SME ACCESS TO FINANCE IN THE EURO AREA: BARRIERS AND POTENTIAL POLICY REMEDIES

Small and medium-sized enterprises are, particularly in crisis periods, more likely to experience difficulties in obtaining external funding than large firms. This reflects their limited access to external financing sources other than bank loans, which results from their smaller size, less detailed financial statements and shorter track records, leading in turn to more asymmetric information problems, greater dependence on bank lending and higher financing costs. Given the importance of SMEs for the euro area economy, policies that facilitate their access to finance are gaining increasing attention from European policy-makers, including those in the Eurosystem.

1 INTRODUCTION

Small and medium-sized enterprises (SMEs) constitute about 99% of all euro area firms, employ around two-thirds of the euro area's workforce and generate around 60% of value added, and thus play a key part in the euro area economy.[1] Their contribution to economic activity varies significantly from sector to sector; in 2013 their contribution to value added ranged from 24% in energy to more than 80% in construction and real estate. Cross-country variability in the euro area is also significant, with SMEs in Germany and Ireland producing half of total value added and those in Italy, Spain and Portugal more than 65%.

In terms of financing structure, SMEs in the euro area are typically more dependent on bank lending than larger enterprises. SMEs are usually perceived both to have a higher probability of default than larger firms and to be more informationally opaque. For this reason, in particular, SMEs are more hard-pressed to find alternative sources of financing to bank lending, such as debt issuance. Additionally, SMEs are typically too small to absorb the fixed costs associated with debt issuance in the financial market. As a consequence, they are relatively more dependent on bank finance and thus more likely to be affected by banks' increased risk aversion than larger firms.

Access to finance is a major challenge for SMEs in normal times; it was much more so during the financial crisis as credit sources for small firms tended to dry up more rapidly than for large firms, thereby disrupting the business and investment activity of SMEs to a greater extent. Moreover, the sovereign debt crisis and the subsequent fragmentation of financial markets along national lines affected banks' funding conditions and their ability to provide credit to non-financial corporations, especially in those countries with a high proportion of bank-dependent SMEs.

This article describes the difficulties SMEs faced during the crisis and provides an overview of existing and possible new instruments, including at euro area level, for enhancing access to finance for this group of firms.

2 SME ACCESS TO FINANCE IN PERIODS OF CRISIS

Given the importance of SMEs for the euro area economy, it is crucial to consider whether these firms are bearing a disproportionate burden of bank balance sheet deleveraging. Consequently, this article analyses the increased heterogeneity over the last few years in bank financing conditions for SMEs across euro area Member States by drawing on data from MFI interest rate statistics (i.e. bank lending rates), the bank lending survey (BLS) and the SME access to finance survey

1 See European Commission, "A Recovery on the Horizon?" Annual Report on European SMEs 2012/2013, DG Enterprise, 2013.

(SAFE).[2] In particular, this section analyses the role of financial and non-financial firm characteristics in actual financing constraints during the recent financial crisis.

BANKS' LENDING RATES

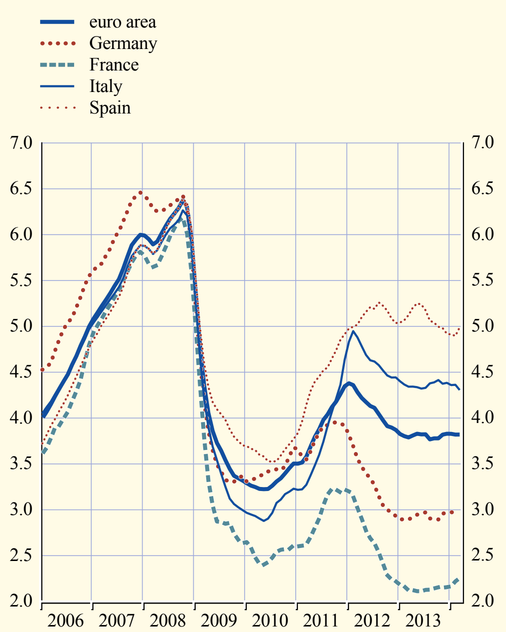
Given the importance of bank financing for SMEs, the bank financing conditions faced by euro area SMEs serve as a useful indicator for the overall degree of access to finance faced by small companies when compared both across euro area countries and with the bank financing conditions for larger firms. In this context, the bank financing conditions for SMEs may be roughly approximated by bank lending rates paid on small loans to enterprises (i.e. the category of loans up to €1 million). For instance, the development of short-term lending rates for small loans to non-financial corporations displayed somewhat increasing heterogeneity across the large euro area countries at the start of the financial crisis in 2008-2009, a pattern which intensified further in 2011 and 2012 (see Chart 1).

