



SME financing in the euro area

New solutions to an old problem

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SMEs play a central role in terms of economic activity and employment in Europe. However, the sector's composition and its performance during the crisis has varied considerably between individual countries. A focus on the domestic market and an overwhelmingly large share of micro firms in the southern countries of the euro area have made these SMEs less resilient to the macro-shocks and changes in domestic demand of recent years.

As a result of organisational features and business strategies that are rarely publicly disclosed, capital market funding is seldom an option for SMEs which largely rely on bank loans for funding. At the same time, SMEs in the countries hit hardest by recession and unemployment struggle the most in their access to bank credit. In addition, not only has it become more challenging for SMEs to get loans but lending rates have also become less favourable for them after the crisis.

Mitigating measures such as LTROs that provide liquidity to the markets and support the liability side of banks' balance sheets have had limited success in easing lending standards for SMEs. Indeed, demand for LTROs is now far below pre-crisis levels and it is doubtful whether the new TLTROs will have a meaningful (positive) impact on bank lending to SMEs.

Instead, high lending rates for SMEs are correlated to a large extent with the banks' (still elevated) own refinancing costs at market rates and their risk perception regarding the outlook for SMEs in general.

The securitisation of SME loans has the potential to bridge the gap between SMEs' funding needs and the availability of bank loans by allowing banks to partly offload SME credit risks and transfer them from their balance sheets to the capital markets. In fact, there is significant upward or rebound potential for securitisation especially in the southern European countries. Therefore, strengthening SME securitisation may be one of the most effective ways to facilitate the flow of funds to the real economy.

Whereas the market for SME securitisations has been shrinking recently, there are signs of more aggressive competition for banks from shadow banks in general. This may imply that some SME loans are now being funded by lightly regulated or unregulated shadow lenders which may not be a desired outcome for regulators.

There is a large spectrum of public institutions which aim to support SMEs' access to finance in the euro area. However, private-sector involvement is crucial as direct government lending or loan guarantees may result in significant costs to taxpayers and may even hurt healthy and creditworthy SMEs. Although capital market-based initiatives are trying to help SMEs to further diversify their funding sources, the success of these efforts has been limited so far.

* The author would like to thank Marlene Braun for her valuable research assistance.



Introduction

Small and medium-sized enterprises (SMEs) play a pivotal role for employment, job creation, investment, innovation and economic growth and thus are crucial for the recovery of the European economy. SMEs' access to finance, however, has been challenging in the aftermath of the financial crisis and, given SMEs' central importance, became the focus of policymakers' attention.

SME definition of the European Union

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Enterprises which employ fewer than 10 persons and whose annual turnover does not exceed EUR 2 m, and/or whose balance sheet total does not exceed EUR 2 m are defined as **micro enterprises**. Enterprises which are larger than micro firms but employ fewer than 50 persons and whose annual turnover does not exceed EUR 10 m, and/or whose balance sheet total does not exceed EUR 10 m are defined as **small enterprises**. Enterprises which are larger than small firms but employ fewer than 250 persons and whose annual turnover does not exceed EUR 50 m, and/or whose balance sheet total does not exceed EUR 43 m are defined as **medium-sized enterprises**.

Taken together, micro, small and medium-sized enterprises make up the category of SMEs.

Sources: Annex, Article 2 2003/361/EC

The organisational features and the informational opacity of SMEs (see box 1 for a definition of SMEs) limit their access to standardised public equity and debt markets for funding.¹ As a result, one of the major challenges in financing SMEs is their heavy reliance on bank loans which puts them under pressure when banks tighten credit conditions, as has been the case in the recent financial upheaval. In addition to the tightening of credit standards in general, another problem is the discrepancy between borrowing costs of SMEs vis-à-vis those of large enterprises which widened significantly with the crisis.² The fact that both the tightening in bank loan criteria and the increase in the rate spread has been more pronounced in peripheral countries puts the SME funding problem into the spotlight of the policy debate. Against this background, a number of mitigating measures are currently being introduced to ease SMEs access to bank lending and allow for more favourable rates. These aim at either supporting the liability side of banks' balance sheets, e.g. through long-term refinancing operations, or the asset side, e.g. via the securitisation of SME loans. Nevertheless, from a banking sector perspective, the perception of risks regarding the outlook for many SMEs together with the banks' own refinancing costs at market rates, which remain elevated, may make it difficult to relax lending conditions for SMEs. Relief could come from the securitisation of SME loans which may have the potential to bridge the gap between the SMEs' funding needs and the availability of bank loans. Meanwhile, there are indications that credit intermediation, including some lending to SMEs, has in part already shifted outside the regulated banking system.

In closing the funding gap of SMEs, direct public-sector initiatives are as essential as the mitigating measures that are directed at the banking system. Even though some public initiatives for funding innovative firms and start-ups as well as SMEs existed already, a number of new initiatives or umbrella organizations for similar purposes were introduced recently. These existing and newly introduced initiatives either support the credit financing channel through providing loans or enable SMEs to raise equity funds from the capital market. Recently, private-sector or market-based initiatives have emerged that aim at providing direct access to finance for SMEs as well. However, these public and market-based initiatives differ significantly from country to country in terms of volume and scope. Therefore, an overview and comparison of already existing and recently introduced public and market-based initiatives is a topic of interest for policymakers and market participants alike.

In this study, we take a closer look at the funding patterns and funding problems of SMEs in the euro area, the mitigating measures to facilitate their access to finance as well as public and market-based initiatives to provide financing to SMEs. We start with stylised facts of SMEs in individual euro-area countries before discussing the funding alternatives available to SMEs, whereby we differentiate between bank lending and capital market funding. Assessing the degree of availability of bank credit in the euro area in aggregate terms and for a subset of individual countries, we show that SMEs in the countries facing the

¹ Unless otherwise stated, the EC's definition is used to define SMEs throughout this study.

² See OECD (2013) for a detailed discussion.



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starkest recession and highest unemployment struggle the most to obtain access to bank credit. We pursue our analysis by focusing on the relative borrowing cost of SMEs compared with large enterprises. In explaining the heightened lending rates to SMEs, we discuss the impact of mitigating measures such as long-term refinancing operations that support the liability side of banks' balance sheets as well as securitisation which supports the asset side. Moreover, we delve deeper into bank-related factors such as the banks' own refinancing costs and their perception of risks in explaining the unfavourable lending rates to SMEs. We briefly discuss the possibility of a shift in SME lending to the shadow banking sector. Later on, we focus on the public initiatives that support the financing of SMEs. In doing this, we differentiate between measures targeting debt and equity financing separately for a subset of countries. Finally, we provide a brief overview of existing market-based initiatives in some euro-area countries.

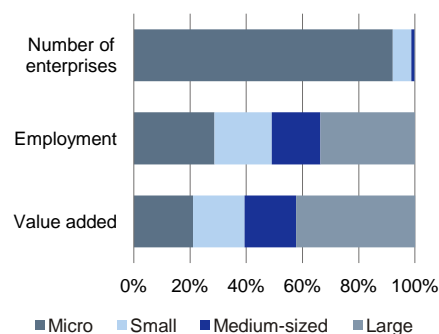
Financing patterns and problems for SMEs in the euro area

SMEs are the backbone of the real economy

SMEs are the engine of the European economy

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SMEs share as percentage in 2012 for EU 27



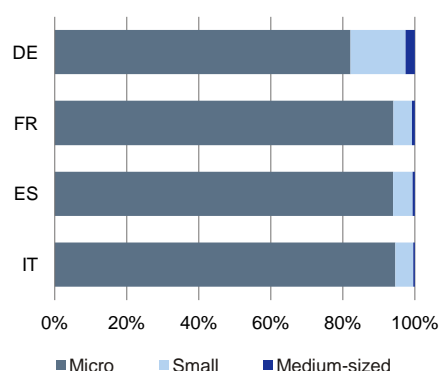
Sources: European Commission, London Economics, Deutsche Bank Research

Although it is intuitively evident why SMEs are of special importance and a key driver of the recovery of the European economy, it is illustrative to start with a brief overview on SMEs' paramount contribution to GDP and their pivotal role as employers (see chart 2).

The most recent statistics on SMEs document that 99.8% of all European businesses are SMEs which generate around 58% of the gross value added of the corporate sector in Europe. Moreover, with 86.8 million people, they account for almost 67% of private sector employment. About 85% of all European SMEs operate in the manufacturing and services sectors, employing a total of 74 million people and producing EUR 2.9 tr of annual value added. The largest contribution of the European SMEs in terms of employment and value added is in the construction sector, a driving force of jobs and growth in the EU. Meanwhile, in the manufacturing sector SME employment stands at roughly 60% of total sector employment and SME contribution to the sector's overall value added is around 45%. In the services sector, which generates the lion's share of growth in the post-industrial era, an even higher share of employment (67%) and 68% of total value added are generated by SMEs.

