have decreased or stagnated in most European countries (Euler Hermes, 2017). Especially in Hungary (-25%), Portugal (-23%) and Slovakia (-20%) insolvencies decreased significantly, indicating an acceleration in those countries' rate of

recovery. Insolvencies increased in Poland, Luxembourg, Lithuania and Denmark⁶. Euler Hermes expects the general declining trend to continue throughout 2017, in all EU countries but the UK, Poland and Lithuania.

Figure 2: Rate of change in insolvency, 2016-2017(f)-2018(f)



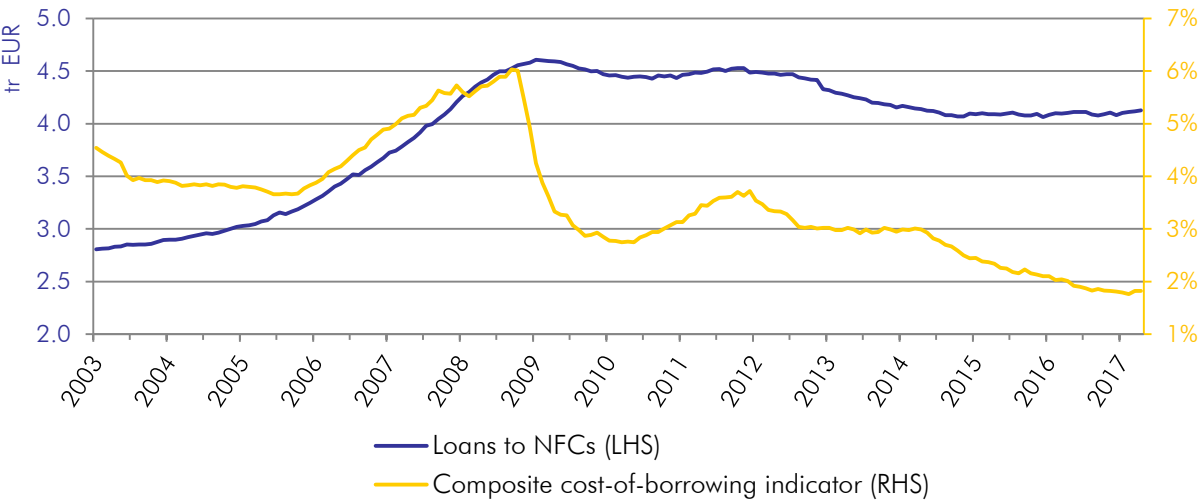
Note: 2017 and 2018 are forecasted values
 Source: Euler Hermes (2017)

2.2 Financial environment

Figure 3 illustrates how borrowing costs and outstanding loans to non-financial corporations (NFCs) evolved from their pre-crisis levels to where they are now. Borrowing costs for NFCs remain historically low: in May 2016, the ECB’s composite borrowing cost indicator⁷ dropped below the 2 percentage barrier for the first time since measurements, reaching a record low of 1.76% in February 2017. While for a long period of time this decline was not accompanied by a corresponding increase in the amount of outstanding loans to NFCs, volumes have started to pick up slightly over the past 6 months, to EUR 4.13tr in April 2017, an increase of 0.9 percent since October 2016, when we last reported on it. Whether this evolution actually concerns a trend reversal, rather than a seasonal effect, remains to be seen over the coming months.

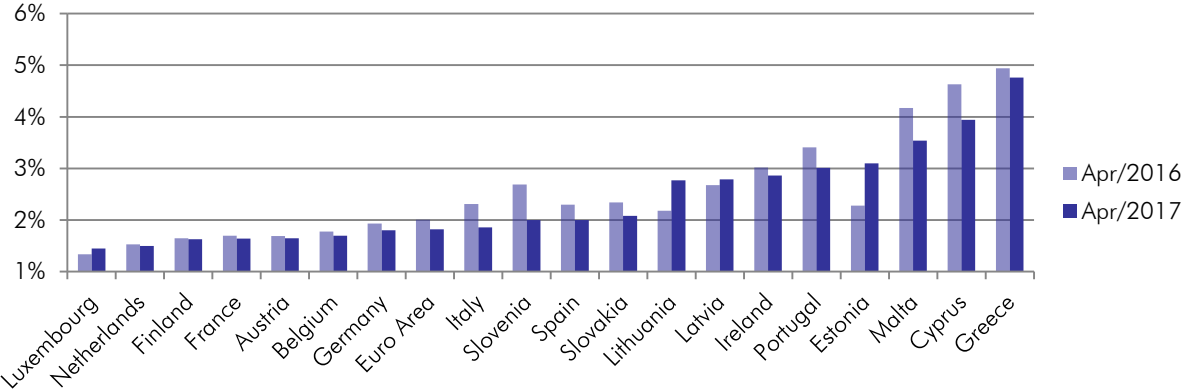
⁶ Note that the strong increase in Danish insolvencies (+66%) finds its roots in an administrative factor and is not reflective of a deterioration of the Danish economy.
⁷ The composite borrowing indicator is a volume weighted average of borrowing cost of loans from different maturities. For an elaborate 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”.

Figure 3: Outstanding loans and composite cost-of-borrowing indicator for non-financial corporations in the Euro Area (until April 2017)



Source: Authors, based on ECB Data Warehouse

Figure 4: Cross-country heterogeneity in borrowing costs to NFCs



Source: Authors, based on ECB Data Warehouse

Within the Euro Area, the aggregate cost-of-borrowing indicator illustrated in Figure 3 masks significant country heterogeneity. Figure 4 shows this by plotting the evolution of borrowing costs at the national level between April 2016 and April 2017.⁸ In line with the European trend, NFCs in most European countries experienced a decrease in borrowing costs. The decrease was particularly pronounced in Cyprus, Malta, Portugal and Slovenia. The cost of borrowing increased significantly only in two countries: Estonia and Lithuania. Interestingly, also in the previous edition of the ESBFO (see Kraemer-Eis et al., 2016a) there was a year-on-year increase reported for those two countries. Higher borrowing costs increase the cost of capital. This implies that countries like Malta, Greece, Cyprus and Portugal face a competitive disadvantage on export-markets, vis-à-vis countries in which firms have access to cheaper credit, like Luxembourg, the Netherlands or France.

⁸ While the ESBFO is a semi-annual publication, the graph illustrates year-to-year differences to cancel out seasonal fluctuations and focus on the underlying trend.

3 Small business economic environment

3.1 SME's economic outlook

SMEs are defined by the European Commission⁹ 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 of no more than EUR 43m:

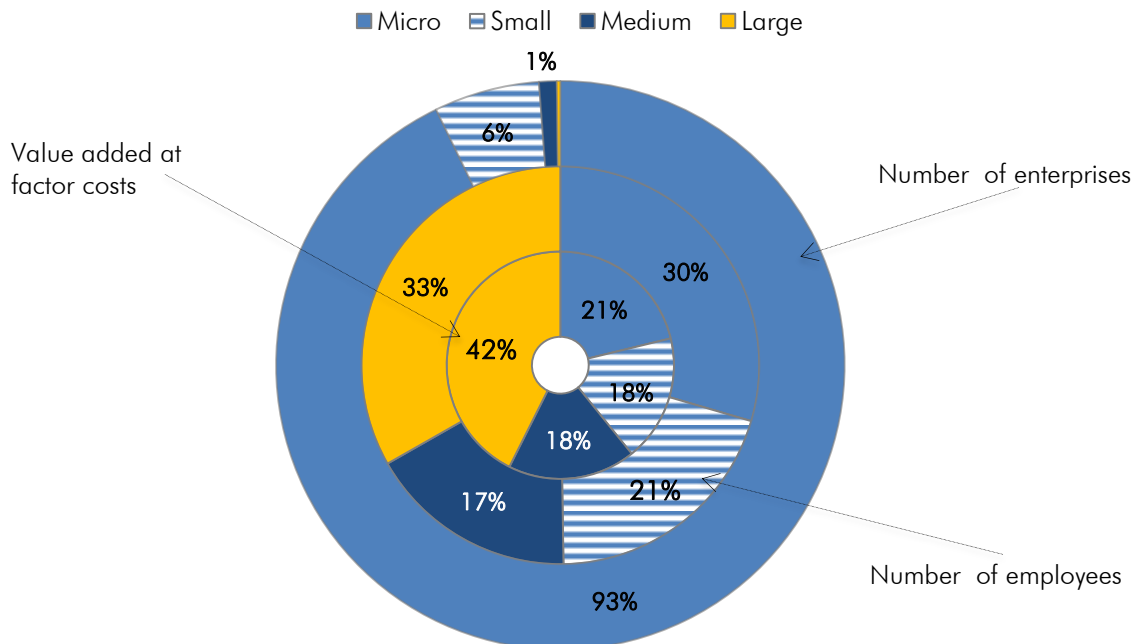
Table 2: EU definition of SMEs¹⁰

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

Source: European Commission (2016)

Small and medium-sized enterprises contribute significantly to job creation and economic growth. In 2015, nearly 23 million SMEs in the European Union made up 99.8% of all non-financial enterprises, employed around 91 million people (66.8% of total employment) and generated 57.4% of total added value (EUR 3,700bn, see Figure 5).

Figure 5: SMEs, employment and value added in the EU, 2015



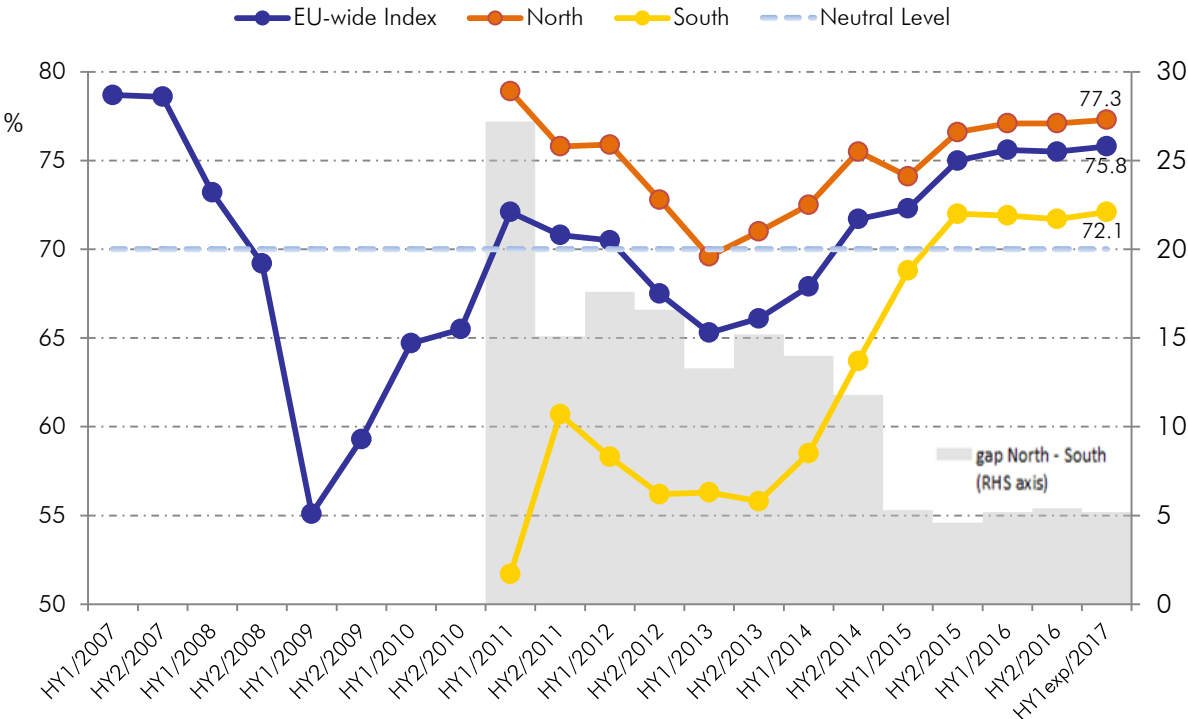
Source: Authors, based on European Commission (2016)

⁹ Commission Recommendation of 6 May 2003.

¹⁰ In the context of defining enterprise categories, often also the category of mid-caps is mentioned in between the categories of SMEs and corporates. We define mid-caps as enterprises with a minimum of 250 and a maximum of 2,999 employees; moreover, there is the sub-category of small mid-caps, with a maximum of 500 employees.

UEAPME’s semi-annual EU Craft and SME Barometer provides information on SMEs’ perception on the current and future economic environment. In line with the general economic predictions of the EC and Euler Hermes, the UEAPME study unit (2017) concludes that the SME business climate in Europe has continued its gradual path to recovery over the second semester of 2016, an evolution which is expected to have continued during the first semester of 2017 (Figure 6).¹¹ This trend is observed both in the North/Centre¹² of the EU, as well as in the Southern/Vulnerable¹³ regions. The North-South gap therefore remains constant at 5 percentage points.

Figure 6: SME Business Climate Index



Source: Authors, based on UEAPME Study Unit (2017)

Figure 7 plots net responses¹⁴ for a number of different economic indicators contained in UEAPME’s semi-annual EU Craft and SME Barometer, such as the overall economic situation, turnover, employment, prices, investments and orders. Over the second semester of 2016, SMEs were significantly more positive about the general economic situation compared to one semester earlier. This was driven by a general sense of optimism regarding most factors under consideration, in particular turnover. SME were carefully optimistic regarding the investment climate, a sentiment that remained unchanged vis-à-vis the first semester of 2016.

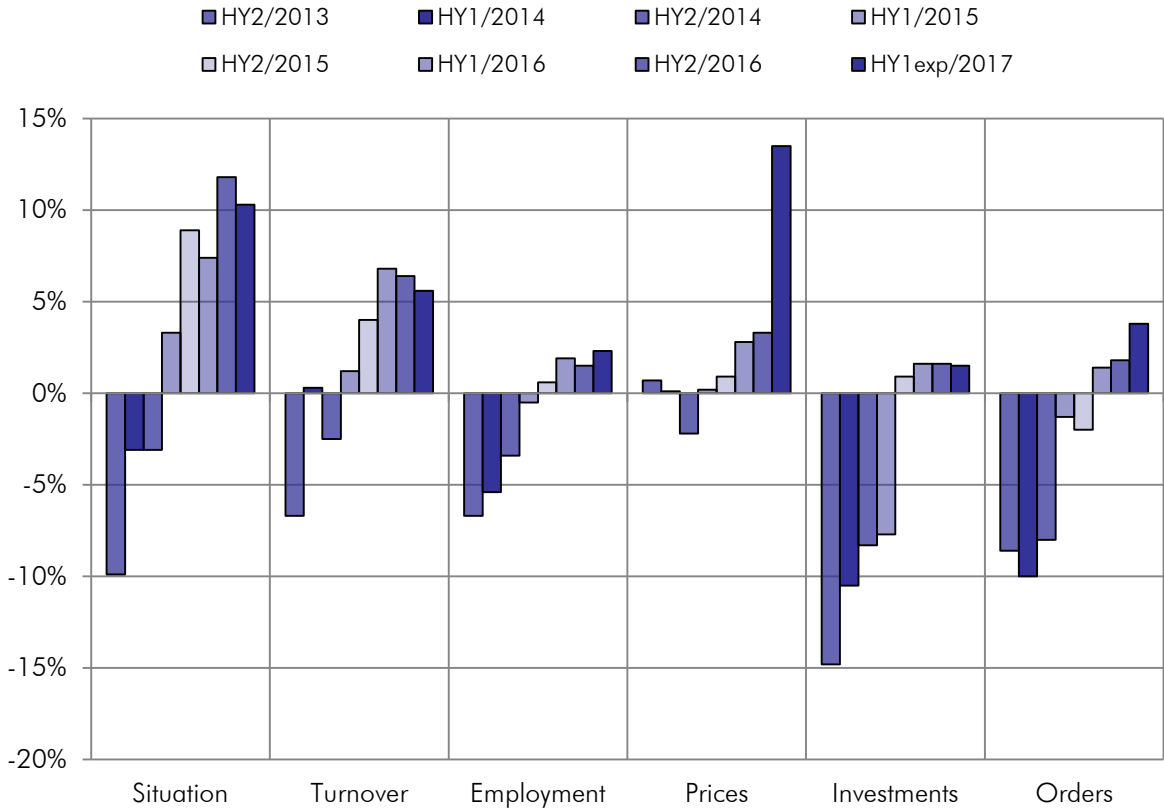
¹¹ The UEAPME SME Business Climate Index is calculated as the sum of positive and neutral answers with regards to the overall situation for the business, averaged over the current situation and the expectations for the next period. It is based on the results of surveys conducted by UEAPME Member organisations two to four times a year in different regions all over Europe.

¹² Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Romania, Slovakia, Sweden and UK.

¹³ Croatia, Cyprus, Greece, Ireland, Italy, Malta, Portugal, Slovenia and Spain.

¹⁴ The net response is calculated as the share of positive minus negative responses.

Figure 7: Main Results of the EU Craft and SME Barometer HY1/2017



Source: Authors, based on UEAPME Study Unit (2016)

While the EU continues its steady path towards recovery, the European economy still faces a number of challenges: a recent survey conducted by McKinsey (2017) brought to light that, despite the general sense of optimism, European businesses are still reluctant to invest. Half of the respondents indicated to have delayed investments to build up reserves for future crises, citing policy uncertainty to be an important consideration. Similarly, the most recent Eurochambres (2017) Economic Survey¹⁵ identified economic policy conditions as one of the main challenges for European businesses in 2017, in addition to lack of domestic demand, rising labour costs and a lack of skilled labour.

3.2 SME’s financial environment

3.2.1 The EIF SME Finance Index

The EIF SME Finance Index is a composite indicator that summarises the state of SME financing in 27 EU countries. It was first introduced and elaborated upon in the June-edition of 2016 (Kraemer-Eis et al., 2016a). The index is composed out of four subindices, three of which are

¹⁵ The Eurochambres Economic Survey is a European qualitative survey of business expectations for the year ahead. Conducted annually by the Chambers of Commerce and Industry, and coordinated by Eurochambres, the survey records the expectations of approximately 59,000 businesses in EU Member States and EU Candidate Countries on five economic indicators: business confidence, domestic sales, export sales, employment and investment. The Eurochambres Economic Survey has been conducted since 1993. For details on the methodology see Eurochambres (2017).

related to different financing instruments, while the fourth covers the general macro-economic conditions in which SMEs operate. The subindices in turn are comprised of a series of variables, which are listed below. The most recent version presented in the current volume differs from the earlier version because the weighting scheme now follows an equal weights approach. This implies that during the aggregation method all four sub-indices received an equal weight in the calculation of the aggregate index. Likewise, the underlying variables in each of the four subindices were also equally weighted. In contrast, the earlier version relied on a survey-based weighting scheme derived from EIF experts' knowledge on the subject of EIF financing. While we realise neither methods are immune to criticism, we opted for an equal weighting scheme for reasons of simplicity and transparency. Robustness checks revealed that changing the weighting scheme did not significantly affect the relative position of the respective countries, nor the evolution of the index over time. The normalisation (min-max) and aggregation (geometric) methodologies have remained the same and are elaborated upon in Kraemer-Eis et al. (2016a).

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 with rejected loan applications or unacceptable offers
- 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)
- Percentage of SMEs that "applied for bank loans, and received less than 75% of the amount"

Equity:

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

Credit and Leasing:

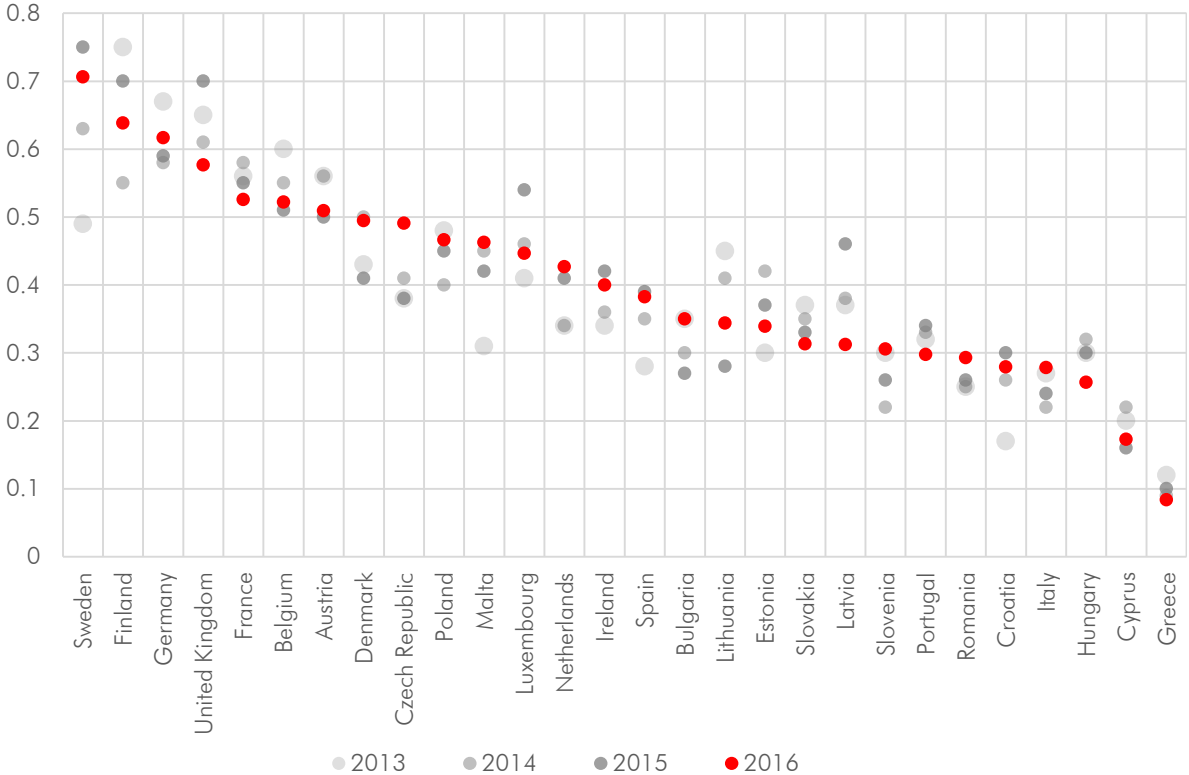
- Percentage of SMEs using bank overdraft, credit line, or credit card overdraft in last 6 months
- Percentage of SMEs with rejected overdraft, credit line or card overdraft applications in last 6 months
- Percentage of SMEs not applying for the above because of possible rejection in last six months
- 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
- Percentage of SMEs that applied for the above but received less than 75% of the requested loans

Macro Factors:

- Gap between actual and potential GDP
- Strength of legal rights index
- Depth of credit information index
- Availability of financial services index
- Bank non-performing loans to total gross loans
- Percentage of SMEs "feeling that there are no financing obstacles"

The results of the most recent update are presented in two different graphics. Figure 8 represents the 2016 value of the composite indicator (red dot) for each of the EU-27 countries and illustrates how it evolved since 2013 (grey dots). Neither the left-hand nor the right-hand tail of the distribution reveals big surprises, with countries like Sweden, Finland, Germany, and the UK leading the ranking, while Greece, Cyprus, Hungary and Italy are lagging it. However, the results reveal some interesting findings when considering the evolution of the index over time. Greece, for example, has experienced a gradual but consistent deterioration of its index value. Comparing 2015 to 2016, the countries experiencing the biggest set-back in their SME Finance index were Latvia, the United Kingdom and Luxembourg (see Figure 11 for an elaboration). The biggest improvements were recorded by the Czech Republic, Denmark and Bulgaria.

Figure 8: The EIF SME Finance Index: Country comparison and evolution over time

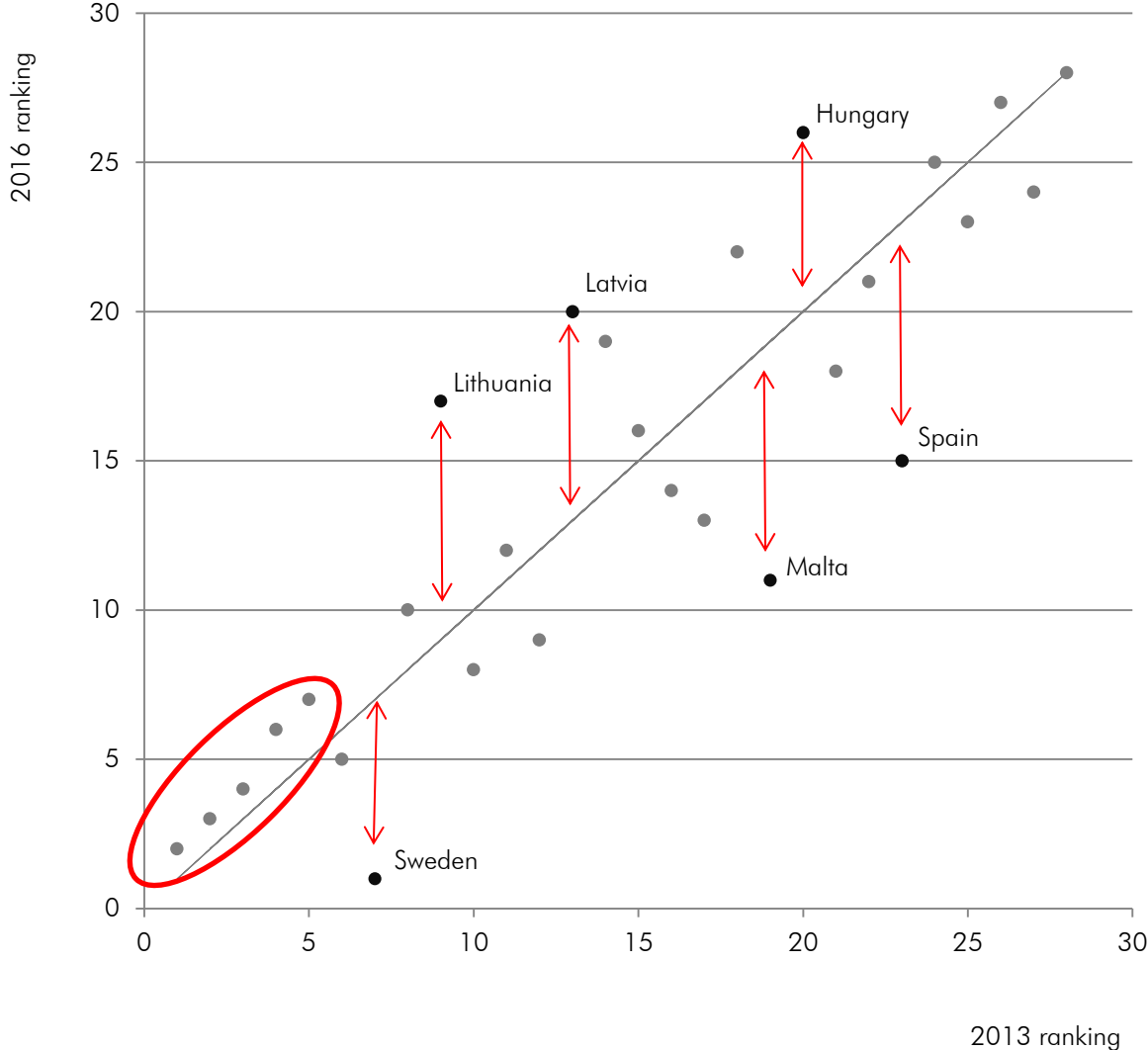


Source: Capstone project SME Finance Index

While it is clear from Figure 8 that the absolute value of individual countries’ EIF SME Finance Index is relatively stable over time, there is some degree of time variation in country rankings. Figure 9 makes this point more explicit by plotting the 2013 country ranking against the 2016 country ranking. Points to the north-west of the 45-degree curve indicate a deterioration of a country’s ranking, while all points to the south-east indicate an improvement. The change in the relative position is measured by the vertical distance to the 45 degree curve, as indicated by the red arrows. Furthermore, there are a number of countries that shifted significantly within the distribution, both upwards and downwards: Lithuania (-8 places), Latvia (-7 places) and Hungary (-6 places) all slid down in the hierarchy significantly. On the other hand, Spain, Malta (+8 places) and Sweden (+6 places) improved their relative position. While there is no real pattern of

polarisation, nor conversion noticeable, one additional result that catches the eye is the deterioration in the ranking of the top 5 countries (red circle) since 2013.

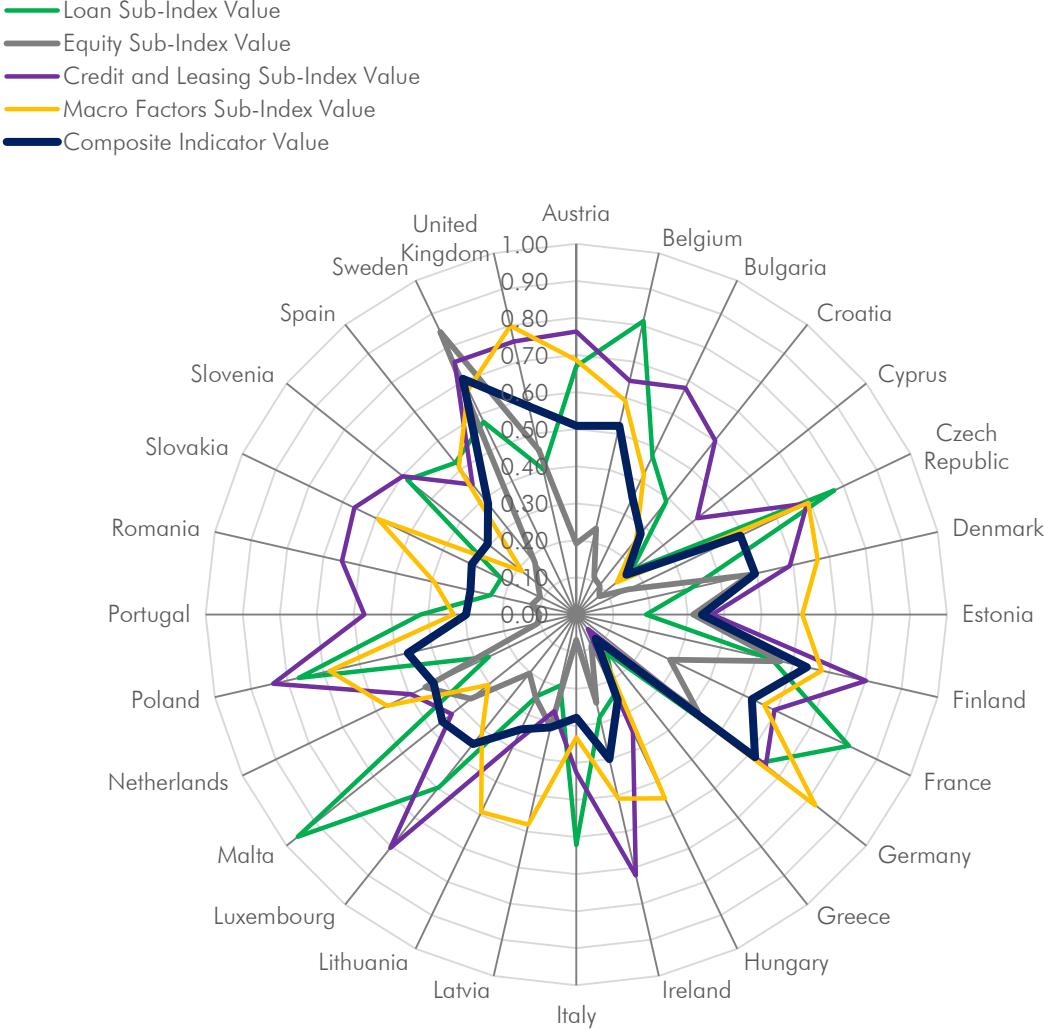
Figure 9: The EIF SME Finance Index: ranking comparison, 2013 vs 2016



Source: Capstone project SME Finance Index

To provide some additional insight into the drivers of the country-level outcomes of the EIF SME Finance Index, Figure 10 presents the outcomes for the different subindicators. The high score of Sweden seems to a large extent driven by a very high score on the equity subindex. At the low end of the ranking, Greece’s poor performance is driven by low scores on all four subindicators.

Figure 10: The EIF SME Finance Index: country comparison of sub-indices

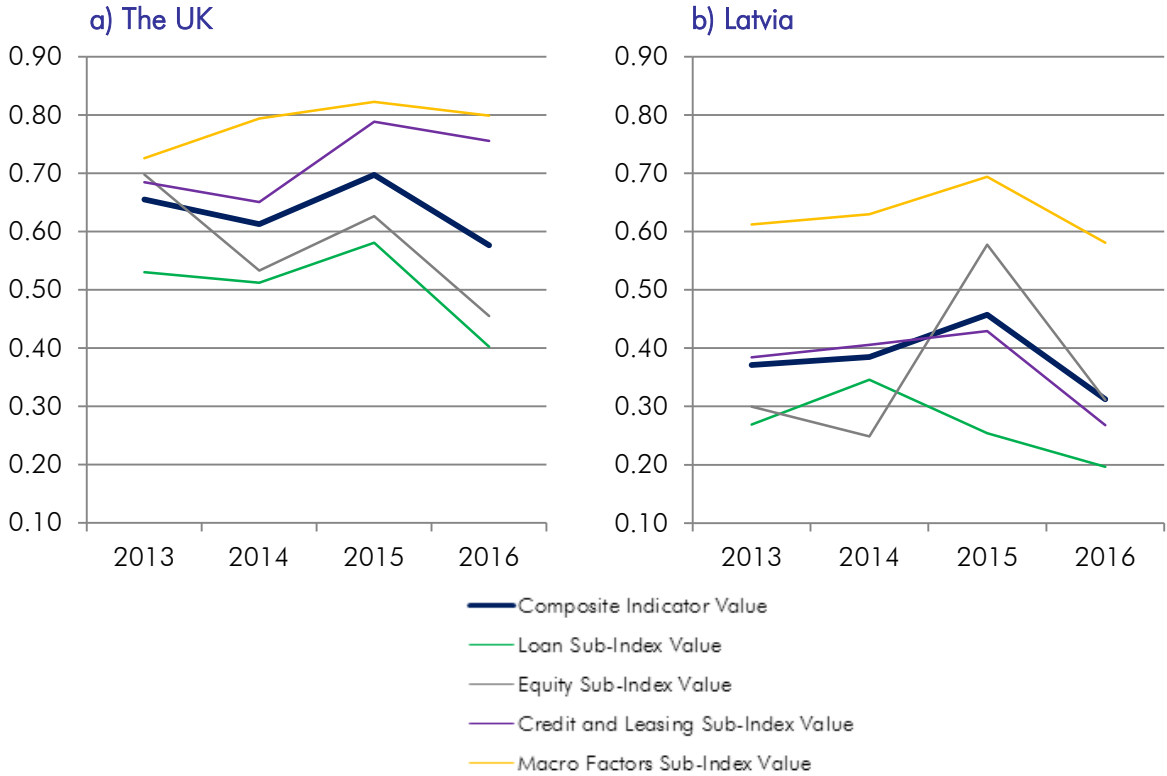


Source: Capstone project SME Finance Index

Figure 11 takes the analysis one step further and illustrates the evolution over time of the different sub-indices of the UK (left-hand panel) and Latvia (right-hand panel), the two countries which experiences the strongest deterioration in the value of their aggregate index. This exercise reveals that for Latvia the deterioration was driven by poor performance on all four sub-indices. For the UK, the credit and leasing subindex and the macro-factors subindex stayed roughly constant, while the SME financing situation on the loan and equity markets deteriorated significantly.

In sum, the cross-country ranking based on the EIF SME Finance Index largely confirms prior intuition: countries that have suffered most from the financial crisis still bear the consequences today, as local SMEs continue to suffer from poor financing conditions. A comparison of the index between 2015 and 2016 provides a rather mixed picture, as 14 out of 27 countries recorded a decrease in the finance indicator, while the others recorded an improvement.

Figure 11: Evolution over time of the sub-indices for:



Source: Capstone project SME Finance Index

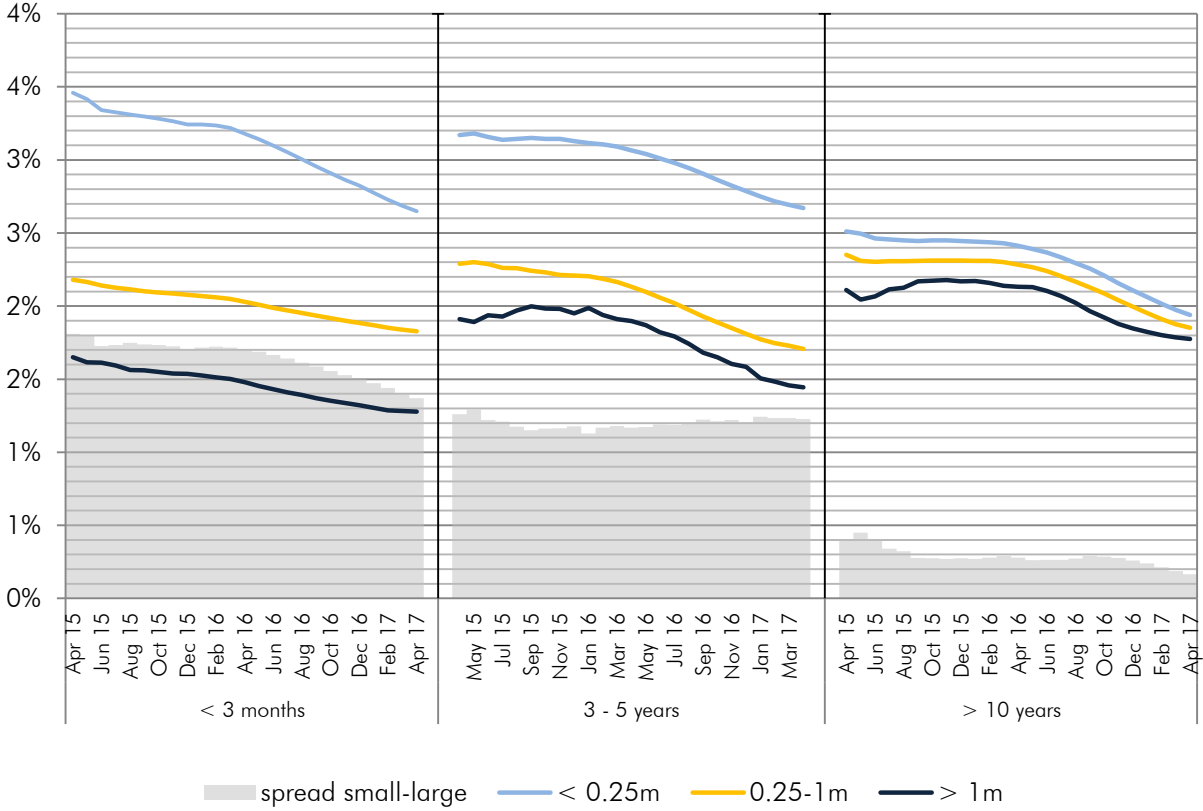
3.2.2 Borrowing costs

The interest rate is an important determinant of loan demand, as it determines the cost of investment financing. Figure 3 and Figure 4 illustrated that overall borrowing costs in the Euro Area have been declining over the past few years, but large country-level heterogeneity exists. This section takes an in-depth look at borrowing costs by using ECB information on interest rate levels and newly euro-denominated loan volumes.¹⁶ Although this information is not made available by firm-size, it is published for three distinct loan size categories: small loans (<EUR 0.25m), medium-sized loans (EUR 0.25m – EUR 1m) and large loans (>EUR 1m). Interest rate data is further subdivided according to loan maturity. Assuming smaller loans are predominantly used by smaller firms,¹⁷ one can use this information to defer some conclusions on the different lending conditions faced by firms from different size classes.