This development, in particular since 2011, suggests considerable differences in financing costs for smaller firms located in France and Germany, on the one hand, and in Italy and Spain, on the other. These disparities are likely to reflect differences both in the economic environment and in the associated sovereign risk and respective funding costs of domestic banks.

Further, comparing bank financing costs of SMEs with the respective costs for larger firms (proxied by the category of loans to enterprises of above €1 million) indicates that euro area SMEs were particularly affected by a widening of bank interest rate spreads early on in the crisis and especially in 2011 with the start of the sovereign debt crisis (see Chart 2). The increase in the spread of interest rates paid on small-sized loans may in part reflect the impact of the sovereign debt crisis on banks' financing costs for banks domiciled in distressed countries, with the increase in the banks' financing costs being then passed on to their SME customers in the form of higher lending rates on small-sized loans, given these borrowers' disproportionate dependency on bank financing. Another factor explaining the higher cost of borrowing for SMEs in the stressed economies was the overall deterioration in economic activity in these countries, which affected SMEs more than large companies, given the SMEs' relatively larger reliance on domestic demand. Across the large euro area countries, the development of these spreads also suggests that for firms in Italy and Spain not only was the absolute

Chart 1 Short-term lending rates on loans to non-financial corporations of up to €1 million for the euro area and large countries

(percentages per annum; three-month moving averages)



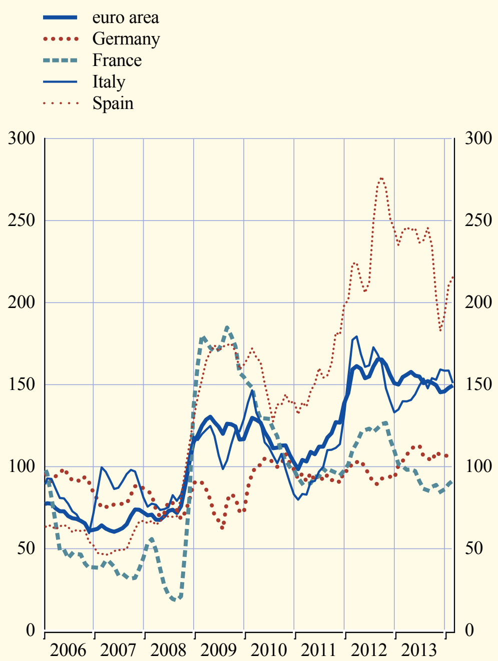
Sources: ECB and ECB calculations.
Notes: Short-term lending rates are a weighted average of loans with floating rates and with an initial rate fixation period of up to one year. Weights are based on new business volumes.

2 The MFI interest rate statistics (MIR) provide information on bank lending rates and deposit rates in the euro area for different loan and deposit categories. The Eurosystem's bank lending survey (BLS) collects information on supply and demand conditions in the euro area credit markets covering bank lending to enterprises and households in the euro area. The Survey on the access to finance of SMEs in the euro area (SAFE) covers micro, small, medium-sized and large firms and provides evidence on the financing conditions faced by SMEs compared with those of large firms.

level of lending rates substantially higher than for firms in France and Germany, but also the premia SMEs paid over and above the rates charged for larger enterprises increased substantially in 2011 and 2012. Only in the second half of 2012, following the easing in sovereign bond market tensions, did these spreads start to decline, although remaining at elevated levels throughout 2013 with only the spread for Spanish SMEs falling – temporarily quite strongly[3] – towards the end of 2013. Whether and to what extent a greater increase in the individual credit risk of smaller firms or the direct and indirect impact of the overall macroeconomic stress and sovereign debt tensions determined these increasing spreads is generally difficult to assess with the available aggregate time series. In particular, it is hard to disentangle this widening from the typically observed pro-cyclical increase of these spreads in troughs. Despite this, empirical evidence on the interest rate pass-through for overall loans to non-financial corporations suggests that for distressed countries macroeconomic risk and borrower risk as well as sovereign spreads have contributed significantly to the rise in corporate lending rates since the first quarter of 2011.[4]

Chart 2 Spread between lending rates on small and large loans to enterprises for the euro area and large countries

(basis points; three-month moving averages)



Source: ECB.
Notes: Small loans are loans of up to €1 million, while large loans are those above €1 million. Aggregation is based on new business volumes.