Composition of SMEs by country

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Sources: London Economics, European Commission, Deutsche Bank Research

SMEs play a very crucial role in job creation too: between 2002 and 2010 85% of newly created jobs in the EU came from SMEs. Considering the high unemployment rates in many euro area countries, the role of SMEs in job creation has become increasingly important in the recovery from the financial and debt crises. Given their paramount role for the real economy, SMEs are of particular importance for a sustained economic recovery and balanced growth.

Characteristics of SMEs and their performance during the crisis in individual countries

SMEs' contribution to employment, value added and their performance during the crisis as well as the share of micro enterprises among all SMEs differ significantly in individual euro area economies. Among SMEs, micro enterprises are traditionally more focused on domestic markets and therefore more vulnerable to changes in local demand and local credit availability. Because value added per employee tends to increase with company size, economies

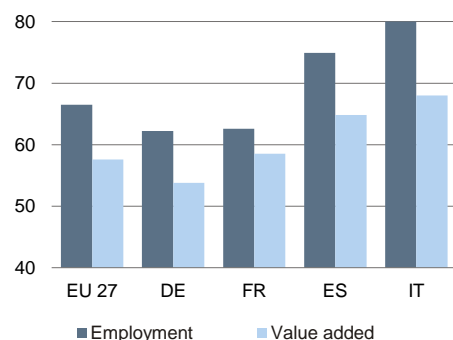


SME financing in the euro area

SMEs' contribution to employment and value added

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Share of SMEs in total in %



Sources: London Economics, European Commission, Deutsche Bank Research

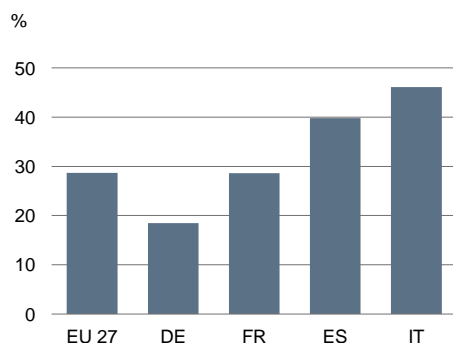
featuring mostly micro firms are likely to be lagging in terms of aggregate efficiency.³ Taken together, an overwhelmingly large share of micro firms could make SMEs as a whole less resilient to macro-shocks and changes in domestic demand in times of financial upheaval.

In **Germany**, compared with other countries, SMEs feature a larger share of small and medium-sized firms relative to micro firms. The share of micro enterprises among SMEs is some 10 pp less than the EU average which can largely be explained by structural differences such as i) German SMEs' greater export orientation as a result of which they benefited from decades of globalisation and ii) fewer obstacles to corporate growth in Germany than in other euro area countries. German SMEs still generate "only" 62% of all jobs and 54% of value added which is some 4 pp below the EU average. Nevertheless, it is important to note that the EC definition of SMEs does not necessarily cover the entire German *Mittelstand*, which usually also includes larger family-owned companies with e.g. up to 500 employees. Policy initiatives to support SMEs/the *Mittelstand* in Germany are well-developed and offer a number of alternative debt financing options which we discuss in detail later. EC reports suggest that German SMEs were by and large resilient even during the financial upheaval and recession of 2008/09 and have since fully recovered from the crisis.⁴

The share of micro enterprises among SMEs and SMEs' contribution to value added in **France** are about the EU average, while at 63%, SMEs' contribution to total employment is somewhat lower. In contrast to German SMEs, the SME sector in France was affected severely by the global financial crisis.⁵ Following a moderate improvement after the crisis, SMEs' recovery has been losing momentum again over the past two years. Despite favourable and well-established public support schemes, the overall subdued performance of French SMEs may partly be explained by their frequent focus on local markets and role of subcontractors to large firms.

Micro firms' contribution to total employment

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Sources: London Economics, European Commission, Deutsche Bank Research

Micro enterprises make up the vast majority of SMEs in **Italy** and provide almost half of the economy's total employment with 46% and 30% of value added. In total, SMEs generate 80% of employment and almost 70% of value added in Italy. Similar to French SMEs, SMEs in Italy were hit hard by the recent financial upheaval.⁶ The overwhelmingly large share of micro enterprises seems to make it harder for Italian SMEs to withstand macro-shocks and to adjust to changes in access to finance.

Similar to Italy, micro enterprises represent a disproportionately large share of SMEs in **Spain** and account for 40% of employment and 28% of value added. In total, SMEs generate 75% of employment and almost 65% of value added in Spain. Spanish SMEs largely comprise low-tech manufacturing and less knowledge-intensive services that focus on domestic markets. These features tend to make Spanish SMEs less competitive and particularly vulnerable to changes in domestic demand. Against this background, policy initiatives in Spain aim at supporting competitiveness and export orientation of SMEs. EC reports point out that the prolonged recession between 2008 and 2012 in Spain had a severe impact on the country's SMEs and large enterprises alike.⁷ With demand for their goods and services dropping substantially, SMEs not just in Spain, but also in other countries saw cash flows weakening, shifting attention to their overall financing structure.

³ See Vetter and Köhler (2014) for a detailed discussion.

⁴ See European Commission (2013a).

⁵ See European Commission (2013b).

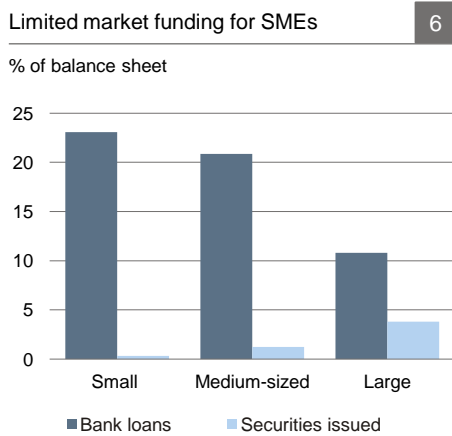
⁶ See European Commission (2013c).

⁷ See European Commission (2013d).



SME financing in the euro area

SMEs with limited financing alternatives

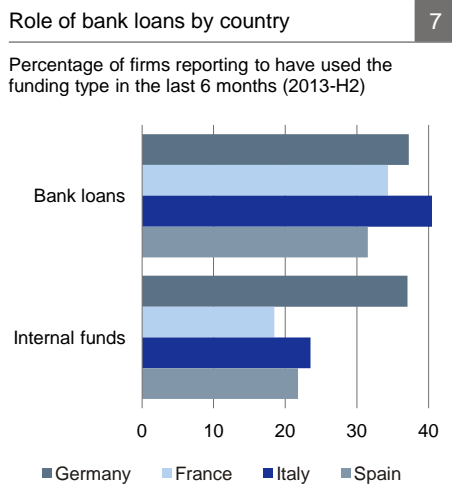


Countries covered are Austria, Belgium, France, Germany, Italy, Portugal, Spain and the Netherlands. Securities issued include bonds and other securities issued.

Sources: BACH, Deutsche Bank Research

Despite their major contribution to the real economy and their importance for the recovery, the spectrum of funding alternatives available to SMEs is constrained compared with large enterprises. As a result of their organisational features and business strategies that are rarely publicly disclosed, SMEs are usually not as transparent as large enterprises. This informational opacity limits their access to standardised public markets for equity and debt.

The Bank for the Accounts of Companies Harmonized (BACH)⁸ database sheds light on the differences between balance sheets of SMEs and those of large firms. As shown in chart 6, the share of bank loans in total assets is inversely related with firm size. Bank loans constitute 23% of small and 20% of medium-sized firms' balance sheets compared with only 11% for large firms. By contrast, SMEs are virtually unable to raise funds directly from investors, i.e., basically none of the small firms has issued any (debt or equity) securities, which also account for barely 1% of medium-size firms' balance sheets compared with 4% for large corporations. Clearly, prohibitively high legal, accounting and marketing costs together with SMEs' inherent structural characteristics, ownership features etc. are major impediments for SMEs to issue equity. Against a similar backdrop of exorbitant fixed costs, tapping bond markets is not a viable option for the overwhelming majority of SMEs either. What's more, debt capital market financing in the euro area is generally much more limited compared with the US which as such already makes tapping bond markets a less likely alternative even for large firms. As a consequence, it is not surprising to see barely any SME issuing bonds. Taken together, unlike large enterprises which may turn to the capital markets, SMEs largely rely on bank loans for funding. This narrow set of financing sources makes them more vulnerable to changing conditions in credit markets.



Sources: SAFE, Deutsche Bank Research

A complementary discussion focuses on internal funds. Generally, the availability of internal funds reduces external financing needs and may put a firm in a relatively better liquidity position when other forms of funding dry out. In this respect, a cross-country look at SMEs' internal funds (and their use of bank loans) reveals differences and similarities in financing structures across Europe (see chart 7). Data from the ECB's survey on access to finance (SAFE)⁹ shows a broadly comparable degree of reliance on bank loans for German, French, Italian and Spanish SMEs: between 32% and 41% of SMEs in these countries report to have used bank credit for financing in the last six months. Internal funds play a notable role as well. Nevertheless, German SMEs have made by far greater use of them recently than their peers elsewhere. 37% of SMEs in Germany but only roughly 20% in the other large EMU economies reportedly used internal funding in the last six months – a pattern that has broadly held true since the start of the SAFE survey in 2010. This may indicate better profitability as well as higher capital ratios for German SMEs which can be important factors in determining the supply and demand for bank credit. Indeed, banks will normally request higher risk premia for loans to undercapitalised SMEs whereas better capitalised or more profitable SMEs are able to rely more on internal resources for funding and in addition may have access to cheaper bank credit. To delve deeper into these trends, we discuss bank loan availability in more detail in the following section.