¹⁶ Concerning information regarding interest rates for microfinance please see chapter 6.

¹⁷ 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 arguably used independent of firm size.

Figure 12: Interest rates by loan size and maturity, and the interest rate size spread – April 2015 to April 2017



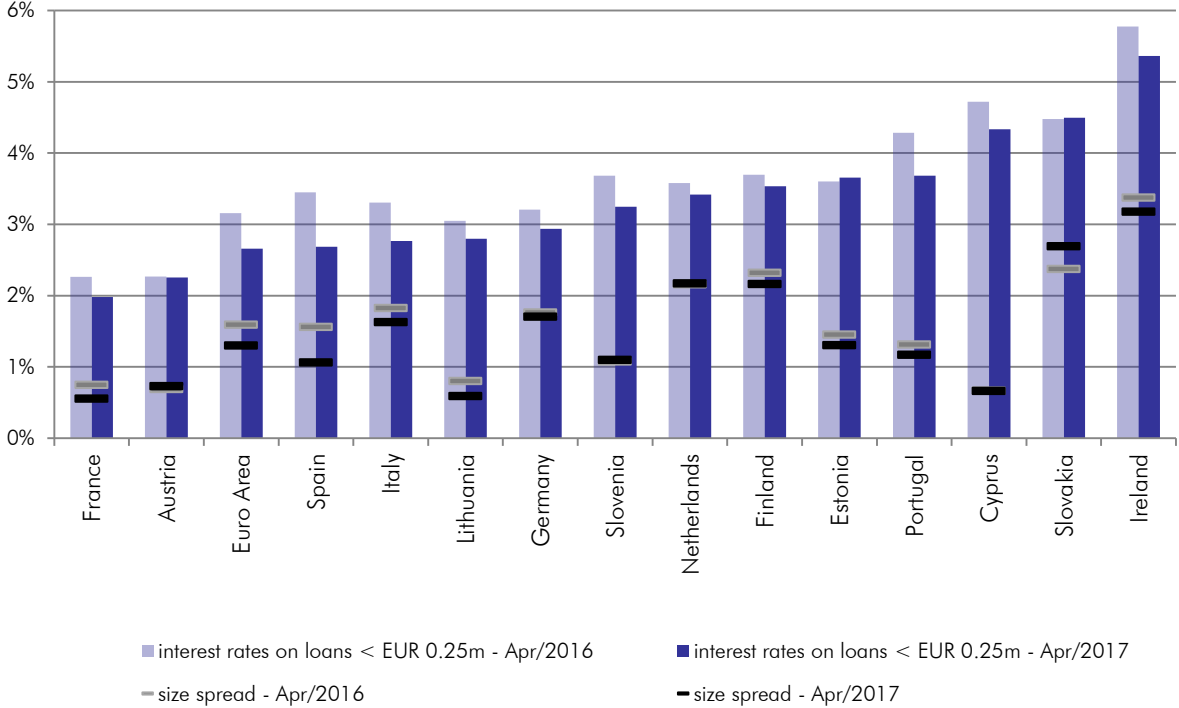
*The graph depicts the 12 month backward moving average floating interest rates charged by banks on loans to NFCs (other than revolving loans and overdraft)

Source: Authors, based on ECB Data Warehouse

Figure 12 illustrates the evolution of interest rate levels for different loan sizes, by maturity, over the past two years. The graph highlights several interesting findings: First, over the past six months, the ECB’s QE efforts have continued to trickle down, resulting in declining interest rates for NFC loans of all size-classes and all maturities. Second, 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). Two factors could explain why the inverse relationship between loan size and the interest rate breaks down for bank lending to NFCs. In the presence of fixed screening costs, small loans will carry a higher interest rate. Alternatively, smaller lenders could possess 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. Third, Figure 12 exposes an anomaly in the maturity spread of small loans. As a general rule, liquidity decreases with loan maturity. Long term loans will therefore 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, or the specific characteristics of small loans.

While overall financing costs for Euro Area NFCs might be decreasing, Figure 13 indicates that the aggregates enfold significant country-level heterogeneity. It plots the 12-month moving average of the interest rate charged to NFCs on loans not exceeding EUR 0.25m for a selection of countries for which data was available. It also depicts the size spread, 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 position for small firms vis-à-vis larger borrowers. Between April 2016 and April 2017, the interest rates charged on small loans in the Euro Area decreased further, as did the size spread. Small loans interest rates either further decreased or remained roughly constant in all countries for which data was available. The decrease was most pronounced in Portugal, Spain and Italy. Per April 2017, small borrowers in France faced the most favourable lending conditions, followed by Austria, Spain and Italy. On the other side of the spectrum, small borrowers in Ireland, Cyprus and Slovakia faced the most expensive borrowing conditions. The size spread on small loans decreased or stayed roughly constant in all countries but Slovakia. The decrease was most pronounced in Spain.

Figure 13: 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. 12months backwards moving averages were used to eliminate the influence of monthly outliers and focus on the underlying trend. Countries for which there was no sufficient data available are omitted.

Source: Authors, based on ECB Data Warehouse

In conclusion, small lenders experienced an improvement in lending conditions over the past six months, although significant country-level differences persist. Small businesses continue to face less favourable conditions compared to their larger counterparts, as evidenced by large size spreads in borrowing costs. Just as the interest rate for small loans itself, the size-spread displays a significant

amount of country-heterogeneity.¹⁸ While cross-country heterogeneity in interest rates could be explained by difference in the individual risk-profile of SMEs located in those respective countries, a recent study investigating the differences in cross-country interest rate variations on small loans found that such factors held little explanatory power (Caroll and McCann, 2015). Controlling for individual risk factors of SMEs, the authors conclude that national interest rate differences for SME lending are associated with institutional characteristics of the country such as, among others, recoverability of collateral and lack of competition in the banking sector. This latter explanatory factor appears to be particularly relevant for explaining the interest rate size-spread documented in Figure 12 and Figure 13. Large firms have greater bargaining power, vis-à-vis SMEs, which leads to lower interest rates on larger loans and hence, a size spread vis-à-vis smaller loans (Berger and Udell, 2006). This effect which was further evidenced by Affinito and Farabullini (2009).

3.2.3 SME financing from a supply perspective

The ECB's latest Bank Lending Survey (ECB, 2017) provides an overview of the current state of the SME lending market from the perspective of the banks. Figure 14 plots the quarterly net change¹⁹ in credit standards and illustrates how banks' perception of credit standards upheld to NFCs has changed since the beginning of the financial crisis.²⁰

While credit standards continued to ease during the third quarter of 2016 for both SMEs and large firms, credit standards have again started to tighten for SMEs during the final quarter of 2016, as well as the first quarter of 2017. In contrast, credit standards for loans to large firms continued to ease. Over the second quarter of 2017, credit standards for both SMEs as well as for large firms remained roughly constant.

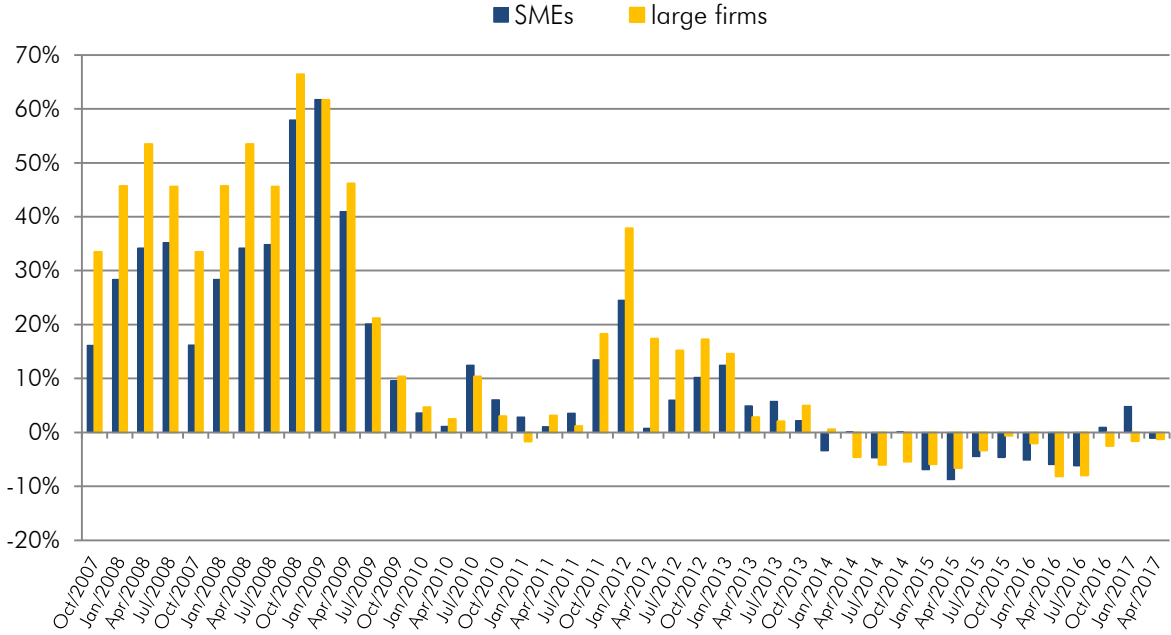
Figure 15 illustrates the factors that drove the change in credit standards to SMEs applying for bank loans. It shows that the upswing in the tightening credit standards was caused by a reduction in banks' risk tolerance and, related, cautiousness about their capital position. Furthermore, the supply of credit to SMEs was negatively impacted by economic conditions, as banks pointed to industry or firm specific situation as the most important driving factor behind the credit tightening in the first quarter of 2017. Interestingly, while all these factors were considered less important during the second quarter of 2017, the risk on SMEs' collateral seemed to have increased. This was not enough to offset the factors driving credit easing, resulting in a minor positive evolution over that period.

¹⁸ See also 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 European nations.

¹⁹ The net change is calculated as the difference between the sum of the percentages of banks responding "tightened considerably" and "tightened somewhat", and the sum of the percentages of banks responding "eased somewhat" and "eased considerably", for loans to firms from different size classes.

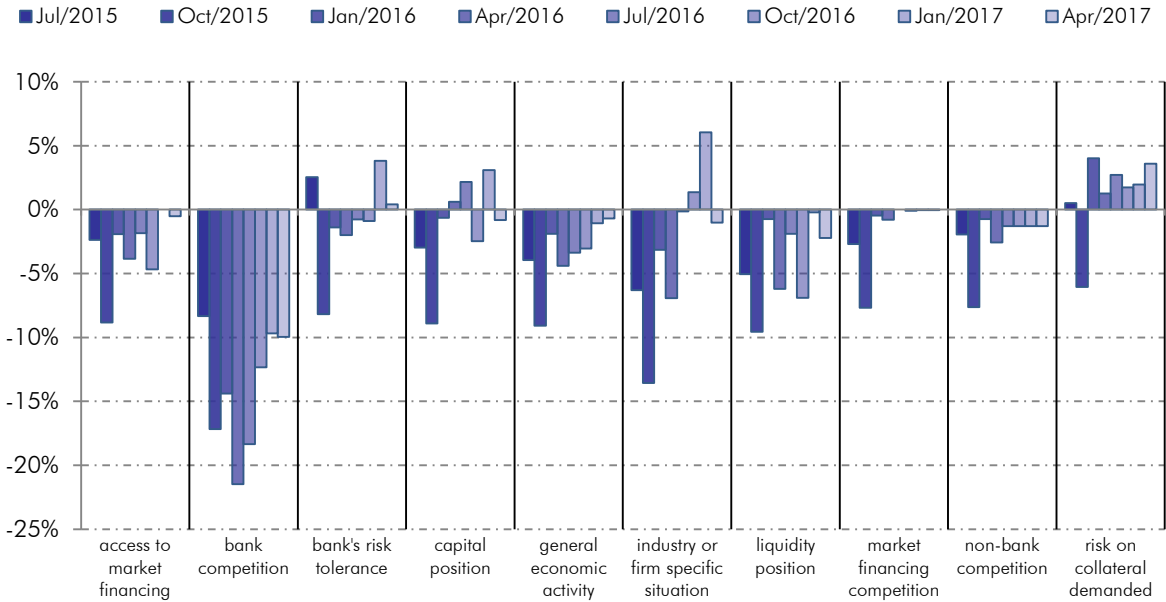
²⁰ Banks are requested to answer the following question: 'Over the past three months how have your bank's credit standards as applied to the approval of loans or credit lines to enterprises changed?'

Figure 14: Net changes in credit standards applied to the approval of loans or credit lines to enterprises (SMEs versus large enterprises)



Source: Authors, based on ECB Bank lending survey (ECB, 2017b)

Figure 15: Factors contributing to changes in credit standards to SMEs²¹



*Note: "Bank's risk tolerance" was only introduced to question 2 of the BLS in Q2/2015

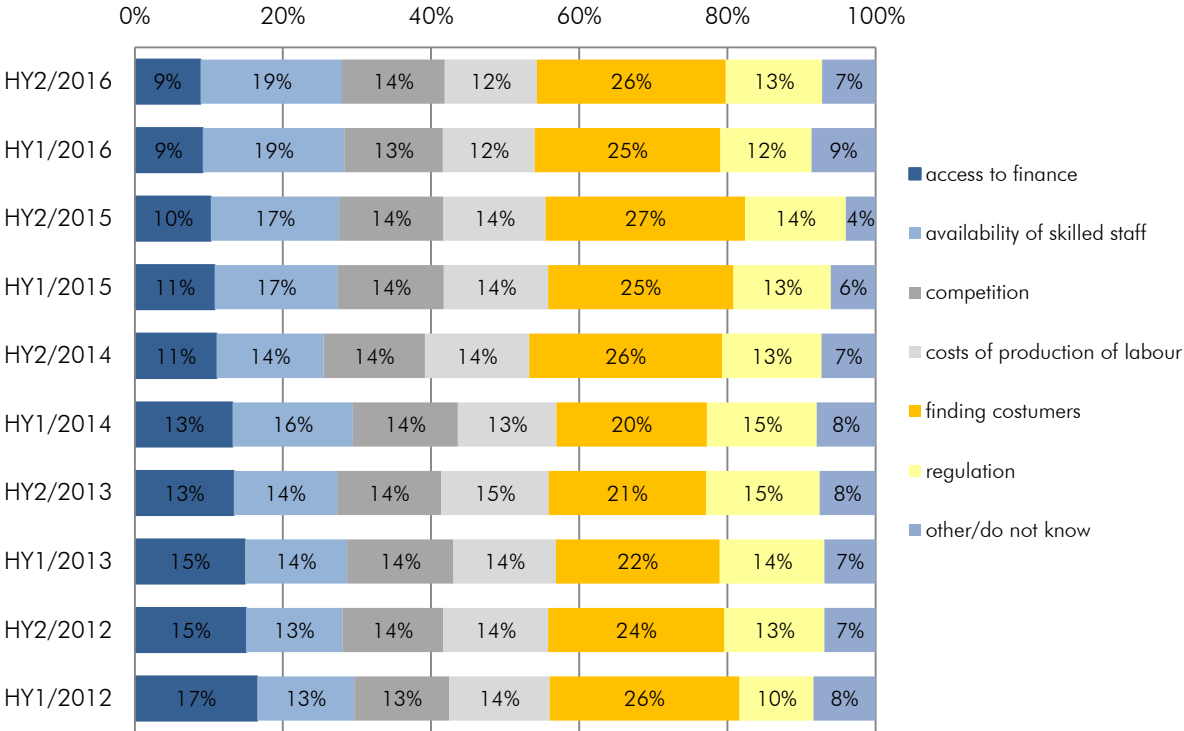
Source: Authors, based on ECB Bank lending survey (ECB, 2017b)

²¹ Banks were requested to answer 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 percentage contribution of each factor to the tightening or easing of credit standards. The net percentage is defined as the difference between the percentage of banks reporting that the given factor contributed to a tightening and the percentage reporting that it contributed to an easing.

3.2.4 SME financing from a demand perspective

Having discussed the bank’s supply side perspective of the lending market, this section turns to the demand side and reports the most important results of the latest Survey on the Access to Finance of Enterprises (SAFE). Figure 16 lists the most important problems faced by SMEs in the Euro Area and illustrates how their relative importance changed over time. During the most recent semester, access to finance has not been the most important concern to SMEs. Similar to the previous period, only 9% of them rank it as their most important issue. Finding costumers remains SMEs’ primary concern, with 26% of respondents ranking it as their most important problem, 1 percentage point up from the first half of 2016. Nineteen percent of SMEs report difficulties in finding skilled staff to be their most important concern.

Figure 16: The most important problems facing Euro Area SMEs

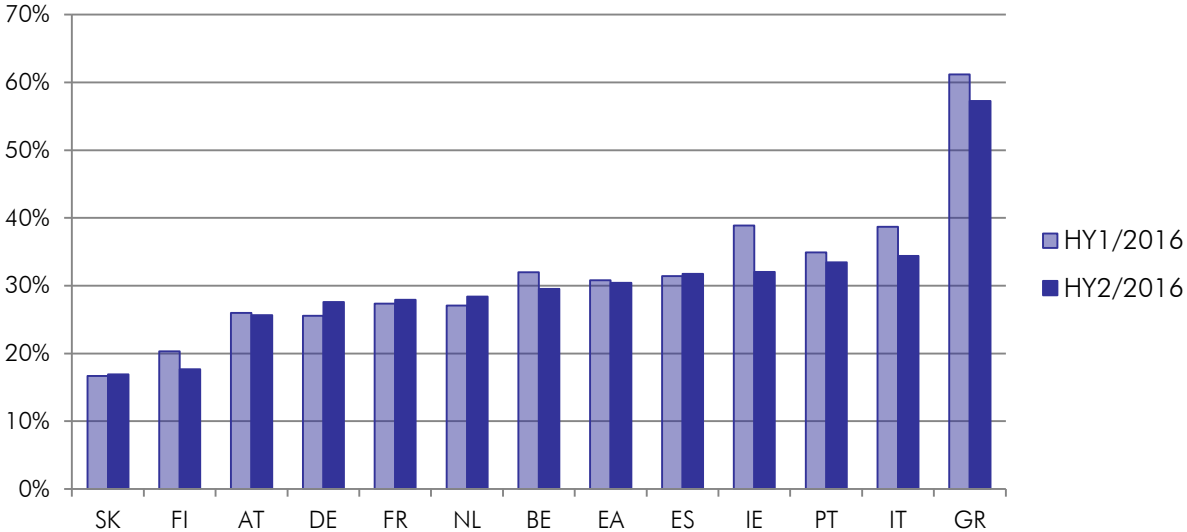


Source: Authors, based on ECB SAFE (ECB, 2017a)

Figure 17 provides more insight into the within-Euro Area heterogeneity underlying Figure 16, by plotting per country the percentage of SMEs that consider access to finance to be a highly important problem.²² This percentage varies significantly by country, with Greece still leading the ranking (57%) during the second semester of 2016, even though the situation improved considerably compared to one semester earlier. In general, the financing situation of SMEs improved or stayed constant in most countries, with the exception Germany, France and the Netherlands, where it deteriorated slightly.

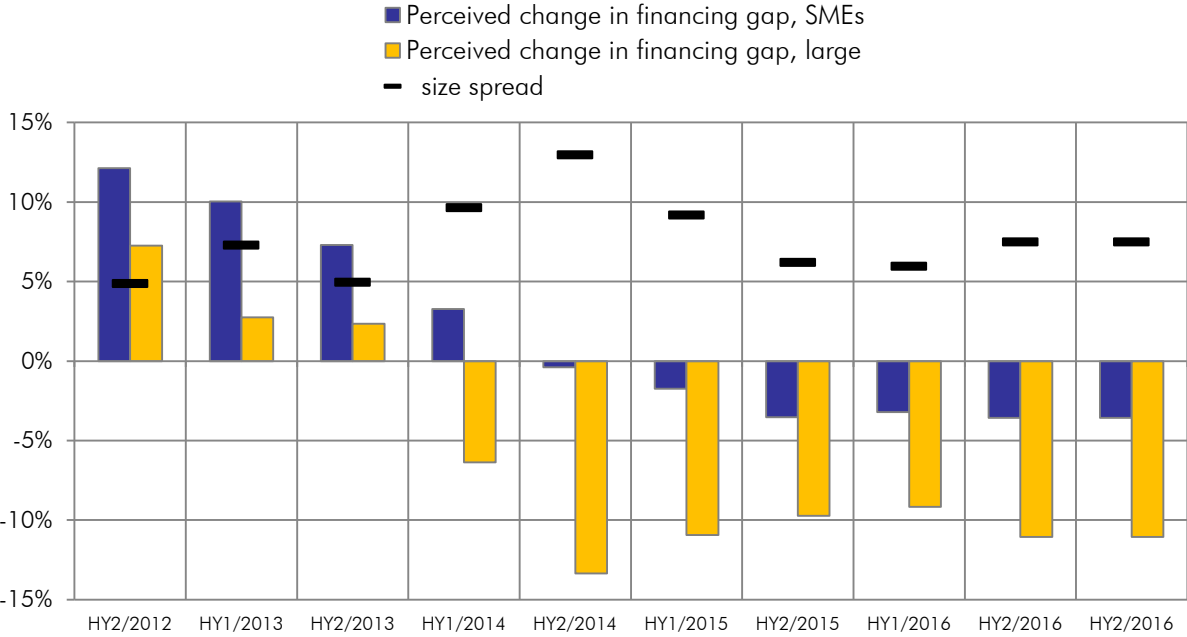
²² Rating it 7 or higher on a scale of 10 for the survey item Q0b. Pressingness of problems that the firm is facing.

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



Source: Authors, based on ECB SAFE (ECB, 2017a)

Figure 18: Perceived change in the external financing gap by SMEs and large firms²³



Note: Weighted net balance for enterprises and net percentage for banks.

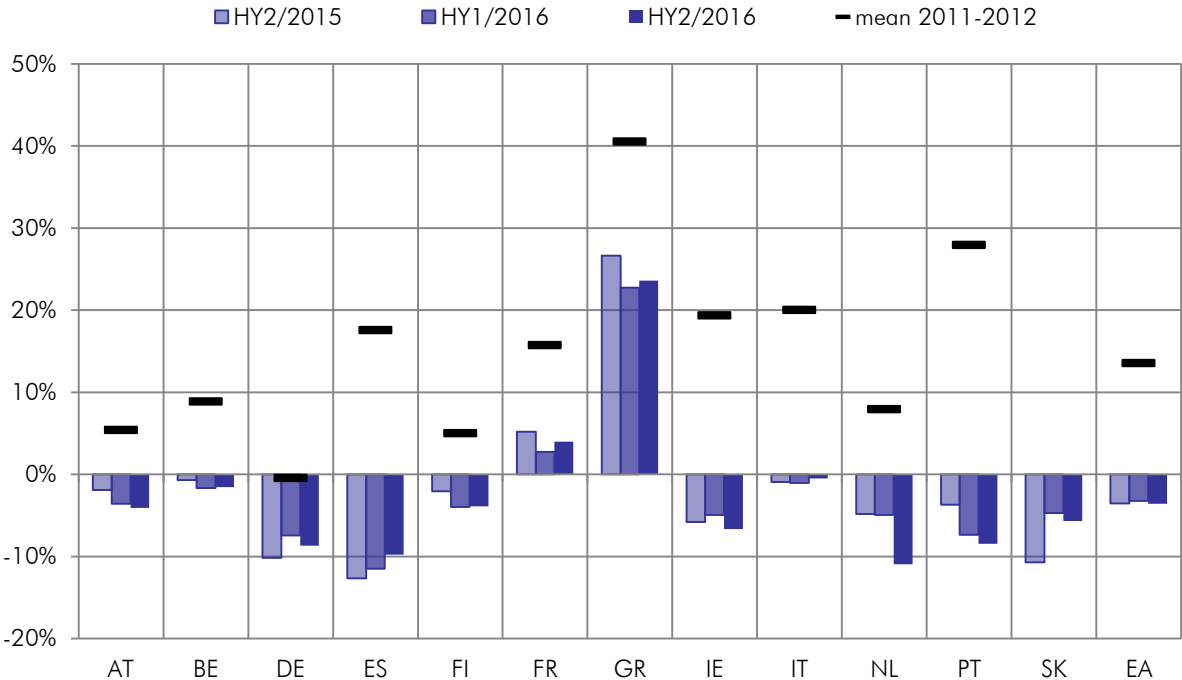
Source: Authors, based on ECB SAFE (ECB, 2017)

²³ 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.

Figure 18 illustrates how SMEs' perception of the external financing gap has evolved over the past 5 years and compares this to the gap perception by large firms. The external financing gap is a composite indicator constructed by the ECB, based on perceived changes in the needs and availability of external financing to firms (see footnote 23). During the second semester of 2016, both SMEs as well as large firms perceived the financing gap to be shrinking for the fifth consecutive semester. Clearly, SMEs consistently experience more difficulties in accessing external finance, vis-à-vis large firms, as evidenced by the positive size-spread depicted in Figure 18. This size spread, measuring the difference in perception between SMEs and large firms, further increased in the most recent period.

Figure 19 illustrates the country-level heterogeneity in SMEs' perception of the (change in the) financing gap. During the second semester of 2016, France and Greece remain the only two countries in which SMEs perceive the financing gap to be growing. The rate at which it increased remained roughly constant compared to the previous semester. In all other countries for which data was available, negative values were reported, implying SMEs believe the gap between the supply and demand of external finance to be decreasing. In general, the situation on external financing markets for SMEs has improved drastically compared to the 2011-2012 period: in particular in Ireland, Spain, Italy and Portugal.

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



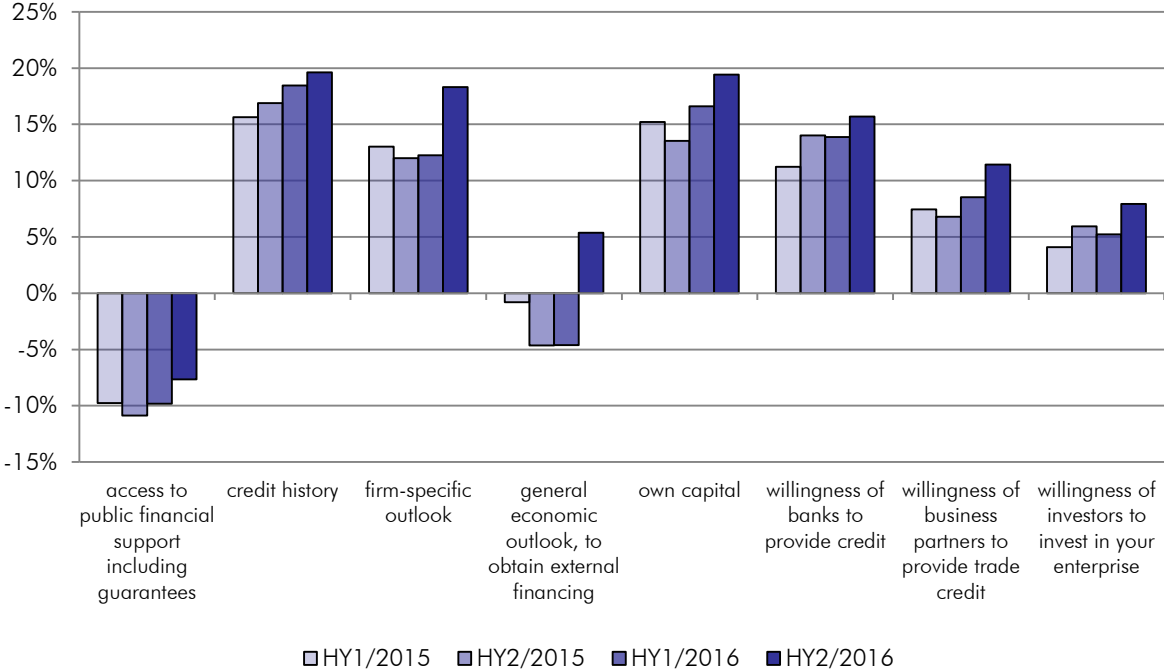
*The marker denotes the average level of the index throughout the four semesters of 2011 and 2012.²⁴

Source: Authors, based on ECB SAFE (ECB, 2017a)

²⁴ 2011-2012 is the period in the aftermath of the crisis in which SMEs reported the highest values of the perceived change in the financing gap.

The SAFE survey also asks about the factors which SMEs believe are driving the availability of external financing. Figure 20 illustrates how responses evolved over the last two years. During the second semester of 2016, all but one factor are reported to have contributed positively to the availability of external finance to SMEs in the Euro Area. Especially SMEs’ own credit history, the availability of own capital and the willingness of banks to provide credit were important driving factors. Noteworthy is also the increase in the willingness of business partners to provide trade credit over the past three semesters. Interestingly, contrary to the general optimism regarding all the other factors and increased support to SMEs, the perceived lack of public financial support, such as guarantees, remains to be an issue for Euro Area SMEs.

Figure 20: Change in factors driving the availability of external financing to Euro Area SMEs



Source: ECB SAFE (ECB, 2017a)

Turning to specific financing instruments, Figure 21 illustrates the relative importance of different funding sources by Euro Area SMEs during the first and second semester of 2016. Bank products (loans and overdraft taken together) remain the most popular financing products for SMEs, followed by leasing and hire-purchase (see Box 1), whereas 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 Fintech or crowdfunding, as a possible answer, even though they have gained popularity in SMEs’ financing mix over the past years. At the end of this chapter, Box 2 elaborates on the growing importance of crowdfunding as a source of external financing for European SMEs.

Figure 22 provides some deeper insights in the availability of bank loans specifically. SMEs reported that the availability of bank loans for Euro Area SMEs continued to improve: during the second semester of 2016, 12% (net balance) of Euro Area SMEs reported an increase in the availability, a significant improvement compared to the first semester of that same year.

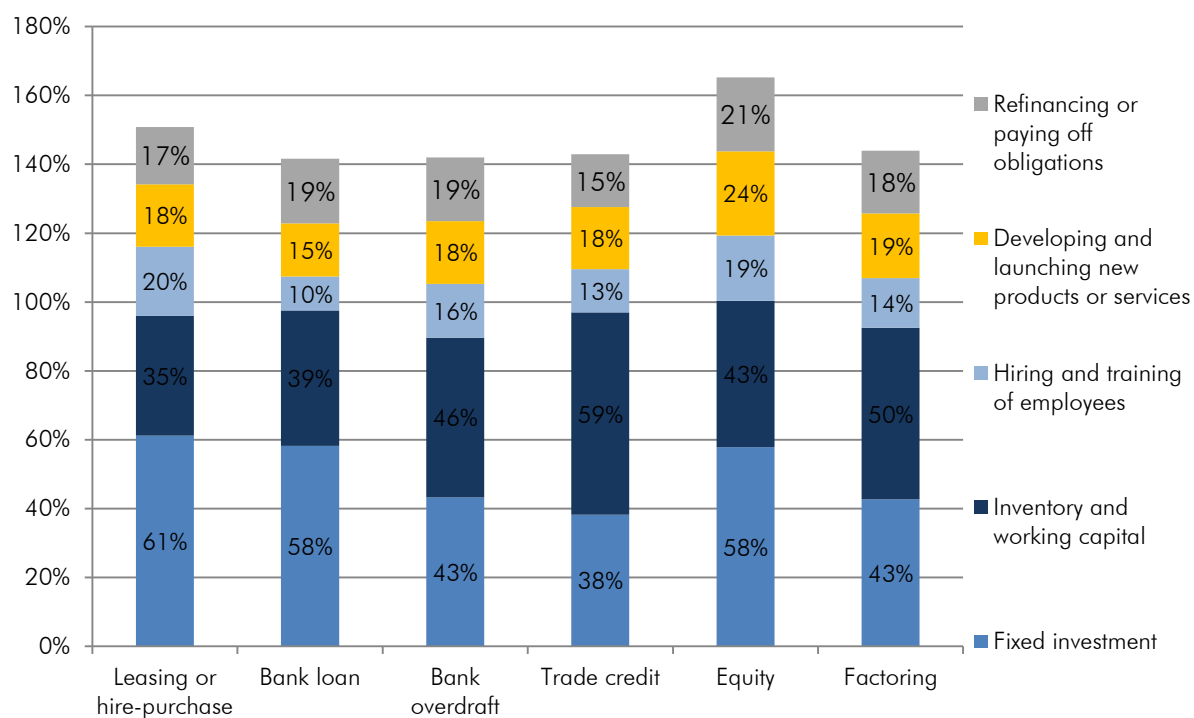
Box 1 : SME leasing in Europe

In the ECB SAFE survey for the Euro Area²⁵, leasing and hire-purchase together remains the third most relevant source of finance for SMEs in the Euro Area. More importantly, in the six months preceding the survey, it was the second most often used type of external SME financing, after credit line/overdraft and before trade credit and bank loans. Austria, Germany and Belgium are the countries with the highest proportion of SMEs using leasing or hire-purchase, followed by the Netherlands, Finland and France. The use of leasing or hire-purchase grows with the firm size.

Survey respondents stated that the availability of leasing or hire-purchase improved (net balance) the most in the past six months compared to other external financing sources. Moreover, SMEs expected that the availability of leasing would continue to improve the most among all external financing sources in the coming 6 months. Leasing is also the source of finance with the largest proportion of SMEs signalling an increased need for it.

Leasing users are characterised by a high degree of investment activities. According to the survey, leasing was mainly used for investments in property, plant or equipment. Moreover, the percentage of SMEs who used leasing for fixed investment is higher than the percentage of SMEs who used other types of financing for the same type of investment. The same applies to training of employees (see Figure B1.1).

Figure B1.1: Purpose of the financing by type of finance used, euro area SMEs

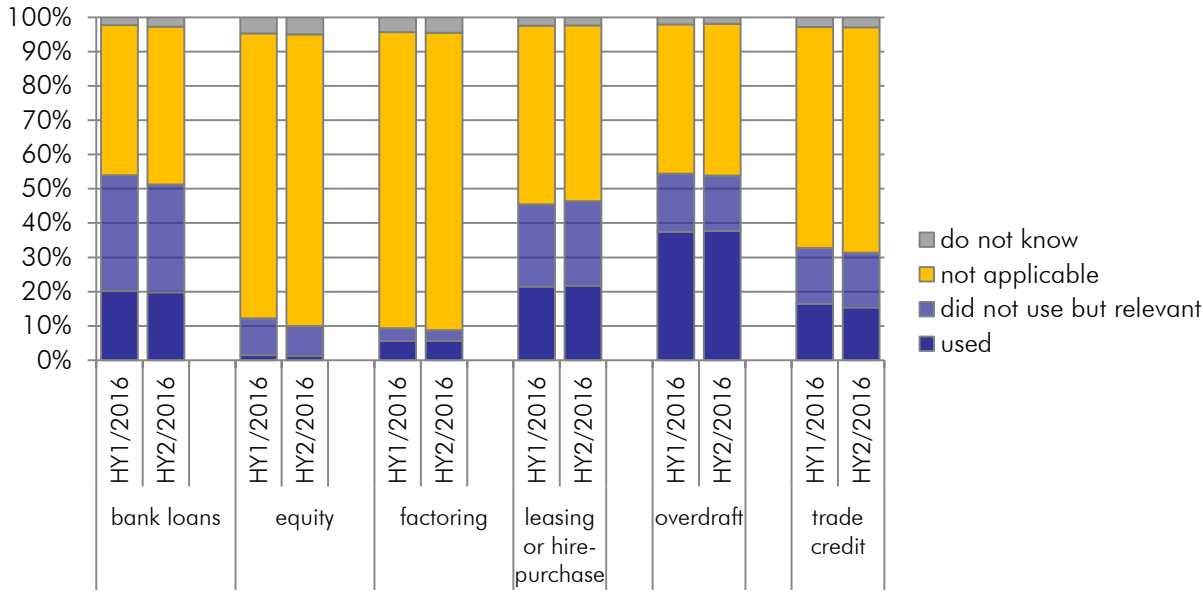


*Note: The Y axis scale is higher than 100%, because companies can have more than one type of investment purpose

Source: Authors, based on ECB SAFE (ECB, 2017a)

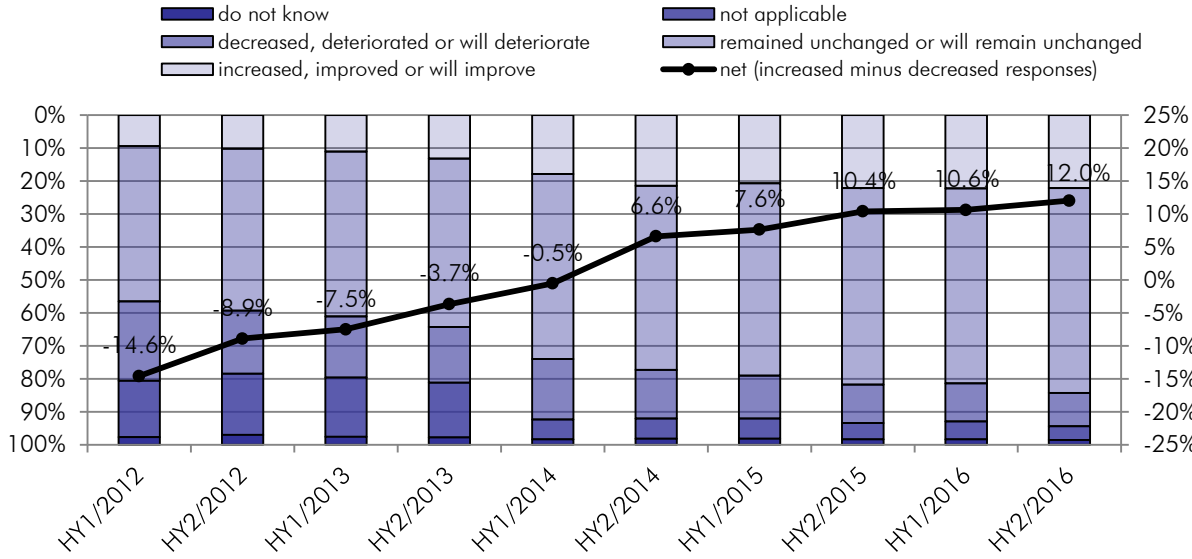
²⁵ Information based on the latest ECB SAFE survey wave (October 2016-March 2017).