Concerning the impact of the financial crisis on credit supply to specific entrepreneurial borrowers, empirical evidence suggests that small, bank-dependent firms are particularly affected. More specifically, empirical analyses for the United States indicate that banks that incurred larger losses following the sub-prime crisis increased their lending rates only to bank-dependent borrowers.[5] Likewise, using loan-level data for Portugal, Iyer et al. find that the interbank liquidity shock during the period 2007-2009 translated into binding credit supply restrictions particularly for small firm customers of banks which relied more on interbank borrowing before the financial crisis.[6] This empirical evidence for the financial crisis suggests that the impact of the sovereign debt crisis on banks' funding situation and balance sheets is likely to have had a stronger effect on small, bank-dependent firms and their real activity, as indicated also by first empirical evidence for Italian data[7].

3 This temporary strong fall in the Spanish spread was driven by a temporary marked increase in lending rates for large loans while rates on small loans declined steadily at a moderate pace (see Table 1).

4 See article entitled "Assessing the retail bank interest rate pass-through in the euro area at times of financial fragmentation", *Monthly Bulletin*, ECB, August 2013, pp. 88.

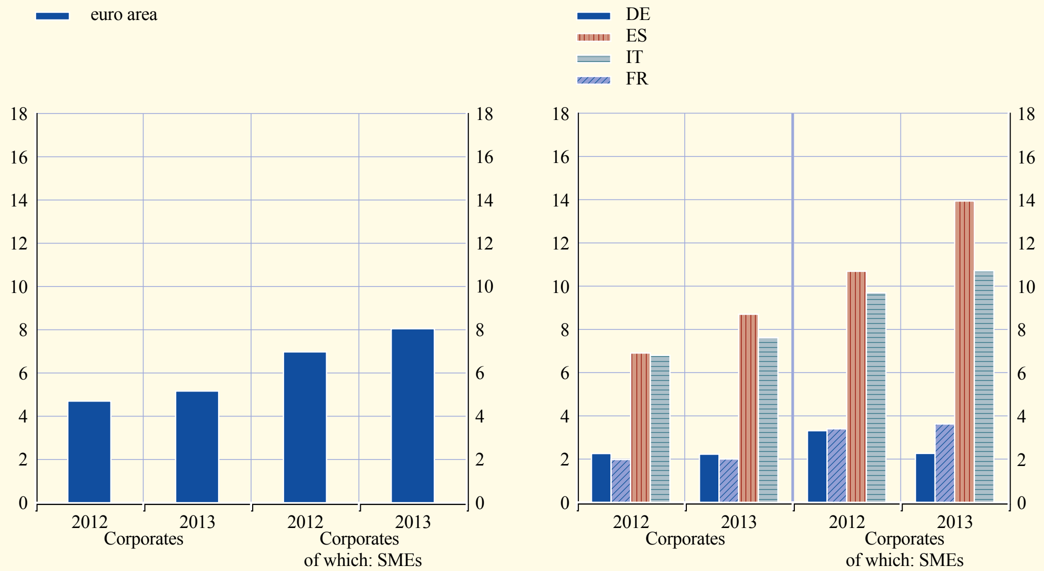
5 See Santos, J.A., "Bank Corporate Loan Pricing Following the Subprime Crisis", *Review of Financial Studies*, Vol. 24, No. 6, 2011, pp. 1916-1943.

6 See Iyer, R., Peydró, J.-L., da-Rocha-Lopes, S. and Schoar, A., "Interbank Liquidity Crunch and the Firm Credit Crunch: Evidence from the 2007-2009 Crisis", *Review of Financial Studies*, Vol. 27, No 1, 2014, pp. 347-372.