⁸ The BACH database only looks at a single criterion – sales volume – for classifying SMEs, but here it follows the EC definition: enterprises with an annual turnover not exceeding EUR 10 million are defined as small; enterprises with a turnover between EUR 10 million and EUR 50 million are defined as medium-sized; enterprises with a turnover above that are defined as large.

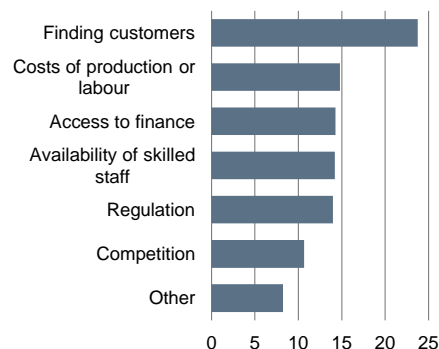
⁹ Data availability for individual countries is limited in the BACH database but the SAFE survey data provides useful insights into the use of particular funding instruments on a cross-country level.



SME financing in the euro area

Most pressing problems for SMEs in the euro area

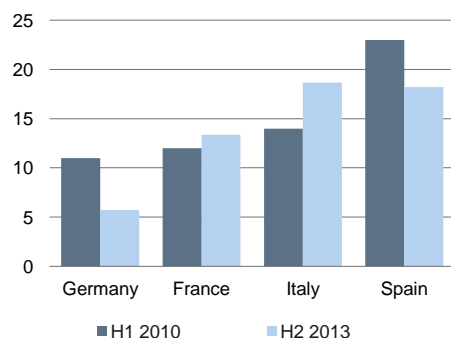
%, (2013-H2)



Sources: SAFE, Deutsche Bank Research

Most pressing problem for SMEs - access to finance

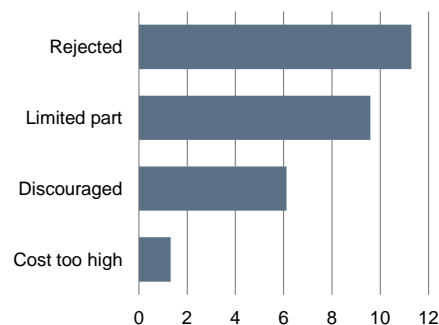
Percentage of SMEs reporting access to finance as most pressing problem



Sources: SAFE, Deutsche Bank Research

Euro area SMEs find it difficult to obtain bank loans

Percentage of SMEs reporting obstacles when applying for bank loan (2013-H2)



Sources: SAFE, Deutsche Bank Research

Availability of bank loans for SMEs

The fact that SMEs rely heavily on bank credit does not necessarily imply they face financing obstacles. The period before the financial crisis, for instance, was marked by easy access to bank loans. However, the favourable market conditions changed drastically with the intensification of the financial crisis in 2008 and since then SMEs on aggregate have suffered to some extent from disruptions in the supply of bank credit. By now, while 24% of the SMEs surveyed in SAFE cite finding customers as the most pressing problem – potentially due to weak demand in the aftermath of the crisis – a still substantial 14% name difficulties in the access to finance as the *single* most pressing problem (see chart 8).

A cross-country comparison reveals a striking divergence in access to finance being an obstacle for SMEs. Access to external funding is the single most challenging problem for SMEs in Italy, as indicated by 19% of firms and the second most challenging problem for SMEs in Spain, as mentioned by 18% of firms (see chart 9). The situation has deteriorated in particular in Italy with the share having increased significantly (up 5 pp) since H1 2010. SMEs in France report moderate problems in their access to finance (cited by 13% of firms). At the other extreme, only 6% of German SMEs report access to finance as their most pressing problem, down from 11% in 2010 which seems to be in line with both more relaxed credit supply conditions and lower external funding needs of German SMEs.

The survey also asks for more details about the exact problems SMEs face in accessing their most important source of funding, i.e. bank loans (see chart 10). For instance, 11% of the SMEs in Euroland reported that their credit application was rejected outright in the second half of 2013, and 10% received only a limited part of the loan sum they had applied for.¹⁰ Moreover, 6% did not apply at all, fearing possible refusal. There is strong cross-country heterogeneity in rejection rates too. On the one hand, in Germany, SMEs hardly experience problems obtaining bank credit: only 1% were rejected when they applied for credit and only 6% report they got a smaller loan than needed. Moreover, the rate of discouraged SMEs in Germany stands at around 2%, the lowest level in the entire euro area, and is down from 11% in 2010. On the other hand, Italian and Spanish SMEs report both high rejection rates (almost 15% and 10%, respectively) and a high share (almost 15% each) of loan applications that were only partly approved.

Overall, while having the greatest need for loans, it seems that SMEs in the countries with the fiercest recession and highest unemployment struggle the most in their access to bank credit, which is attributable to weaker profitability and lower capital positions. Meanwhile, if SMEs' demand for credit rises due to limited availability of internal funds, supply side problems in bank lending become more critical. This demand-supply imbalance may be more severe in countries such as Spain and Italy which is also reflected in unfavourable lending rates to SMEs.

Cost of bank credit increased disproportionately for SMEs

Not only has it become more challenging for SMEs to obtain loans at all but lending rates also became less favourable for them after the crisis. To shed more light on the borrowing cost of SMEs vis-à-vis large enterprises, a widely used proxy is the spread between the interest rates of loans with a size of up to EUR 1 million and those over EUR 1 million. Information on the borrowing costs of micro enterprises can also be gleaned from the spread between the interest

¹⁰ "Limited part" corresponds to a loan amount between 1% and 74% of the applied volume.

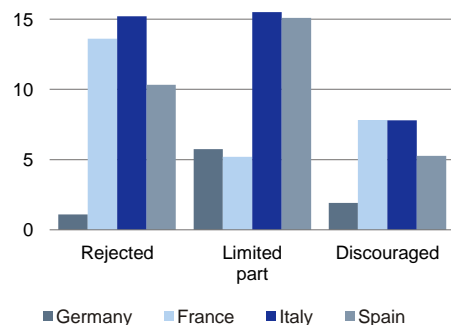


SME financing in the euro area

SMEs in southern countries have problems in obtaining bank credit

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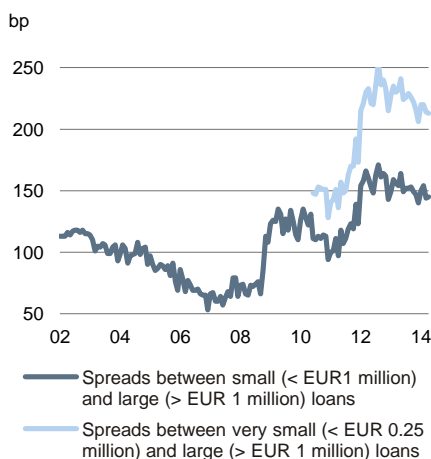
Percentage of SMEs reporting obstacles when applying for bank loan (2013-H2)



Sources: SAFE, Deutsche Bank Research

Disproportionally high financing costs for SMEs

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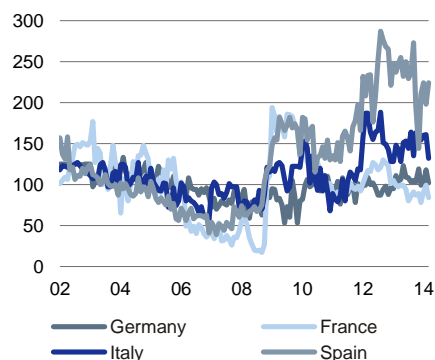


Sources: ECB, Deutsche Bank Research

SMEs' borrowing costs by country

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Spreads (in bp) between small (< EUR 1 million) and large (> EUR 1 million) loans



Sources: ECB, Deutsche Bank Research

rates of loans up to EUR 0.25 million and over EUR 1 million. However, time series for these very small loans are available only from mid-2010. Chart 12 presents how these indicators have evolved over time.

As shown in the chart, the gap between borrowing costs narrowed from 2002 to 2008 and in September 2008 the average costs of new SME borrowing were only 66 bp higher than those of large enterprises in the euro area. However, a significant widening took place with the intensification of the financial crisis in late 2008, and again in 2012 with the acceleration of the sovereign debt crisis. Following this second surge and only a slight moderation since then, SMEs' borrowing costs today are still around 140 bp higher than those of large enterprises in the euro area. Similar upward trends are observable for the relative borrowing costs of micro enterprises too: the spread widened up from approximately 150 bp before the aggravation of the sovereign debt crisis to over 250 bp in summer 2012. Recently, the disproportionately high borrowing costs for micro firms have somewhat stabilised at a spread of around 210 bp, which nevertheless is significantly higher than in the pre-sovereign crisis period.