Figure 21: Sources of external financing of Euro Area SMEs



Source: Authors, based on ECB SAFE (ECB, 2017)

Figure 22: Change in the availability of bank loans for Euro Area SMEs



Source: Authors, based on ECB SAFE (ECB, 2017a)

Overall, the outlook about the general economic environment has improved since the publication of the previous European Small Business Financing Outlook in December 2016. Monetary policy continues to drive down borrowing costs for NFC to record lows, but the interest rate spread between small and large loans remains significant and varies strongly between countries. The most recent waves of the ECB’s BLS and SAFE survey consistently brought to light that the financing situation of SMEs improved, although large country heterogeneity exists. Most interestingly in this context is that SMEs continue to report a perceived lack of public support for access to finance.

Box 2: Crowdfunding in Europe, a market overview

Alternative finance is an umbrella term capturing a variety of financing sources that have developed outside of traditional financing channels – it plays an important role in the Capital Markets Union (i.e. the ambition to diversify financing possibilities for SMEs). One familiar example is crowdfunding (CF), in which an internet platform functions to combine small amounts of funding, typically from individuals, and channels it to the final recipient, which can be individuals, companies or projects. While some interpretations of alternative finance would also include financial instruments such as debt funds, or venture debt funds, securitisation, or even Venture Capital, the discussion in this box will focus on crowdfunding, specifically. CF platforms have become an essential element in SMEs' financing strategies, for traditional small businesses, but in particular for innovative start-ups with a high growth potential.

While there is no universally agreed-upon categorisation, many authors distinguish between four stylised categories: equity-, debt-, reward- and donation-based platforms. The most widely known crowdfunding platforms, such as Kickstarter and Indiegogo (both US-based), operate a donation-based business model, on which investors pledge contributions to projects which are generally charitable by nature, without expecting a financial return. The absence of a financial return element is shared by reward-based platforms, on which individuals fund a project or company conditional on receiving a non-financial reward at a later stage, typically in the form of a product or service produced by the funded company. Equity-based platforms provide the greater public the opportunity to take equity stakes in participating companies, and this way bring private equity to the masses. The return to the investor crucially depends on the growth performance of the company. This is different for debt-based crowdfunding, where investors pledge funding in return for interest payments. Debt-based CF platforms can take the form of peer-to-peer business lending, debt-based securitisation, or invoice trading. Different sub-categorisations exist, as well as hybrid forms that combine elements of debt- and equity-based crowdfunding.²⁶

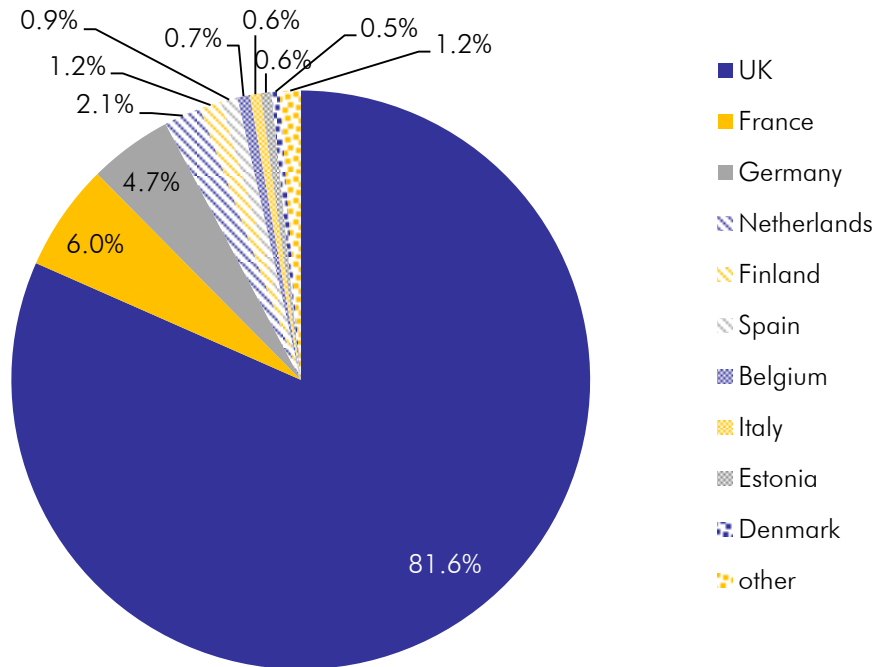
In recent years alternative finance experienced significant growth. A recent study undertaken by the Cambridge Centre for Alternative Finance, in cooperation with KPMG (Wardrop, 2016) monitors and quantifies the European online alternative finance market, using a survey-based methodology. They reported the growth of the total transaction volume to be 151 and 92 percent, for 2014 and 2015 respectively, resulting in a total market size of EUR 5,431m, in 2015 (Figure B2.1). The bulk of the action on the crowdfunding market takes place in the UK, as platforms on mainland Europe only accounted for about 19 percent of total transaction volume (or EUR 1,010m). The dominance of the UK market is also apparent after normalizing according to population (Figure B2.2, panel a). With a per capita transaction flow of EUR 67 per inhabitant, the UK comfortably surpasses other countries. Also the other big European economies score well here. The picture changes somehow in panel b) of figure B2.2, which normalises transaction volumes by GDP, which highlights the exceptional performance of two of the Baltic States: Latvia and Estonia.

Figure B2.3, which focusses only on transaction volumes in continental Europe (excluding the UK), illustrates the distribution of the total transaction volume over different platform types. Debt-based crowdfunding accounts for over half of the total transaction volume, but only part of it relates to business lending (21 percent of total). Equity-based crowdfunding comes in third at 16 percent. Although donation-based crowdfunding might be the best known category, its total transaction amount makes up just a small fraction of the total transaction volume (2.1 percent, contained in the 'other' category).

²⁶ For an elaborate discussion, see European Commission (2015a)

Box 2 continued:

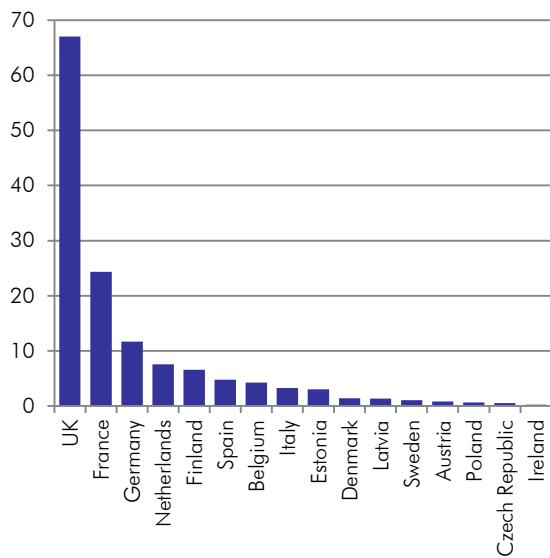
Figure B2.1: The distribution of total transaction volume (EUR 5,431m) on the crowdfunding market in Europe over different countries, for 2015



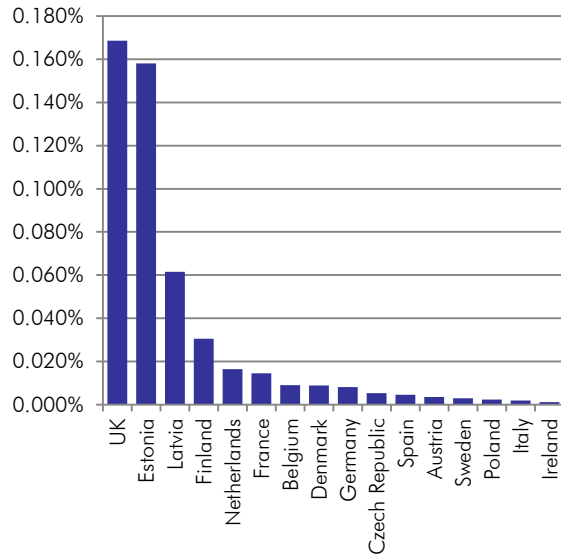
Source: Wardrop et al. (2016)

Figure B2.2: Normalised transaction volumes on the crowdfunding markets in different countries

a) per capita



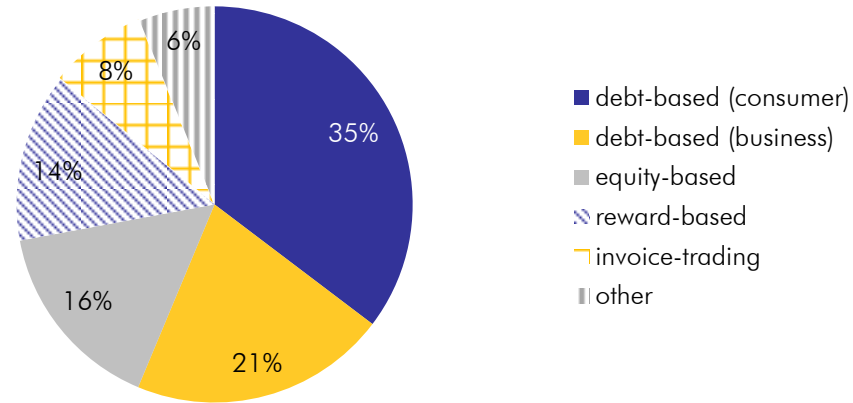
b) by GDP



Source: Wardrop et al. (2016), Eurostat, own calculations

Box 2 continued:

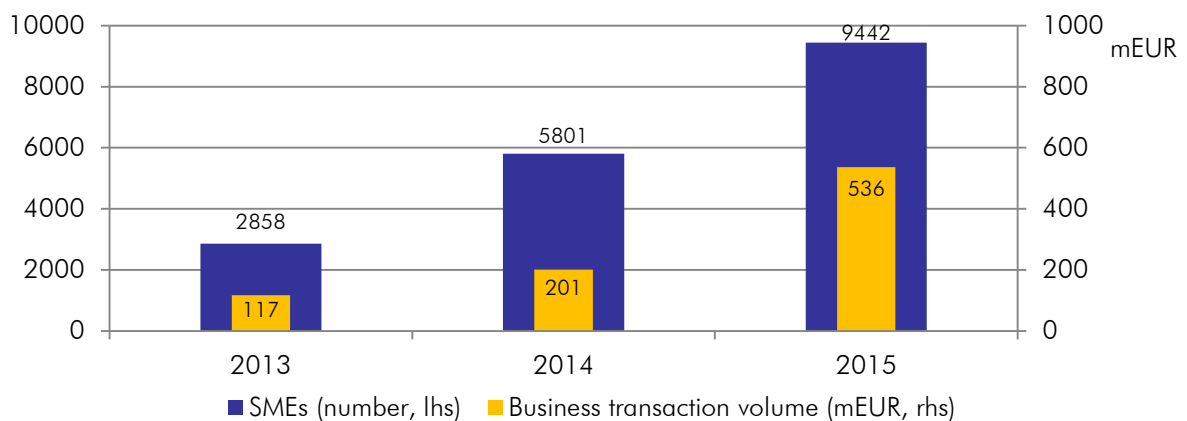
Figure B2.3: The distribution of total transaction volume (EUR 1,010m) on the crowdfunding market in continental Europe over different platform classes, for 2015



Source: Wardrop et al. (2016)

The exponential growth of crowdfunding in recent years is often attributed to a combination of factors, most notably the emergence of internet-based financing technology, in combination with the credit-crunch caused by the global financial crisis. This credit crunch disproportionately affected SMEs (Wehinger, 2014), unsurprisingly, the crowd has grown to be an increasingly important source of SMEs' external funding. This is reflected in the statistics, which show that nearly half of the total transaction volume on the online crowdfunding market is related to business funding²⁷ (figure B2.4). While the number of SMEs that raised funding on CF platforms also increased strongly, it did so at a slower pace than the total funding volume, implying a significant increase in the average amount per funding round, from EUR 40,938 in 2013, to EUR 56,767 in 2015.

Figure B2.4: The evolution of business-related transaction volume on the crowdfunding market from all platform types in continental Europe and the number of fundraising SMEs.



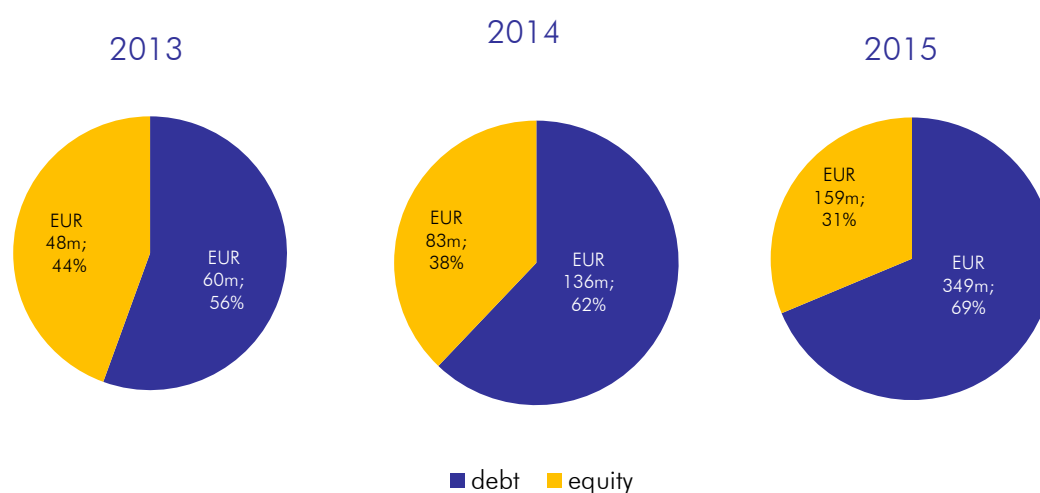
Source: Wardrop et al. (2016)

²⁷ The analysis in Wardrop et al. (2016) appears to assume implicitly that the entirety of business related crowdfunding flowed to SMEs. Given the nature of crowdfunding, we believe this is a fair assumption to make.

Box 2 continued:

Per 2015, the vast majority (EUR 349m) of business finance was raised on platforms following lending models, such as peer-to-peer business lending, balance sheet business lending, invoice trading, or debt-based securities. Equity based platforms ranked second with a total of EUR 159m raised. Since 2013, debt-based platforms have gained in relative importance, having grown consistently faster than the equity-platforms between 2013 and 2015 (figure B2.5).

Figure B2.5: Business financing on equity and debt-based crowdfunding platforms: transaction volumes raised on equity vs debt-based models (mEUR)



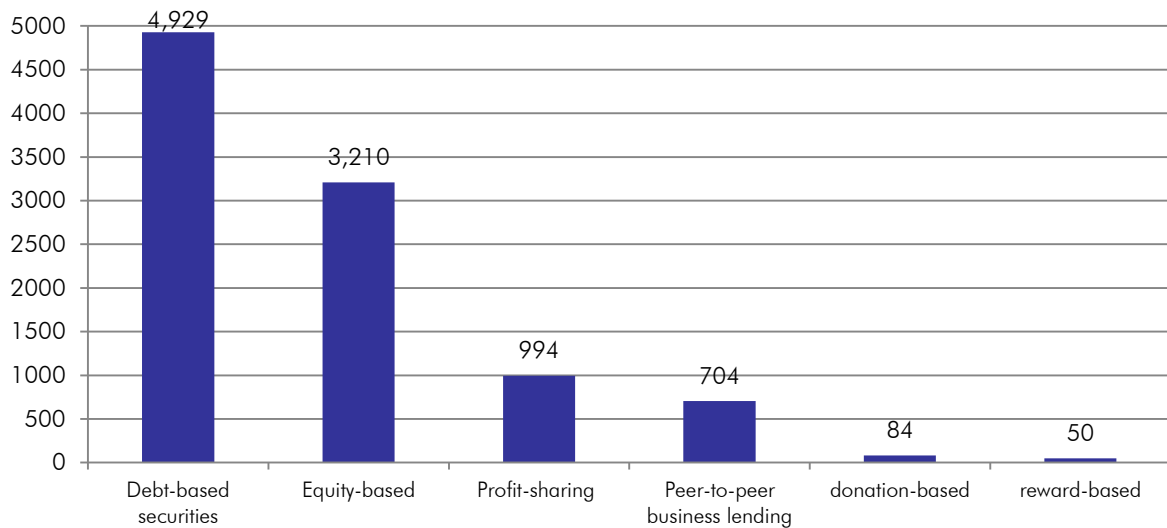
Source: Wardrop et al. (2016)

Different platforms serve different business types: whereas retail and wholesale was the most funded sector on peer-to-peer business lending models, equity-based CF platforms were most frequented by SMEs from technologically intense sectors. The inherent differences in funded projects by platform type are also apparent when considering average deal size, which was by far highest on equity-platforms (EUR 460,000). Average deal sizes on debt-based securities and peer-to-peer business lending were substantially smaller, averaging at EUR 192,238 and EUR 99,985, respectively. When adding the average numbers of investors per platform type to the picture, it becomes clear that platform types also differ considerably on the supply side, with vast differences in funders' average contribution. This was highest on debt-based securities and equity platforms, with an average contribution of EUR 4,929 and EUR 3,210, respectively (figure B2.6).

This size difference does not seem to be driven by differences in institutional participation, which has been on the rise in recent years: while the proportion of projects with some level of institutional backing was only 24 percent in 2013, this increased to 44 percent in 2015. One would expect that platforms with a high degree of institutional participation also have the largest average investor contributions. Institutional participation in equity-based CF (8 percent of transaction volume), however, is significantly smaller than in the case of peer-to-peer business lending (24 percent of transaction volume), even though the average investor's contribution on equity platforms exceeds those of peer-to-peer lending by a factor 7.

Box 2 continued:

Figure B2.6: Average contribution of funders per platform type in continental Europe per 2015 (EUR)



Source: Wardrop et al. (2016) and own calculations

Crowdfunding is often considered to be a 'disruptive' force on external finance markets. This perspective views CF as a substitute for traditional sources of financing and expects the CF market to crowd out other forms of external financing, at least to some extent. D'Ambrosio and Gianfrate (2016), for example, find that CF competes with traditional VC for seed capital. However, those same authors also find that CFs rather acts as a complement for subsequent rounds of financing. Other authors share the view that CF constitutes a complement to more traditional financing channels. Hornuf & Schwienbacher (2014) argue that equity CF fills funding gaps at the lower end of the market and is often used side-by-side to angel funding, where the funding of the crowd complements the investment savviness of angel investors.

While market participants did not consider institutional involvement to be a major threat to the development of the CF sector, fraudulent practices on the project level and the instability or even collapse of major platforms were reported to be a significant risk for future growth prospects. The absence of a European-level harmonised regulatory framework or control mechanism contributes to these fears. A lack of a harmonised framework also deters the flow of cross-border CF flows, although opinions on current regulations are mixed: while 38 percent feels current regulations to be adequate, 28 percent of platforms reported them to be overly strict. On the other hand, 22 percent of platforms felt regulations were inadequate. Other hurdles to the future development of the sector are the lack of secondary markets for equity CF investors (Wardrop et al., 2016).

4 Private equity

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 (formerly EVCA, the European Private Equity & Venture Capital Association; Box 3 provides more information on the Invest Europe data); see Figure 23.

In the same years, the overall PE investment levels were at EUR 35bn and EUR 71bn (and even increased further to 78bn 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 partial rebound, although the recovery has shown some setbacks and fundraising, investments and divestments have not reached their pre-crisis levels.

Box 3: Introductory information on Invest Europe data

In this chapter, numbers, diagrams and statements are to a large extent 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.

Please do also note that Invest Europe private equity (PE) statistics do not include infrastructure funds, real estate funds, distressed debt funds, primary funds-of-funds, secondary funds-of-funds and PE/VC-type activities that are not conducted by PE funds. Further, activities of business angels and hedge funds as well as corporate acquisitions outside of dedicated corporate venture programmes are not included in the statistics.

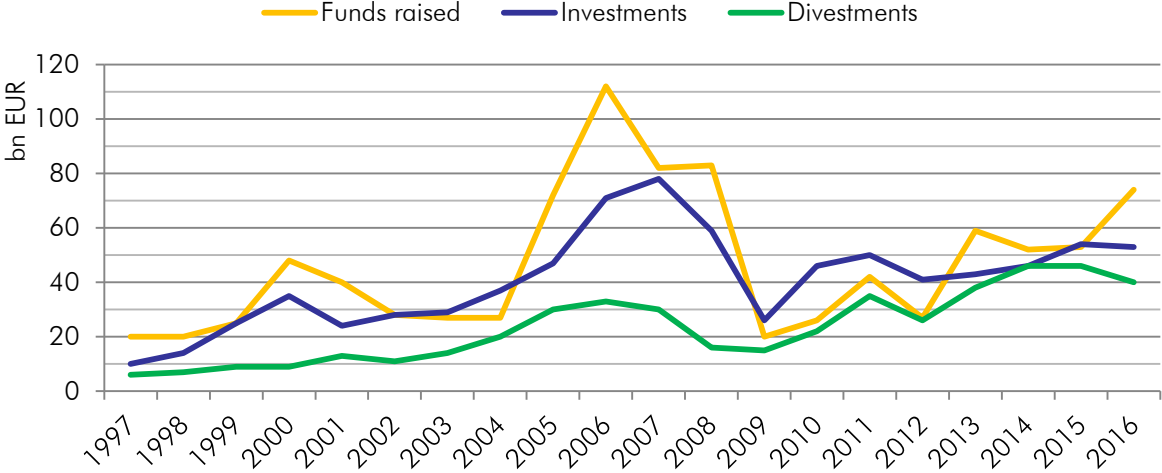
Invest Europe statistics can differ from the numbers reported by other data providers for the reasons just mentioned and due to, e.g., differences in methodology, definitions and interpretations of the PE fund and investment stages and geographical definitions (e.g. of “Europe”).²⁸

In 2017, Invest Europe released its statistics for the first time based on a new database. All data since 2007 was restated and complemented with additional information. With data on more than 1,200 European PE firms, the latest statistics cover 88% of the EUR 600bn in capital under management in Europe.

See, also for more details, Invest Europe (2017a) and the Invest Europe website (www.investeurope.eu).

²⁸ With regard to PE and VC, there is in general a lack of data and its consistency, given, inter alia, the lack of data disclosure. Therefore, it is “difficult to paint in definitive terms the level of investment activity and fund performance”, as recently 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”.

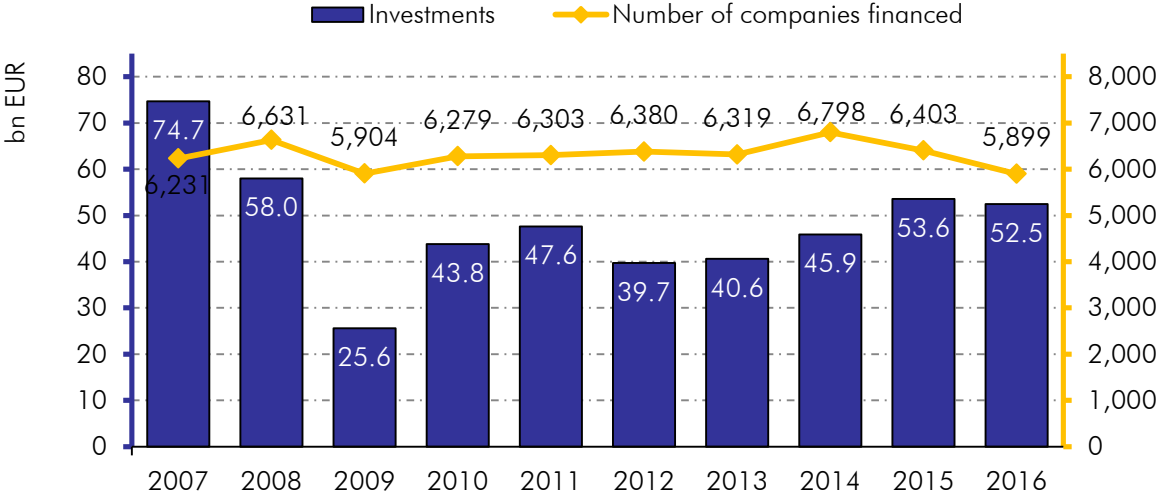
Figure 23: Fundraising, investment and divestment amounts by PE firms located in Europe²⁹



Source: Authors, based on data from Invest Europe.

In 2016, the PE investment amounts remained rather stable. PE funds located in Europe (statistics based on the “industry approach”; see Figure 23)²⁹ invested EUR 53.4bn, which means a small decrease by 1.3% compared to the previous year. At the same time, investments by PE funds from all over the world (including Europe) in portfolio companies based in Europe (“market approach”)³⁰ declined by 2.1% to EUR 52.5bn (see Figure 24). The number of European companies financed decreased by 7.9% to 5,899 in 2016.

Figure 24: PE investment in European portfolio companies³⁰



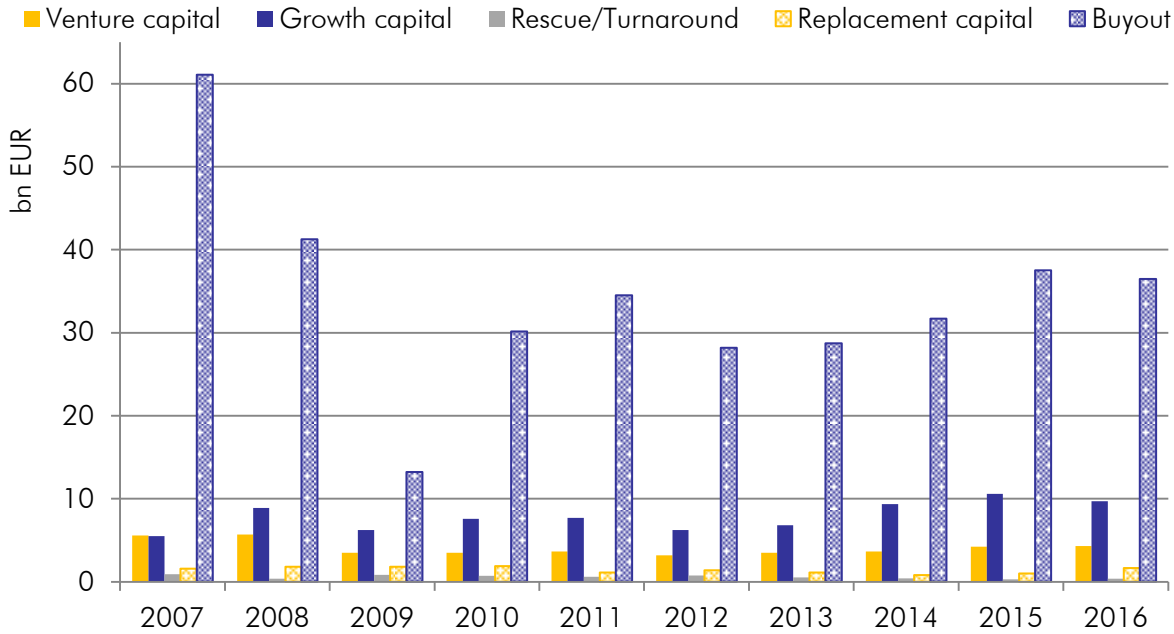
Source: Authors, based on data from Invest Europe

²⁹ This diagram shows data based on the “industry approach” (or “office approach”), i.e. by PE firms located in Europe (in contrast to the “market approach”, which shows investments and divestments based on the location of the portfolio companies).

³⁰ Investment activity by PE firms in portfolio companies based in Europe (“market approach”). All investment figures are equity value, i.e. excluding leverage.

A differentiation by stage focus (Box 4 provides an overview of the Invest Europe investment stage definitions) reveals that investments decreased in the two largest parts of the PE market, i.e. in the buyout (–2% to EUR 36.5bn) and the growth capital (–8% to EUR 9.7bn) segments (see Figure 25). Strong positive growth rates were recorded for rescue/turnaround (+23% to EUR 0.4bn) and replacement capital (+67% to EUR 1.6bn) investments. Venture Capital (VC) investments increased by 2% to EUR 4.3bn. In terms of number of companies financed, the VC segment accounted for the majority of PE investments (3,124 out of 5,899).

Figure 25: PE investments in European portfolio companies by stage focus



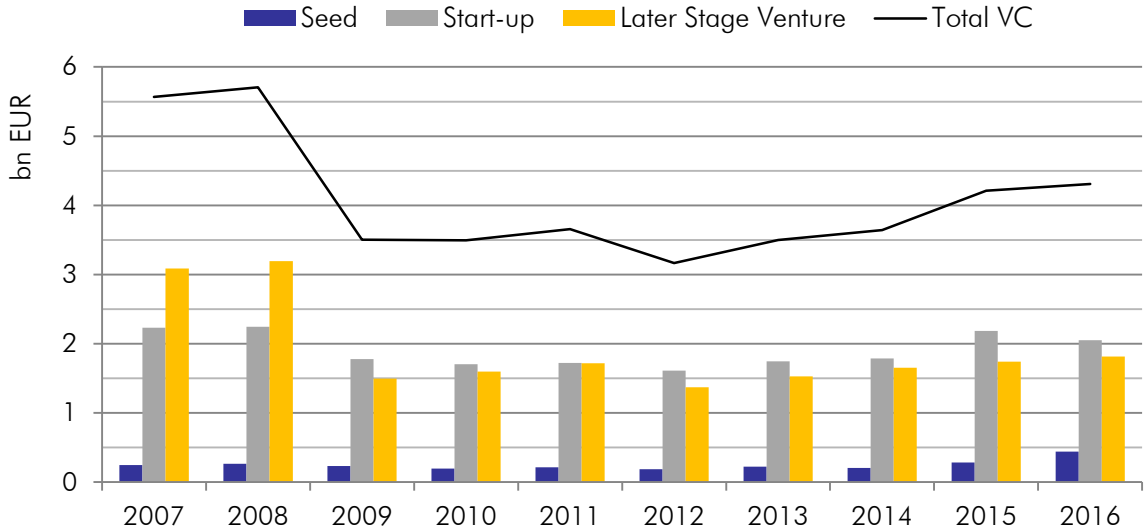
Source: Authors, based on data from Invest Europe

Within the VC market segment, investments with a focus on the seed stage surged by 54% to EUR 0.4bn.³¹ Later stage venture activities increased by 4% to EUR 1.8bn. Following their continuous improvement over the previous 3 years, start-up investments now exhibited a decrease by 6% to EUR 2.0bn (see Figure 26). Before the crisis, later stage venture was the driver of VC investment, but it is now far away from these activity values; in 2016, it was still 43% below its 2007 level. In contrast, since 2009, investments at the start-up stage have been higher than later stage VC investments.³²

³¹ With regard to seed investments, equity investments in Technology Transfer (TT) activities can contribute to reducing early-stage (pre-seed, seed and post-seed) funding gaps and sustain viable TT structures while generating over time financial returns for investors (EIF, 2016). TT activities encourage collaboration between research organisations and industry, the licensing of intellectual property rights, and the creation of start-up businesses and university spin-out companies. As a part of its TT activities, EIF supports business incubators. In the context of a cooperation with the University of Trier, EIF also contributed to a recent 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).

³² 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 Chapter 4.1.2.

Figure 26: VC investment amounts by stage focus



Source: Authors, based on data from Invest Europe

Box 4: Invest Europe definition of investment stages

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.

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.

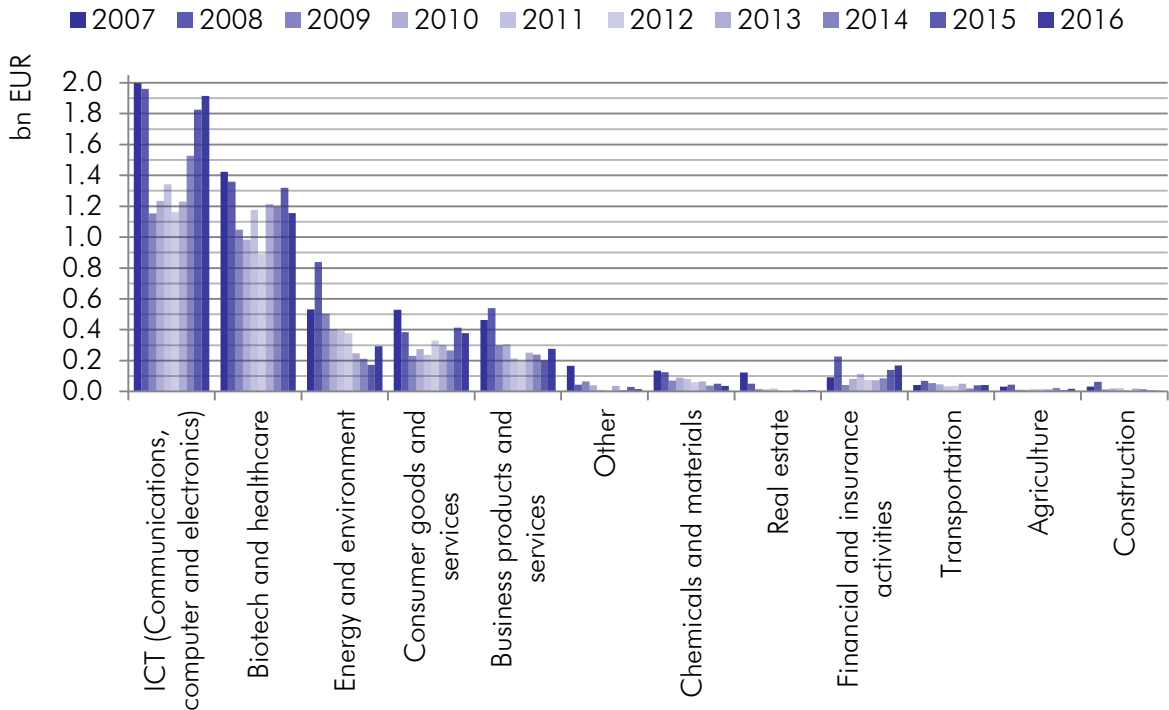
Rescue / Turnaround: Financing made available to an existing business, which has experienced financial distress, with a view to re-establishing prosperity.

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

Source: <https://www.investeurope.eu/research/about-research/glossary/> and Invest Europe (2017a).

Developments in venture investment by sector are shown in Figure 27. The relative importance of sectors has 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 in the past 10 years. Over the most recent 3 years, the *share* of ICT in total VC investment activity even increased, i.e. from levels between 33% and 37% in the 2007 to 2013 period to 42% in 2014 and 45% in 2016. In contrast, the share of investments in the energy and environment sector decreased from 15% in 2008 to (on average) 6% in the past 3 years.

Figure 27: Venture investment in Europe by sector focus, 2007-2016



Source: Authors, based on data from Invest Europe

Moreover, in particular the developments in the IT sector had a substantial impact on *structural* developments in the VC market. Chapter 4.5.2 provides a more detailed elaboration, while Box 5 provides an overview of corporate venture capital, which has also been affected by these changes. Furthermore, according to Invest Europe, market participants have observed more and more growth stage investments as follow-on investments in venture backed companies, which mean additional contributions from the PE industry that are not shown in VC investment statistics, but contribute to the growth stage investment statistics. In 2016 about 10% of the EUR 9.7bn in growth stage investments was received by venture-backed companies, according to Invest Europe.

Box 5: Corporate venture capital

The Invest Europe activity data cover fundraising, investment and divestment from PE and VC firms in Europe. A segment that is not covered under the Invest Europe PE activity statistics are, inter alia, corporate acquisitions outside of dedicated corporate venture programmes. However, corporate venture capital (CVC), which typically can serve both an investing corporation’s financial and strategic goals (e.g. to enhance its innovative capacity or to tap into new markets), has gained importance in recent years.

Box 5 continued:

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 three 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). The relatively low cost of capital has driven more corporates to become part of the game in the last years (Mankins et al., 2017). Available information points to strong growth of the sector. “Global Corporate Venturing”, a media publication and data provider for the CVC industry, estimates that, in 2016, USD 83bn were invested by 965 corporate investors in 1,961 CVC deals worldwide, which would account for two thirds of global venture capital investments, based on a VC definition that is broader than Invest Europe’s (Mawson et al., 2017).³³ Despite a stronger focus on contributing to the corporate’s strategic goals instead of pursuing purely financial objectives, CVC investors meanwhile also hold shares in European unicorns (Madhvani et al., 2017).