7 Balduzzi, P., Brancati, E. and Schiantarelli, F., in "Financial Markets, Banks' Cost of Funding, and Firms' Decisions: Lessons from Two Crises", Institute for the Study of Labor (IZA) discussion paper No 7872, 2013, find in a matched bank-firm dataset for Italy that rising bank CDS and falling bank equity valuations of their lenders induce younger and smaller firms to cut borrowing, investment and employment. Similar effects of the financial crisis 2008-2009 for US small and medium-sized firms were found in Chodorow-Reich, G., "The employment effects of credit market disruptions: firm-level evidence from the 2008-9 financial crisis, *Quarterly Journal of Economics*, Vol. 129, No 1, 2014, pp. 1-59.

Chart 3 Banks' value adjustments and provisions relative to gross domestic exposures to corporates and SMEs – euro area and large countries

(percentages)



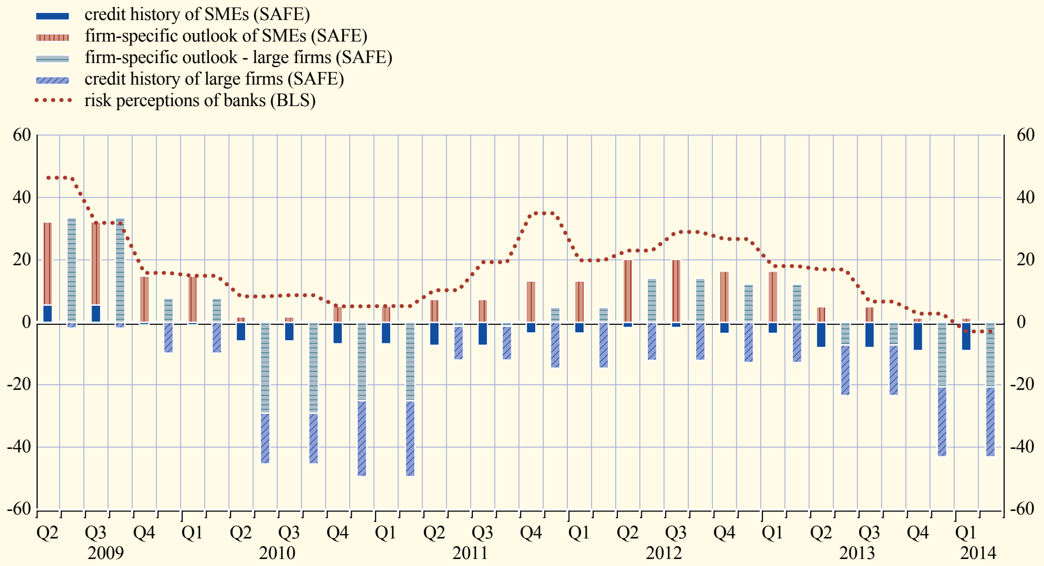
Sources: EBA 2013 transparency exercise; own calculations.
Note: Value adjustments and provisions relative to respective gross domestic exposures for euro area banks covered in the EBA 2013 EU-wide transparency exercise.

In any case, it has to be recognised that the considerable differences in lending rates across the largest euro area countries and across size categories probably reflect to a large extent the heterogeneity in the underlying riskiness of the respective loan engagements, independent of the initial firm-specific or country-specific origin of these risks. The right-hand side of Chart 3 shows the country breakdown across the larger euro area countries of value adjustments and provisions relative to domestic gross exposures to corporates as reported by euro area banks participating in the 2013 European Banking Authority (EBA) transparency exercise. The results differed substantially between German and French banks, on the one hand, and Italian and Spanish banks, on the other, both at end-2012 and in mid-2013 (latest coverage of the exercise). More specifically, value adjustments and provisions for domestic gross exposures hovered at around 2% for the overall corporate portfolio of German and French banks in the sample. By contrast, the figures on the overall corporate portfolio were at significantly higher levels for Italian, and especially Spanish, banks at around 7% and 8%, respectively, over the two periods.