The increase in lending rates to SMEs has been particularly pronounced in southern euro area countries, therefore demanding greater attention. During the boom phase, SMEs' relative borrowing costs in the largest economies of the euro area had converged to some 80 bp. Remarkably, during this period, German SMEs were paying persistently higher rates than SMEs in Spain, Italy and France in both absolute and relative terms. For instance, in September 2008 lending rates for SMEs in France were only 17 bp higher than for large enterprises compared with a spread of 63 bp in Germany. These trends reversed following the collapse of Lehman Brothers. However, even though the borrowing costs of SMEs surged in all countries, the upswing was much more evident in France, Italy and Spain. In Germany, the increase was relatively modest and by now the relative borrowing cost of SMEs is only slightly higher than in the pre-crisis period. On the other hand, a significant normalisation over recent months notwithstanding, the increase in lending rates to SMEs was much more pronounced in Italy and Spain, with peak spread values around 200 bp and 300 bp, respectively. Moreover, a stark divergence still persists compared with countries such as Germany.

All in all, SMEs and in particular micro firms from the countries with the deepest recession and highest unemployment pay significantly higher rates for bank loans than large enterprises. In normal times, analysts and policymakers would probably have agreed that action is needed to reduce these rates. However, under the current circumstances there is no consensus among market participants whether elevated rates in these countries are in line with SMEs' fundamentals or not. On the one hand, some argue that before the outbreak of the financial crisis, lending rates to SMEs were unreasonably low and fuelled excessive indebtedness. According to this line of argument, policy action to reduce lending rates would in fact negatively affect the economy as a whole by draining funds from the healthier parts of the economy to structurally weak SMEs.¹¹ On the other hand, others claim that in addition to significant negative spillover effects during the crisis among the southern countries and to other euro area members, the unsustainable level of unemployment in southern countries indeed requires policy action.¹² Furthermore, it is not clear a priori if the elevated lending rates to SMEs are due to SMEs' structural weaknesses or due to deleveraging in the banking sector, banks' risk aversion and liquidity problems. In line with the proponents of market intervention to reduce lending rates to SMEs, the ECB has introduced several mitigating measures which we discuss in detail below.

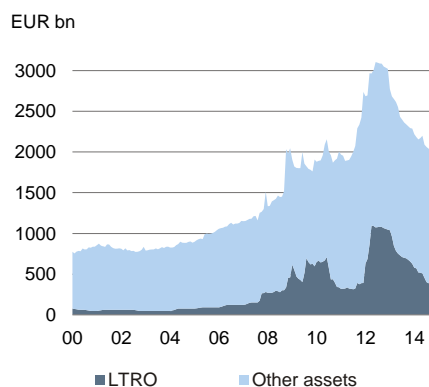
¹¹ See Moec (2013) for a detailed discussion.

¹² See Darvas (2013) for a detailed discussion.



Mitigating action (I): Long-term refinancing operations

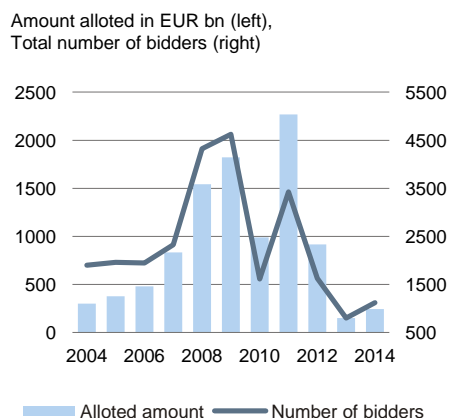
ECB balance sheet expanded 14



Sources: ECB, Deutsche Bank Research

To boost bank lending and thereby spur economic activity, the ECB provides cheap funding to banks in the form of long-term refinancing operations (LTROs) which come in addition to its provision of short-term liquidity. It is important to note, however, that the features of the LTROs have markedly changed since the pre-crisis period. First, originally, the longest maturity offered was only three months, which subsequently was lengthened to one year, three years and, most recently, four years. In addition, the ECB until 2008 set a fixed amount of funding it would provide and then obtained banks' bids for a certain volume. Overall, the amounts on offer were much lower than today, leading almost always to excess demand and oversubscription for LTROs. Third, the rates applied by the ECB – usually the normal benchmark rate – were much higher. All these factors dampened LTRO volumes significantly until late 2008. However, with the acceleration of the financial crisis and the onset of recession, the ECB took extraordinary measures, switching from an auctioning process to full allotment of any amount the banks applied for. Furthermore, the central bank considerably extended LTRO maturities in several steps, and cut the interest rates banks had to pay to record lows. Currently, the LTRO rate stands at only 0.15%, with durations of the latest tenders of up to four years. To shed more light on LTRO trends, chart 14 presents the ECB's LTRO volume (across all the different terms and conditions) and its total assets over time.

LTRO amounts allotted and number of bidders 15



2014 allotted amounts and total number of bidders are year-to-date (January-September).

Sources: ECB, Deutsche Bank Research

Prior to the crisis, the outstanding LTRO volumes were broadly stable at around EUR 150 bn. Bids for LTROs still exceeded the allotted amounts just before the failure of Lehman Brothers (on 9th September 2008, the ratio was about 2 to 1). After Lehman, LTRO volumes expanded; and LTRO bids and allotted amounts have been balanced since, of course. Volumes reached a record level of EUR 1,093 bn or 37% of the ECB's total assets in April 2012. Following significant repayments over recent years, LTRO volumes now stand at only EUR 430 bn or 21% of the ECB's balance sheet total.

The outstanding LTRO amounts provide limited information on the demand for LTROs and the reasons for the recent decline in volumes. More insights can be gained from the total number of bidders which is a proxy for the demand for LTROs (presented in chart 15). Similar to the surge in the outstanding amounts, the number of bidders increased exponentially with the crisis and reached a peak in 2009. Demand then remained elevated and allotted amounts marked a record volume in 2011. However, from 2012 onwards, demand for LTROs and allotted volumes decreased significantly and both are now far below even pre-crisis levels.

Undoubtedly, mitigating measures such as the LTROs have supported the banking sector during the crisis and have contributed to easing liquidity and funding constraints of the industry, thereby indirectly also helping bank lending to SMEs and large enterprises alike. However, the fact that both LTRO volumes and SME lending rates reached their peak at about the same time could be interpreted as evidence that LTROs indeed were hardly successful in bringing down lending rates to SMEs. We will take a further look at this potential causal relationship in an empirical analysis below. By now at least, both the demand for LTROs and the actual flows – which of course are partly affected by the maturing exceptional 3-year LTROs – have dwindled significantly, while the elevated costs of bank credit for SMEs still persist. This may indicate that there are factors other than a lack of cheap liquidity and funding for banks that lead to higher lending rates for SMEs.

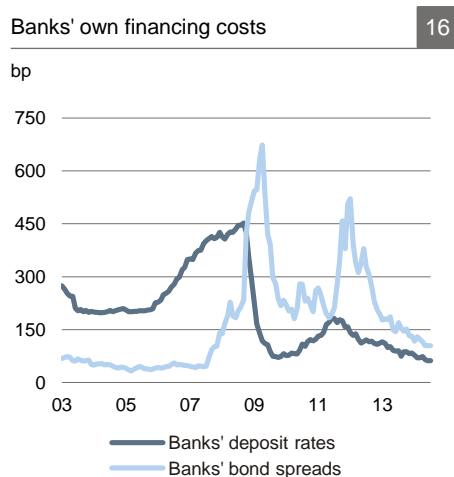
Recently, the ECB has introduced targeted longer-term refinancing operations (TLTROs), to promote bank lending to the real economy, i.e. bank lending to euro area non-financial corporations and households excluding loans for house purchase. The two TLTRO operations (the first conducted in September, the



SME financing in the euro area

second to follow in December) will allow banks to borrow up to 7% of their outstanding loans to the non-financial private sector in the euro area. The ECB loans will have a maturity of a maximum of 4 years and will be priced at 10 bp above the benchmark interest rate. Nonetheless, considering the subdued impact the 3-year LTROs seem to have had on SME credit supply, it looks unlikely that the new TLTROs will create meaningful incentives to lend to SMEs. Indeed, the September tender's result remained well below the EUR 400 bn on offer from the ECB, with banks borrowing only EUR 83 bn.