CVC investment could contribute to the scaling up of European companies with high growth potential to become global leaders. However, “Europe’s corporations are not benefiting from the success of European scale-ups” (Mawson et al., 2017). Only a comparatively small share of high-growth companies’ finance is provided by CVC investors in Europe. Despite a strong increase over the past three years, there are still fewer EU corporations active in CVC than in the US and Asia, where the CVC activity also exhibited higher growth. In 2016, 201 corporate investors invested in 252 CVC deals in Europe (compared to, e.g., 384 CVC investors and 1,065 deals in the US). Roughly half of the deals of European CVC investors were 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, which “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).

The geographical fragmentation of the European VC market

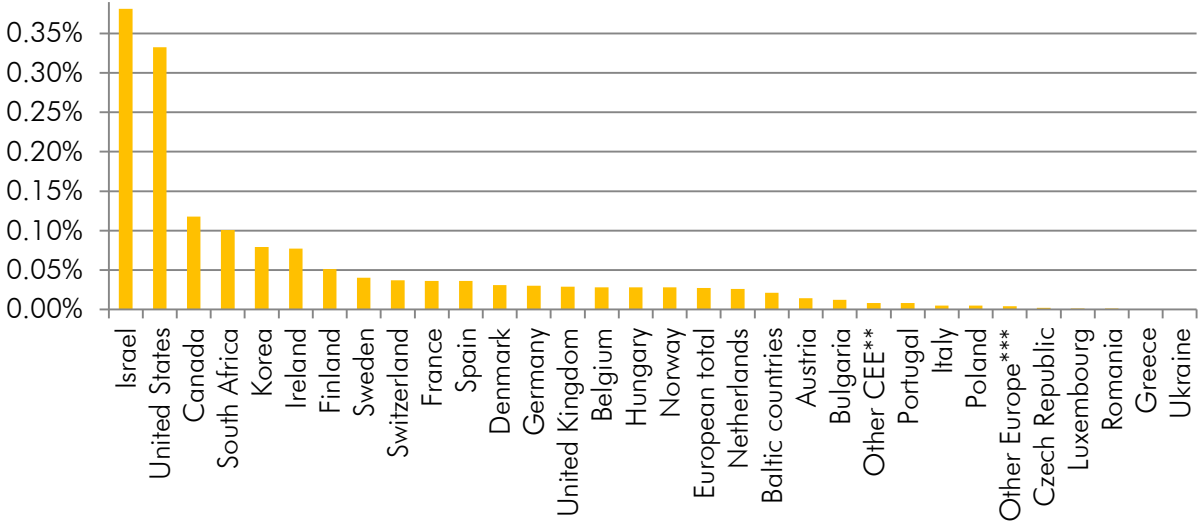
The European VC market has remained fragmented and is geographically far less homogenous than its US counterpart. Whilst the traditional core markets in Europe (Ireland, the UK and Scandinavia) have still a relatively high market activity after the crisis and others have recently caught up (e.g., Hungary), other countries continue to struggle with the size of their domestic VC market which is in no relation to their share in the aggregate GDP of the EU (e.g., Italy); Figure 28 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 equally from EU’s very fragmented institutional investor base.

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. Recent EIF research has shown that European hubs, and in particular those backed by EIF investments, act as the beating heart of

³³ Data on corporate venture capital is scarce, in particular for Europe, but, for example, information presented by <http://www.globalcorporateventuring.com/> can give a flavour of the market developments. Additional information is also presented in Giese (2014), a thesis prepared in cooperation with EIF RMA in fulfilment of the “Business Administration” M.Sc. at the University of Trier.

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 signal of deeper integration of the European VC market, EIF may hold a vantage point in fostering the consolidation of a European-wide VC ecosystem.

Figure 28: VC investments by country of portfolio company, % of GDP, 2016*



*2016, or latest available year.

**Other CEE: Bosnia - Herzegovina, Croatia, FYROM, Moldova, Montenegro, Serbia, Slovakia, Slovenia.

***Other Europe: Cyprus, Iceland, Liechtenstein, Malta, San Marino, Vatican City.

Source: Invest Europe, OECD (2016a)³⁴

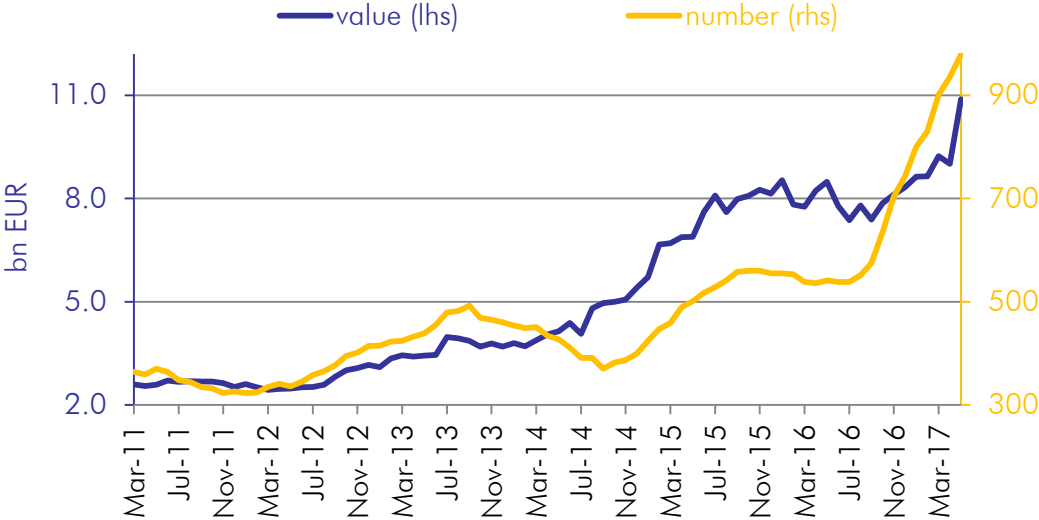
Recent trends

There are indications for an ongoing high market activity. For example, Go4Venture Advisers’ early indicator, the European Tech Headline Transactions Index³⁵, recorded, on average, strong increases in the number and total value of investment deals since the second half of last year (see Figure 29, which shows the index development on a 12-month rolling-horizon basis). However, looking ahead, there are also important challenges for a further market recovery, mainly due to risks related to the global and European structural and political framework conditions (see chapter 4.5 for details).

³⁴ Source for “Europe”: Invest Europe; data as published in 2016. Europe = European average; Europe as covered by Invest Europe (i.e. EU minus Cyprus and Malta, but plus Norway, Switzerland, Ukraine, and those Ex-Yugoslavian countries that are not part of the EU).

³⁵ Go4Venture’s European Tech Headline Transactions Index “is a derivative index” which is compiled “based on the deals reported in major trade publications and news feeds [...] as an early indicator of evolutions in the private investments market for European Technology Media and Telecoms (TMT) companies. TMT is defined to include Technology, including IT, Healthtech (except drug discovery) and other Tech (essentially Cleantech and Materials); Media, as in Internet & Digital Media; Telecom Services (alternative operators only)”. For this and more information on definition and methodology see <http://go4venture.com/hti/>.

Figure 29: European tech headline investment transactions (12-month rolling horizon)³⁶



Source: Authors’ calculations, based on Go4Venture Advisers data

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. Certain segments outside the definition that Invest Europe applies for the collection of its activity statistics are not covered, e.g. business angels’ activities. However, business angel financing has gained importance in recent years.

Business Angels (BAs) represent an important class of private equity investors, primarily consisting of high-net-worth individuals, usually with business or managerial experience. According to a study by Slush & Atomico (2016), 22% of all tech-related business founders invest as angels, with repeat entrepreneurs more active than first-time founders. BAs tend to invest their own money, either individually or in formal or informal syndicates, in businesses which are not publicly traded. (See, also for a general description of BA financing, Kraemer-Eis and Schillo, 2011; OECD, 2016b; OECD, 2011; BAND, 2016.)

BAs differ from VC funds, which primarily invest third parties’ funds (e.g. institutional investors’). Angel-financed companies are typically in earlier stages of their development and the holding periods of BA investments are typically shorter than the corresponding periods in VC funds (Kraemer-Eis and Schillo, 2011). BAs’ transaction costs are relatively low, which allows them to invest on a lower 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 services 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, 2016b). According to several studies, BAs have a positive impact on the growth of the firms they invest in, their

³⁶ In the two lines in the diagram, each data point shows the sum of the total value of deals (blue line) and the sum of the total number of deals (yellow line) observed in the month to which the respective data point is related and over the 11 months prior to that data point. For example, in July 2013, the total value of deals observed during the period from August 2012 to July 2013 amounted to EUR 4.1bn, and a total number of 480 deals were observed during the same period.

performance, and survival (Lerner et al., 2015; OECD, 2016b). The success of the investees seems to be strongly based on the services beyond financing that BAs provide (Kerr et al., 2011). There is evidence that BAs are relatively resilient to changing market cycles (OECD, 2016b), and angel investments in early-stage high-growth companies tended to increase during the crisis, 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, 2016b) and/or to improve their skillset and experience (Capizzi, 2015). Moreover, vehicles 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, 2016b).

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 on their investments are rarely disclosed. Further, nothing can prevent an individual from identifying oneself as a ‘virgin’ angel, although he/she may have never actually invested. Others may have occasionally acted as angels, but are no longer looking for investment opportunities. Moreover, the so called “invisible market” makes a precise estimation of the angel market difficult. There are studies that the invisible part of the market is up to seven times greater than the visible part (CSES, 2012), while others estimate even a multiplier of around ten (EBAN, 2014, 2016). 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 is typically imprecise and can only be used as indication or very rough estimate. For the visible market segment, data is collected by angel associations from angel groups and networks. In the following, we use these statistics, as currently no better information is available. However, it is important to note the shortcomings of these statistics, which we take from the related EBAN disclaimer that we show in Box 6. Information on the state of angel investing in different European countries can also be found in BAE (2015).

Box 6: 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 European Commission to CSES about the Business Angels 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.

Knowing the underlying limitations, the main objective of the EBAN statistics is to provide a better understanding of the European early stage market. The EBAN publication comprises information collected through direct surveys from BA networks, national federations and other early stage investors.

Source: EBAN (2016)

At a European level, the European Business Angel Network (EBAN), reported an increase in BA investment by 5%, compared to the year before, to EUR 6.1bn in Europe in 2015 (EBAN, 2016;

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 607m, represents 10% of the whole market. The number of BAs is estimated at 310k (comprising 30k angels organised in networks and an estimated 280k “invisible” BAs), which represents an increase by 7% compared to 2014. While the market has been growing in terms of total amount invested as well as number of BAs, the number of deals decreased, which could be due to increased BA co-investment funds and syndication among angels. The number of BA networks (BANs) in Europe has been relatively stable at around 470 over the preceding three years. However, compared to 2003 the number increased by 17%. The positive trend in European BA activity until 2015 is confirmed by more recent PitchBook information; however, according to this report, the activity was less favourable in 2016 (PitchBook, 2017b).

Most of the BA activity within the EU is happening in the UK, Spain, Germany, France and Finland. When compared to GDP, total BA investment amounts are relatively high in Estonia, Finland and Portugal. In 2015, only 6% of BA deals targeted companies outside their home country; in some countries BA co-investment funds, tax break or grant schemes do not support or not even allow investment abroad (EBAN, 2016).

The average amount invested per company increased by 6% to EUR 184k in 2015. 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. According to EBAN (2016), investments per individual angel vary between EUR 9k and EUR 100k; the average investment per BA has remained relatively stable at EUR 20.0k in 2015 (EBAN, 2016).

ICT has continued to be by far the most attractive target sector for BA deals, both in terms of investment amounts (with a share of 22% of the total investment amount) and number of deals (37%), followed by mobile (13% of total amount, 7% of deals), biotech/life sciences (11%, 9%) and finance/business services (10%, 6%). Early stage and start-up phase companies have received the largest share of BA investments (40%), but also seed investments (32%) account for a considerable part of the market.

While co-investments with other BAs are still the most common deal form, the relevance of investments alongside early-stage funds has increased in the recent past. In some countries, governments created such funds with favourable terms for BAs’ co-investment, inter alia supported by the European Angel Fund, an initiative advised by the EIF, which provides equity to BAs and other non-institutional investors for financing innovative companies in the form of co-investments.³⁷ Syndication among angels has also increased, inter alia due to co-investment schemes, in which the threshold amounts are relatively high for a single BA (EBAN, 2016).

As explained, the invisible part of the market is dominant – therefore, data availability for general statements is limited. However, it can be assumed that BAs behaviour did not move in the same direction like bank lending or venture capital supply during the crisis. Mason and Harrison (2013), e.g., showed for the UK that angel investment activity has held up since the onset of the crisis and

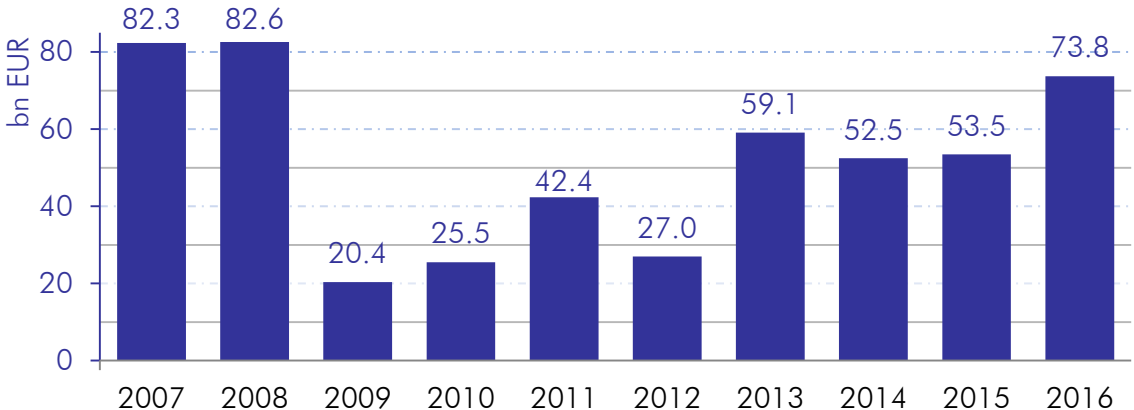
³⁷ See www.eif.org/eaf for more information about the EAF.

they emphasise the economic significance of this market segment. Moreover, they underline the need for ongoing government support. Recent 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, 2015a). According to the OECD (2016b), 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, and Box 14 for details), 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, 2017c). A recent overview of barriers to BA financing in Europe and recommendations how these could be mitigated are provided in AFME (2017c).

4.2 Fundraising activity

In 2016, total funds raised by PE firms located in Europe strongly increased by 38%, compared to the year before, to EUR 73.8bn, which constitutes the highest value since 2008 (see Figure 30). This was mainly due to the 71% increase of the amount raised by funds with a focus on buyouts³⁸ (EUR 56.3bn), but also fundraising in the growth capital segment slightly increased (+1.2% to EUR 3.9bn). In contrast, reduced fundraising amounts were reported for funds focussing on mezzanine capital (-81% to EUR 0.7bn) and for funds with a generalist focus (-17% to EUR 6.5bn).

Figure 30: Funds raised by PE funds located in Europe (incremental amounts raised during year)



Source: Authors, based on data from Invest Europe

³⁸ Box 7 provides an overview of the Invest Europe fund stage foci definitions.

Box 7: Invest Europe definition of fund stage foci

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

Early-stage fund: Venture capital funds focused on investing in companies in the early stages of their lives.

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.

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.

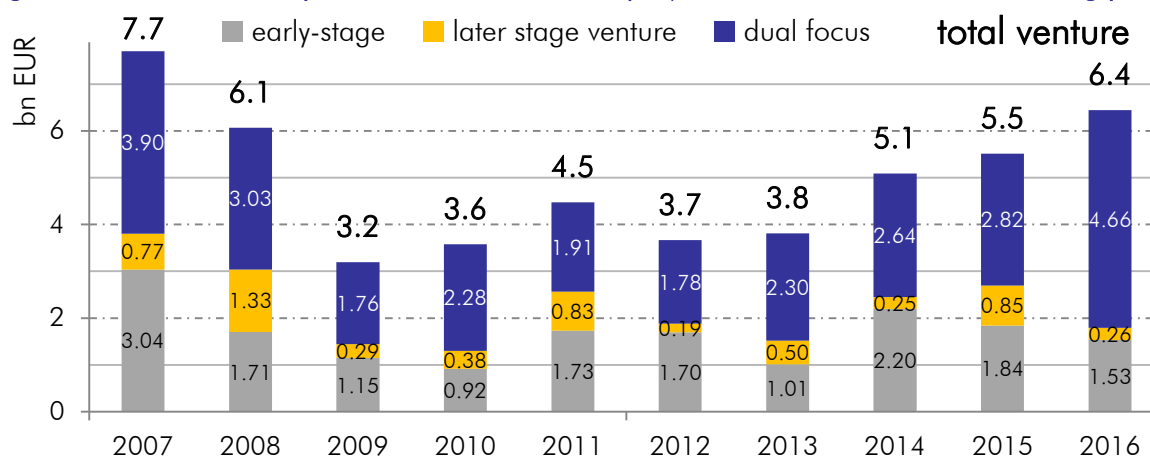
Mezzanine fund: Funds using a hybrid of debt and equity financing, comprising of equity-based options (such as warrants) and lower-priority (subordinated) debt.

Venture fund: Venture capital funds focused on both early and later stage investments.

Source: <https://www.investeurope.eu/research/about-research/glossary/> and Invest Europe (2017a)

In the venture capital segment, fundraising increased by 17% to EUR 6.4bn (see Figure 31). This was the highest amount since 2008. While funds with a focus on the early stage (–17% to EUR 1.5bn) and later stage venture (–70% to EUR 0.3bn) raised less volumes, a remarkable increase was recorded for venture funds with a focus on both early and later stage investments (+65% to EUR 4.7bn).

Figure 31: Funds raised by VC funds located in Europe (incremental amounts raised during year)

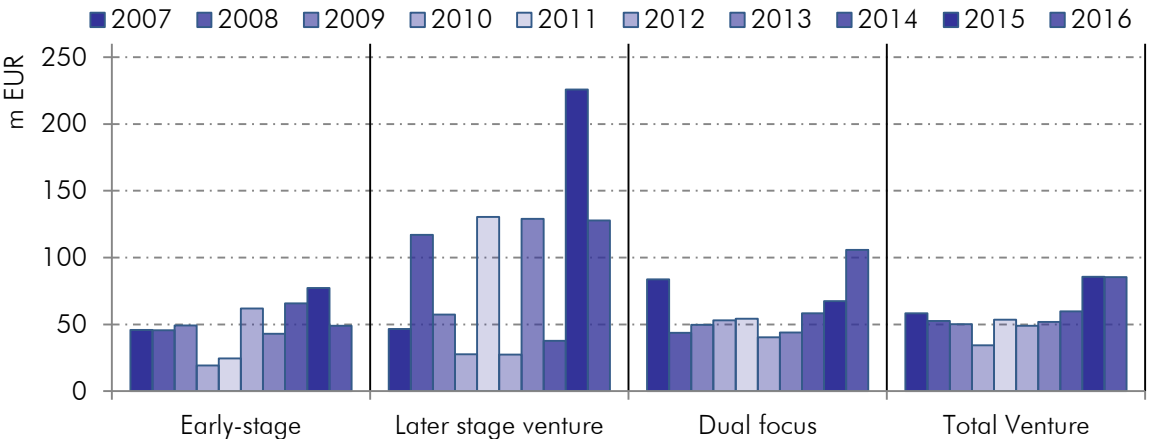


Source: Authors, based on data from Invest Europe

In 2016, the average VC fund size has remained relatively steady at EUR 85m (see Figure 32), i.e. only 0.4% lower than the record high reached in 2015, according to the Invest Europe statistics, which started to report VC fund sizes in 2007. However, while the average sizes of funds focussing either on the early stage (–37% to EUR 49bn) or on later stage venture (–43% to EUR 128bn) decreased substantially, those funds with a focus on both stages showed a further increase by 57%

to EUR 106bn. The number of final fund closings remained almost stable at 45 in 2016 (46 in 2015). Final closings of funds with a primary focus on the early or later stage decreased, while more funds with dual focus were finally closed. Based on 2015 data, Slush & Atomico (2016) reported a decline in the number of smaller funds with a size of less than EUR 50m and an increase in the number of funds with a larger size. Given the evidence in previous studies, which indicated that small fund size was one of the reasons for poor European VC performance (Kelly, 2011), the current finding might mean positive news.

Figure 32: Average VC fund size³⁹ (based on final closings, cumulative amounts raised since inception)



Source: Authors, based on data from Invest Europe

However, EIF internal analysis suggests that larger funds are often managed by teams that previously had smaller funds that performed well. Thus, the size would 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.

A sign of investors’ cautious sentiment for VC as a consequence of the crisis has been the shift in the investor base, which went on during the past years (see Figure 33). According to Invest Europe figures, government agencies accounted for 25% of total investments into VC funds in 2016. This share had increased from 13% in 2007 to 36% in 2011, before it came down again during the last 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 0.6bn p.a. in

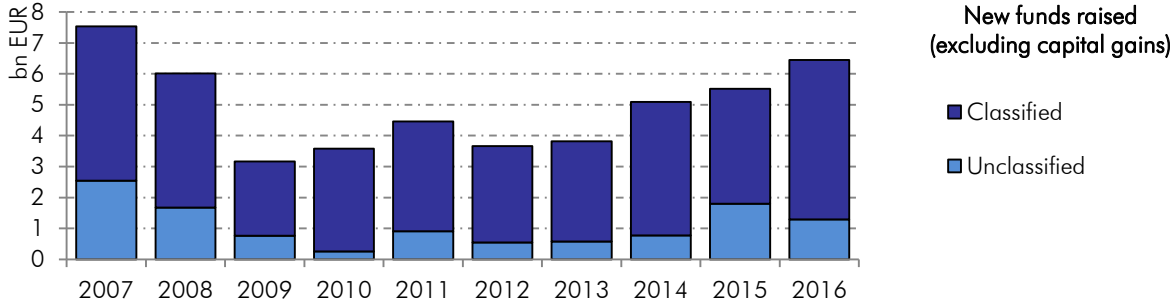
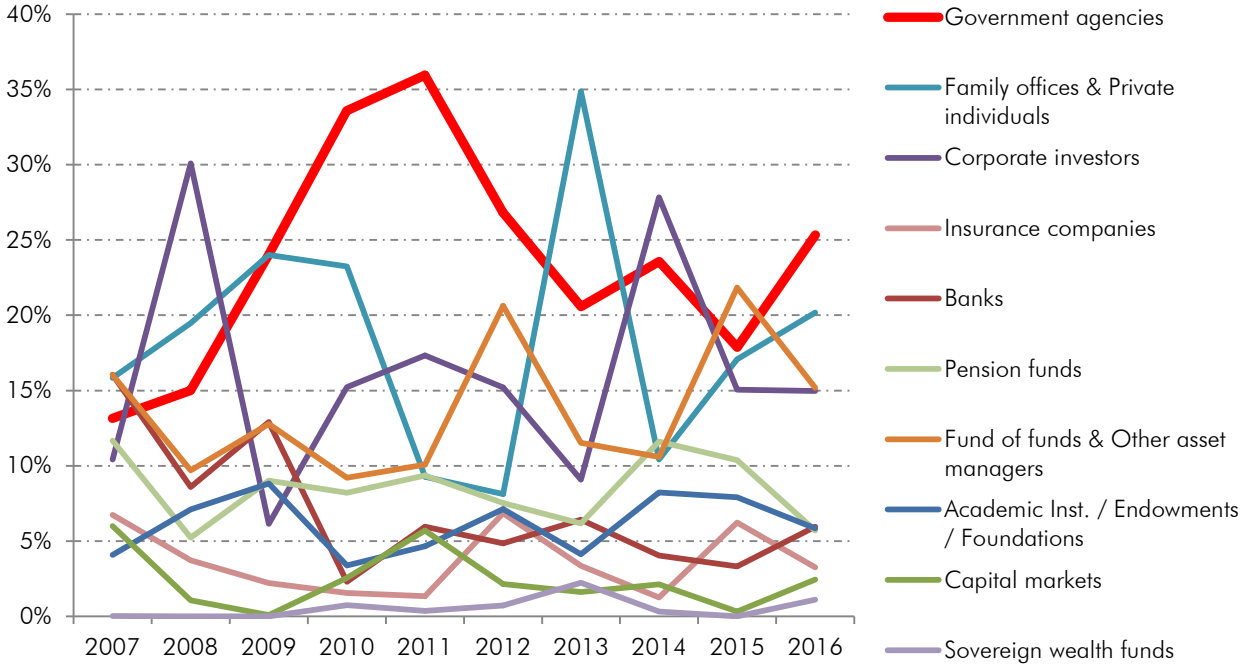
³⁹ The results for 2016 are based on 45 final VC fund closings (17 funds with an early-stage focus, 2 funds with a later stage focus and 26 funds with a dual stage focus).

2007-2009 to EUR 1.0bn thereafter. It remains to be seen if the percentages reported for government agencies in 2015 and 2016 will be confirmed in later issues of the Invest Europe statistics, i.e. when the relatively high shares of 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 achieving 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 for a recent EIF Working Paper by Kraemer-Eis, Signore and Prencipe (2016), which shed more light on the impact of EIF on the VC ecosystem. The authors estimate, inter alia, 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 hints to 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). More information can be found in Kraemer-Eis, Signore and Prencipe (2016); a longer summary is provided in a previous ESBFO edition (Kraemer-Eis, Lang, Torfs and Gvetadze, 2016a).

Figure 33: Investor base: Share of government agencies in VC fundraising⁴⁰



Source: Authors, based on data from Invest Europe

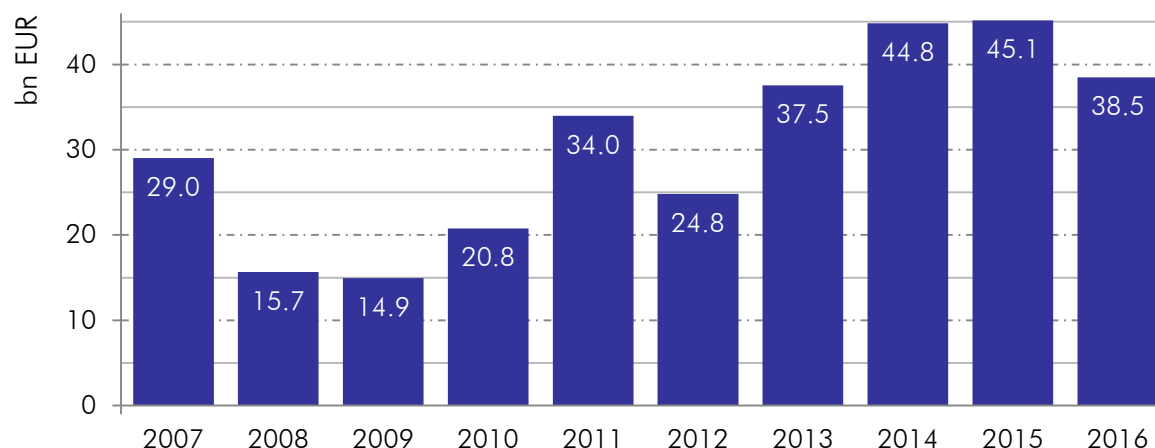
Moreover, EIF is supporting a relatively high number of first-time teams, and many VC funds in which EIF invested successfully managed to close with their full target size. It is also important to see that many of the more established VC funds being the pillars of Europe's VC market today would not be 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 an Unquote Intelligence (2014) survey among General Partners (GPs) and Limited Partners (LPs), which 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".

⁴⁰ Based on incremental amounts raised during year (in contrast to final closings only). The data in this diagram (as well as in others) may differ from those in previous ESBFO issues, because Invest Europe released its statistics for the first time based on a new database in 2017. All data since 2007 was restated and complemented with additional information.

4.3 Divestment activity

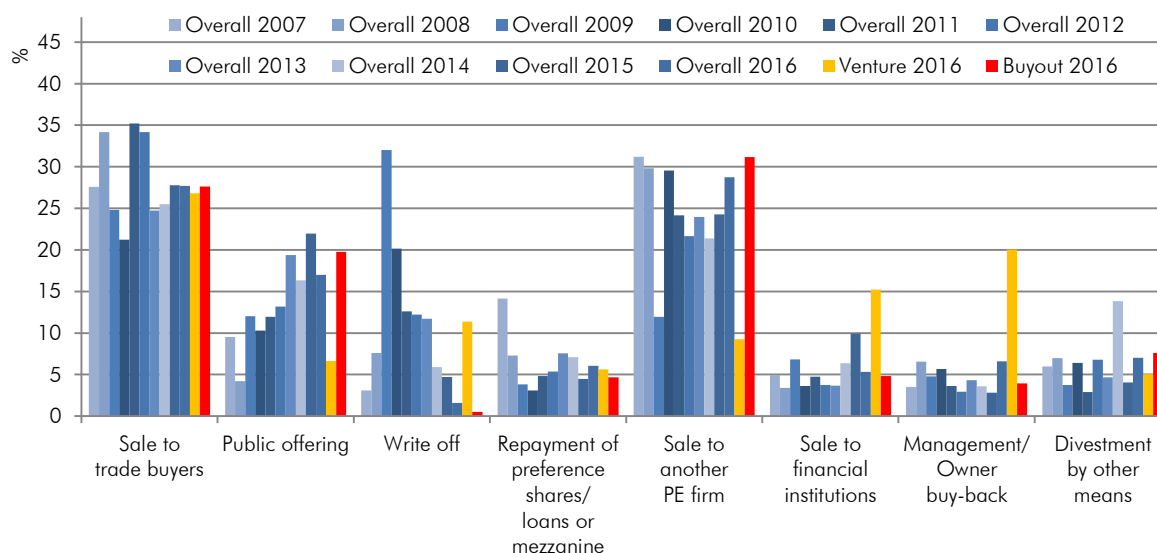
Over the past years, the exit markets have shown remarkable strength. In 2013, 2014 and 2015, Invest Europe statistics had recorded the highest PE divestment amounts since 2007. Despite the 15% drop to EUR 38.5bn in 2016, total PE divestments of European portfolio companies are still at relatively high levels (see Figure 34).⁴¹ However, the recent decline might reflect increased concerns related to the current market environment (see also chapter 4.5).

Figure 34: Total PE divestments (by amount at cost) of European portfolio companies



Source: Authors, based on data from Invest Europe

Figure 35: Divestment routes (shares)⁴²



Source: Authors, based on data from Invest Europe

⁴¹ 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, hence not including any profit on the investment.

⁴² "Overall" figures are not the weighted average of the "buyout" and "venture" figures, as "overall" figures additionally include the growth, rescue/turnaround and replacement capital market segments.

The decline was mainly due to lower activity in the buyout (–19% to EUR 28.1bn) and growth (–18% to EUR 5.9bn) segments of the market. In contrast, divestments in the venture segment increased (+13% to EUR 2.4bn).⁴³

A closer look at the details of the Invest Europe divestment statistics shows the remarkable strength of the exit markets in the past years. As regards overall PE, the relative importance of write-offs continuously decreased since 2010 (see Figure 35). Trade sales and sales to another PE house together account for more than half of the total divestment amounts. Moreover, the share of public offerings increased considerably, on average, over the past years.⁴⁴ In the VC market, the relative importance of write-offs has also continuously decreased since its peak in 2012, although it is still higher than in the buyout segment, which reflects the characteristics of the VC market.

Box 8: Invest Europe definition of exit routes

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.

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

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 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.

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:

- *Depository 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 Institutes* 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.

Source: <https://www.investeurope.eu/research/about-research/glossary/> and Invest Europe (2017a)

Besides that, EIF insight suggests that the number of “fast” exits on the VC side (less than 2 years holding period) have tended to increase over recent years. This could be explained by fund

⁴³ The numbers for VC, buyout and growth divestments do not sum up to total PE divestments, as total PE divestments additionally include the rescue/turnaround and replacement capital market segments.

⁴⁴ In the Invest Europe data, the category “Public Offerings” includes first divestment following flotation (IPO) and sale of quoted equity post flotation.

managers tending to privilege a quick divestment due to still high valuations, combined with prevalent downside risks, instead of longer term buy and build strategy.

More recent information suggests that the activity in the exit markets might have continued to take a breather in the current year; moreover, the five largest acquisitions during the first quarter were made by foreign buyers from non-European countries (PitchBook, 2017b). In contrast, with regard to IPOs, a pick-up was recently observed (McCrum, 2017; AFME, 2017d, confirms an increase of IPOs in Q1/2017 compared to the same period of the previous year).

Box 9 summarises the results of a recent EIF WP analysing the exit returns of EIF-supported seed and start-up VC investments in between 1996 and 2015.

Box 9: The exit return of EIF-supported seed and start-up VC investments

A recent EIF paper (Prencipe, 2017) assessed the exit returns of 3,600 EIF-supported seed and start-up VC investments, between 1996 and 2015, the main results of which are summarised here briefly.

Throughout 20 years of EIF-supported venture capital (VC) activities, the exit scenery of EIF's venture investments has shown sensitivity to the business cycle. While trade sales steadily increased following the expansion of EIF's VC activity, major recession events such as the dot-com bubble (2001–2002) and the European sovereign debt crisis (2009–2010) were linked to peaks in investment write-offs. On the upside, the number of profitable trade sales has steadily increased since 2010, following the modest economic recovery, low interest rates and a rekindled confidence in the tech industry.

The paper also uncovered evidence that start-up valuations are responsive to movements in the NASDAQ Composite index. However, while the European VC ecosystem may be shaped by common macro-factors, there is a high degree of heterogeneity in the exit trends within Europe, particularly across geographies and industries. At fund or fund-of-funds level, the diversity and the granularity of start-up investment opportunities leave room for investors' diversification strategies that can effectively lower the correlation with other asset classes. Moreover, recent years display a clear upward trend in both average and median returns: the weighted average of the multiples on cost (MoCs) at exit for realised VC investments stands at 1.16x for the entire period, the median being 0.12x. The distribution of exit MoCs is extremely right-skewed: 70 percent of exited investments are either written-off or sold for an amount below cost. At the other side of the distribution, for the average fund, 4 percent of exist account for nearly 50 percent of total proceeds.

About 50% of the performing EIF-backed European investees are acquired by non-European corporations, particularly from the US. US-based buyers are typically larger in terms of assets and revenues, more innovative and mostly active in the ICT domain. 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 (and often former successful start-ups). At the crossroads between scaling-up and being acquired, later-stage funding becomes essential. While both acquisitions or foreign buyers are not per se negative, their joint existence may be a signal that European start-ups lack the growth capital necessary to expand and strengthen their position. As such they may end up being acquired, unless they have the chance to go public.

The paper concludes by analysing the factors affecting the exit performance of VC investments. The empirical analysis delivers key results that can be summarised as follows:

Box 9 continued:

- **Geography-related take-away.** While fund managers from the Northern European region display higher propensity to write-off their positions, investments performed by UK and Ireland investors are strongly associated to a greater incidence of profitable trade sales and an initial public offerings. Although causality is never claimed, British and Irish VC funds might play an important role in shaping performance at fund-of-fund level. Moreover, in some specifications of our model, a shorter fund-company geographic distance is associated with a higher chance of a positive trade sales.
- **Industry-related take-away.** Compared to ICT, Life Sciences investments have a significantly higher chance of an IPO. On the other hand, investees in the Services industry have a higher probability of profitable trade sales.
- **Startup-related take-away.** Becoming a Unicorn increased the probability of being acquired, but is not significantly related to the chance of going public. This dynamics might suggest investors' caution for IPO exit strategies when the company private valuation is very high.
- **Investor-related take-away.** More recent vintage years are associated with less likely write-offs and IPOs. Moreover, the first investment amount, i.e., the size of the initial bet on a start-up is negatively associated with the probability of unprofitable trade sales and positively associated with IPO likelihood. Hence, investors appear able to recognize and cherry-pick successful companies at the time of the first check. In some specifications, a larger number of investments made by a VC fund is related to a higher probability of experiencing a write-off, but also to a greater chance of IPO. This last result is non-trivial, because it advocates the idea that enlarging the number of portfolio companies in a fund increases the chance of getting an outlier on board for an investor. Also, venture capitalist's experience is strongly correlated with a lower probability of write-off and higher probability of profitable sale. However, first-time VC teams are no significant predictors of any exit outcome, a finding that defies the expectation of under-performance. This might mean that VC experience is relevant only when it is markedly high. At the same time, it might also suggest the strong selection effect of EIF to choose only high-potential first-time VC teams.

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

Following EIF's definition (see EIF, 2016), the lower mid-market (LMM) covers fund strategies targeting equity and mezzanine investments at growth and buyout stages with a particular focus on SMEs and mid-caps. EIF provides its core LMM products (equity, hybrid debt-equity⁴⁵ and private debt) as alternative sources of long-term finance to established businesses and later-stage technology companies. 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.

During the first months of 2017 the EIF has been observing the continuation of the trend already identified during the past two 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 high exit activity, effectively confirming the recovery path observed since 2015. As a matter of fact, record

⁴⁵ Hybrid debt-equity/mezzanine finance is a diverse asset class in between traditional senior debt and equity instruments. According to the OECD (2014b), "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."

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, together with a backdrop of strong European macroeconomic data, to a very active fundraising environment, where managers with a sound track record are able to complete the fundraising of funds in a shorter timeframe than observed before. However, as mentioned in chapters 4.1 and 4.5, 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 ample liquidity in the markets. An evidence of this is that in 2017 so far the M&A market has seen more buyout deals with a size over EUR 1bn than during the whole of 2016, with some investors considering this as an indicator of a possible new peak on the long-term investment cycle. According to Epsilon Research (2016a,b), investors were concerned, inter alia, about the global economic growth perspectives, the potential tightening of the monetary policy, in particular in the US, and political uncertainty. However, experienced managers are still able to invest in less visible mid-market companies and to provide added value in order to have them becoming more attractive and sustainable.