Likewise, as shown in Chart 3 for the euro area level, value adjustments on domestic gross exposures were notably higher for SMEs in the banks' corporate portfolio than for the overall domestic corporate portfolio. Among the larger euro area countries, this difference was particularly pronounced for Italian and Spanish banks (see the country breakdown on the right-hand side of Chart 3), with value adjustments for SME exposures in the corporate portfolio of around 10% for Italian banks and of up to 14% for Spanish banks. This may in part be reflected in the particularly wide lending rate spread between small and large loans to enterprises for the countries displayed in Chart 2. More granular unsecured exposures to SMEs included in the retail portfolio of these banks recorded even higher value adjustments or provisions (not displayed here). Hence, these figures suggest an inherent difference in credit risk across borrower size in general, intensifying with distressed economic and sovereign environments.

Chart 4 Changes in euro area banks' risk perception relating to firms, and risk indicators by firm size

(percentages)



Sources: SAFE; Eurosystem's BLS; own calculations.
Note: Compound risk perceptions calculated as averages across the three risk factors (general economic outlook, industry and firm-specific outlook, risk on collateral demanded).

Changes in credit risk and differences across firm borrower size are likewise reflected in survey evidence. Results from the Eurosystem bank lending survey (BLS) indicate a re-emergence of risk perceptions as an underlying factor mentioned by the surveyed banks to explain their tightening of credit standards at the euro area level at the start of the sovereign debt crisis in 2011 (see Chart 4, risk perception of banks). These risk perceptions then steadily declined following the easing of sovereign bond market tensions that started in summer 2012. This is roughly in line with the temporary rise in the short-term lending rates for small loans to non-financial corporations in 2011 and the decline that followed in 2012 (as displayed in Chart 1). At the same time, evidence from the SME access to finance survey (SAFE) broadly mirrors banks' perception of firms' credit risk, although with marked differences across firm size (see Chart 4, bars on firm-specific outlook and credit history). More specifically, both the firm-specific outlook and firms' credit history were factors which had a systematically more benign impact on large firms' borrowing conditions than on those for SMEs. These differences across firm size were particularly pronounced for the firms' credit histories, suggesting more deeply-rooted structural differences in credit risk for euro area firms depending on their size class.

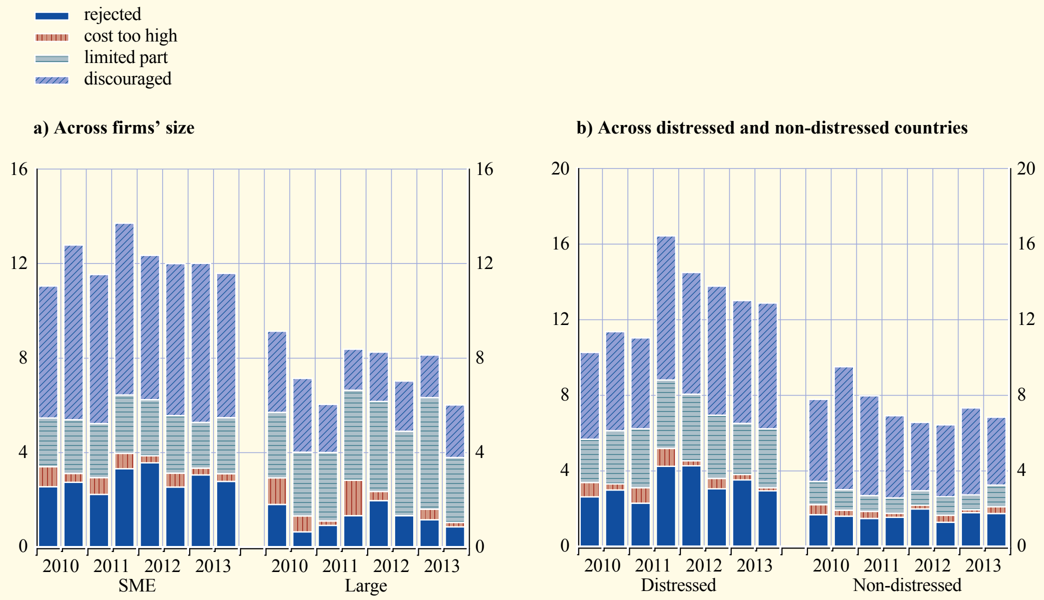
FINANCING OBSTACLES AND SMES' CHARACTERISTICS

Panel a) of Chart 5 shows a composite indicator of financing obstacles, derived from the SAFE, for SMEs and large companies in the euro area. It has been frequently used to identify firms with difficulties accessing bank credit.[8] Since the beginning of the survey, on average 12% of SMEs

8 Financing obstacles are defined as the sum of the percentages of firms which applied for a bank loan, but were rejected, or which received only a limited part of the amount for which they had applied, or which did not take up the loan because borrowing costs were too high. In addition, it includes the percentage of firms that did not apply because of fear of rejection (discouraged borrowers). The survey also contains a measure of perceived financial constraints based on the direct responses of firms on whether access to finance is among their most pressing problems. This indicator is not used in the present article.