Banks' own refinancing costs



Sources: ECB, Markit, Deutsche Bank Research

But why did the cheap ECB liquidity not find its way to small and medium-sized firms? Banks may refrain from transmitting the favourable conditions of central bank funding to their clients due to their own balance sheet constraints, high refinancing costs or perceived risks in the SME sector. The ECB's interest rate statistics on deposit rates may help to shed light on the banks' own financing costs (chart 16). At first glance, this data does not seem to suggest a rise in financing costs; rather, it shows a noticeable decline in deposit rates over recent years. However, it needs to be kept in mind that this decline primarily reflects the ECB's monetary policy aimed at keeping lending rates at very low levels. Also shown in chart 16 is the index of banks' bond yields which provides the floor rates charged to firms. Indeed, bond yields were broadly stable prior to the start of the crisis at around 50 bp above the benchmark. However, financial bond spreads surged with the outbreak of the financial crisis, jumping to an all-time high of almost 700 bp in April 2009 and reaching another peak of more than 500 bp in January 2012. Even though bond yields have come down since, mostly due to search-for-yield sentiment, they remain elevated, at about twice the pre-crisis level. Thus, overall, banks' cost of funding via debt securities has increased considerably from 2008 onwards.

A closer look in the form of an empirical analysis of the relative borrowing costs of SMEs, the LTRO volumes¹³ and banks' own refinancing costs proxied by bond spreads can provide better insights into the relevant transmission channels. Even though all these elements are closely interrelated and are likely to be correlated with numerous other factors, a simple statistical method may help to determine if there is an empirical relationship between the banks' own refinancing costs as well as LTRO volumes and lending rates for SMEs. In doing this, we run a vector auto regression model and perform a Granger causality analysis. Causality in this context is discussed in a narrow statistical sense and indicates if one series helps to predict future values of the other series and vice versa. Table 17 summarizes the results of this exercise.

Table 17

Hypothesis	LTRO	Banks own refinancing costs
Impact on SME borrowing costs	NO	YES
Reverse impact from SME borrowing costs	NO	NO

Source: Deutsche Bank Research

The rejection of a causal relation between LTRO volumes and SMEs' borrowing costs suggests that the success of LTROs in reducing SMEs' borrowing costs may be limited. Moreover, the rejection of the reverse causality further supports a weak relation between the two. On the other hand, there is a causal relation from banks' own refinancing costs to the borrowing costs of SMEs. This implies that banks' balance sheet constraints or elevated refinancing costs may translate into higher lending rates for SMEs. The rejection of reverse causality from SMEs' borrowing costs lends further support to the one-sided relation

¹³ We use the ratio of the LTRO volume and total assets of the ECB for our analysis.



SME financing in the euro area

between the two. Taken together, LTROs seem to contribute relatively little to boosting SME lending which may put the effectiveness of the TLTROs in this regard into question. Admittedly, the results presented here say nothing about the nature of the common trends between these indicators and therefore do not claim to uncover a structural economic relationship.

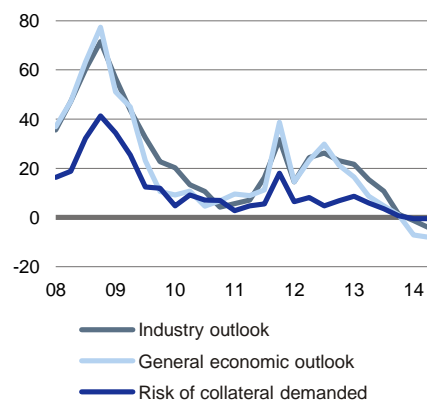
Banks' risk perception regarding SMEs

In addition to banks' own funding costs, a second factor may have been relevant in explaining the substantial rise in SMEs' borrowing costs: banks' risk aversion and increasingly cautious view on the outlook for SMEs. By and large, SMEs are perceived to have a higher probability of default than larger firms which in turn may lead banks to generally be more selective in supplying loans to SMEs. At the same time, as shown above, bank loans are much more crucial for smaller firms than for larger ones which have additional funding options, mainly in the capital markets. To shed light on banks' sentiment regarding SMEs' riskiness, chart 18 demonstrates the contribution of different factors to the tightening of banks' credit standards for loans to SMEs as documented in the Bank Lending Survey (BLS) of the ECB. Each series shows the net change (share of tightened minus share of eased) in the relevant factor compared with the previous quarter.

Banks' risk perception regarding SMEs

18

Contributed to tightening of credit standards
minus contributed to easing in %



Sources: BLS, Deutsche Bank Research

BLS data suggests that at the height of the financial crisis all factors had a peak in their contribution to the tightening of SME lending standards. Similarly, negative risk perceptions re-emerged with the intensification of the sovereign debt crisis. These trends overlap with increases in the relative borrowing costs of SMEs. Even though in recent years the risk perception of banks seems to have contributed less to a tightening of bank credit conditions (which itself also came to an end, largely), the much more negative assessment of SME risks compared with the pre-2007 period may not have reversed yet. Again, it is important to note that the BLS defines (net) changes in a series with respect to the level of the previous quarter. Therefore, the most recent slightly negative figures almost certainly do not imply a reversal or full normalisation of the risk perception's contribution to credit standards. By contrast, this de facto merely reflects a halt in a prolonged tightening process due to an ever greater risk perception, and banks' cautiousness with respect to lending to SMEs may basically persist.

All in all, our findings indicate that the mitigating measures that provide liquidity to the markets and support the liability side of banks' balance sheets may have had a limited impact on reducing the high borrowing costs of SMEs. On the other hand, these costs seem to be correlated to a larger extent with banks' own refinancing costs (specifically, the market rates) and banks' risk perception regarding the outlook for SME credit in general. Hence, alternative mitigating measures are worth discussing that allow for the transfer of the credit risk of SME loans to other parts of the financial system.

Mitigating action (II): Securitisation of SME loans

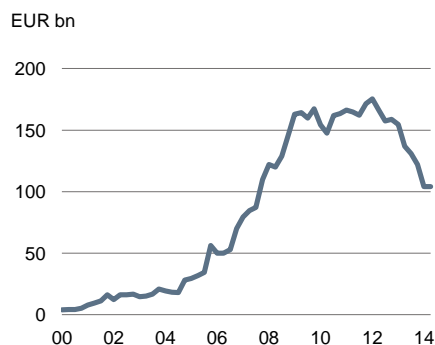
In addition to mitigating measures that provide liquidity at favourable conditions and thus support the liability side of banks' balance sheets, there are other measures such as securitisation that target the asset side of banks' balance sheets to facilitate lending to SMEs. This can be achieved by creating tradable or collateralisable securities linked to SME loans, thereby transferring their credit risk to the capital markets in an effective manner. To address the securitisation trends of recent years, chart 19 shows the outstanding volume of securitised SME loans in Europe. The available data suggests rapid expansion especially from 2006 to 2009, followed by a lull period and, since 2012, contraction. As of



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Securitised SME loans outstanding in Europe

19



2010-2014 data are from AFME. 2000-2010 data are from SIFMA. SIFMA values in USD are adjusted with the average exchange rate in the respective year.

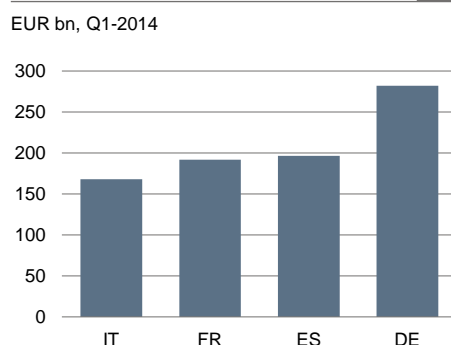
Sources: SIFMA, AFME, Deutsche Bank Research

Q2 2014, securitised SME loans stood at around EUR 104 bn, down from a peak of EUR 175 bn in Q1 2012.¹⁴

Before taking a closer look at securitisation, it is helpful to compare these figures with the entire volume of SME loans outstanding, irrespective of whether they are still kept on banks' balance sheets or are held by investors. Even though there is no exact data on the outstanding amount of SME loans, as lending figures in general are aggregates with respect to company size, OECD (2014) and Bundesbank (2013) statistics may help to quantify the approximate amounts, at least for some countries in the euro area. Using the most recent SME loan shares statistics,¹⁵ we estimate that there are around EUR 282 bn SME loans outstanding in Germany, EUR 196 bn in Spain, EUR 192 bn in France and EUR 168 bn in Italy (for a total of EUR 838 bn). Put differently, around 24% of all business loans in these four countries are loans to SMEs. It is important to note that the predicted values of SME loans are approximate figures using various information sources and hence they do not claim to be precise point estimates.

Outstanding amounts of SME loans

20



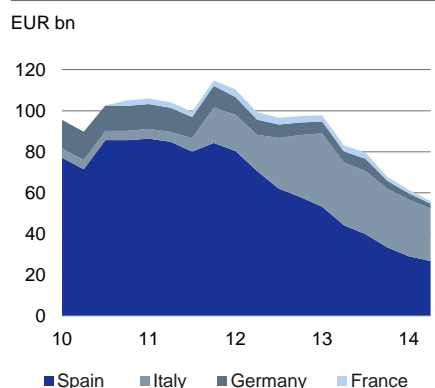
To compute SME loans outstanding, the share of SME loans in total business loans from 2012 (2011 for Germany) is used due to data limitations.