4.5 PE prospects

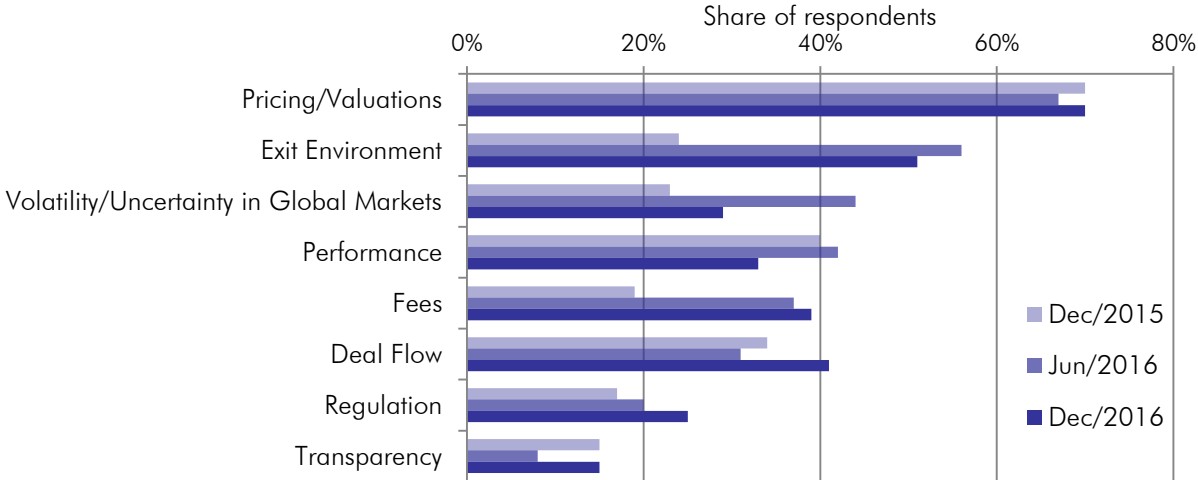
4.5.1 Current situation, risks and market actors' concerns

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, at least in some parts of the markets. However, it remains still an open question if a sustainable longer-term positive trend can become prevalent. While in some cases an improvement in performance has indeed been driven by fundamental economic value, part of the upside performance may also be due to higher demand due to the ample liquidity in the markets. All this is to be looked at with caution. It is then, however, 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. In addition, 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.

The previous favourable developments in the PE/VC market might become even more strongly contested by risks related to the current economic, monetary and political environment. According to a recent Preqin survey⁴⁶, pricing/valuations were still perceived as the biggest challenge investors were facing (Preqin, 2016c). However, while the proportion of investors that raised this concern (70%) was almost the same as in the previous waves, investors were now much more worried about the exit environment (51%) than one year ago, but also, although to a lesser extent, about the deal flow (41%); see Figure 36. However, these issues are still less of a concern in Europe than in, e.g., the US, as the European PE market "still has room to grow" (Bain & Company, 2017).

⁴⁶ The latest (i.e. February 2017) issue of the "Preqin Investor Outlook: Alternative Assets" is based, inter alia, on a series of interviews with more than 500 institutional investors from around the world, of which 33% are located in Europe. The interviews were conducted in December 2016 (Preqin, 2016c).

Figure 36: Investor views on the key issues facing PE



Source: Preqin (2016a, b, c)⁴⁷

A Preqin survey among fund managers confirmed that pricing/valuations are perceived as the most important challenge for the PE industry (Preqin, 2016d). Warning voices of possible overheating have been uttered since some time (e.g. Go4Venture Advisers, 2015), because of the strongly expansive monetary policy stance that has led to ample global liquidity and very low interest rates. In line with this, fundraising, liquidity and availability/pricing of debt financing were not among the upper ranks of investors’ biggest challenges (Preqin, 2016a,b,c).

Regulation is still among investors’ concerns, albeit only mid-table. We cannot go into a detailed assessment of all the different rule sets here, but refer the reader to related publications (e.g. Invest Europe, 2017b, provides a comprehensive overview of the regulatory initiatives and changes and their potential impact on PE/VC in Europe; Kraemer-Eis and Lang, 2017, discuss the regulatory initiatives related to the Capital Markets Union; see also Box 14 for an overview). Mueller-Marbach and Steinmetzer (2017) give an insight into recent developments in terms and conditions of PE/VC funds. Besides regulatory initiatives, structural market weaknesses such as the difficult access of smaller companies to IPO markets (see, for example, EU IPO Task Force, 2015), limit the upside potential of the European VC market.

Another key concern is the possibly longer period of uncertainty about the timing and nature of the UK’s departure from the EU (“Brexit”), which might have negative implications for the PE industry, investors and (potential) investee companies. Invest Europe (2017b) provides an overview of issues under discussion that might have an impact on PE. According to a Collier Capital (2016b) survey,⁴⁸ 37% of LPs expect a negative effect on European PE returns in case of a “hard” Brexit, while only 6% expect a positive effect. However, there seems not to have been a significant shift in VC investment away from the UK so far, despite news about slowing fundraising activity in the UK

⁴⁷ Please note that some response options have changed or were reported with slight differences in wording in the reports quoted.

⁴⁸ Collier Capital’s Global Private Equity Barometer is published twice-yearly and intends to give an overview of the plans and opinions of institutional PE investors (LPs) based in North America, Europe and Asia-Pacific (incl. the Middle East). The 25th edition (winter 2016-17) of the Global PE Barometer captured the views of 110 PE investors from round the world, surveyed in September-October 2016.

(PitchBook, 2017a). In case business founders already perceived negative effects, they were mainly affected by increased uncertainty, currency fluctuations and the impact on market expansion (Slush & Atomico, 2016).

4.5.2 Structural challenges affecting European PE and VC

Moreover, the PE and VC markets are challenged by economic developments of the last years that have 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 the internationalisation and globalisation of their business models. As a result, and 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 sustain the risk of seeing their business model being out-dated before they capture a significant market share. However, 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, 2016b; 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 sometimes relatively small funds with the aim of scouting emerging business models whilst a new class of giant VC funds expands globally from the US, providing large scale capital to businesses in their global market expansion. In the large scale technology growth capital space Europe has no established players, which explains why European funding rounds especially in digital technology growth capital have typically been led by US VC growth capital funds. However, a number of growth stage VC funds have successfully completed their fundraising recently and hence, going forward aim to play the lead role in funding rounds of, for example, digital economy companies in Europe on their pathway to global category leaders.

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. Moreover, 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 statistics confirms that the gap between the VC markets in the US and in Europe is particularly high at the later stage (AFME, 2017c; Echikson 2017). Moreover, 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. Moreover, in the period 2007–2015, the average VC-backed US company received five times higher amounts than its EU counterpart, i.e. EUR 6.3m compared to EUR 1.3m (AFME, 2017c; Kraemer-Eis and Lang, 2017). Duruflé, Hellmann and Wilson (2016) identify the creation of larger

venture funds and a venture debt market, a reinvigoration of tech IPOs, improved markets for secondary shares and avoiding to sell companies too early as main elements of a strategy that would help Europe in catching up to the US in terms of scale-up funding. (We look into venture debt in Europe in Box 10; see also Box 5 for an overview of corporate venture capital, which can also be a tool to improve the financing for scale-ups.)

Moreover, in order to strengthen investment capacities, co-investment can be a promising feature of the PE market. According to Collier Capital (2015), “most LPs expect co-investments to remain a fixed feature of the PE landscape”. Moreover, a large majority of LPs reported “that their co-investments have outperformed their overall PE portfolios in recent years” (Collier Capital, 2016a). In an EIF survey among VC fund managers in Germany, two thirds of the participants saw a benefit from the availability of stable providers of co-investment capacity when addressing potential investment opportunities (source: EIF). This is even more relevant, as the large majority of LPs seems to believe “that the LP community lacks the necessary investment skills, experience and processes to make successful co-investments” (Collier Capital, 2015). Time constraints, a limited understanding of co-investment performance drivers, and the inability to recruit staff with the requisite skills were cited as “the main challenges preventing LPs from making successful co-investments”. However, the markets have started to develop and, looking forward, investors believe that the economics of co-investing will change. In the most recent Collier Capital survey, 62% of LPs expected more co-investment opportunities coming with fees and carried interest in the future (Collier Capital, 2016b).

Box 10: Venture debt in Europe⁴⁹

Recently there have been several calls for supporting a more enhanced and larger venture debt market in Europe (see, e.g., AFME, 2017c, and Duruflé et al., 2016). Although there is no universally accepted definition of “venture debt” (Duruflé et al., 2016), it is often defined as a form of debt financing provided to VC-backed companies that lack the collateral or cash flow to access traditional loan financing or that prefer higher flexibility. In this way, it complements the equity financing of the company, as it provides customised debt to young and innovative companies as an interim financing to grow their operations before having another VC financing round. Typically, venture debt comes in the form of “senior debt, collateralised by a company’s tangible or intangible asset and structured as a term loan which amortise over time, with warrants for company stock” (AFME, 2017c). It is usually provided by banks or funds (Duruflé et al., 2016).

There are various situations where venture debt can be very helpful for an enterprise. First, venture debt may be the right choice if the business wants to increase its balance sheet and accelerate growth while not accepting further dilution through equity (Levin, 2008; Gordan, 2012; Toenies & Fischer, 2013; Voelpel, 2017). Second, if the start-up needs more time to raise its next VC funding, venture debt may help to bridge this time span and thus increase the firm’s valuation (Levin, 2008). Finally, venture debt can be useful in situations when the company wants to purchase new equipment or undertake an acquisition, or when the financial demands are too small to be met in a financing round (Gordan, 2012; Feinstein et. al., 2015). Hesse et. al. (2015) state that the more indebted a new venture is, the faster it grows and in fact the more profitable it is. However, this should be treated with caution, as higher indebtedness might also increase the likelihood of bankruptcy (Ibrahim, 2009). However, a certain amount of debt helps to benefit from a tax shield (Ibrahim, 2009).

⁴⁹ This text box is largely based on AFME (2017c) and Voelpel (2017).

Box 10 continued:

When used sensibly, venture debt decreases the need for existing VC investors to deploy follow-on funding. The absence of dilution is particularly welcome for equity investors and the management team. Venture debt is useful for early-stage businesses with high research and development expenditures as it enables more time to the development of new products and hit new milestones which will be essential to attract new equity investors on the next fundraising round. On the other hand, and like any other form of debt finance, venture debt should not be used as a financing of last resort and debt payment should not be too burdensome for the company and discourage future equity investors. Finally, venture debt is not recommended for businesses with stable revenues and receivables, where working capital finance could be more appropriate (AFME 2017c).

In Europe, the venture debt market is small, compared to the US. Estimates suggest that the share of VC-backed companies that receive venture debt is at 15-20% in the US, but only at 8-10% in the UK and 5-7% in continental Europe (AFME, 2017c; Duruflé et al., 2016; EY, 2015). Promoting the venture debt financing route could help enhancing the access to finance of fast-growing and innovative European businesses (AFME, 2017c; Duruflé et al., 2016).

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

The challenges described in the preceding two chapters continue to create access to funding problems in the European VC market. The difficulties for young innovative companies to access seed and early stage finance increased during the crisis, as VCs became more risk-averse and focussed more on later stage investments (Wilson, 2015b). This supports a view that public backing is needed in order to strengthen the market. 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. Indeed, an Unquote Intelligence (2014) survey found that “public money remains absolutely critical to the European venture industry and is likely to remain so for the next five years”, and this has been particularly true for new funds, as most public funding bodies support first-time funds, while this is true for only approximately half of private investors. 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 relatively high stability of public LPs’ commitment to a fund. These advantages seem to outweigh the potential disadvantages (e.g. a possibly negative impact on speed and responsiveness or imposed restrictions in the investment strategy of the fund) of public investors’ participation. 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, by increasing the deal flow, can raise competition among investee companies and thereby elevate expected profits of independent VCs⁵⁰ with purely financial investment objectives. This may attract additional investors and trigger “the virtuous cycle of VC market development”.

However, for public policy intervention in the VC market, the relationship between private VC activities and governmental support is as well important; it was analysed in several empirical

⁵⁰ 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.

studies: According to Colombo, Cumming and Vismara (2014), the design of a public VC investment scheme is relevant for their impact. In particular, 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. 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. Cumming, Grilli and Martinu (2014) 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. 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 that outperforms all other forms.” 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), but rather aim to attract equity financing to Europe also 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).

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

In all, Europe therefore needs an integrated portfolio of funding instruments in support of the various segments of its start-up⁵¹, SME and mid-cap landscape to foster the recovery from the 2008 financial crisis and 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 development stages of businesses could be prohibitive to an efficient VC market. Moreover, EU’s VC markets show different development stages and so require different policy instruments. In less developed markets instruments may need to work strongly together with the actors in the informal VC markets (BAs, Incubators, TT Centres) and be complemented by flexible co-investment products to grow the domestic VC market. However, companies with global ambitions compete globally. 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 in 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 a flexibility of instruments adapted to diverse market conditions in the various geographies of the EU. Large-scale

⁵¹ In order to shed some more light on the relationship between VC and start-ups, Brinckmann (2015) analysed, in cooperation with EIF RMA, the effect of entrepreneurs’ profiles on the performance of VC-backed start-ups. We presented key parts of this work in the previous ESBFO issue (see Kraemer-Eis, Lang, Torfs and Gvetadze, 2015).

venture initiatives need however be associated with the knowledge of how to grow businesses to larger scale to make a desired impact on the EU's competitiveness.

Measures aiming at regulatory simplification, harmonization and promoting cross-border investment (e.g. the so-called pan-European passport for VC investors, which aims at ensuring that VC funds established in any EU Member State invest freely in other Member States, and its extensions and complementary measures under the initiatives related to the Capital Markets Union; see Box 14 and Kraemer-Eis and Lang 2017 for an overview) 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 4.1). Two new initiatives, the EIF NPI equity platform and the Pan-European Venture Capital Fund(s)-of-Fund (FoF) programme, could contribute to this (see the EIF website www.eif.org and the previous EBSFO issue, i.e. Kraemer-Eis, Lang, Torfs and Gvetadze, 2016b, for more information).

Europe needs a seamless funding infrastructure for supporting the full corporate financing escalator, i.e. an EU equity flagship facility 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). However, public backing of the European VC market should aim at crowding-in private investors and catalysing private sector investments in order to support development of an integrated European VC market, which is originated by venture capitalists and other key actors as 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. However, there is in fact a need to use public sector resources with the primary objectives of mobilising private sector capital, as clearly demonstrated, for example, by the leverage factor built in the Investment Plan for Europe (see Chapter 7 for more details) and other instruments implemented by the EIF. One way to attract private investors to the VC market is a fund-of-fund approach (Acevedo et al., 2016), which is pursued by the EIF. As a reference catalytic investor in European venture and growth capital funds, EIF is actively working in the direction outlined above: EIF has increased its counter-cyclical role by providing financing solutions to boost entrepreneurship and innovation. 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; moreover, EIF's activity in the equity sphere also includes the launch and extension of new and pilot initiatives. This will contribute, inter alia, to the EC's "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, 2016b).

5 SME guarantees 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

Public CGSs are used in many developed and developing economies to alleviate the constraints facing SMEs in accessing finance. Indeed, 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 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.⁵² Information asymmetries can lead to credit rationing through either *moral hazard* problems or an *adverse selection* of low quality borrowers (Akerlof, 1970). Adverse selection occurs when banks cannot differentiate between good and bad projects. Higher interest rates will discourage businesses with the least risky projects to take out loans. This then implies that, for any given interest rate, inherently riskier projects will be overrepresented in the loan application pool (Jaffee and Russel, 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.⁵³ 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.

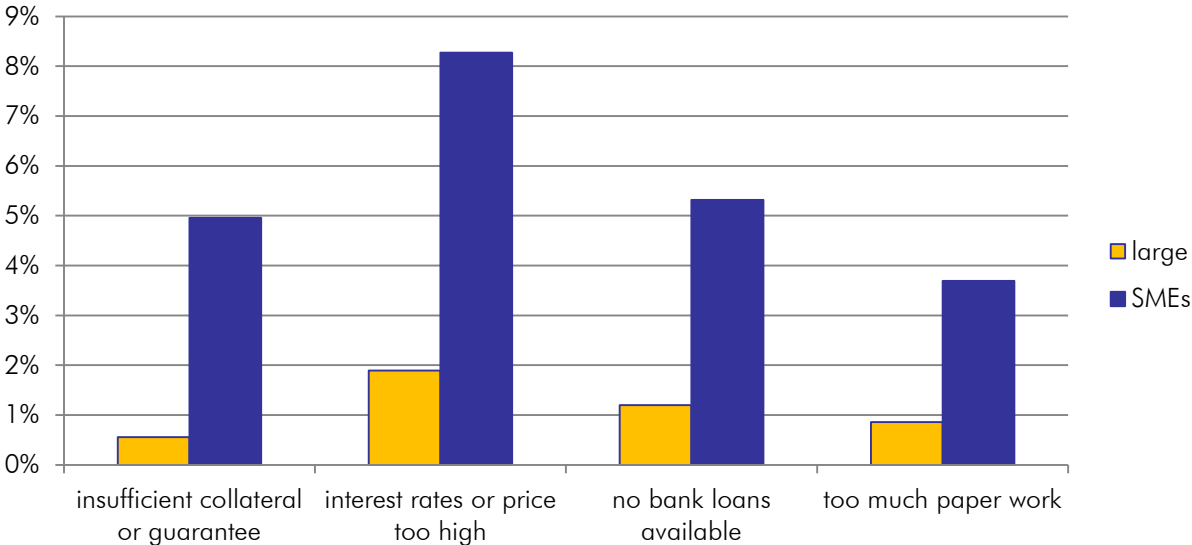
Credit rationing is particularly prevalent in the market for lending to SMEs, for two reasons. The first reason relates to their lack of collateral: the availability of collateral provides a way for borrowers to directly eliminate the asymmetric information problem. Pledging collateral in a loan-agreement allows firms to bindingly signal their true credit worthiness. However, firms do not always possess the required collateral. This holds especially true for small and medium sized enterprises (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. For one, the collateral may be worth more to the borrower than to the financial institution providing the loan. In addition, the use of collateral increases the cost of borrowing, as it generally involves legal and other administrative procedures. The ECB/EC Survey on the Access of Enterprises (SAFE) confirms the argument that the insufficient availability of collateral and guarantees is indeed an important

⁵² See OECD (2014b) for an overview of market failures in SME lending and mitigation techniques.

⁵³ 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, 2010), which is an illustration of the typical principal-agent problem (Arrow, 1985).

reason why SMEs consider bank loans not relevant for them (see Figure 37). 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 the cost of monitoring them is higher. Large companies 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 37: Most important reason for bank loans being not relevant (HY2/2016)



Source: Authors based on ECB Data Warehouse

Recently, two factors have contributed to a worsening of the SME financing gap. First, a number of studies have put forward the conclusion that credit constraint issues are further deepened by increasing market concentration in the banking sector. Ryan et al. (2014) for example, show how bank market power is associated with an increase in financing constraints, and thus leads 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. Given the strong consolidation in the European banking sector (Uhde and Heimeshoff, 2009; ECB, 2016), these observations are particularly relevant for SMEs in Europe. Second, the sharp drop in real estate prices negatively impacted 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 (support in this regard is also given by third parties like, for instance, chambers and

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. These 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 or credit market failures in order to exploit the externalities from entrepreneurial dynamism (Honohan, 2009).

Using CGSs to alleviate the supply shortage

Guarantee mechanisms, "whereby should the borrower default the guarantor compensates a pre-defined share of the outstanding loan" (OECD, 2014b, 2015b), are a commonly used response to address the consequences of these kinds of market failures, as guarantees reduce the risk of lenders and favour the provision of financing to viable businesses that are constrained in their access to finance. 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 market failures in SME financing.

Moreover, loan 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 (such as on employment and tax revenue) of guarantees for the economy. In addition, "new elements were added to some of these programmes, such as reduced red tape and more rapid provision (i.e. 'express guarantees' [in Belgium]), and new instruments were created outside traditional guarantee programmes" (OECD, 2014b). Therefore, credit guarantee programs continue to be "the most widely used instrument at governments' disposal to ease SME access to finance" (OECD, 2015a; see also OECD, 2015c, 2016b). Moreover, guarantees are "increasingly targeting young and innovative firms in an effort to boost employment and value added" (OECD, 2016b). While CGSs do not alleviate information asymmetries directly, and hence do not address the root of the market failure,⁵⁴ 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.

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).

⁵⁴ This would only be the case to the extent that CGS has 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 final 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.

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 being 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 programmes, 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. 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 programme behind the uncertainty around the expected long-term losses on the guarantee portfolio. This can result in unexpected fiscal costs further down the road. 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 a previous ESBFO issue, i.e. Kraemer-Eis, Lang, Torfs and Gvetadze 2016a) 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. Supranational CGSs can therefore contribute to an efficient cross-border allocation of credit.

The importance of credit guarantee schemes has been confirmed, inter alia, in two recent studies by the EIB Group on the use of CGSs in Europe (see Chatzouz et al., 2017; VIWGCGS, 2014) and in a joint Working Paper of the EIF and the European Commission (Asdrubali and Signore, 2015; see also VIWGCGS, 2014). Based on an analysis of the Multi-Annual Programme for enterprises and entrepreneurship (MAP) EU SME Guarantee Facility and focussing on Central, Eastern and South Eastern Europe (CESEE) countries, Asdrubali and Signore (2015) find significant positive effects of this EU guarantee programme on the beneficiary firms. By breaking down the sample by country, signature year, size and age classes, the authors find that micro and young SMEs have benefited the most from MAP-guaranteed loans in terms of economic additionality. See

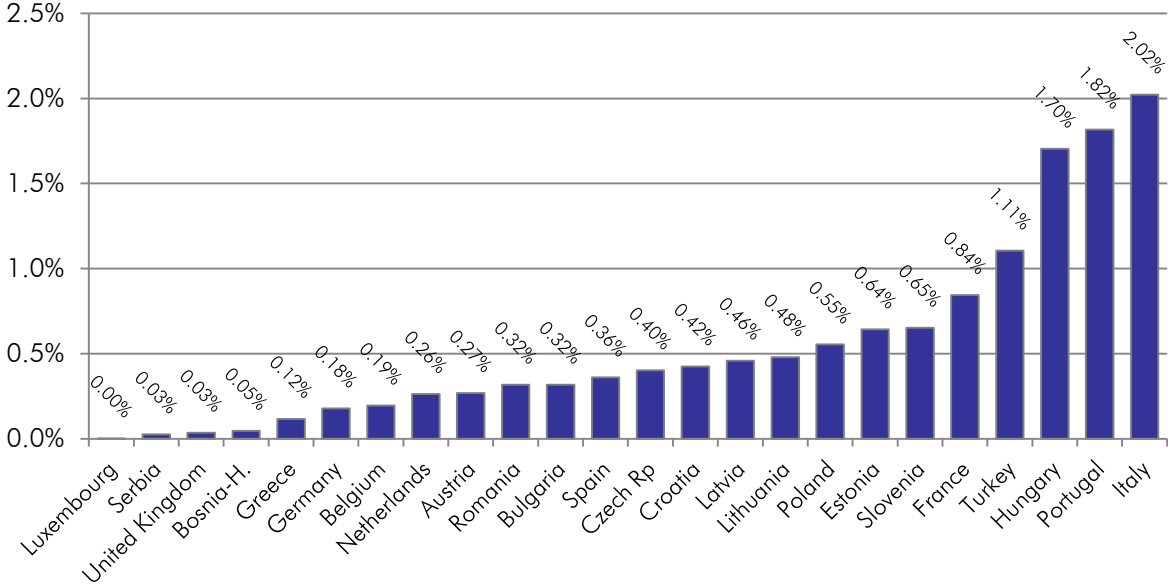
for more details Asdrubali and Signore (2015); a summary can also be found in a previous ESBFO issue (Kraemer-Eis, Lang and Gvetadze, 2015).⁵⁵

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, EIF effectively provides both financing to SMEs and guarantees for SME financing. Apart from EIF guarantees for securitised SME financing instruments (see Chapter 5.2), EIF offers guarantees/counter-guarantees for portfolios of microcredits, SME loans or leases.⁵⁶

5.1.2 Market size and activity in 2016

Market information concerning CGS in Europe is gathered by AECM, the European Association of Guarantee Institutions.⁵⁷ In the following, 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.

Figure 38: Volumes of outstanding guarantees in portfolio scaled by GDP*



*As at 31.12.2016 or latest available data

Sources: Authors based on data provided by AECM (provisional figures), Eurostat, Worldbank

Key figures, based on *outstanding guarantees* on SME loan portfolios (as at 31.12.2016 or latest available data), are presented in Table 3. The countries with the highest activity remain Italy (EUR

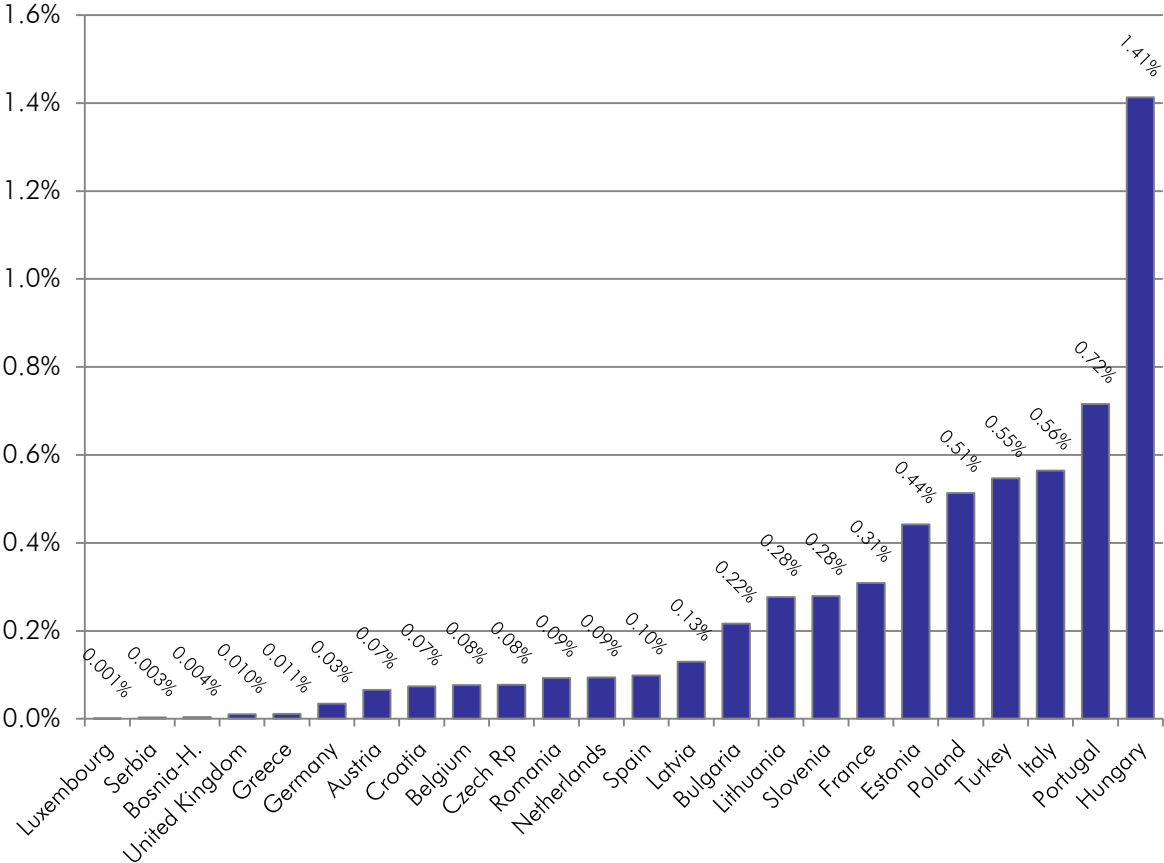
⁵⁵ Schich et al. (2017) give an overview of evaluations of CGSs for SMEs. This forthcoming study is based on a literature review and an OECD/EC survey.

⁵⁶ See for more information the EIF website www.eif.org.

⁵⁷ We thank our colleagues from AECM for their support. AECM has currently 41 members in 21 EU Member States plus Bosnia and Herzegovina, 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. Source: AECM.

33.8bn), France (EUR 18.8bn), Turkey (EUR 8.5bn), Germany (EUR 5.6bn) and Spain (EUR 4bn). The total number of SME beneficiaries in the portfolios of the AECM members amounted to 2.85m, nearly half of which (1.4m) are located in Italy. Italy also leads the ranking in terms of volumes of outstanding guarantees scaled by GDP (2 percent of GDP, see Figure 38). The top three is completed by Portugal (1.82 percent) and Hungary (1.7 percent). Relative to GDP, Portugal recorded the highest amount of new guarantees in 2016 (0.72 percent, see Figure 39), followed by Italy and Turkey (0.56 and 0.55 percent, respectively).

Figure 39: Volumes of guarantees granted in the full-year 2016 scaled by GDP



Source: Authors based on data provided by AECM (provisional figures), Worldbank

Table 3 furthermore shows that the change in new guarantee activity in between 2015 and 2016 varies widely within the EU: in Bulgaria (+57.3%), Netherlands (+56.3%) and Estonia (+44.2%) it increased strongly. On the other hand, newly granted guarantees decreased significantly in the Czech Republic (-47.8%), the UK (-21%) and Croatia (-19.3%).

Table 3: Guarantees and number of SME beneficiaries in portfolio, AECM members by country, HY2/2016

Country	Outstanding guarantees HY2/2016				New volumes 2016		
	Volume [k EUR]	Number	average guarantee size [k EUR]	Number of SME beneficiaries	amount	percentage of outstanding	Change from 2015
Austria	934,645	5,556	168.22	4,349	231,048	24.7%	6.5%
Belgium	818,030	10,474	78.10	8,375	324,726	41.1%	(2)
Bosnia-H.	8,144	61	133.51	41	770	9.5%	-58.1%
Bulgaria	150,539	2,895	52.00	2,645	102,393	68.0%	57.3%
Croatia	194,591	1,646	118.22	1,518	33,738	17.3%	-19.3%
Czech Republic	700,296	8,905	78.64	6,583	135,279	19.3%	-47.8%
Estonia	134,353	1,275	105.37	965	92,517	68.9%	44.2%
France	18,821,619	687,186	27.39	577,017	6,877,715	36.5%	0.9%
Germany	5,557,332	45,627	121.80	45,627	1,088,600	19.6%	-0.4%
Greece	204,490	4,838	42.27	4,838	20,124	9.8%	17.2%
Hungary	1,915,607	49,351	38.82	41,104	1,587,901	(1)	(1)
Italy	33,830,357	1,055,572	32.05	1,387,231	9,435,540	27.9%	-1.2%
Latvia	114,797	739	155.34	579	32,452	28.3%	-6.2%
Lithuania	185,046	2,010	92.06	2,144	106,993	57.8%	11.6%
Luxembourg	931	57	16.33	57	277	29.8%	-12.9%
Netherlands	1,827,015	18,016	101.41	15,828	656,738	35.9%	56.3%
Poland	2,349,683	96,311	24.40	96,311	2,178,255	(1)	(1)
Portugal	3,360,220	88,389	38.02	50,694	1,323,410	39.4%	-1%
Romania	537,272	8,197	65.54	7,796	157,800	(1)	(1)
Serbia	8,587	603	14.24	531	1,117	13.0%	-5.5%
Slovenia	259,283	1,972	131.48	1,983	111,093	42.8%	(2)
Spain	4,005,405	70,272	57.00	122,198	1,097,355	27.4%	12.6%
Turkey	8,546,492	459,642	18.59	452,145	4,225,271	49.4%	23.5%
United Kingdom	821,884	11,072	74.23	9,914	245,499	29.9%	-21.9%
TOTAL	85,825,474	2,638,483	32.53	2,848,290			

*For data availability reasons, the statistics on outstanding guarantee figures for HY2/2016 include the HY2/2015 of one Hungarian, one Polish, one Belgian and one Romanian member.

*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 the actual beneficiaries of guarantees in that particular year).

(1) For new volumes, the percentage change since 2015 and share of total outstanding volumes are only reported for countries in which the AECM members that reported outstanding volumes also reported new volumes.

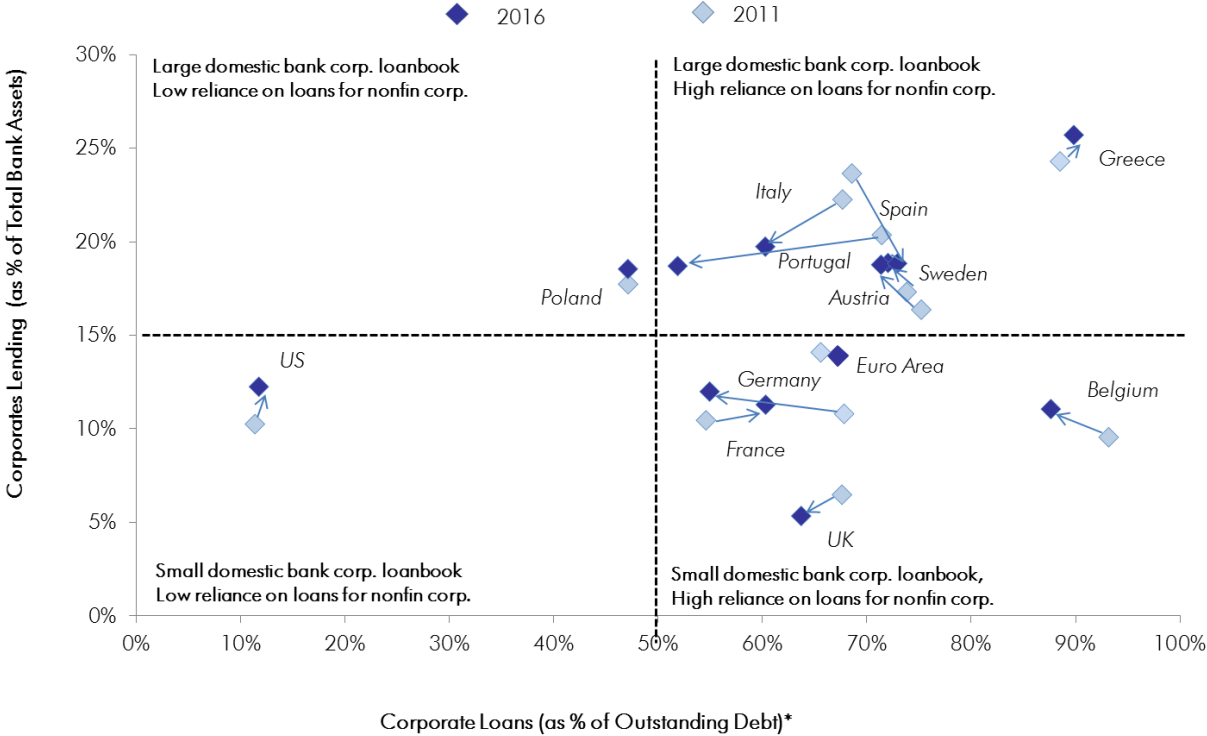
(2) Percentage change in newly granted volumes vis-à-vis 2015 is only reported for countries for which all member organisations consistently reported the relevant statistics for both years.

Source: Authors based on data provided by AECM (provisional figures)

5.2 SME Securitisation⁵⁸

European SMEs heavily rely on bank lending; Figure 40 provides an indication based on IMF data. As outlined in more detail in Kraemer-Eis (2014), this ratio is moving towards more capital market action: Cour-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. During the crisis part of the declining bank lending was offset by an increase in capital market funding (see Figure 41): 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 40: Reliance on bank financing by non-financial corporations (in %)

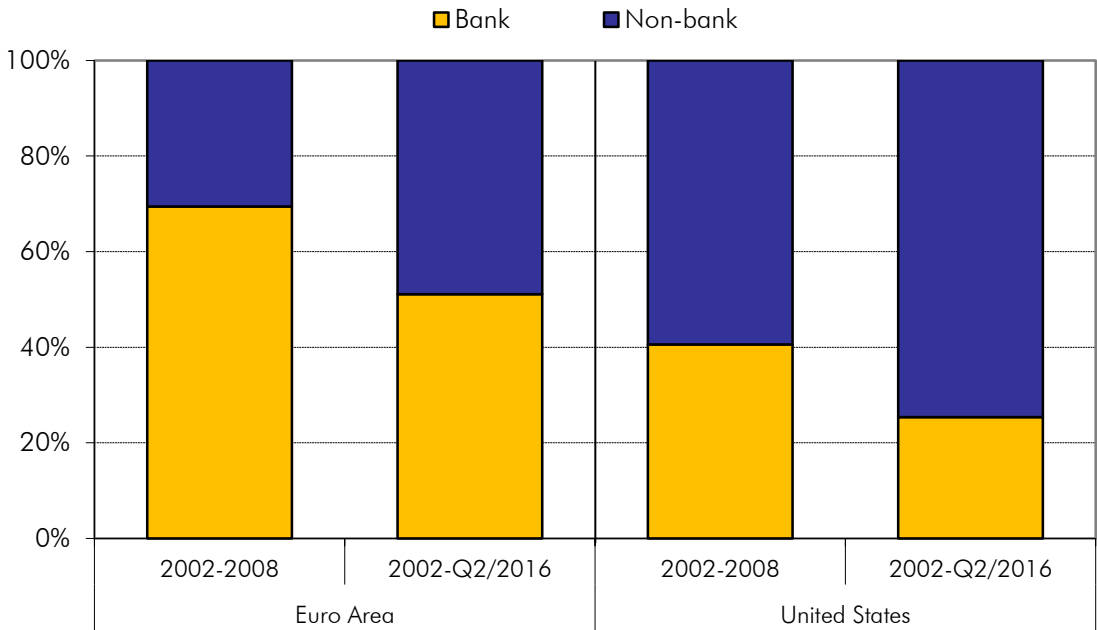


Source: Authors, based on IMF (2012) and updated information (as per YE/2016)

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 as such provide an indirect access to capital markets for SMEs.

⁵⁸ 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. Given that bank financing is and will be less available for leasing companies post-crisis, it can be expected that SMESec will be particularly relevant in the leasing area. For more information on the importance of leasing for SMEs finance, see Kraemer-Eis and Lang (2012 and 2014).