Chart 5 Financing obstacles faced by non-financial corporations

(percentages)



Sources: ECB (SAFE) and ECB calculations.
Notes: Financing obstacles are defined as the sum of the percentages of firms that applied for a bank loan, but were rejected or received only a limited part of the amount for which they had applied or did not take up the loan because borrowing costs were too high. In addition, it includes the percentage of firms that did not apply because of fear of rejection (discouraged borrowers). Distressed countries are Ireland, Greece, Spain, Italy and Portugal. Data are not available for Cyprus or Slovenia, which also belong to this group.

have reported financing obstacles, while the percentage is around 8% for large companies. The level and the pattern of financing obstacles have been quite heterogeneous between the two groups of firms. The latest survey, which refers to the period from October 2013 to March 2014, indicates that the percentage of SMEs that did not apply for a bank loan because of a possible rejection was 6%, while it was 2% among large firms (striped blue bar in Chart 5).[9] Straightforward loan rejections were reported by 3% of SMEs, compared with 1% of large firms (blue bar in Chart 5). At the same time, a considerable percentage of firms did not apply for a loan because of sufficient internal funds (47% of SMEs and 48% of large firms) or for other reasons (22% of SMEs and 12% of large firms). In respect of distressed and non-distressed countries (in Chart 5, panel b)), SMEs in the former group were evidently suffering proportionally more than SMEs in non-distressed ones.[10]

As for the factors affecting the availability of external financing, survey data distinguish between factors related to the characteristics of the firms, such as credit history, their own capital, and firm outlook in terms of sales, profitability and business plans, and external factors, such as the general economic activity as perceived by firms and the importance of the access to public support, including guarantees. More firms in distressed countries have reported that the deterioration of these factors has an impact on the availability of external financing (see Chart 6). More than 50% of the respondents in distressed countries have argued that the general economic outlook is an important factor, followed

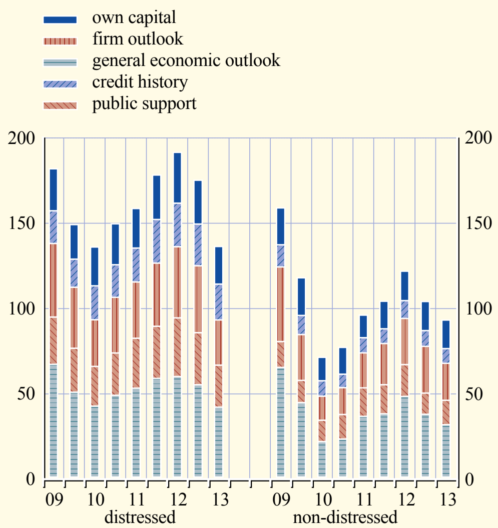
9 For an analysis of the characteristics of discouraged borrowers and their importance for the monetary policy transmission see Popov, A., "Monetary policy, bank capital and credit supply: a role for discouraged and informally rejected firms", ECB Working Paper 1593, 2013.
10 See, for a more detailed analysis, the special feature "Divergence in financing conditions of small and medium-sized enterprises (SMEs) in the euro area" of the publication "Financial integration in Europe", ECB, April 2014.

by their firm outlook (36%). For firms in non-distressed countries, the percentages are lower, at 37% and 24%, respectively. Credit histories play a more important role for firms in distressed countries (22%) than in non-distressed ones (10%), reflecting differences in underlying credit risk. The development of these factors over time closely follows the different phases of the sovereign debt crisis.