Sources: OECD, Bundesbank, Deutsche Bank Research

To complete the picture, chart 21 presents the breakdown of securitised SME loans for these four countries. In total, some EUR 56 bn or 7% of the outstanding SME loans are securitised as of Q2-2014. Meanwhile, the aggregate figures mask a stark cross-country heterogeneity: in Germany and France, outstanding volumes of securitised SME loans are quite low, at EUR 2.3 bn and EUR 1.2 bn respectively. Considering the overall subdued securitisation markets in these countries, this is not a surprising observation. By contrast, in line with a buoyant securitisation market in general, SME loan securitisations in Spain amount to around EUR 27 bn. Put differently, despite a significant decrease over recent years, some 14% of the SME loans in Spain are securitised. In Italy, the securitisation of SME loans gained a pace considerably after 2012, almost reaching the level of Spain, and now stands at around EUR 26 bn or 16% of all SME loans.

Outstanding amounts of securities backed by loans to SMEs

21



Sources: AFME, Deutsche Bank Research

The available data reveals a clear divergence in euro area economies with regard to the securitisation of SME loans. On the one hand, in countries where SMEs' access to bank credit is less of a problem, securitisation is meagre – as might be expected. On the other hand, where SMEs have significant difficulties in their access to finance or where lending rates are high, the volume of securities backed by loans to SMEs is higher. But there is upward or rebound potential both in Italy (with its positive development recently) and Spain (given that the market used to be much bigger). Higher levels of SME securitisation would allow Italian and Spanish banks to reduce the (credit) risks on their balance sheets by transferring further SME loans to the capital markets. By doing this, banks could benefit from capital relief and free up capacity for new loans to SMEs.¹⁶ Thus, securitisation allows banks to improve their capital positions without damaging lending to SMEs. SMEs may benefit through reduced lending rates or eased credit standards in general. In this respect, public initiatives that support the securitisation of SME loans may be helpful though of course, in doing this, the introduction of new risks should be avoided. For instance, new securitised products should be transparent and have standardised structures (no multiple securitisation); in addition, originators should have sufficient *skin in the game* to avoid moral hazard etc.¹⁷ 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. Potentially this could also involve at least temporary buying by

¹⁴ Data availability prevents a cross-country analysis of SME loan securitisation before 2010.

¹⁵ 2012 for all countries.

¹⁶ See Kraemer-Eis (2010) for a detailed discussion.

¹⁷ See Kraemer-Eis (2013) for a detailed discussion.



SME financing in the euro area

the ECB of high-quality paper backed by SME loans; limitations due to the relatively small market size notwithstanding.

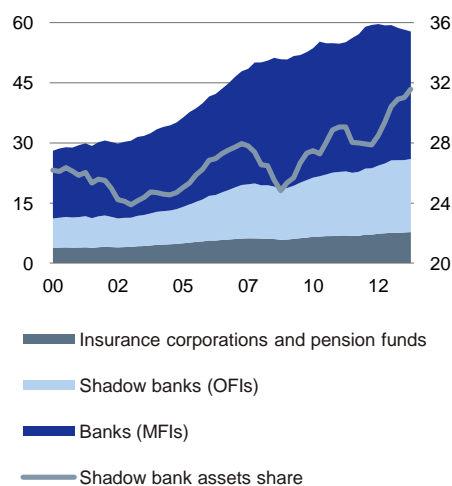
It is worth mentioning that banks often sell securitised SME (and other) loans to special purpose vehicles. In other words, even though the regulated banking sector plays a key role in originating and possibly securitising SME loans, a different part of the financial system is ultimately financing the securitised assets. We discuss the role of this non-bank financial sector in detail below.

Does SME lending shift to alternative providers?

Shadow bank assets on the rise in the euro area

22

Total assets in EUR tr (left),
Shadow bank share in financial sector % (right)



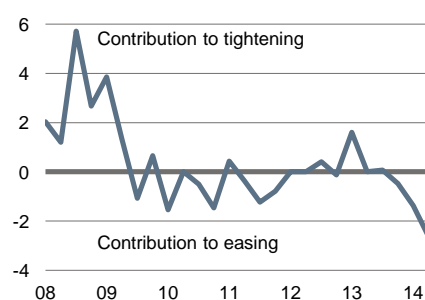
For computing shadows banks' relative share, financial sector is defined as the sum of MFI, OFIs as well as insurance corporations and pension funds.

Sources: ECB, Deutsche Bank Research

BLS: Impact of non-bank competition on banks' lending standards for SMEs

23

Net percentage of banks



Sources: ECB, Deutsche Bank Research

Given the constraints some SMEs face in getting sufficient credit from banks, due to ongoing deleveraging and regulatory pressure, are other sources of funding becoming more relevant? Shadow banks could emerge as alternative lenders, i.e. institutions which act like financial intermediaries but stay in the lightly regulated or unregulated non-bank financial sector. These non-bank entities, in addition to investing in securitised products, can also directly lend in the form of peer-to-peer lending, crowd funding or in other forms.

The shadow banking sector in the euro area has seen remarkable growth in the past few years. Chart 22 shows the total assets of banks, insurance corporations and pension funds as well as those of "other financial intermediaries", a conservative proxy for the size of the shadow banking system.¹⁸ Prior to 2005, the shadow banking sector was somewhat moderate in size with total assets amounting to around EUR 8 tr at end-2005. Since then, however, total shadow banking assets have more than doubled (with a temporary dip during the financial crisis), reaching EUR 18 tr at the end of 2013. The remarkable growth of this sector is visible in relative terms too. The share of shadow banks in the financial sector as a whole has climbed considerably to around 32% today, from 25% in 2005.

Certainly, an expansion in shadow bank assets does not necessarily indicate an increase in shadow bank lending to SMEs. Furthermore, bank assets are far larger than those of shadow banks. However, there are indeed some signs that change is underway. For instance, some non-bank financial institutions have publicly mentioned their interest in lending to SMEs. Moreover, policymakers point to growing activity of shadow banks in peer-to-peer lending and some other forms of credit creation for SMEs. A lack of data by and large prevents detailed analysis of these trends, but the BLS may shed some light on this discussion. It asks banks whether competition from non-banks has an impact on the tightening (or easing) of their conditions for SME loans. Not surprisingly, banks tend to ease credit standards in response to competitive pressures from the non-bank sector such as shadow banks. In the BLS context, the non-bank sector consists of insurance corporations and pension funds, financial auxiliaries and other financial intermediaries, for whom data is available from 2008 onward (see chart 23). The BLS results suggest that during the first few years of the crisis, non-bank competition has actually even led to some tightening which may largely be explained by the fragile situation of the financial sector as a whole, including non-banks. During this period, shadow banks seem to have had similar constraints as banks, thus refraining from providing credit. Between 2009 and 2013, non-bank competition only had a marginal impact on the availability of bank loans to SMEs. However, over the past few quarters, competition from shadow lenders seems to have become somewhat stronger, which contributed to a moderate net easing of credit standards.¹⁹ This may imply that some SME loans are now being funded by lightly regulated or unregulated shadow banks.

¹⁸ See FSB (2013) for a detailed discussion.

¹⁹ Overall, most of the other factors driving SME credit conditions have also started to contribute similarly to a moderate relaxation of banks' lending standards.



It is important to bear in mind that shadow banks are often highly opaque in terms of their activities and cannot rely on explicit public sector backstops for liquidity. Therefore, a situation in which banks are not able to lend to SMEs and the real economy is instead becoming dependent on more volatile and potentially unreliable alternatives may not be a desired outcome for regulators and policymakers. This underlines the importance of the mitigating measures already discussed and of other initiatives to support new loans (or equity financing) for SMEs described below.

Other initiatives to support SME funding

In closing SMEs' financing gap, another option is that public-sector or market-based entities e.g. lend directly to SMEs or provide guarantees for SME loans. In this respect, public and market-based initiatives are as essential as the mitigating measures, i.e. ECB funding and securitisation. Even though some public initiatives to help fund innovative firms and start-ups as well as SMEs already existed, a number of public initiatives or umbrella organisations for similar purposes have been set up only recently.²⁰ These initiatives either target debt by providing loans to SMEs or equity such as venture capital or tax incentives which we discuss in detail below.

Public / government initiatives

The financing problems of euro area SMEs have led to public interventions to overcome the obstacles. With the direct intervention of national governments, state-owned banks and other companies, these initiatives aim at improving financing conditions for SMEs through favourable interest rates or public guarantees for traditional bank loans as well as through support targeted at equity financing.