Figure 41: 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 2016)

Empirical literature shows that securitisation can strengthen the capacity of banks to supply new loans (Altunbas et al., 2007); as it can mitigate credit supply frictions, securitisation has the potential of having positive real effects on investment, sales, and employment (Berg et al., 2015). 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, Marques-Ibanez, and Ongena (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, Bottero, Gambacorta, and Ongena (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, credit risk transfer did not lead to lax credit standards.

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 ultimately both issuers as well as 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. Using this instrument in developed capital markets, public sector support for SMEs (e.g.

guaranteeing mezzanine tranches) can create multiplier effects - and hence it is an efficient use of public resources, which is especially important against the background of a high public debt burden in many key countries. "Taken together, 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 reputation of the SME securitisation market segment is continuously improving; a de-stigmatisation is happening, and the general perception is shifting from one of "toxic waste" to a means that could help overcome the negative effects of the crisis. 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.

5.2.1 SMESec market activity⁵⁹

The European securitisation market had grown steadily from the beginning of the previous decade until the outbreak of the crisis. However, the European market is much smaller than its US peer (see Figure 42). During the crisis, issuance remained initially at high levels (compared to pre-crisis values) in Europe, but these volumes were almost exclusively driven by the eligibility of ABS as collateral for ECB liquidity operations;⁶⁰ then the overall market activity decreased to the 2003/2004 levels, in particular due to regulatory uncertainties and tighter euro system collateral rules. In Q1/2017 securitisation issuance in Europe was 35.6% lower compared to the same period 2016.

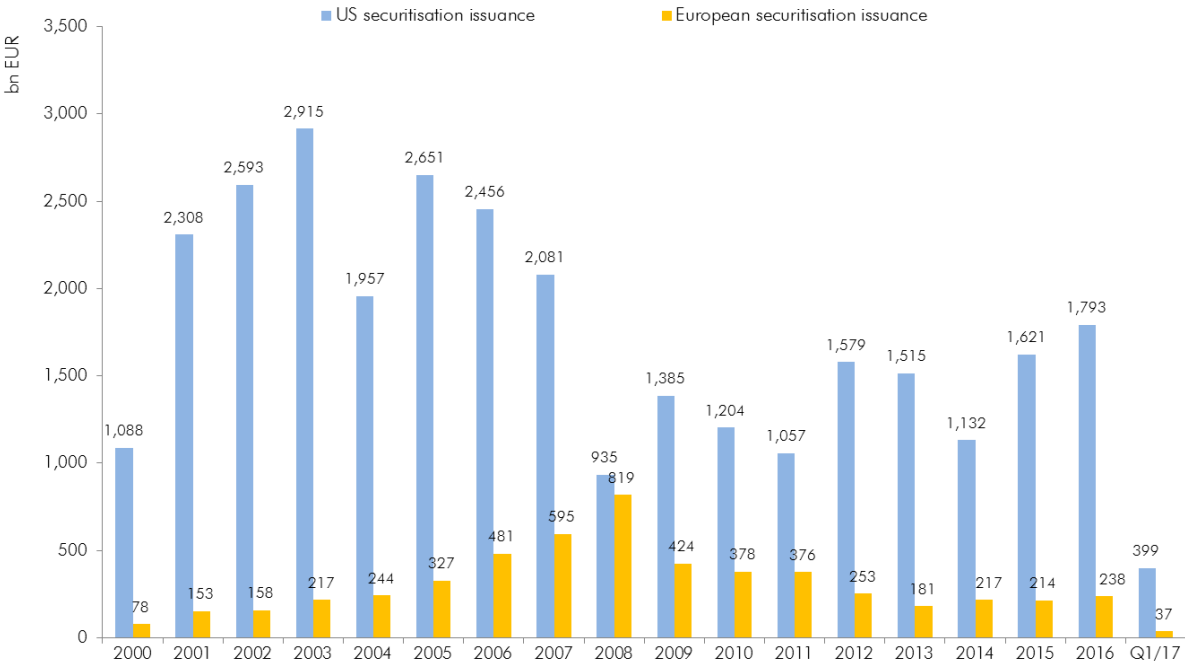
Securitisation is a technique that needs significant know-how and sophisticated actors on the supply and demand side. However, in line with the shrinking activity volumes, the number of active market participants is also declining: there are a reduced number of active securitisation professionals, i.e. at investors, issuers, agents, etc.

To date, public issuance is still hindered in particular by the regulatory framework (and related uncertainties) that makes transactions less attractive for originators and investors, by the availability of cheap funding for banks driven by the ultra-loose monetary policy, as well as by ECB eligibility rules under the repo-collateral framework that favour alternative instruments, such as sovereign bonds or secured or unsecured bank debt.

⁵⁹ If not flagged otherwise, the data source is AFME, the Association for Financial Markets in Europe.

⁶⁰ The ECB's asset repurchase or "repo" facility allows (among other assets) Asset Backed Securities to be used as collateral for funding.

Figure 42: Securitisation issuance Europe versus US (annual issuance 2000 – Q1/2017, bn EUR)



Source: Authors, based on data from AFME/SIFMA

Issuance

The most active markets in 2016 in terms of overall securitisation issuance were the UK (market share: 23%), Italy (17%), Spain (14%), the Netherlands (14%), France (9%), and Germany (7%). The overall market activity in 2016 (EUR 238bn) was around 10% higher than in 2015 (EUR 216bn). In 2017, so far (Q1), a volume of EUR 36.7bn has been issued, a decrease of 35.6% compared to Q1/2016. Of this, EUR 16.3bn were placed in the market (44.4%).

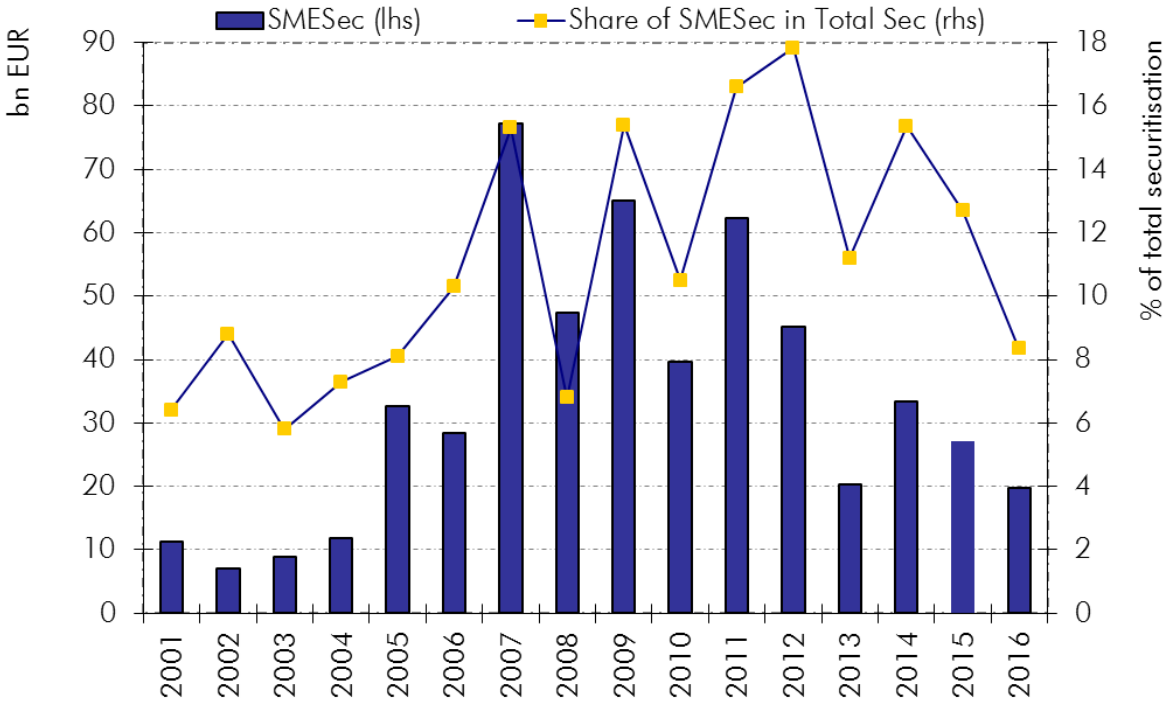
SMESec issuance is still suffering from the crisis and remains at low levels. The overall issued volume of SME deals in 2016 (EUR 19.8bn) was well below the 2015 values (EUR 27.1bn, see Figure 43). This year, so far (Q1), SME issuance was only around EUR 2bn – significantly lower than during the same period last year (EUR 4.6bn). 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, came about due to the base effect, as the overall activity went down (while SMESec activity decreased slightly less). In 2016, the share of SMESec was 8.3%, significantly lower than the year before (12.7%). We observe that total European ABS issuance volumes have roughly been stable during the last three 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.

During the crisis, also 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.

However, it is important to note that the AFME data, used above and in many of the following figures, 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. According to BoA/ML (2016) and to EIF market insight there was recently a significant rise in number and volume of synthetic SME transactions, driven by risk transfer, asset liability management aspects, and regulatory capital considerations. Based on discussions with market participants, BoA/ML estimate that the volume of such transactions (mainly based on large diversified SME portfolios and trade receivables) might well be in the area of EUR 60bn accumulated over the last two years (BoA/ML, 2016). These transactions do not appear in the statistics. Therefore, the numbers, shown here, are an underestimation of the total SME Sec market size and can be seen as a lower bound.

Figure 43: SME Sec issuance in Europe (volume and share of total securitisation, bn EUR and %)



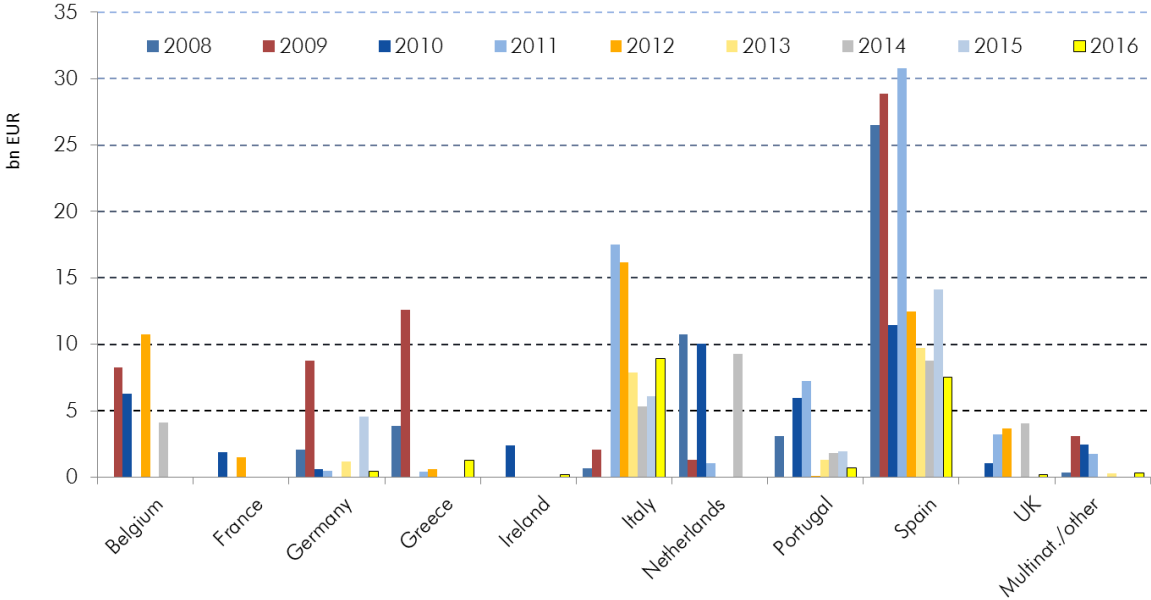
Source: Authors, based on data from AFME and own calculation

In terms of countries, the market activity is concentrated: The SME related issuance in 2016 occurred mainly in Italy (EUR 9bn, 46% of SME issuance) and Spain (EUR 8bn, 39%). Minor activity happened as well in Greece (6%), Portugal (4%), Germany (2%), Ireland, and UK (1% each). In Q1/2017 transactions happened only in Italy – see as well Figure 44 for an overview of the SME Sec issuance by country during the crisis.

Typical originators are large banks or banking groups – some of them are active as originators in several countries (e.g. UniCredit, Raiffeisen, ING Group), but as well mid-sized banks. Moreover, in particular in the field of leasing, non-bank asset finance providers are active as originators; for instance, Alba Leasing in Italy and the small and medium size asset-finance providers in the UK which are the primary target recipients of the British Business Bank’s ENABLE program.⁶¹

As already mentioned, it is important to note that only a very small fraction of the issuance has been placed with investors (see Figure 45): 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.

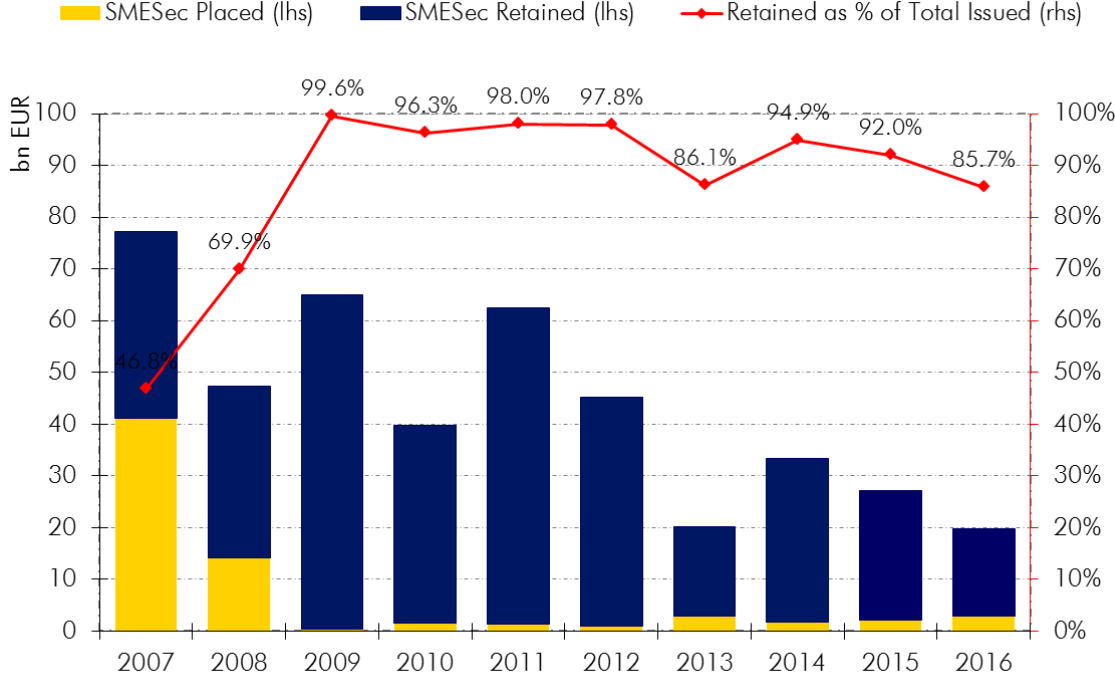
Figure 44: European SMESec issuance during the crisis (by country, in bn EUR)



Source: Authors, based on data from AFME

⁶¹ See for more information e.g. <http://british-business-bank.co.uk/become-a-partner/wholesale-solutions/>.

Figure 45: European SMESec by retention (bn EUR and %)



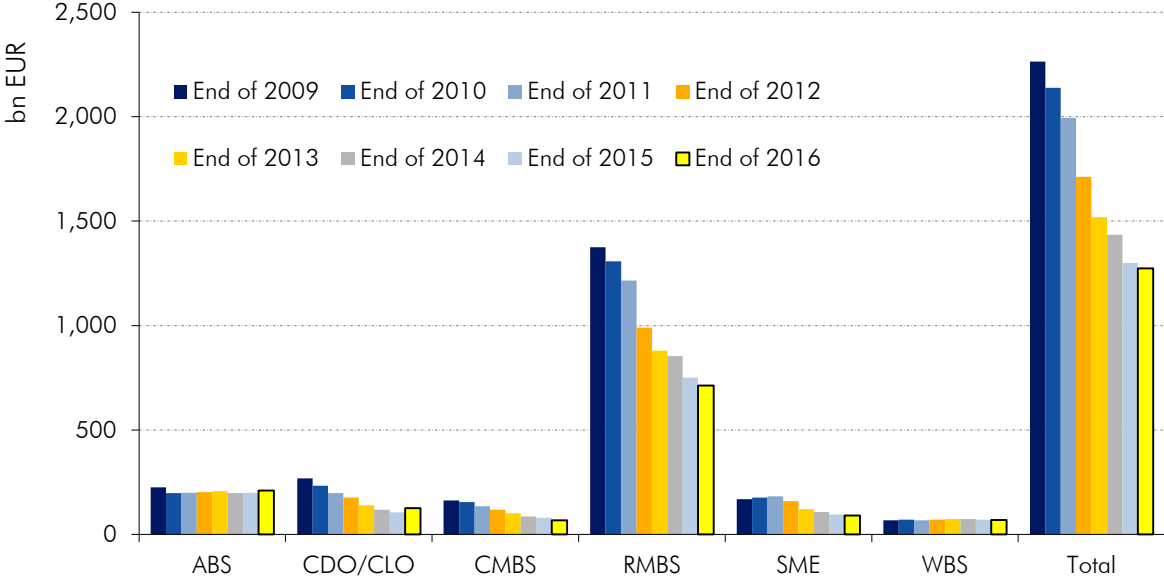
Source: Authors, based on data from AFME

Outstanding

Due to low new activity levels, the volume of *total outstanding securitisation transactions* (see Figure 46) is on a downward trend (negative net supply), however at reduced speed. Compared to the end of 2015, until end of 2016, the total outstanding decreased further by around 2%. Since the end of 2009, the volume of total outstanding securitisation transactions decreased by 44%. During the same period, the volume of outstanding SMESec transactions decreased by 47%, from EUR 168bn to EUR 89.6bn (end of 2016). By the end of Q1/2017 the volume of outstanding SMESec transactions reduced further to EUR 86.6bn.

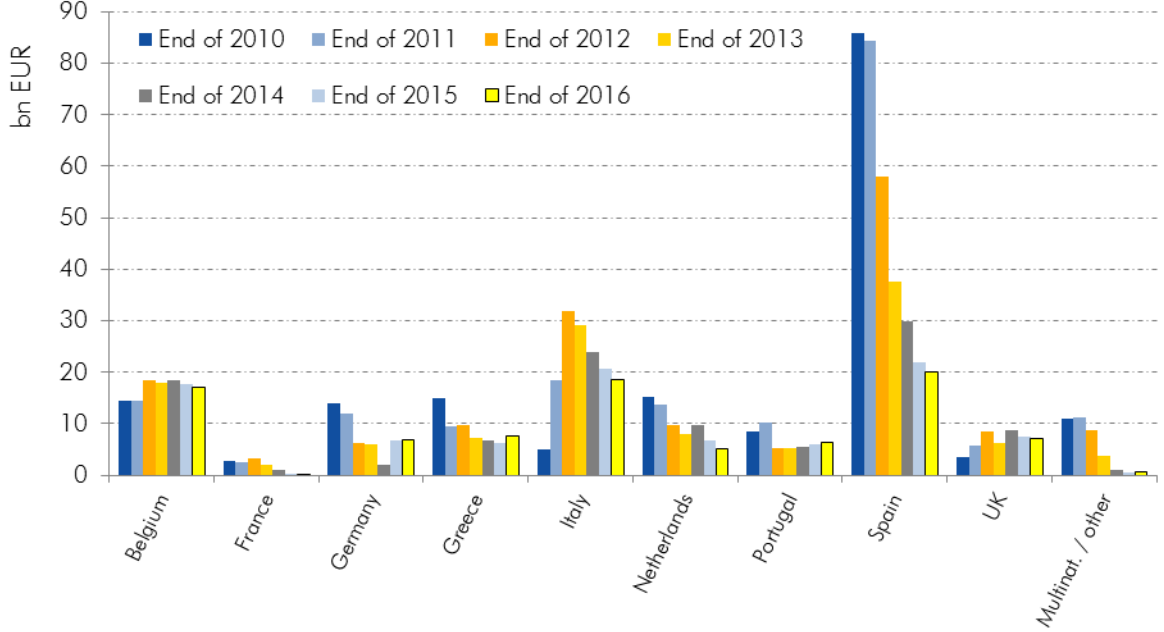
Breaking down SMESec volumes per end of 2016 by country shows, that the main three countries together represent more than 62% in terms of outstanding: Spain (EUR 20.1bn/22.4%), Italy (EUR 18.6bn, 20.8%), and Belgium (EUR 17bn, 19%), see Figure 47. These countries are followed by Greece (8.5%), UK (7.9%), Germany (7.7%), and Portugal (7%).

Figure 46: European outstanding securitisation transactions by collateral (bn EUR)



Source: Authors, based on data from AFME

Figure 47: European SMESec outstanding volume by country (bn EUR)



Source: Authors, based on data from AFME

SMESec performance trends

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.⁶² The low losses are not only based on the typically high granularity, diversification and seasoning of these transactions, but also on 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).

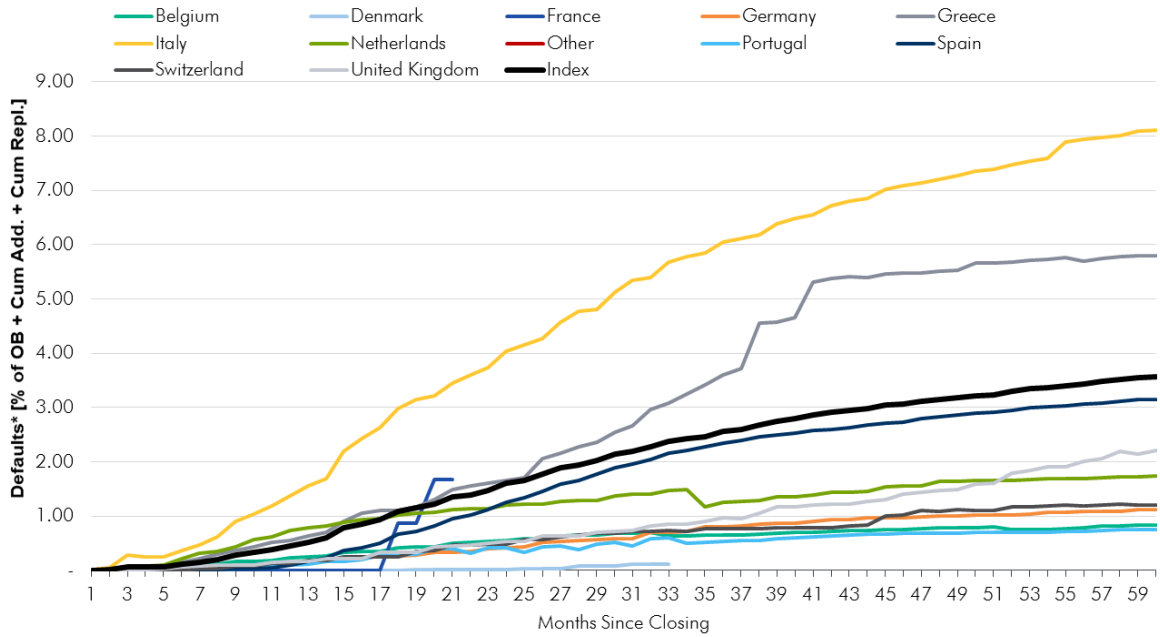
The track record of SMESec in Europe is relatively limited: the market started only towards the end of the 1990s – at the time, this segment was relatively unknown to investors and rating agencies (based on the novelty of the applied tools, but as well based on the heterogeneity of SMEs/SME loans), and the securitisation technique was also new to most of the originators – and many banks were not in a position to securitise SME loans (a typical hurdle is represented by 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 relatively good SMESec performance in Europe compared to other segments of the European securitisation market and to the US.⁶³ Figure 48 and Figure 49 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).

⁶² With some exceptions, i.e. the non-granular hybrid transactions (German Mezzanine CDOs). For more details see Kraemer-Eis, Passaris, and Tappi (2013).

⁶³ According to Standard & Poor's (2014), only 1.58% of European Structured Finance notes (rated by Standard & Poor's) outstanding in mid-2007 had defaulted by mid-2014. The cumulative default rate for SMESec transactions was at 0.55% – for comparison: the cumulative default rate for US Structured Finance notes was at 19.3%, the one for CDO of ABS was at 41.08%. Similar statements can be made for transactions rated by Fitch or Moody's. See also EBA (2014) for an analysis of historical credit performance of the securitisation market.

Figure 48: EMEA ABS SME loan and lease cumulative credit events or defaults on original balance (seasoning by country)⁶⁴



Source: Moody's (2017)

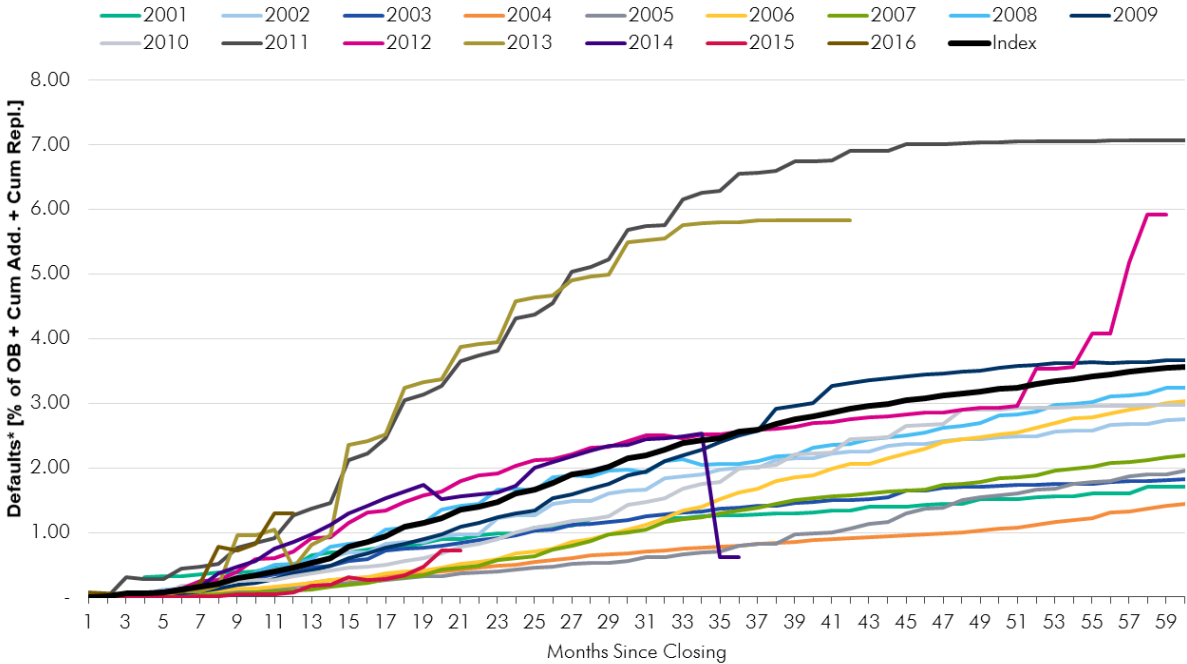
As explained in more detail in our previous working papers, the SMESec market has also been hit by a wave of downgrades due to weaker (crisis-driven) performance effects in the underlying portfolios, as well as the rating methodology changes. Typically, AAA tranches show strong rating stability, but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

The rating transition data shows that the downgrade pressure for SME transactions persists across all tranche levels. The example below (Table 6) shows the rating migration of SME Collateralised Loan Obligation (CLO) transactions (rated by Fitch, migration since transaction closing). For example, of all the tranches initially rated AAA, 64% (by number⁶⁵) have paid in full (pif), 19% are still AAA, 4% moved down to AA etc.

⁶⁴ Terminated transactions are included in the index calculation, hence here “cumulative” curves can show as well 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.

⁶⁵ Relative to the number of tranches in a given initial rating category.

Figure 49: EMEA ABS SME loan and lease cumulative credit events or defaults on original balance (seasoning by vintage)⁶⁶



Source: Moody's (2017)

Table 4: Fitch European SMEs Rating Transition Matrix (May 2017)⁶⁷

% of tranches	Current rating									
	PIF	AAA _{sf}	AA _{sf}	A _{sf}	BBB _{sf}	BB _{sf}	B _{sf}	CCC _{sf}	CC _{sf}	C _{sf}
AAA _{sf}	64%	19%	4%	9%	2%	0%	2%	0%	0%	0%
AA _{sf}	33%	4%	41%	7%	0%	11%	4%	0%	0%	0%
A _{sf}	14%	3%	10%	59%	7%	3%	3%	0%	0%	0%
BBB _{sf}	4%	0%	4%	8%	28%	12%	16%	0%	24%	4%
BB _{sf}	0%	0%	0%	0%	7%	57%	7%	7%	21%	0%
B _{sf}	0%	0%	0%	8%	0%	25%	67%	0%	0%	0%
CCC _{sf}	0%	0%	0%	13%	0%	13%	0%	13%	25%	38%
CC _{sf}	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
C _{sf}	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Source: Fitch (2017)

⁶⁶ The chart differs from indices published by Moody's prior to March 2016 due to the inclusion in the denominator of Additions and Replenishments.

⁶⁷ The addition sf indicates a rating for structured finance transactions.

5.2.2 SMESec prospects

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. There are many advantages of SMESec – 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, Al-Eyd et al.(2015), 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 unlocking credit supply and economic recovery. 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. Regulatory uncertainty and unbalanced regulation was and is still seen as main impediment. Most individual proposed regulations make sense on a stand-alone basis, but negative spill-overs from a non-holistic approach might lead to unintended consequence that hinder a market development.

Originators and investors need to have certainty and clarity. Short and medium term perspective, reasonably defined criteria for simple, transparent, and standardised (STS) securitisations (incl. SMESec) - which should receive preferential regulatory treatment - could help on the way out of this dilemma.⁶⁸ In this context, the European Commission states that “[T]he development of a simple, transparent and standardised securitisation market constitutes a building block of the Capital Markets Union (CMU) and contributes to the Commission’s priority objective to support job creation and a return to sustainable growth. A high quality framework for EU securitisation can promote integration of EU financial markets, help diversify funding sources and unlock capital, making it easier for credit institutions and lenders to lend to households and business” (European Commission, 2015b).⁶⁹

In this context, 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

⁶⁸ We use here STS as term – in the current discussion, also other terminologies 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. It can be expected that the STS acronym will prevail in European regulation.

⁶⁹ For more information on the relation between CMU and SME financing see Box 14 in the Concluding Remarks of this working paper.

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”.

- 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).
- Following the agreement, the related regulations are expected to be formally endorsed by the Council and the Parliament soon (Council of the EU 2017b; European Commission 2017d). According to the European Commission (2017d), “the swift implementation of the securitisation package could unlock up to EUR 150bn of additional funding to the real economy”.

The agreement covers two (draft) 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 2017b). 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 2017b).

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 2017b). 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 introduces a number of changes in the securitisation regulation, amongst which:

- A potential 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-ERBA⁷⁰. 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. Although we expect this to potentially apply to a few asset classes in some specific jurisdictions, rather than across the board, more clarity on this point is expected to come out in the course of the next months. 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

⁷⁰ 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, Inglis (2015).

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 to the real economy and more specifically to 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.

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 2017b).

All in all, the agreement brings out important features of the future STS securitisation market segment. The fog around the future regulation design has lifted⁷¹ – 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. Interpreting the effects of the new legislation, it has to be borne in mind that the proposed risk weights for STS will still result in increased capital requirements for IRB banks compared to today. 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.

Our initial estimation from last year, that STS transactions would not come to the market before 2018, was correct. There are even concerns in the market that an implementation by mid-2018 might be too fast as this would not leave sufficient time for regulators to develop and consult on the large number of technical standards required to flesh out key details of the new rules. Hence many market participants expect implementation only in 2019.

⁷¹ This is valid for STS/CRR – another area that will have 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.

Box 11: Synthetic STS securitisations?

Synthetic securitisations have notable potential, especially for SME lending to gain traction (Kaya, 2017). In our ESBFO a year ago we discussed already whether synthetic SMESec should be eligible to qualify under certain conditions as high quality securitisations – and we closed already with a “yes”.

In February this year, PCS, the Prime Collateral Securities Initiative, launched its new label to be awarded to risk transfer instruments that meet all the criteria devised by the PCS Association to identify key elements for a simple, transparent and standardised instrument (PCS, 2017).

However, the current regulatory framework focusses on true-sale securitisations and for the time being, the STS legislation, although providing a window for synthetic SMESec transactions, does not give rise to a fully defined “synthetic STS” asset class. The new proposed regulation however includes a reference to the possibility of an eventual inclusion of synthetic securitisations under the STS label. At present it is envisaged that within 12 months from the date of entry into force of the proposed regulation (and following suitable advice from EBA in cooperation with ESMA and EIOPA), the Commission shall submit a report to the European Parliament on the establishment of a specific framework for STS synthetic securitisations.

In a new article, Dorin and Vojtko (2017) discuss the upcoming EU regulatory framework for securitisation.. The authors argue that synthetic securitisations are capable of being STS just like their cash peers, and call for their regulatory recognition in light of their high economic policy contribution to the Capital Markets Union. The absence of STS label for synthetics may well be an existential question for such type of transactions, given the foreseen recalibration of risk weights for those transactions. However, there is no reason to penalise structures which allow banks to efficiently manage the use of their capital. Synthetic securitisation structures are not all the same and it is critical for the economy that “balance sheet” synthetic transactions are part of the toolbox used by banks. In their article, Dorin and Vojtko aim at debunk certain myths attached to synthetic securitisations and suggest that, when properly designed, synthetic transactions may very well be simple (or even simpler than traditional securitisation), transparent (equivalent transparency standards can be put in place), and standardised (a number of core structural concepts and contractual requirements are already standardised).

In November 2014, the ECB started its Asset Backed Purchase Programme (ABSPP). The overall objective is 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, is a positive step. However, the programme has so far not achieved significant volumes, moreover, as it is based on publicly placed transactions, there is almost no direct impact on the SME segment on the market. As per end of May 2017, EUR 23.653bn have been bought by the ECB (mainly in the secondary market), compared to around EUR 219.927bn under the Covered Bond Purchase Programme (source: ECB⁷²).

⁷² <https://www.ecb.europa.eu/mopo/implement/omt/html/index.en.html>. On 10.09.2015, the ECB clarified its intention to buy mezzanine tranches of European ABS with an eligible third party guarantee. However, the ECB’s requirement of a *guarantee on demand* (“The guarantee shall be payable on first demand independently of the guaranteed marketable asset or credit claim”) leads for guarantors to a gap between their payment obligation to ECB (on demand) and the receipt of payment from the mezzanine ABS tranches. This feature limits the number of potential guarantors significantly since a wrap of this sort would not be a market standard. To our knowledge there were so far no transactions of this kind.

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. In this respect, public initiatives that support SMESec may be helpful though of course, in doing this, the introduction of new risks should be avoided (for instance, securitisation transactions have to be transparent and have standardised structures; in addition, originators have to have sufficient *skin in the game* to avoid moral hazard (Kaya, 2014)). Moreover, these initiatives can be an efficient way of using public resources as they lead to a multiplier effect.

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 can play a role via market presence, reputation building, and signalling. Its securitisation activities, as well as initiatives and latest developments are explained in detail in Kraemer-Eis, Passaris, Tappi and Inglisa (2015).

Over the recent past, EIF has been involved in a number of diverse and innovative transactions. Market appetite has been especially strong with respect to (i) synthetic securitisation and (ii) warehousing facilities. With respect to the former, 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. On the funding front, warehousing transactions have dominated the scene, with EIF partnering with the British Business Bank in the UK as guarantor of the ENABLE Programme⁷³. We expect synthetics and warehouses to represent an important portion of our future pipeline. Moreover, new types of transactions are appearing on the market, and new initiatives are emerging (we presented recently an example of a new type of transaction (SBOLT-2016-1) that can be seen as a milestone in the area of marketplace lending securitisation). Furthermore, a new platform as cooperation between EIF and National Promotional Institutions (NPIs), the EIF-NPIs Securitisation Initiative (ENSI), has been launched and is active.⁷⁴ In addition, Italy recently opted-in to the SME Initiative as the first country to implement the securitisation instrument.⁷⁵

⁷³ The most recent transaction in the framework of the ENABLE Programme has been closed with Shire Leasing, an asset-finance provider, further details are available at:

http://www.eif.org/what_we_do/guarantees/news/2017/british_business_bank.htm?lang=-en

⁷⁴ 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

⁷⁵ For more information see: http://www.eif.org/what_we_do/guarantees/sme_initiative/index.htm. For an evaluation of EIF's SMESec activities 2004 to 2015 see EIB Group (2017).

6 Microfinance market

6.1 Microfinance and social inclusion

6.1.1 What is Microfinance?

“Microcredit is generally recognised [...] as an effective financing channel for job creation and social inclusion, which can attenuate the adverse effects of the current financial crisis while contributing to entrepreneurship and economic growth in the EU” (European Commission, 2012b). In Europe, microfinance consists mainly of small loans (less than EUR 25,000) that are tailored to microenterprises (see Box 12 for an elaboration on some definitions) and people who aspire self-employed but face difficulties in accessing the traditional banking system. Throughout the EU, 93% of all SMEs are micro enterprises and they account for 30% of total employment.

Box 12: What is “micro”?

A **microenterprise** is any 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 **microfinance institution (MFI)** is 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.

Microfinance, as a general term, is traditionally defined as the provision of basic financial services to poor (low-income) people who traditionally lack access to banking and related services (CGAP Definition, Consultative Group to Assist the Poor). However, more and more often, the definition is used in a wider sense, also to include financial services to existing microenterprises. This wider concept is used in the present text and in order to achieve a pragmatic approach, we follow a differentiation introduced by EMN (2012):

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 maximum loan sizes go up to 25,000 EUR (or even higher in some cases).