Germany

24 Germany

Programmes	Terms
Debt financing public initiatives	
ERP Start-up Loan (StartGeld)	up to EUR 100,000 up to 5-10 years for SMEs with 1-2 years of lifetime
ERP Start-up Loan (Universell)	up to EUR 10 million up to 20 years for SMEs with up to 3 years of lifetime
Entrepreneur Loan	up to EUR 25 million up to 20 years
Entrepreneur Loan (subordinated capital)	up to EUR 4 million up to 10 years
ERP Innovation Programme (Loan)	up to EUR 25 million up to 10 years
Equity financing public initiatives	
ERP-Startfonds (Equity Capital)	up to EUR 5 million per company depending on agreed terms of lead investor
ERP Participation Programme (Indirect Equity Capital)	up to 100% of investment with a max. of EUR 1.25 million up to 10 years

German public initiatives provide a wide range of support schemes to SMEs. KfW Group is the leading institution to provide long-term investment and working capital loans to SMEs in Germany. In terms of promoting credit to SMEs, KfW offers a number of different programmes: i) for individuals who are self-employed, ii) for small enterprises that were established only recently and iii) to SMEs that have been active in the market for a longer time. KfW generally grants SME loans through any regular commercial bank the borrower has chosen (incl. savings banks and cooperative banks). KfW typically provides long-term funding at fixed rates. These interest rates are either based on its AAA capital market rating without any further subsidies or additionally subsidized by KfW or government grants. KfW channels these funds via commercial banks to the final customers. Collateralisation of the loans is left to *usual banking procedure*. Risk margins are regulated according to rating and collateralisation. In their role as *relationship banks*, these commercial banks first analyse the commercial risk and then decide whether KfW should be involved in the provision of the loan or not. This two-step process ensures fair and reasonable allocation of funds.

Depending on the lifetime of the SMEs, KfW offers numerous loan and subsidy programmes (see table 24). For instance, *ERP-loan programmes* provide credit to SMEs with different maturities and at subsidised interest rate conditions. *ERP Innovation programmes* provide long-term financing for investments in the

²⁰ For a detailed discussion see Infelise (2014).



SME financing in the euro area

research and development (R&D) of new products, processes and services. For SMEs that have been active in the market for longer, KfW provides *entrepreneur-loans* with favourable interest rates. To provide equity financing to SMEs, KfW has the *ERP-Startfonds* and *ERP participation programmes*.

In 2013, the start-up and general corporate financing continued to increase with new (gross) lending of EUR 11.3 bn. KfW issued more than 34,000 *entrepreneur loans*, with a total volume of almost EUR 8 bn. Meanwhile, despite a shrinking number of start-ups in Germany, the committed volumes for both start-up loans increased to EUR 2.6 bn. Similarly, loan volumes rose in 2013 for KfW innovation funding and for promoting young innovative enterprises. Taken together, the range of KfW's public support schemes for German SMEs is markedly diversified and may be quite effective in facilitating access to finance especially in times of financial upheaval. Moreover, the availability of robust public support lowers the risk of funding uncertainty, thereby allowing for a longer-term approach to business.

Programmes	Terms	
Debt financing public initiatives		
Prêt Participatif d'Amorçage (PPA) (Loan)	EUR 50,000-EUR 75,000 up to 8 years	
Contrat de Développement Innovation (CDI) (Loan)	EUR 40,000-EUR 300,000 up to 6 years	
Contrat de Développement Participatif (CDP) (Loan)	up to EUR 3 million up to 7 years	
Prêt Pour l'Innovation (PPI) (Loan)	EUR 30,000 - EUR 1.5 million up to 7 years	
Garantie Innovation (Guarantee)	up to 60% of the loan	
Biotech Garantie (Guarantee)	up to 70% of the loan	
Garantie de Caution sur Projets Innovants (Guarantee)	up to 80% of the loan with a max. of EUR 300,000	
Credit Mediation Schemes (CMS)	Advisory support	
Equity financing public initiatives		
Contrat de Développement Participatif (CDP) (Equity Capital)	up to EUR 3 million	
Fonds Stratégique d'Investissement (FSI) (Direct and Indirect Equity Capital)	no threshold	
Garantie des Fonds Propres (Guarantee)	up to 50% of the investment	

25 France

French public initiatives are coordinated by the *Banque Public d'Investissement* (Bpifrance), created by the French government in December 2012 on the role model of KfW. It provides assistance and financial support to SMEs for accessing bank credit as well as in raising equity capital, focussing on start-ups and innovation funding. Bpifrance is an umbrella institution that combines the activities of OSEO, CDC, FSI, Fonds Stratégique d'Investissement Regions and takes the lead in coordinating the variety of public initiatives promoting the economic development of French SMEs.

The supportive programmes of Bpifrance consist of three elements: subsidisation of bank loans, guarantees for SME loans and advisory support (see table 25). For instance, *Prêt Participatif d'Amorçage* (PPA) and *Contrat de Développement Innovation* (CDI) subsidise bank loans and do not require collateral or guarantees. *Prêt Pour l'Innovation* (PPI) is designed for SMEs that commercialise new products. With *Contrat de Développement Participatif* (CDP), Bpifrance intends to collaborate with a firm's commercial bank and co-finance bank credit. *Garantie Innovation*, *Biotech Garantie* and *Garantie de Caution sur Projets Innovants* are different loan guarantee programmes offered by Bpifrance. In order to promote equity funding of SMEs, the French government has established public investment funds and also guarantees private-sector investments in SMEs' capital.

France is the leading country in Europe with regard to the total number of SMEs financed: Bpifrance guaranteed EUR 8 bn of bank loans to 60,800 companies in 2013. In terms of financing innovation, Bpifrance granted EUR 747 million in 2013 and has a target budget of EUR 985 million for this year. As regards public initiatives targeting equity financing, the investment funds initiated by Bpifrance (directly or indirectly) invest in 1,000 enterprises on average each year. In 2013, equity investments in SMEs thus amounted to EUR 121 million with an investment target of EUR 170 million for 2014. All in all, the public initiatives in France offer a diversified range of financial support and are primarily intended for SMEs during their high-risk phases. Indeed, these high-risk phases – start-up, innovation, development, internationalisation and buyout – play a key role in terms of job creation and employment. Hence, combined with tight supervision by the state and a sound liquidity position, Bpifrance has become crucially important (and promisingly successful) in supporting French SMEs.

Source: Deutsche Bank Research



SME financing in the euro area

Italy 26

Programmes	Terms
Debt financing public initiatives	
Nuovo Plafond PMI Investimenti	transmission of favourable loan conditions
Plafond PMI Crediti vs PA	short-term liquidity support
Fondo Centrale di Garanzia (Guarantee)	up to 80% of the investment with a max. of EUR 2.5 million
Equity financing public initiatives	
Fondo Italiano d'Investimento (Direct and Indirect Equity Capital)	no threshold

Source: Deutsche Bank Research

Italian public programmes that provide financial support to SMEs are less diversified, yet more concentrated in terms of the funding capacity of each programme. The state-owned *Cassa Depositi e Prestiti (CdP)* takes the leading role in coordinating a variety of public initiatives to finance and promote the economic development of Italian SMEs. CdP and the Italian Banking Association jointly set up in January 2012 the *Nuovo Plafond PMI Investimenti* programme which aims at facilitating SMEs' access to bank credit by channelling funds at favourable conditions through participating commercial banks (see table 26). *Plafond PMI Crediti vs PA* is a complementary programme which focuses on providing short-term liquidity. In order to support SMEs' equity financing, in 2010 the Italian government established the investment fund *Fondo Italiano d'Investimento* together with a number of sponsoring banks and trade associations.

The most recent figures show that the CdP has stepped up its lending activity substantially with the outstanding amount of SME loans increasing to EUR 7.6 bn, up from EUR 5.7 bn in 2012. By and large, a strong upward trend in public support for SMEs is observable in Italy and indeed, considering the limited alternatives to bank credit, sustained support from the CdP may be of central importance for restoring the financial viability and growth of Italian SMEs.

Spain 27

Programmes	Terms
Debt financing public initiatives	
ICO Liquidity Facility (Loan)	up to EUR 10 million up to 20 years
ENISA Entrepreneur (Loan)	EUR 75,000 - EUR 300,000 up to 6 years
ENISA Competitiveness (Loan)	EUR 75,000 - EUR 1.5 million up to 9 years
ENISA Technology-Based Companies (Loan)	EUR 75,000 - EUR 1.5 million up to 7 years
ENISA M&A (Loan)	EUR 200,000 - EUR 1.5 million up to 9 years
SME Guarantee Programme	up to EUR 625,000 up to 10 years
Equity financing public initiatives	
ENISA MAB (Indirect Equity Capital)	EUR 200,000 - EUR 1.5 million up to 9 years
FOND-ICOpyme (Direct and Indirect Equity Capital)	early-stage firms: EUR 750,000 - EUR 1.5 million growth sector firms: up to EUR 15 million average term of 5 years

Source: Deutsche Bank Research

Public initiatives in Spain that target debt financing of SMEs are mostly managed and financed by two public institutions, *Instituto de Crédito Oficial (ICO)*, a state-owned bank, and *Empresa Nacional de Innovación (ENISA)*, a public company that is attached to the Ministry of Industry, Energy and Tourism. ICO and ENISA offer a number of different support schemes to promote the economic development of Spanish SMEs (see table 27). The *ICO Liquidity Facility* provides loans to SMEs. Meanwhile, *ENISA* programmes provide loans with different maturities and amounts to SMEs that are either innovative firms, active in manufacturing or technology-based and to SMEs undertaking M&A projects in order to improve the firm's competitiveness. There are also *SME Guarantee Programmes* for self-employed individuals. Public support for SMEs' equity financing in Spain is coordinated by two initiatives: a programme helping firms to go public and the ICO investment fund.

This broad range of financial support programmes involves substantial sums: ICO granted EUR 12 bn of SME loans in 2013 alone, thereby facilitating access to liquidity and the internationalisation activities of Spanish SMEs. In the first quarter of 2014, ICO already provided EUR 3.8 bn through Spanish credit institutions in particular for micro firms and freelancers. ENISA approved 809 operations in 2013 with a total amount of EUR 102 million. Overall, given that around 96% of Spanish companies have less than 10 employees, the supportive programmes offered by public institutions may be of significant importance and may play a key role in improving the financing situation of Spanish SMEs.

Principles of efficient public initiatives

Given the large spectrum of public institutions and initiatives which aim at supporting SMEs' access to finance, determining the most efficient way of public intervention has pivotal relevance for market participants and policymakers alike.



First and foremost, private sector involvement is crucially important. Indeed, few institutions are as skilled and experienced in assessing and managing risk as banks – which is one of the reasons why they exist. Moreover, their often long-term client relations may allow banks to gauge credit risk more precisely than other creditors. In addition, private involvement reduces the incentive problems that may otherwise arise in the distribution of loans: public intervention could lead to credit decisions being politically driven instead of commercially, thus impeding efficient allocation of capital and in fact of taxpayers' funds. Taken together, initiatives that share the commercial risk of loans between the private and the public sector or in which the authorities grant loans through banks are more likely to really reach the healthy and most creditworthy SMEs. By incorporating banks, public initiatives can draw on their risk management expertise and build on banks' client relations as well as ensure sufficient skin in the game. In the large euro-area countries at least, KfW in Germany seems to achieve private involvement most effectively. Even though public institutions in other countries share similarities with KfW, direct government lending schemes or loan guarantees in southern countries could result in significant costs to taxpayers and, due to crowding out effects, even lead to problems in credit availability for healthy and creditworthy SMEs in the long run.²¹

Another important aspect is efficient coordination and harmonisation of public resources. Indeed, too many public institutions may lead to extensive bureaucracy and costs for public budgets. As a result, having a single umbrella institution seems to be the best way to minimise administrative costs for taxpayers. By and large, this has been achieved in Germany and, recently, also in France. However, it might be even more important to harmonise resources at the EU level. It is therefore good news that there are now indications of cooperation and harmonisation between individual countries. The recent agreement, worth EUR 1.6 billion, between KfW and ICO to finance SMEs in Spain is a meaningful step in this direction. Finally, as a true EU umbrella institution, the European Investment Fund, too, has a significant role to play in supporting the continent's SMEs in accessing finance.

Market-based initiatives

In addition to public support for SMEs, a number of market-based initiatives were launched in recent years. Their main objective is to diversify SMEs' funding options by facilitating access to external financing sources such as equity or bond markets.

In many countries equity trading platforms are better developed than bond markets. In general, specific trading platforms for SME stocks usually target medium-sized firms but not micro firms, due to minimum size requirements. These trading platforms have a greater growth potential in countries where the financial market infrastructure is better developed and the proportion of medium-sized enterprises is higher. Due to a relatively low share of such firms, at least compared with Germany, in Italy, Spain and France, the number of SMEs that utilise these funding platforms is still relatively low.

In Germany, the *Entry Standard segment for shares* gives SMEs the opportunity to raise capital under reduced administrative requirements and at lower costs. In France, Alternext offers small and mid caps an alternative way to enter the capital market. Launched in May 2013, Mercado Alternativo Bursátil is the Spanish trading platform with a more flexible regulatory framework exclusively targeting SMEs. Similarly, in Italy, AIM ItaliaMAC represents the market

²¹ Of course, there is also the general problem of competitive distortion as government intervention may prevent a market shakeout and keep firms going even without a sustainable business model, to the detriment of their better positioned rivals.



segment that attracts SMEs in a more flexible and less costly administrative framework than the ordinary regulated market. In addition, in April 2012, the Italian exchange (Borsa Italiana) in cooperation with the Italian government and other major Italian financial institutions initiated the *Elite Programme*, which is a specific platform aiming to support SMEs' growth intentions.

Alternative investment markets for SME bonds to support access to debt capital markets are on the rise in Germany, too. For instance, the *Entry Standard* for corporate bonds on the Frankfurt Stock Exchange is wooing clients with reduced requirements regarding disclosures and issuance size. The *ExtraMOT PRO segment* of the Italian stock exchange was created in February 2013 in order to promote external financing of SMEs through bond issuance. Similarly, in October 2013, Spain initiated the Alternative Fixed-Income Market (*Mercado Alternativo de Renta Fija – MARF*) specifically for SME bond trading. Nonetheless, the overall uptake has been mixed so far and SME funding through the bond markets has yet to develop to indeed become a meaningful force.

The development of alternative capital markets for SMEs can help mitigate costly administrative obstacles. The scope and intensity of these market-based initiatives differs substantially between countries though. In terms of SMEs which are already listed on stock exchanges, Germany and France are ahead of Spain and Italy. Spanish and Italian public initiatives, on the other hand, increasingly establish schemes which aim at bringing more SMEs to the market, including technical and advisory support. In all cases, however, it is important to note that the national structure of SMEs' stock markets limits the attractiveness for international investors. On the debt side, Germany has taken a leading role in developing bond segments specifically designed for SMEs whereas other countries only recently started to promote this channel.

Conclusion

In this study, we have taken a closer look at the funding problems of SMEs in the euro area, the mitigating measures to facilitate their access to finance as well as other public and market-based initiatives. Among the largest euro-area countries, SMEs' contribution to economic activity and employment and their performance during the crisis varies considerably. This can largely be explained by structural differences of SMEs in individual countries: German SMEs e.g. tend to be rather export-oriented and thus more resilient to changes in local demand whereas there is an overwhelmingly large share of micro enterprises among Italian and Spanish SMEs which find it harder to withstand macro-shocks. SMEs usually rely heavily on bank credit for funding, although in Germany they currently seem to be more profitable and thus able to fund themselves to a greater extent internally. But there is strong cross-country heterogeneity when it comes to the availability of bank credit. The tightening of lending standards over the past few years was far more pronounced in the countries with the starkest recession and highest unemployment. Moreover, SMEs and especially micro firms in these countries pay significantly higher lending rates than large enterprises. This has shifted the focus on some mitigating measures.

By and large, policies that aim to expand bank lending may address either the liability or the asset side of banks' balance sheets. However, the mitigating measures such as ECB LTROs that provide liquidity to the markets and support the liability side seem to have had limited success in reducing the borrowing costs of SMEs. Instead, high lending rates for SMEs are correlated to a large extent with banks' (still elevated) own refinancing costs at market rates and their risk perception regarding the outlook for SMEs in general. Therefore, it is



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doubtful whether the new TLTROs will have a meaningful (positive) impact on bank lending to SMEs.

Mitigating measures such as securitisation that support the asset side of banks' balance sheets are more or less a niche topic in countries where SMEs' access to bank credit is less of a problem. On the other hand, the securitisation of SME loans has gained pace over the recent years in Italy and equally has substantial upward potential in Spain. Strengthening this option would allow Italian and Spanish banks to partly offload SME credit risks and transfer them from their balance sheets to the capital markets, thereby freeing up equity and extending their capacity to lend. Taken together, securitisation has the potential to bridge the gap between SMEs' funding needs and the availability of bank loans especially in those countries where SMEs report significant problems in accessing finance.

There are currently some signs of more aggressive competition for banks from shadow lenders. This may imply that some SME loans are now being funded by lightly regulated or unregulated shadow banks which may not be a desired outcome for regulators.

In closing SMEs' financing gap, another option is that public-sector or market-based entities e.g. lend directly to SMEs or provide guarantees for SME loans. Public initiatives are extensive in the countries that we focus on. In Germany, the range of public support schemes for SMEs is markedly diversified and may fundamentally lower SMEs' funding risk. In France, newly introduced public institutions also offer a diversified range of financial support. In Italy and Spain, public support for SMEs is on a strong upward trend which is of particular relevance considering the overwhelmingly large share of micro firms in these countries. For public intervention to be effective and efficient, private sector involvement is crucial. Direct government lending or loan guarantees could result in significant costs to taxpayers and even hurt healthy and creditworthy SMEs by channelling funds towards firms that are politically better connected. In addition, public initiatives should be coordinated and harmonised within countries and beyond to avoid excessive bureaucracy and competitive distortions.

A number of market-based initiatives that allow direct access to equity and bond markets have been launched in many European countries in recent years too. These may help SMEs to diversify their funding sources by facilitating access to external market-based financing. Nonetheless, the uptake here has been mixed so far and SME funding through the capital markets has yet to develop further.

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