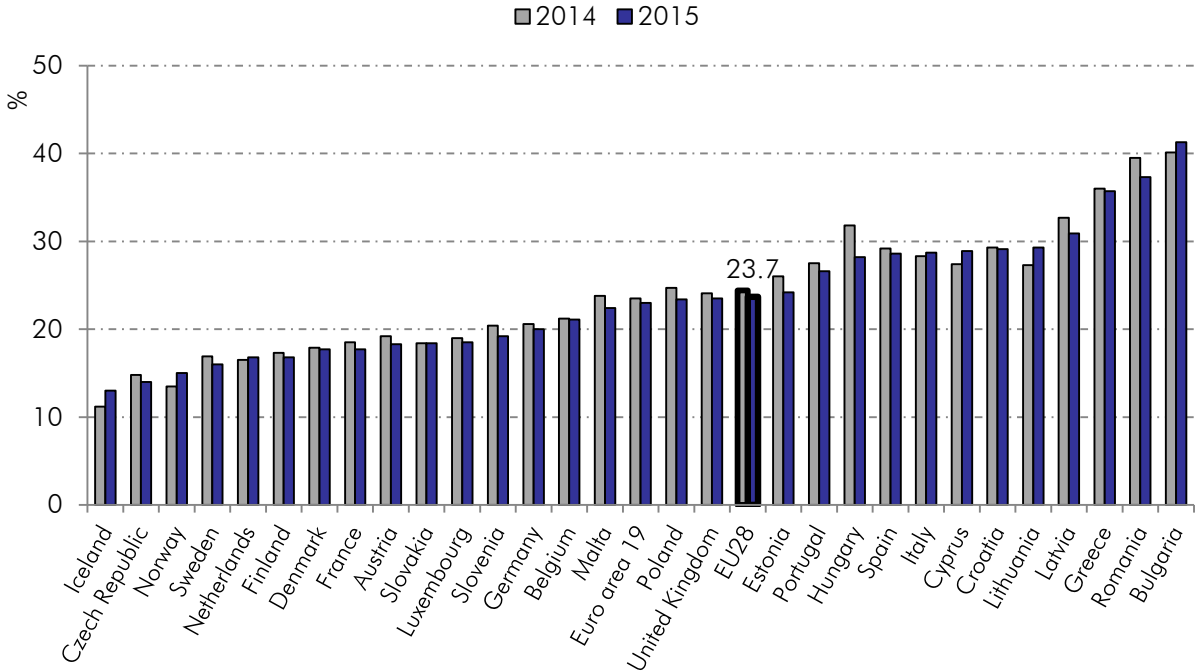
Social inclusion lending = lending to self-employed individuals that are excluded from banking services, due to their socioeconomic status of being socially excluded or (long term) unemployed and/or belonging to financially excluded population groups like ethnic minorities or young people. The average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

The microfinance market in Europe remains 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. In Eastern Europe on the other hand, 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 subchapter 5.1.1).

6.1.2 A support tool for necessity-driven business creation

Microfinance is an essential tool to facilitate necessity-driven business creation, which arises when entrepreneurship is driven by push-factors that originate from adverse conditions in the labour market. That is, when a combination of poor labour market prospects and poverty drives people to start new businesses. This is not to say that every unemployed individual would be eligible to become a successful entrepreneur, but it does imply that countries faced with adverse labour market conditions provide a fertile ground for necessity-driven entrepreneurial activity. Therefore, this section discusses some important indicators related to unemployment, poverty and social exclusion.

Figure 50: People at risk of poverty or social exclusion (percentage of total population)

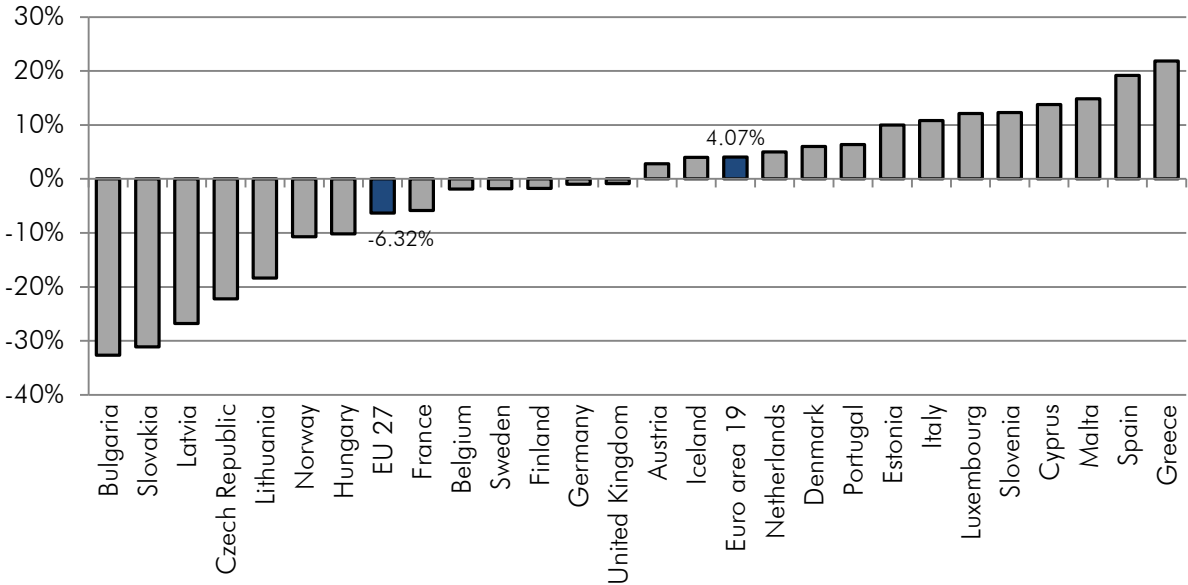


Source: Authors, based on data from Eurostat

In the context of the Europe 2020 social inclusion targets, Eurostat has constructed the “people at risk of poverty or social exclusion” indicator⁷⁶, depicted in Figure 50. The indicator corresponds to the sum of individuals who are at risk of poverty, after social transfers, are severely materially deprived, or are living in households with very low work intensity.⁷⁷ Per 2015, nearly one fourth of EU-28 citizens were at risk of poverty and social inclusion. The highest rates were recorded in some Eastern European countries (Bulgaria, Romania). The geographical subdivide in poverty risk becomes clear when considering the mostly Nordic and Western European countries on the other side of the spectrum (Iceland, Norway, Netherlands, Sweden).

That the global financial and sovereign debt crisis has had a detrimental impact on the progress towards achieving the Europe 2020 goals becomes clear from Figure 51, which illustrates the relative change (in percentage terms) since 2006. Interestingly, while poverty risk in absolute terms was highest in the East of Europe, in the post-crisis period Western European countries clearly fared worse. In the New Member States (NMS) the total number of people at risk of poverty or social inclusion decreased by 25% from 2006 to 2015. This contrasts with the EU-15 members, which show a marked increase of 6%. In fact, apart from France and Belgium, none of the Western European Euro countries recorded a decrease in the number of people at risk of poverty or social inclusion since 2006.

Figure 51: Number of people at risk of poverty or social exclusion, relative change since the crisis (2006-2015)

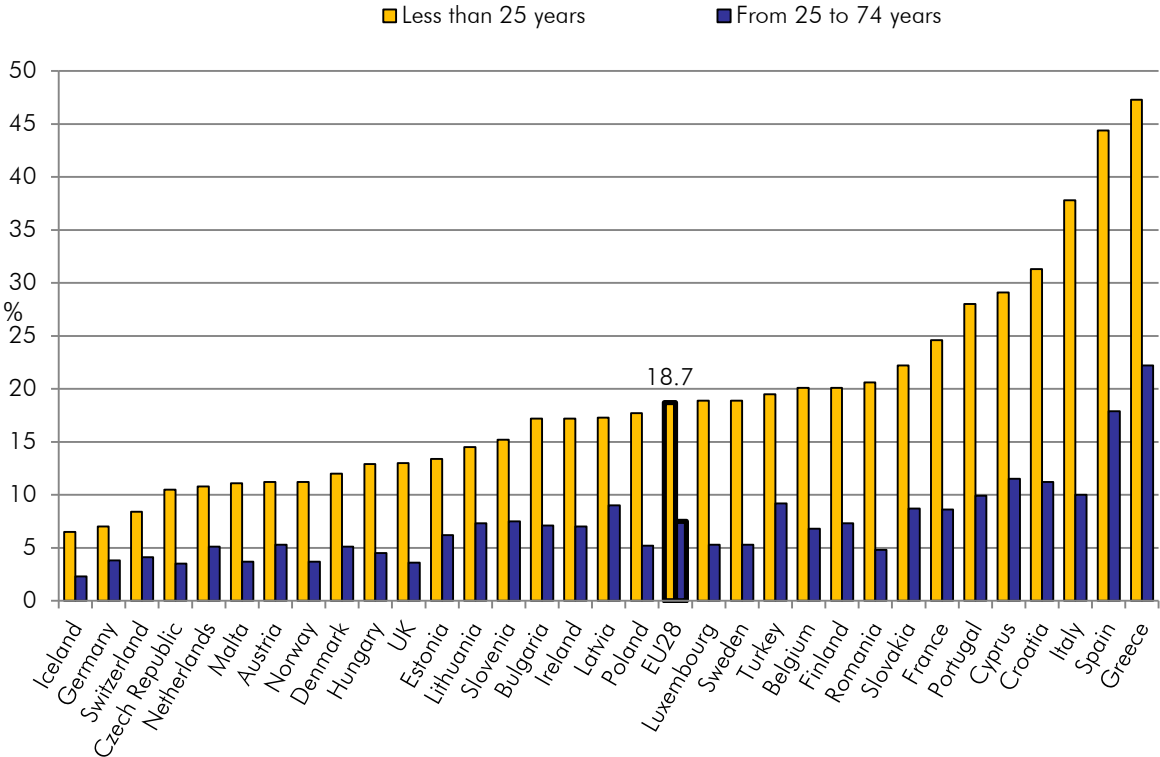


Source: Authors, based on data from Eurostat

⁷⁶ See the Eurostat internet site on the Europe 2020 indicators at: http://epp.eurostat.ec.europa.eu/portal/page/portal/europe_2020_indicators/headline_indicators.
⁷⁷ 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.

The statistics depicted in Figure 50 and Figure 51 are relevant because people at risk of poverty are a potentially important group of business creators, since a decision to start a business often arises out of necessity. Indeed, the OECD (2014a) reports that the majority of entrepreneurs start businesses to improve their economic situation (OECD, 2014a).⁷⁸

Figure 52: Unemployment rate by age groups, 2016

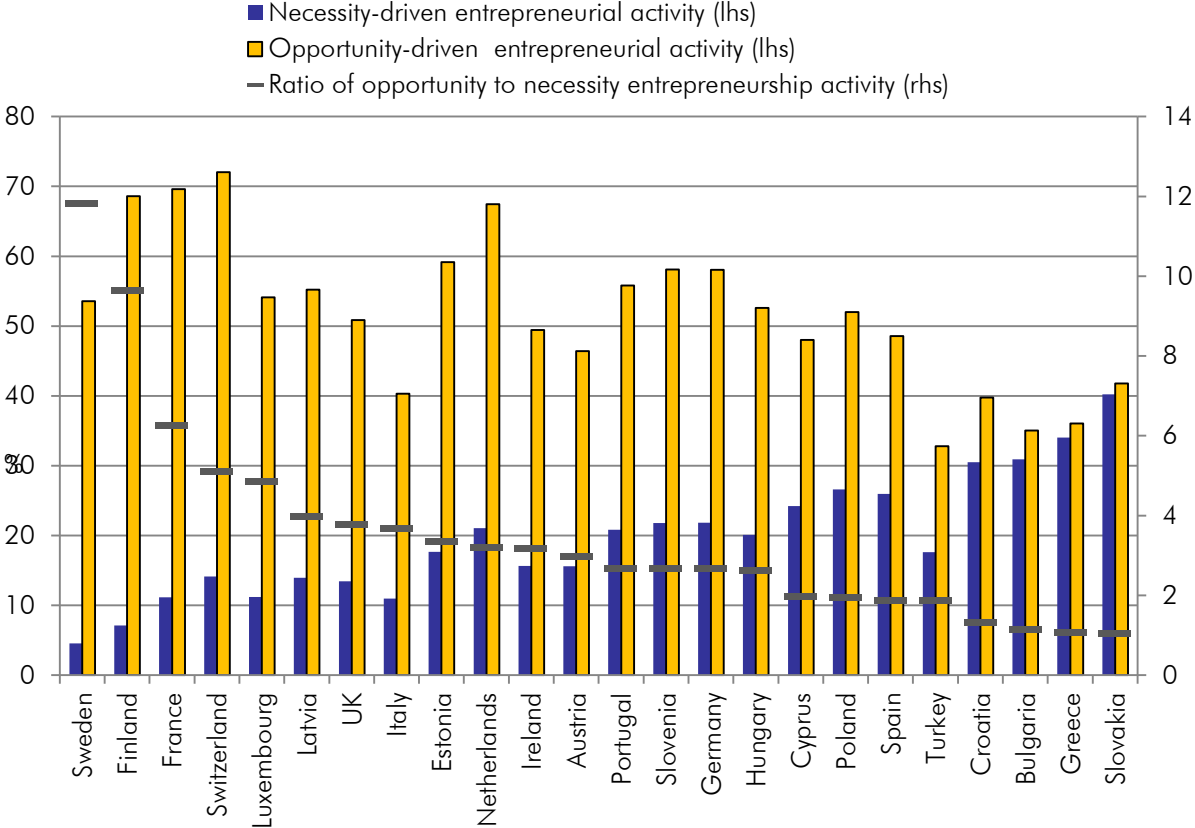


Source: Authors, based on data from Eurostat

Since adverse labour market conditions are the most important driver for necessity-driven entrepreneurship, Figure 52 plots the unemployment rate for a number of European countries. In the aftermath of the 2007-financial crisis, unemployment remains one of Europe’s main challenges, in particular for the age cohort of workers under 25. The incidence of necessity-driven entrepreneurial decisions is illustrated by country in Figure 53. The highest rates are recorded in Slovakia, Greece and Bulgaria, where around a third of entrepreneurs started their business because they had no better options in the labour market.

⁷⁸ According to the Eurobarometer Survey on Entrepreneurship (European Commission, 2012a), in most countries of the EU, the majority of self-employed people found dissatisfaction with their previous work very important in their decision to start a business.

Figure 53: Necessity-driven entrepreneurial rates (2016)



Source: GEM 2016/17 Global Report

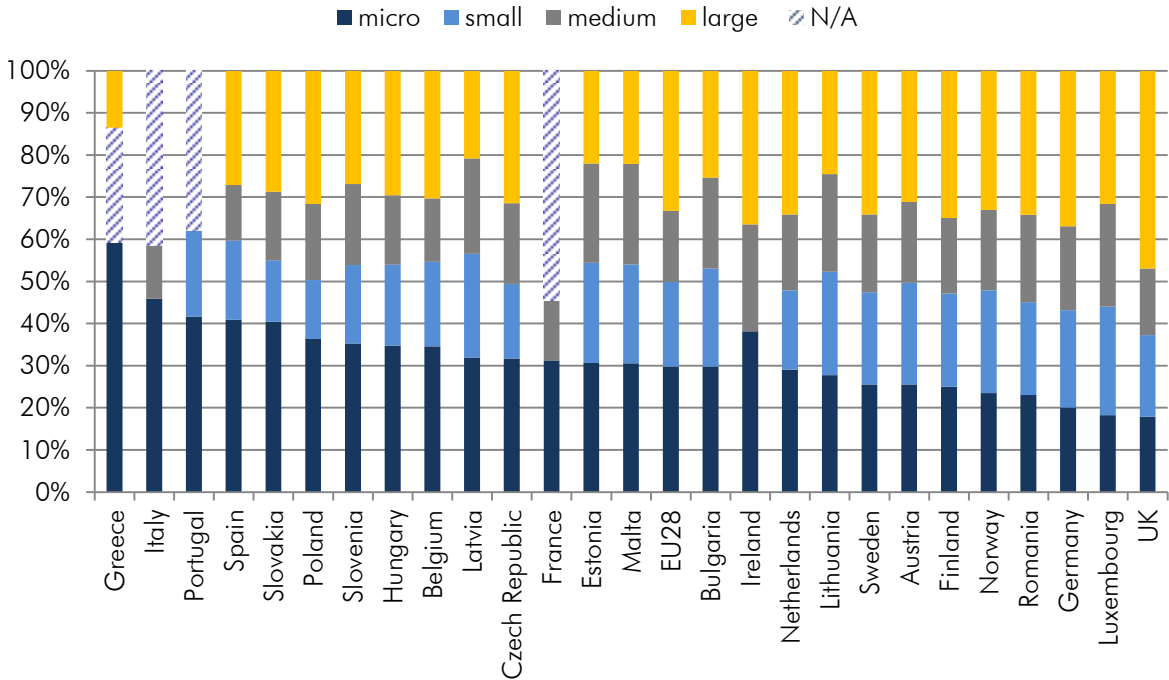
Long term unemployment spells can lead to a loss of skills, or labour market discouragement in general, which is particularly problematic among young workers, as it can result in a lost generation of workers (Choudhry et al., 2012). Supporting measures to facilitate the transition of these worker groups from unemployment to self-employment are therefore of crucial importance (OECD/European Commission, 2014).

Microfinance, characterised by a high degree of flexibility in its implementation, is a product that can be tailored to support the needs of aspiring entrepreneurs from disadvantaged labour market segments. Given the sector of microenterprises is prone to market failures in the external financing market, it should be considered a crucial policy tool in alleviating the negative impact of the crisis on European labour markets.

6.2 The demand for microfinance: microenterprises and their finance decisions

Microenterprises, making up 93% of all European businesses, are important contributors to employment and account for 30% of total employment (European Commission, 2016). Micro-businesses seem to be relatively more important in countries with elevated unemployment levels. In Spain, Portugal and Italy employment by microenterprises accounts for more than 40% of total employment and in Greece this amounts to almost 60% (Figure 54).

Figure 54: Relative employment share by microenterprises compared to other enterprise size classes, 2014*



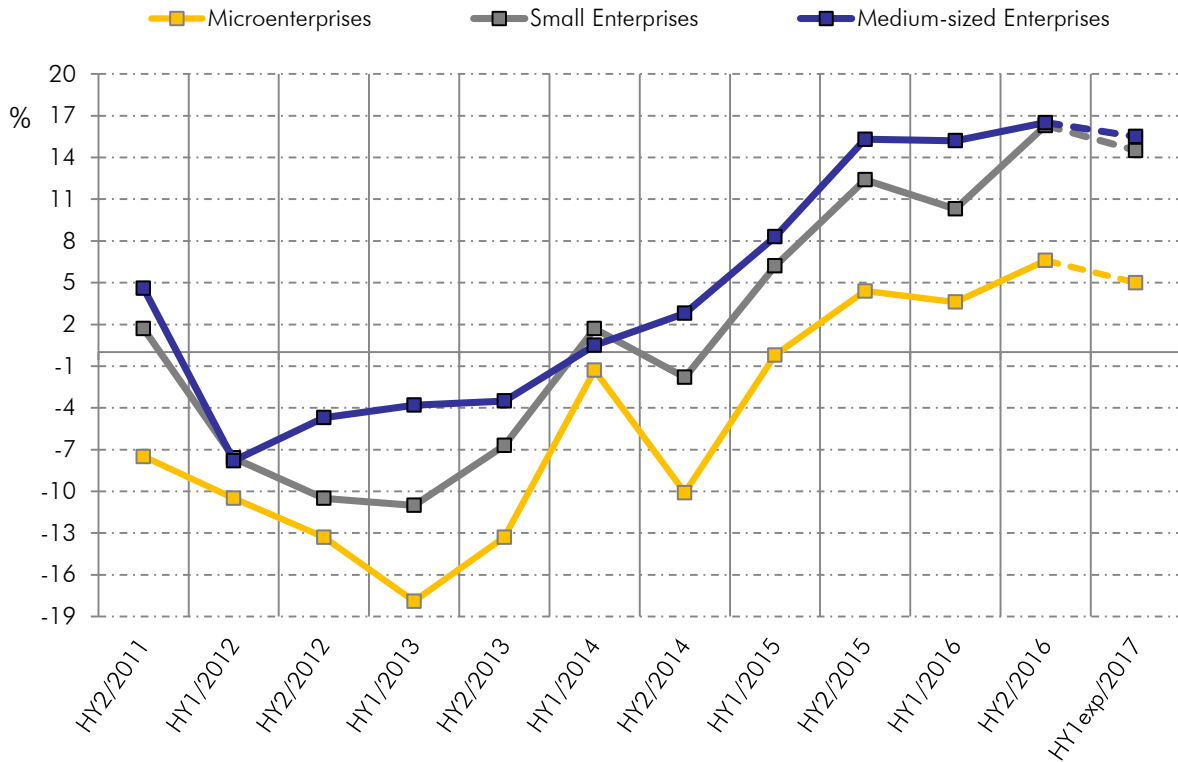
*For Greece latest available year is 2013

Source: Eurostat

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 55, which illustrates microenterprises’ perception about the current economic climate and compares it to larger firms’ perception. For the first half of 2017, microenterprises are on balance expecting a positive change (5.0%) in their overall situation, thereby being significantly less optimistic than their larger counterparts. The UEAPME survey furthermore reveals that they expect their investment climate to worsen (UEAPME, 2017). Given the importance of microenterprises in sustaining employment levels of vulnerable labour market groups, policy makers ought to be cautious for a situation of underinvestment.

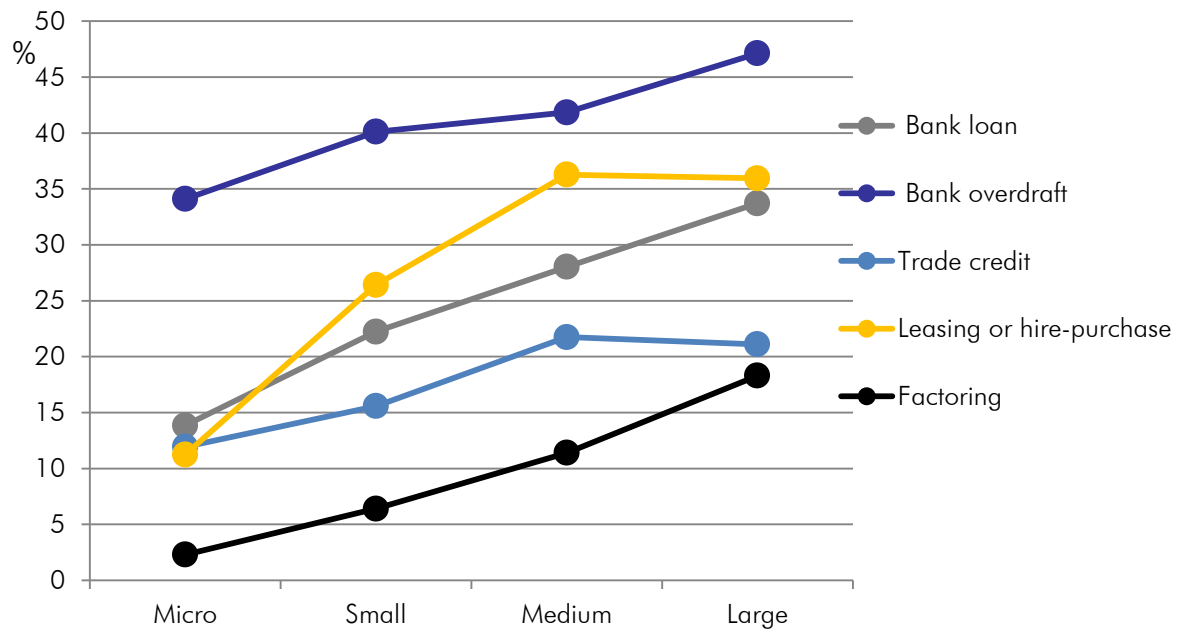
Microenterprises, on balance, reported slightly increased needs for bank loans. Almost half of the microenterprises indicated that bank loans were relevant sources of financing. However, only 14% used bank loans, presumably due to difficult access to finance. Figure 56 shows that the usage of different financing sources on average typically increases with the size of the SME (more on financing patterns of micro-enterprises, Box 13). 25% of microenterprises reported they applied for a bank loan, out of which almost one third applied for micro-loans (more on the outcome of the applications, see subchapter 6.4)

Figure 55: Overall situation of European microenterprises compared to other size classes



Source: UEAPME Study Unit (2017)

Figure 56: Different financing sources used by enterprises (by enterprise size class), HY2/2016



Source: Authors, based on ECB SAFE (2017a) data

Box 13: Financing patterns of micro firms – they are different!

The vast majority of firms in Europe are micro firms. Still, we know little about their financing patterns. A forthcoming paper by Masiak et al. (2017) aims at closing this gap. Based on a large European firm-level data set, the paper finds that micro firms differ in their financing patterns from small and medium-sized companies. The empirical results show that micro firms are more likely to use internal financing instruments, whereas they are less likely to use state subsidies, trade credit or asset-based financing instruments. Furthermore, micro firms differ from medium-sized firms by using more short-term debt (credit card overdrafts, credit lines and bank overdrafts).

As a result, support programs, focusing on micro firms, should be tailored specifically to small businesses' needs in order to optimize the policy intervention's impact and should be separated from more general SME support. Even though some programs, designed specifically to support micro firms *directly*, exist, the implied costs to apply for public support programs are often high. Hence, indirect public support programs that use standard financing channels - in particular, banks or specialised microfinance providers (e.g. via portfolio guarantees for financial intermediaries) - are likely to be more efficient, as these mechanisms mitigate the collateral requirements for micro firms to obtain bank loans and do not require additional application processes. Important steps in this direction were taken in the European Progress Microfinance Facility (Bruhn-Leon et al., 2012) and subsequent programs, e.g. the European Commission's Programme for Employment and Social Innovation (EaSI Financial Instruments⁷⁹).

6.3 The supply of microfinance: a sector characterised by significant diversity

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: microfinance associations, credit unions, cooperatives, Community Development Financial Institutions (CDFIs), non-bank financial institutions (NBFIs), government bodies, religious institutions and Non-Governmental Organisations (NGOs). The focus of MFIs' activities changes from Western to Eastern Europe. Most of the MFIs in Eastern Europe are mainly focused on micro-lending. In contrast, Western European MFIs provide a more diversified set of financial products, not only to microenterprises but to bigger enterprises as well. Moreover, Eastern European MFIs are more focused on providing financial products and services, while Western European MFIs provide both, financial and non-financial products and services. The duality indicates that the development process of the microfinance sector is highly dependent on the geographic market under consideration.

According to the latest survey by EMN-MFC⁸⁰, almost two thirds of all surveyed MFIs reported that their main mission was financial inclusion (72%), followed by job creation (70%), and social inclusion and poverty reduction (59%).

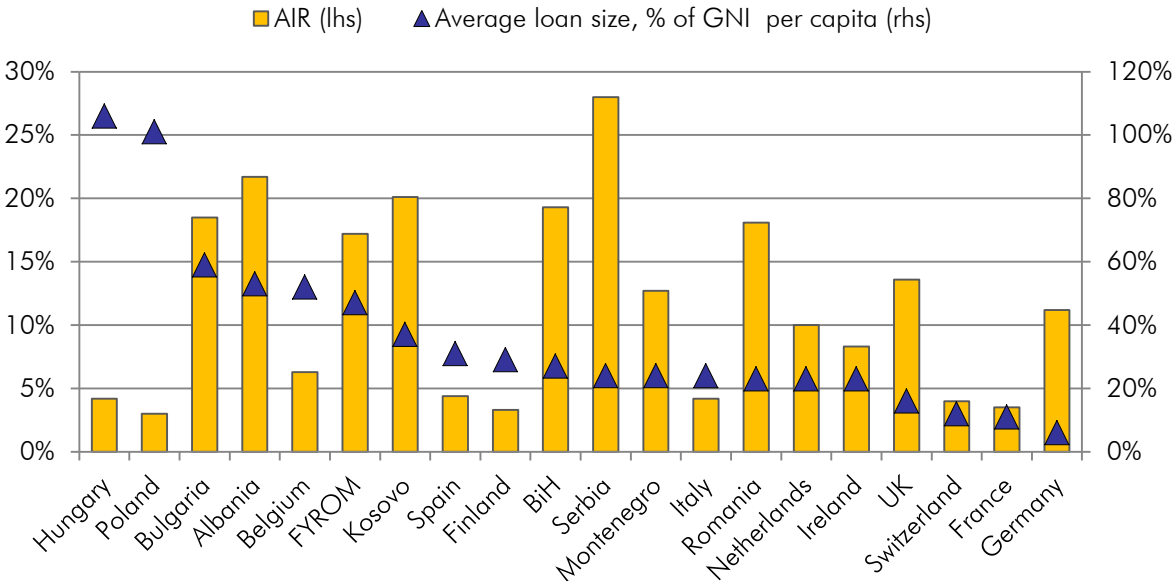
⁷⁹ See EIF (2017) Microfinance. Available at: http://www.eif.org/what_we_do/microfinance/index.htm.

⁸⁰ The European Microfinance Network (EMN) and Microfinance Center (MFC)'s *Overview of the microcredit sector in Europe for the period 2014-2015* is based on a survey among 149 MFIs in 22 countries.

The latest market data show that, per 2015, a minimum of 747,265 microenterprises and start-ups received support by the surveyed organisations, an increase of 13% compared to 2014. Over that same period, total lending volume increased by 15% and reached EUR 2.5 billion. Average loan size remained roughly stable over the last 2 years (EUR 6,104 in 2014 and EUR 6,072 in 2015). The average loans sizes adjusted by the GNI per capita are higher in Eastern European countries than in Western European countries, meaning that western clients are relatively poorer. It again indicates the fundamental difference in the role of microfinance in these two regions of Europe. The average sizes of microloans are quite different for business and personal consumption: in 2015, the average business loans were almost five times higher than the average personal microloans (EUR 7,947 versus EUR 1,697). The average interest rate charged by the surveyed MFIs for business consumption purpose was 10.7% with an average loan term of 41 months, while the average interest rate charged for personal consumption purpose was 19% with an average loan term of 30 months (EMN-MFC, 2016).

Moreover, the characteristics of microloans for business purposes differ strongly between countries (Figure 57). According to the recent EMN-MFC survey for the period 2014-2015, the average interest rate among the surveyed microfinance providers amounted to 10.7% in 2015, but ranged from 3% in Poland and Finland, to as high as 18% in Bulgaria and Romania, and even higher in non-EU Balkan states.

Figure 57: Microcredit conditions in Europe per 2015



Note: AIR is average interest rate, GNI is Gross National Income
 Source: Authors, based on data from EMN-MFC (2016)

Next to geographical diversity, the microfinance sector is also characterised by diversity across different 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 come from grants, while in

Bulgaria, Romania and in non-EU Balkan countries the surveyed MFIs don't depend on grants at all.

Microloan amounts and terms also vary greatly across and within the types of MFIs. The average loan size as a percentage of GNI per capita reported by NGOs is significantly higher than reported by NBFIs (52.2% versus 29.6%). Moreover, NGOs in Eastern Europe reported 74.6%, while their western counterparts reported 17.3%, on average. Regarding the average microloan term, NGOs reported 46 months, while NBFIs reported 37. Within the surveyed NGOs, terms varied from 5 to 96 months (EMN-MFC, 2016).

The differences in average interest rates are typically related to differences in the legal framework, MFI business models, pricing policies, refinancing cost, cost structure and the subsidy levels. Microloans are usually offered with a special focus on social inclusion. Higher interest rates ("high" compared to "standard" lending business) for micro-loans typically reflect the non-subsidised, cost-covering business models (often MFIs in the central-eastern part of the EU), while the lower interest rates are reflecting 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). Typically, for-profit institutions charge higher interest rates (cost coverage) and grant larger loans (economies of scale). However, it is important to note that profit orientation is consistent with a socially-oriented investment strategy. In fact, the micro-loan business model, if operated on sustainable terms in the long run, inherently requires relatively high interest rates (Bruhn-Leon, Eriksson, and Kraemer-Eis, 2012).

6.4 The microenterprise financing gap

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.⁸¹ This section discusses some indicators that illustrate how access to finance often is restricted for vulnerable labour market segments and microenterprises.

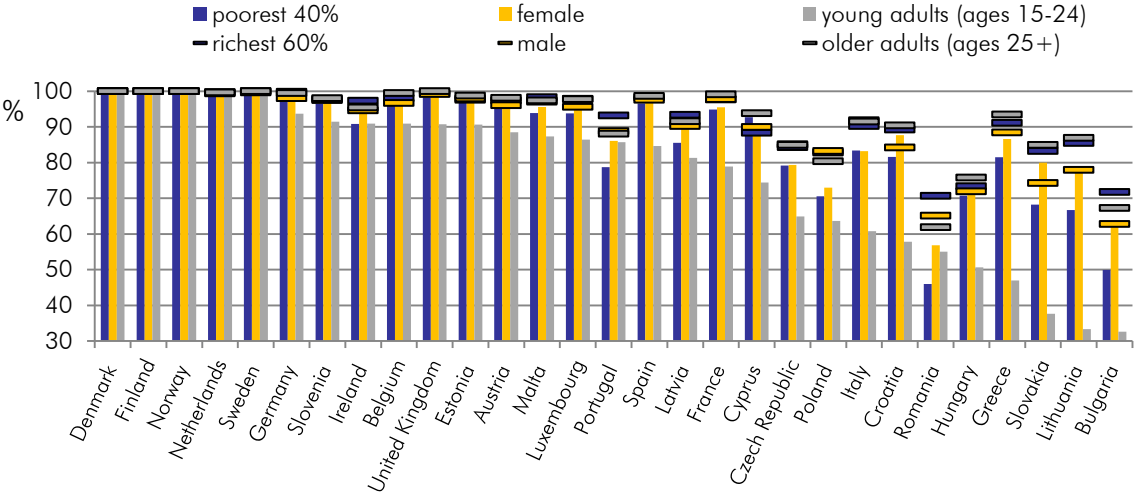
Financial inclusion, at its most basic level, starts by having access to a simple bank account. The Global Findex, the financial inclusion survey⁸² illustrates how financial inclusiveness varies strongly between countries and social groups (see Figure 58). In countries like Denmark, Finland, and Norway, 100% of the respondents reported having accounts in financial institutions, regardless of the social group they belong to. This contrasts strongly with countries like Romania, Bulgaria and Hungary, which on average do not only have lower levels of financial inclusion, but also higher within-country social disparities. The highest gap in account penetration between rich and poor

⁸¹ For a full discussion on the mechanisms underlying finance market failures and credit rationing, see 5.1.1.

⁸² 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 143 economies - representing more than 97 percent of the world's population.

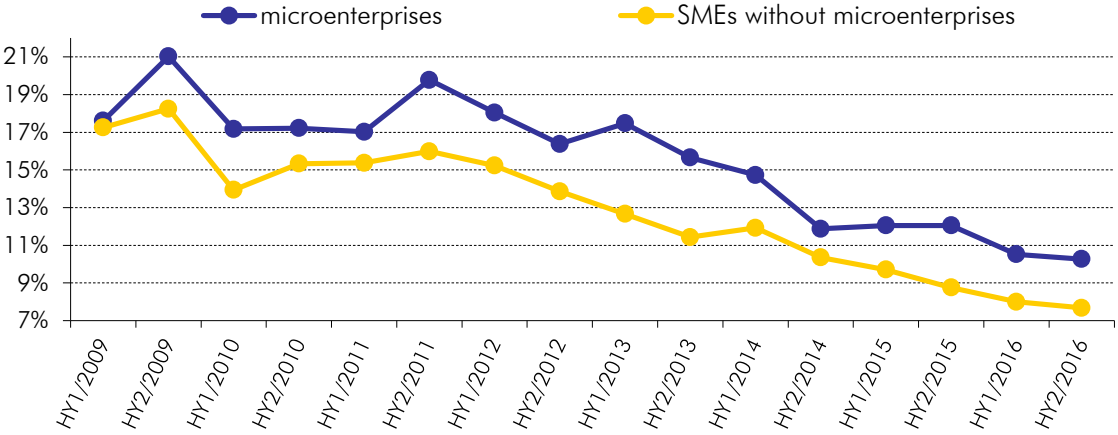
was observed in Romania (25%) and in Bulgaria (22%). On average, women reported lower account-holding rates than men. Significant gender gaps are observed in Romania and Poland, but surprisingly also in France. Account ownership also difference between age groups (ages 15–24 vs age 25 and above). The age gap is particularly pronounced in Lithuania (54%), followed by Slovakia (47%) and Greece (46%).

Figure 58: The percentage of respondents who report having an account at a bank or another type of financial institution



Source: Global Findex Database

Figure 59: Share of enterprises reporting access to finance as their most important problem

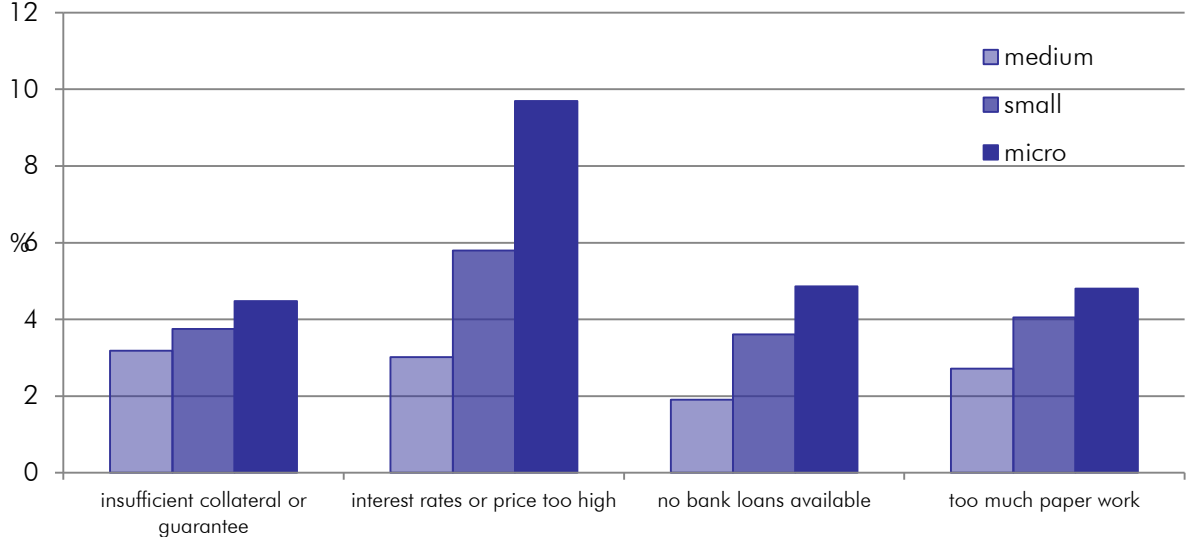


Source: Authors, based on data from ECB (2017a), Statistical Data Warehouse

The ECB SAFE survey in the Euro Area (ECB, 2017a) 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 (Figure 59). Importantly, it consistently exceeds the share of bigger SMEs. This is in line with a report of the ECB (2017a) that states that bank loan rejection rate is still the highest for microenterprises (10%), compared to 8% for small firms and 2% 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 8%. 46% of the SMEs did not use bank loans because it was not a relevant source of financing. Among them, proportionally more microenterprises indicated “insufficient collateral or guarantee”, “interest rates or price too high” and “too much paperwork” is involved (see Figure 60).

Figure 60: Reasons for bank loans being not relevant (by enterprise size class), HY2/2016

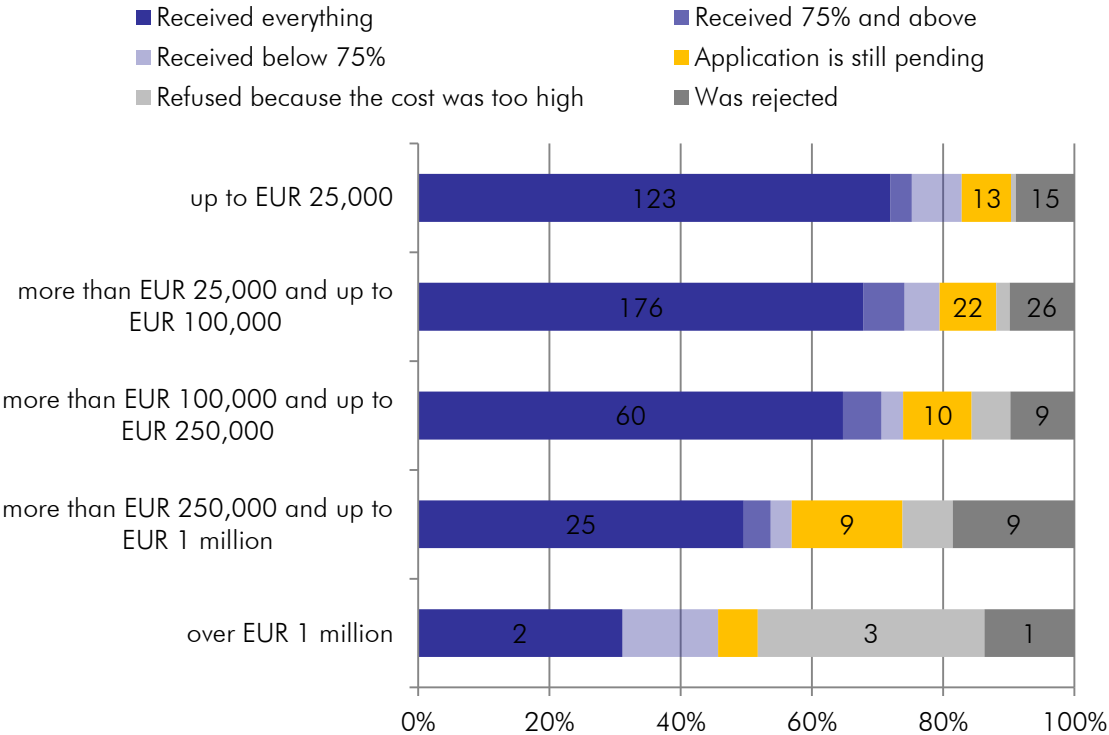


Note: the figure is based on responses from 594 microenterprises who applied for bank loans in the past six month.

Source: Authors, based on ECB SAFE (2017a) data

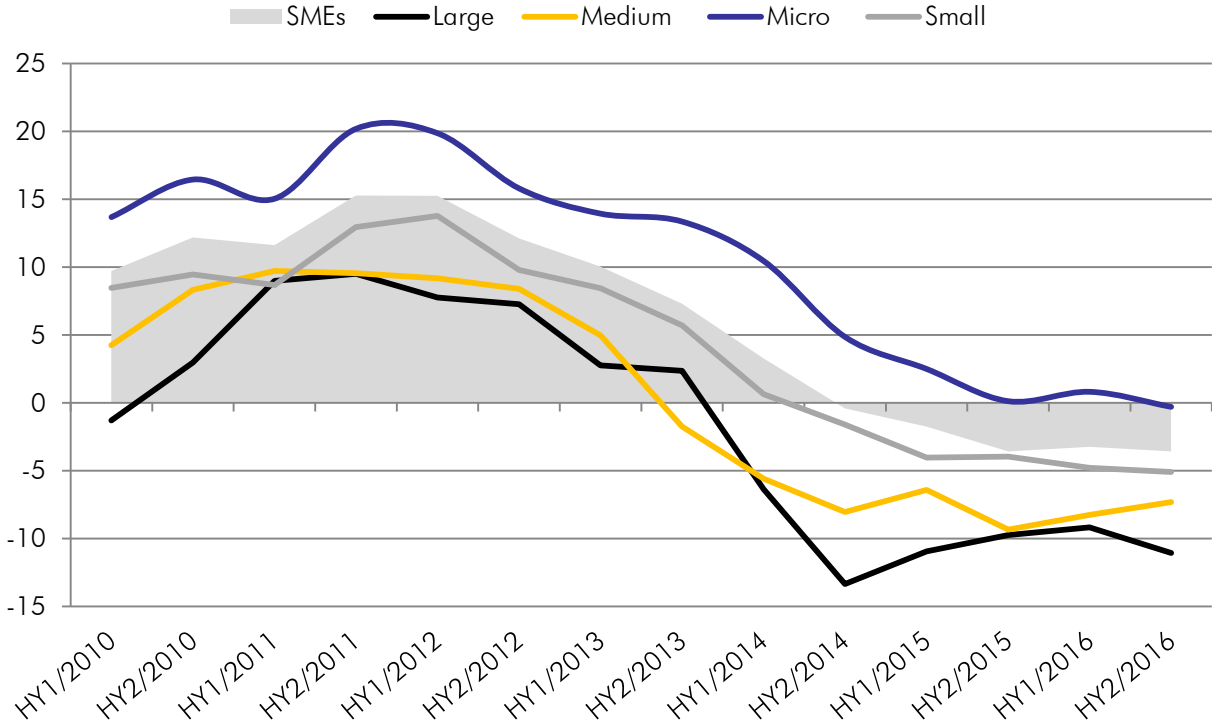
When microenterprises do decide to apply for a bank loan, they are more likely to be rejected than their larger parts (see Figure 61). Unsurprisingly, microenterprises have better chances to receive micro-loans than bigger loans, implying that microenterprises with high funding needs face persistent barriers to growth.

Figure 61: Application status of bank loans requested by microenterprises (by loan size), HY2/2016



Source: Authors, based on ECB SAFE (2017a) data

Figure 62: Perceived change in the external financing gap (by firm size)



Source: Authors, based on ECB SAFE (2017a), Statistical Data Warehouse

Figure 62 shows how microenterprises report on changes in their perceived financing gap and compares this to other company size classes. Also here it becomes apparent that microenterprises believe they operate in a more challenging environment than larger firms: 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 specifically, are still burdened by significant difficulties in accessing financial resources from traditional credit channels. Microenterprises still face a tight credit supply by mainstream banks with a high risk aversion and increasing need to de-leverage their balance sheets. Disadvantaged groups, such as long term unemployed, or workers with a migrant background, lack the necessary collateral to secure loans from traditional loan providers. In this environment, lending might be allocated away from small, young and opaque firms as they are perceived to be more risky than their larger peers and have smaller financing needs which are difficult to cover in a cost-efficient manner by mainstream funding providers.

Financial inclusion of potential business creators is especially important in countries with high unemployment numbers. In addition to the 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. Well trained entrepreneurs are better able to repay loans. Therefore, aside from these financial products and services, many European MFIs provide non-financial services as well, but without public support cost-free non-financial services may become a burden for MFIs (EMN-MFC, 2016).

Against the background of 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 well-established microfinance banks – in order to make microfinance a fully-fledged segment of the European financial sector. Bruhn-Leon, Eriksson and Kraemer-Eis (2012) discuss the rationale for public support in the microfinance area and explain how European policy – through the EIF - currently supports the microfinance sector under the Progress Microfinance mandate. The intervention logic is based on the market structure of the microfinance sector and its characterising diversity. It seeks to maximise outreach through a flexible investment approach in terms of eligible types of investments and types of financial intermediaries. The key target group are non-bank MFIs, but the range of financial intermediaries is extended also to banks with good outreach to microfinance clients, such as cooperative banks or micro-banks.

Results show so far that non-bank MFIs have been the most active lenders over the first five years of Progress Microfinance, as their main focus is micro-lending, unlike banks. Moreover, many non-bank MFIs have made use of the flexibility under Progress Microfinance to provide funding and risk coverage denominated in local currency. Progress Microfinance that was launched in 2010 has in April 2016 reached the end of the investment period. It has reached micro-borrowers across 23 countries within EU-28. It is estimated that Progress Microfinance will mobilise more than EUR 500m of new micro financing to around 60,000 micro-borrowers, most of which are start-ups.

In mid-2015 the Progress Microfinance successor program, the program for Employment and Social Innovation (EaSI) was launched. It has a wider geographical scope within Europe and also targets lending to social enterprises. EaSI contributes to the Europe 2020 strategy by supporting the EU's objective of high level employment, adequate social protection, fighting against social exclusion and poverty and improving working conditions. By mid-2017 EIF had signed 42 EaSI guarantee agreements covering 21 countries (including Albania, Montenegro and Serbia outside of EU-28). Over time these guarantee agreements will mobilise around EUR 800m of new financing to micro-borrowers and social enterprises. Around 43% of the EaSI guarantee agreements had been entered into with non-banks.

7 Concluding remarks

The economic outlook for Europe remains positive. The financing outlook of European SMEs has further improved since the publication of the last ESBFO in December 2016. Despite this positive development, a significant proportion of European SMEs still experience barriers in access to finance. Furthermore, this proportion varies strongly from country to country. In addition, worries about the general economic outlook weighed on firms' investment decisions and in many countries there is a low growth trap. Findings from the EIB Group Survey on Investment and Investment Finance (EIBIS) show signs of an investment gap: Approximately 15% of the surveyed firms reported that their investment activities over the past three years were too low to ensure the future success of their business. With respect to the short-term, the political and regulatory climate negatively affected investment, while for the longer-term uncertainty and a lack of skilled staff were identified as the main barriers to investment (EIB, 2017).⁸³

Uncertainty is the enemy of investment – the triggering of article 50 by Theresa May did start the Brexit process, but the process itself, as well as the outcome is very much unclear – also for the impact on the EIB Group. Moreover, the uncertainty related to US politics and a more protectionist trade stance increased. On the other hand, the results of the elections in the Netherlands and France removed a significant portion of the political risk that overshadowed positive economic fundamentals.

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. EIF has increased – as the key catalytic investor in European venture and growth capital funds – its counter-cyclical role in providing financing solutions to boost entrepreneurship and innovation. 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. 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, highly 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-

⁸³ See www.eib.org/eibis for more information on the EIBIS survey.

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 the EU Member States.

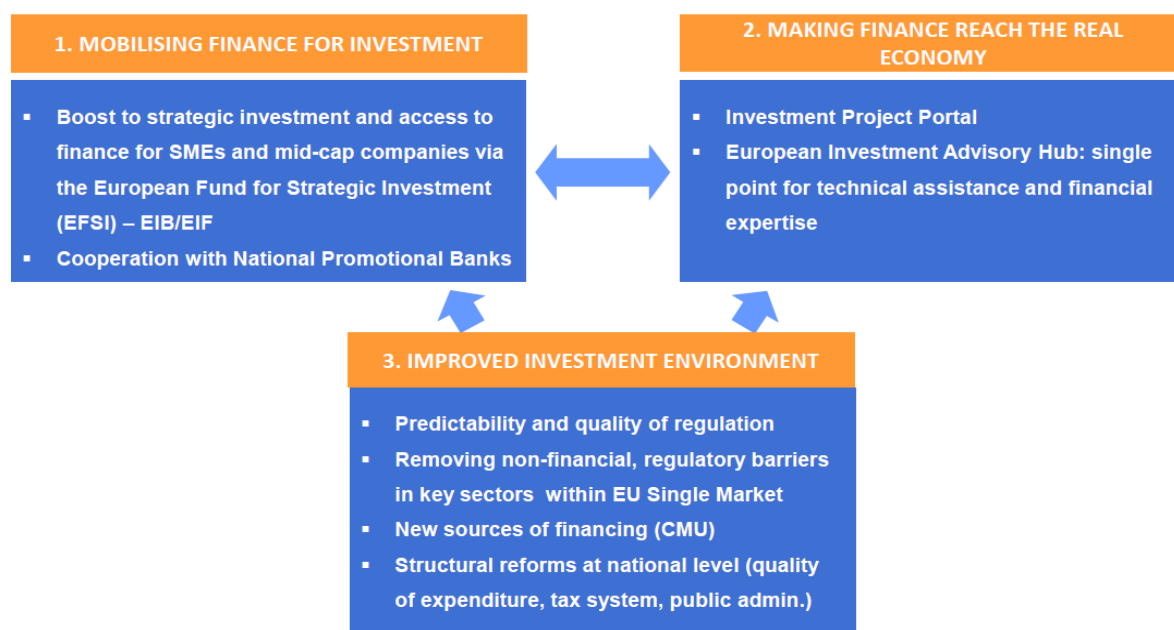
A segment that we only covered partially in this report is *Fintech* (we discussed crowdfunding as sub-segment of Fintech, see Box 2). Fintechs are attracting considerable attention – and while it is probably too early at this stage to draw conclusions on the overall contribution to the economy of these 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. For established market players Fintechs can play various roles – e.g. as competitors, integration targets, or in a symbiosis as business partners. New blending solutions are emerging, in particular in the fields of crowdfunding (both, lending and equity) – examples are combinations of microfinance and crowdlending, Business Angel/Venture Capital financing and crowdinvesting, or banks using marketplace lenders as distribution channels. Fintech market players can potentially play an important role in enhancing access to finance for SMEs, as counterparts in SMESec transactions, and as well as final beneficiaries/investee companies. Moreover, Fintechs might help to reduce the pronounced asymmetric information problem in small business lending, through technological advances in information processing, such as the increasing ability to handle and process ‘big data’.

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. In 2016, EIF has participated in the inaugural SMESec transaction for Funding Circle, the largest European market based lender to SMEs. The latest 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 (see Box 14) 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 seamless within the European Union by creating a pass-porting and licensing framework would go a long way in creating a pan-European Fintech market.

As shown above, despite significantly increased public support for SMEs, including by the EIB Group, SMEs continue to perceive a lack of public support in access to external finance. In this context, the relevance of the *Investment Plan for Europe (IPE)*⁸⁴ 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 63.

⁸⁴ See <http://www.eib.org/efsi/index.htm> and http://www.eif.org/what_we_do/efsi/index.htm.

Figure 63: Pillars of the IPE



Source: European Commission

Box 14: Capital Markets Union (CMU)

The CMU is an important part of the IPE’s third pillar – but of course all three pillars are strongly interlinked. The CMU Initiative aims at developing and integrating the EU financial markets to address financial market fragmentation across Member States. The purpose is to diversify the availability and access to funding sources by improving access to bank financing and complementing it, as well as ensuring a more efficient and less-costly allocation of capital across borders. The thrust of the CMU is to provide a comprehensive structure of financial channels efficiently linking available liquidity and productive investment projects (see European Commission 2015c). Many of the CMU’s policy actions have the objective to enhance access to finance for SMEs. In a forthcoming article, Kraemer-Eis and Lang (2017) summarise and explain the links between SME financing and the CMU. The essay covers the following aspects:

The CMU aims at improving the framework conditions for SME financing, at strengthening bank lending – as the most important external financing source for SMEs - and at diversifying the range of potential financing sources for SMEs – for various financial instruments from debt to equity.

For the implementation of the CMU, the EC is pursuing a dual strategy of “quick wins” that aims at having short-term impact on capital markets, coupled with long term structural changes paving the way to greater integration and harmonisation of the European capital markets.

Box 14 continued:

The CMU can contribute to the mitigation of SMEs' access to funding constraints. In doing so, it aims at improving the access to financing not only from banks but also from alternative sources. A basis for this approach is that European SMEs receive five times less funding from capital markets than their US peers (European Commission 2015d). The EC's idea is that stronger capital markets could complement Europe's tradition of bank financing. This is expected to mobilise capital and channel it, inter alia, to SMEs. Therefore, among other actions,⁸⁵ the EC plans to diversify the funding choices for Europe's businesses and SMEs and to enhance the capacity of banks to lend. In order to broaden the range of available funding sources, the EC intends to implement a range of measures, which will be complemented by initiatives to enhance the lending capacity of banks.

In particular the CMU tries to foster bank lending to SMEs through a revival of securitisation, to support the emergence and use of alternative financing sources (like crowdfunding, loan-originating funds, venture and growth capital funds, Business Angels), and covers as well a range of further actions like the use of covered bonds to support SME lending, private placements, local credit unions, and how to overcome challenges around non-performing loans.

The article concludes that the European Commission's ambitious plan to establish a CMU until the end of 2019 - with all its different features – can improve the framework conditions for SMEs in Europe. Due to the heterogeneity of the SME population also the effects of the proposed policy actions may be heterogeneous across various types of SMEs and across countries (Demary et al. 2016).

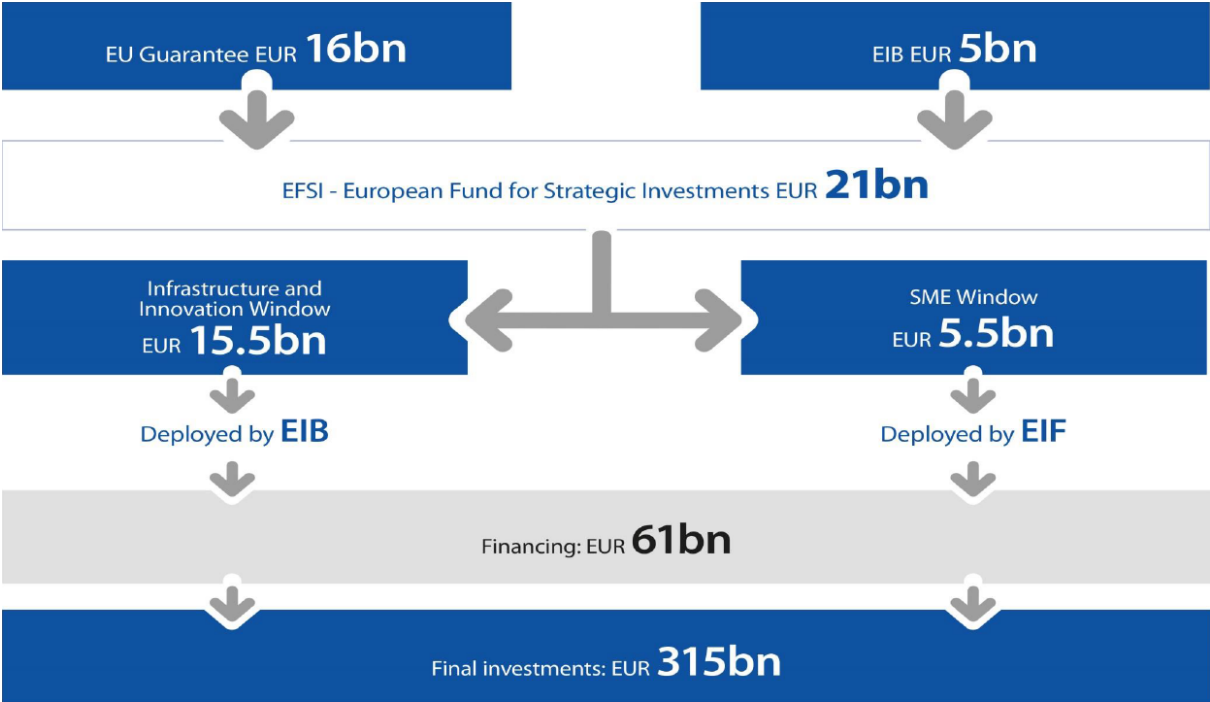
As part of the IPE's pillar one, the European Fund for Strategic Investments (EFSI) aims at unlocking additional investments of at least EUR 315bn over a three year period by addressing market gaps and mobilising private resources. EFSI is a strategic partnership between the EC and the EIB Group. The EIB Group contributes EUR 5bn to the initiative alongside a EUR 16bn guarantee from the EU budget. Currently, EFSI has two components (see as well Figure 64):

- 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.

The resources under EFSI enable 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. During the first phase, initial EFSI resources under the SME Window are being used to accelerate and enhance the deployment of existing EU flagship programmes which EIF manages – i.e. COSME, InnovFin – and to significantly increase the Risk Capital Resources (RCR) mandate for equity investments, which EIB has entrusted to EIF. Thanks to EFSI, also the RCR equity mandate which EIF manages on behalf of EIB has been increased by EUR 2.5bn.

⁸⁵ Other actions include measures that aim at (a) ensuring an appropriate regulatory environment for long term and sustainable investment and financing of Europe's infrastructure, (b) increasing investment and choices for retail and institutional investors and (c) bringing down cross-border barriers and developing capital markets for all Member States. In the CMU mid-term review communication, the EC published priority actions that also address some additional capital market dimensions (see European Commission 2017e for details).

Figure 64: EFSI structure



Source: EIB Group

In the second phase of the EFSI SME Window (started in 2016), new products are being rolled out, including a new Pan-European Venture Capital Fund(s)-of-Funds programme, products for social impact and microfinance, as well as products in relation to the new equity and securitisation platforms: 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 on a 1:1 basis. 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.

The implementation of the EFSI SME window is well on track, as per end of May 2017, 276 transactions have been signed in all EU (28) Member States, with expected mobilised investments of around EUR 74bn (89% of target) and estimated number of benefitting SMEs of almost 424k.⁸⁶ The demand from intermediaries to finance SMEs remains very high. Based on the success of the EFSI implementation, the European Commission, in accordance with Article 18 of Regulation (EU) 2015/1017, on 14th September 2016 proposed an extension of EFSI by increasing its firepower and duration and to reinforce its strengths (European Commission 2016d). European Union economy and finance ministers approved in principle the extension of the Investment Plan for

⁸⁶ Latest EFSI figures can be found here (http://ec.europa.eu/priorities/publications/investment-plan-results-so-far_en).

Europe and EFSI at the Ecofin Council on 6th December 2016, passing the ball to the European Parliament.

The new proposal, referred to as EFSI 2.0, includes an increase in the EU guarantee to EUR 26bn and in EIB capital to EUR 7.5bn, which should mobilise private and public investment of EUR 500bn over the period until 2020. The proposal also focuses on project sustainability, enhancement of geographical coverage and ways to reinforce take-up in less developed regions, while also aiming to enhance the transparency of investment decisions and governance procedures, and reinforce the social dimension by means of additional financial instruments.

It is foreseen that the SMEW, which has already been scaled up under the present framework with EUR 500m transferred from the IIFW in July 2016, will be a key beneficiary of support under EFSI 2.0. One aim is to step up access to financing for SMEs significantly. According to the proposal, particular attention should be paid to social enterprises and to EFSI's social dimension. This would include the development and deployment of new financial instruments.

On 15th May 2017, the European Parliament's Budgets and the Economic and Monetary Affairs Committees have approved by a large majority the extension of EFSI.

European Commission Vice-President Jyrki Katainen, responsible for Jobs, Growth, Investment and Competitiveness, said: "The European Fund for Strategic Investments has already proven to be an important tool to boost investment, support jobs and spur growth across all 28 Member States. The extension of the EFSI represents an opportunity to build on that success. I look forward to continue working with Members of the European Parliament and Member States in the weeks to come to secure a final agreement." (European Commission 2017c).

ANNEX

Annex 1: Private Equity Glossary

(selection, from EVCA/Invest Europe)

- **Buyout:** A buyout is a transaction financed by a mix of debt and equity, in which a business, a business unit or a company is acquired with the help of a financial investor from the current shareholders (the vendor).
- **Buyout fund:** Funds whose strategy is to acquire other businesses; this may also include mezzanine debt funds which provide (generally subordinated) debt to facilitate financing buyouts, frequently alongside a right to some of the equity upside.
- **Capital weighted average IRR:** The average IRR weighted by fund size.
- **Carried interest:** A share of the profit accruing to an investment fund management company or individual members of the fund management team, as a compensation for the own capital invested and their risk taken. Carried interest (typically up to 20% of the profits of the fund) becomes payable once the limited partners have achieved repayment of their original investment in the fund plus a defined hurdle rate.
- **Closing:** A closing is reached when a certain amount of money has been committed to a private equity fund. Several intermediary closings can occur before the final closing of a fund is reached.
- **Commitment:** A limited partner's obligation to provide a certain amount of capital to a private equity fund when the general partner asks for capital.
- **Deal flow:** The number of investment opportunities available to a private equity house.
- **Disbursement:** The flow of investment funds from private equity funds into portfolio companies.
- **Distribution:** The amount disbursed to the limited partners in a private equity fund.
- **Divestment:** See exit.
- **Drawdown:** When investors commit themselves to back a private equity fund, all the funding may not be needed at once. Some is used as drawn down later. The amount that is drawn down is defined as contributed capital.
- **Early stage:** Seed and start-up stages of a business.
- **Early stage fund:** Venture capital funds focused on investing in companies in the early part of their lives.
- **Exit:** Liquidation of holdings by a private equity fund. Among the various methods of exiting an investment are: trade sale; sale by public offering (including IPO); write-offs; repayment of preference shares/loans; sale to another venture capitalist; sale to a financial institution.
- **Expansion capital:** Also called development capital. Financing provided for the growth and expansion of a company, which may or may not break even or trade profitably. Capital may be used to: finance increased production capacity; market or product development; provide additional working capital.
- **Follow-on investment:** An additional investment in a portfolio company which has already received funding from a private equity firm.
- **Fund:** A private equity investment fund is a vehicle for enabling pooled investment by a number of investors in equity and equity-related securities of companies (investee companies). These are generally private companies whose shares are not quoted on any stock exchange. The fund can take the form either of a company or of an unincorporated arrangement such as a limited partnership. See limited partnership.

- **Fund of Funds:** A fund that takes equity positions in other funds. A fund of fund that primarily invests in new funds is a Primary or Primaries fund of funds. One that focuses on investing in existing funds is referred to as a Secondary fund of funds.
- **Fund size:** the total amount of capital committed by the limited and general partners of a fund.
- **Fundraising:** The process in which venture capitalists themselves raise money to create an investment fund. These funds are raised from private, corporate or institutional investors, who make commitments to the fund which will be invested by the general partner.
- **General Partner:** A partner in a private equity management company who has unlimited personal liability for the debts and obligations of the limited partnership and the right to participate in its management.
- **General Partner's commitment:** Fund managers typically invest their personal capital right alongside their investors' capital, which often works to instil a higher level of confidence in the fund. The limited partners look for a meaningful general partner investment of 1% to 3% of the fund.
- **Generalist fund:** Funds with either a stated focus of investing in all stages of private equity investment, or funds with a broad area of investment activity.
- **Holding period:** The length of time an investment remains in a portfolio. Can also mean the length of time an investment must be held in order to qualify for Capital Gains Tax benefits.
- **Horizon IRR:** The Horizon IRR allows for an indication of performance trends in the industry. It uses the fund's net asset value at the beginning of the period as an initial cash outflow and the Residual Value at the end of the period as the terminal cash flow. The IRR is calculated using those values plus any cash actually received into or paid by the fund from or to investors in the defined time period (i.e. horizon).
- **Hurdle rate:** A return ceiling that a private equity fund management company needs to return to the fund's investors in addition to the repayment of their initial commitment, before fund managers become entitled to carried interest payments from the fund.
- **Inception:** The starting point at which IRR calculations for a fund are calculated; the vintage year or date of first capital drawdown.
- **Institutional investor:** An organisation such as a bank, investment company, mutual fund, insurance company, pension fund or endowment fund, which professionally invest, substantial assets in international capital markets.
- **Internal rate of return (IRR):** The IRR is the interim net return earned by investors (Limited Partners), from the fund from inception to a stated date. The IRR is calculated as an annualised effective compounded rate of return using monthly cash flows to and from investors, together with the Residual Value as a terminal cash flow to investors. The IRR is therefore net, i.e. after deduction of all fees and carried interest. In cases of captive or semi-captive investment vehicles without fees or carried interest, the IRR is adjusted to create a synthetic net return using assumed fees and carried interest. For the avoidance of doubts: IRR means the financial IRR and not the economic IRR, i.e. it does not account for any externalities.
- **IPO (Initial public offering):** The sale or distribution of a company's shares to the public for the first time. An IPO of the investee company's shares is one the ways in which a private equity fund can exit from an investment.
- **Later stage:** Expansion, replacement capital and buyout stages of investment.
- **Leverage buyout (LBO):** A buyout in which the New Company's capital structure incorporates a particularly high level of debt, much of which is normally secured against the company's assets.
- **Limited Partnership:** The legal structure used by most venture and private equity funds. The partnership is usually a fixed-life investment vehicle, and consists of a general partner (the management firm, which has unlimited liability) and limited partners (the investors, who have limited liability and are not involved in the day-to-day operations). The general partner receives

a management fee and a percentage of the profits. The limited partners receive income, capital gains, and tax benefits. The general partner (management firm) manages the partnership using policy laid down in a Partnership Agreement. The agreement also covers, terms, fees, structures and other items agreed between the limited partners and the general partner.

- **Management fees:** Fee received by a private equity fund management company from its limited partners, to cover the fund's overhead costs, allowing for the proper management of the company. This annual management charge is equal to a certain percentage of the investors' commitments to the fund.
- **Mezzanine finance:** Loan finance that is halfway between equity and secured debt, either unsecured or with junior access to security. Typically, some of the return on the instrument is deferred in the form of rolled-up payment-in-kind (PIK) interest and/or an equity kicker. A mezzanine fund is a fund focusing on mezzanine financing.
- **Multiples or relative valuation:** This estimates the value of an asset by looking at the pricing of "comparable" assets relative to a variable such as earnings, cash flows, book value or sales.
- **Pooled IRR:** The IRR obtained by taking cash flows from inception together with the Residual Value for each fund and aggregating them into a pool as if they were a single fund. This is superior to either the average, which can be skewed by large returns on relatively small investments, or the capital weighted IRR which weights each IRR by capital committed. This latter measure would be accurate only if all investments were made at once at the beginning of the funds life.
- **Portfolio company:** The company or entity into which a private equity fund invests directly.
- **Pre seed stage:** The investment stage before a company is at the seed level. Pre-seed investments are mainly linked to universities and to the financing of research projects, with the aim of building a commercial company around it later on.
- **Private Equity:** Private equity provides equity capital to enterprises not quoted on a stock market. Private equity can be used to develop new products and technologies (also called venture capital), to expand working capital, to make acquisitions, or to strengthen a company's balance sheet. It can also resolve ownership and management issues. A succession in family-owned companies, or the buyout and buying of a business by experienced managers may be achieved by using private equity funding.
- **Private Equity Fund:** A private equity investment fund is a vehicle for enabling pooled investment by a number of investors in equity and equity-related securities of companies. These are generally private companies whose shares are not quoted on a stock exchange. The fund can take the form of either a company or an unincorporated arrangement such as a Limited Partnership.
- **Quartile:** The IRR which lies a quarter from the bottom (lower quartile point) or top (upper quartile point) of the table ranking the individual fund IRRs.
- **Rounds:** Stages of financing of a company. A first round of financing is the initial raising of outside capital. Successive rounds may attract different types of investors as companies mature.
- **Secondary investment:** An investment where a fund buys either, a portfolio of direct investments of an existing private equity fund or limited partner's positions in these funds.
- **Seed stage:** Financing provided to research, assess and develop an initial concept before a business has reached the start-up phase.
- **Start-up:** Companies that are in the process of being set up or may have been in business for a short time, but have not sold their product commercially.
- **Target company:** The company that the offeror is considering investing in. In the context of a public-to-private deal this company will be the listed company that an offeror is considering investing in with the objective of bringing the company back into private ownership.
- **Top Quarter:** Comprises funds with an IRR equal to or above the upper quartile point.

- **Track record:** A private equity management house's experience, history and past performance.
- **Venture Capital:** Professional equity co-invested with the entrepreneur to fund an early-stage (seed and start-up) or expansion venture. Offsetting the high risk the investor takes is the expectation of higher than average return on the investment. Venture capital is a subset of private equity.
- **Venture Capitalist:** The manager of private equity fund who has responsibility for the management of the fund's investment in a particular portfolio company. In the hands-on approach (the general model for private equity investment), the venture capitalist brings in not only moneys as equity capital (i.e. without security/charge on assets), but also extremely valuable domain knowledge, business contacts, brand-equity, strategic advice, etc.
- **Vintage year:** The year of fund formation and first drawdown of capital.
- **Volatility:** The volatility of a stock describes the extent of its variance over time.
- **Write-off:** The write-down of a portfolio company's value to zero. The value of the investment is eliminated and the return to investors is zero or negative.

Annex 2: Securitisation Glossary

- **Attachment Point:** The attachment point is the level of subordination that a particular tranche has beneath it. The attachment point is a proxy of percentage of the transaction that will absorb losses before the senior tranche is adversely affected.
- **Credit Default Swap:** An agreement used in synthetic securitisations where the originator (protection buyer) sells the credit risk of an underlying portfolio to a counterparty (protection seller) without transferring the ownership of the assets.
- **Credit Enhancement:** Refers to one or more measures taken in a securitisation structure to enhance the security, the credit quality or the rating of the securitised instrument, e.g. by providing a third party guarantee (such as the EIF guarantee). The credit enhancement could be provided in the form of:
 - (i) Structural credit enhancement (tranching of the transaction in senior, mezzanine and junior tranches);
 - (ii) Originator credit enhancement (cash collateral, profit retention, interest sub-participation);
 - (iii) Third party credit enhancement (e.g. EIF or monoline insurers).
- **Credit Linked Notes (CLN):** A security issued by an SPV (or directly from the balance-sheet of the originator) credit-linked to the default risk of an underlying portfolio of assets. Usually used in synthetic securitisations for the mezzanine tranches of a transaction.
- **Collateralised loan obligations (CLOs)** are a form of securitisation where payments from multiple middle sized and large business loans are pooled together and passed on to different classes of owners in various tranches.
- **First Loss Piece (FLP):** Part of a securitisation transaction which is usually kept by the originator (as an "equity piece") and which covers the risk of first loss in the portfolio. Its size is a function of the historical losses, so as to protect the investors against the economic risk (estimated loss) of the transaction.
- **Issuer:** Refers to the SPV which issues the securities to the investors.
- **Kirb:** means the sum of the expected loss and regulatory capital that a financial intermediary assigns to an exposure (a portfolio) by using an Internal Rating Based (IRB) approach.
- **Mezzanine Risk:** Risk or tranche which is subordinated to senior risk, but ranks senior to the FLP.

- **Originator:** The entity assigning receivables in a securitisation transaction (funded transaction) or seeking credit risk protection on the assets (unfunded transaction).
- **Primary market:** The market in which securities are issued.
- **Secondary market:** The market where issued securities are traded.
- **Senior:** The class of securities with the highest claim against the underlying assets in a securitisation transaction. Often they are secured or collateralised, or have a prior claim against the assets. In true sale structures they rank senior in the cash flow allocation of the issuer's available funds.
- **Servicer:** Refers to the entity that continues to collect the receivables, enforcement of receivables, etc. Generally, the originator is also the servicer.
- **Special Purpose Vehicle (SPV):** Issuing entity holding the legal rights over the assets transferred by the originator. An SPV has generally a limited purpose and/or life.
- **Subordinated:** The classes of securities with lower priority or claim against the underlying assets in a securitisation transaction. Typically, these are unsecured obligations. They are also called Junior (or Mezzanine) notes and bonds.
- **Synthetic securitisation:** A transaction where the assets are not sold to an SPV but remain on balance sheet; and where only the credit risk of the assets is transferred to the market through credit default swaps or credit linked notes.
- **Tranche:** A piece, a portion or slice within a structured transaction.
- **Portfolio Tranching Cover:** The technique by which an Originator can buy protection on a portfolio. Such protection is only activated when the losses exceed a given threshold (Attachment Point).
- **True sale:** It refers to the separation of the portfolio risk from the risk of the originator, i.e. there is a non-recourse assignment of assets from the originator to the issuer (special purpose vehicle). To be contrasted with synthetic securitisations where only the underlying credit risk is transferred.
- **Whole Business Securitisation (WBS):** Securitisation of the general operating cash flow arising from a certain line or area of the business of the originator over the long term.

Annex 3: 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
- 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
- CESEE (countries): (countries in) Central, Eastern and South-Eastern Europe
- 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
- EAF: European Angels Fund
- 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
- 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
- EU-28: the 28 EU Member States
- EUR: Euro
- EuVECA: European Venture Capital Fund Regulation
- EVCA: European Private Equity & Venture Capital Association
- 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
- IMF: International Monetary Fund
- InnovFin: EU Finance for Innovators
- IORP – Institutions for Occupational Retirement Provision
- 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
- 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
- NFC: Non-financial corporation
- NGO: Non-Governmental Organisation
- 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
- Q: Quarter
- QE: Quantitative Easing
- RCR: Risk Capital Resources
- 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
- 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.)
- 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
- VC: Venture Capital
- WBS: Whole Business Securitisation

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