In particular, firms reported a lessening of these factors in the survey relating to the period from October 2013 to March 2014, after the peak of the crisis observed in the summer of 2012 and the subsequent easing of the sovereign bond market tensions. Differences remain between the two groups of countries, reflecting continued divergence in economic and firm-specific outlook across countries and ongoing market fragmentation.

Chart 6 Factors which, when deteriorating, affect the availability of external financing among distressed and non-distressed euro area countries

(percentages of all respondents; weighted averages)

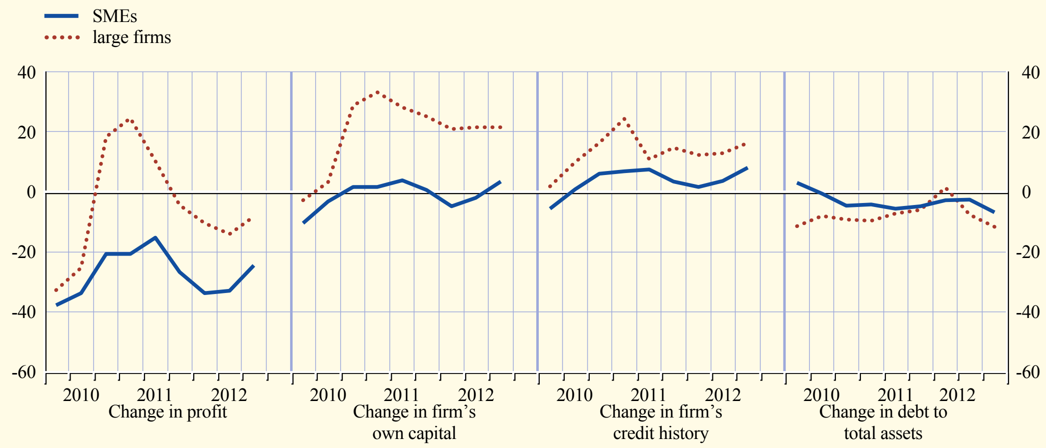


Sources: ECB (SAFE) and ECB calculations.
Notes: Distressed countries are Ireland, Greece, Spain, Italy and Portugal. Data are not available for Cyprus or Slovenia, which also belong to this group.

Although receding, the impact of the recent financial tensions and of the sovereign debt crisis compounded by the recession has strongly increased credit risk, which is a powerful obstacle to the supply of loans. This has been particularly the case for SMEs, whose creditworthiness and financial health have deteriorated more sharply than those of large firms. Indeed, according to survey information, SMEs' profits, liquidity buffers and own capital developed less favourably than those of large firms during the crisis, exacerbating the financial fragility of this group of firms (see Chart 7).

Chart 7 Financial health of euro area SMEs compared with large firms

(over the past six months; net percentages of respondents)



Sources: ECB (SAFE) and ECB calculations.

As broadly documented in the theoretical and empirical analysis of financial constraints, there is a relationship between the financial obstacles encountered by firms and their financial positions, in particular their financial fragility.[11] Results frequently show that highly leveraged firms, firms with low profits and firms with low amounts of collateral at their disposal find it more difficult to access external finance. Size and ownership also matters in this respect.[12] Box 1 describes an empirical investigation based on a sample of euro area SMEs which confirms these results and highlights the differences across selected euro area countries.

11 For a review of the literature, see Silva, F. and Carreira, C., "Measuring firms' financial constraints: a rough guide", Estudos do GEMF No. 14, 2012.

12 Previous studies show that private companies (Brav, O., "Access to Capital, Capital Structure, and the Funding of the Firm", Journal of Finance 64, 2009, pp. 263–307), small-sized (Berger, A. N. and Udell, G. F., "Small Business and Debt Finance", in *Handbook of Entrepreneurship Research*, Kluwer Academic Publishers, UK, 2003, pp. 299–328) and young enterprises (e.g. Rauh, J.D., "Investment and Financing Constraints: Evidence from the Funding of Corporate Pension Plans", Journal of Finance 61, 2006, pp. 33–71; and Fee, C. E., Hadlock, C.J. and Pierce, J. R., "Investment, Financing Constraints, and Internal Capital Markets: Evidence from the Advertising Expenditures of Multinational Firms", Review of Financial Studies 22, 2009, pp. 2362–2392) face different and often more severe constraints than do large firms.

Box 1

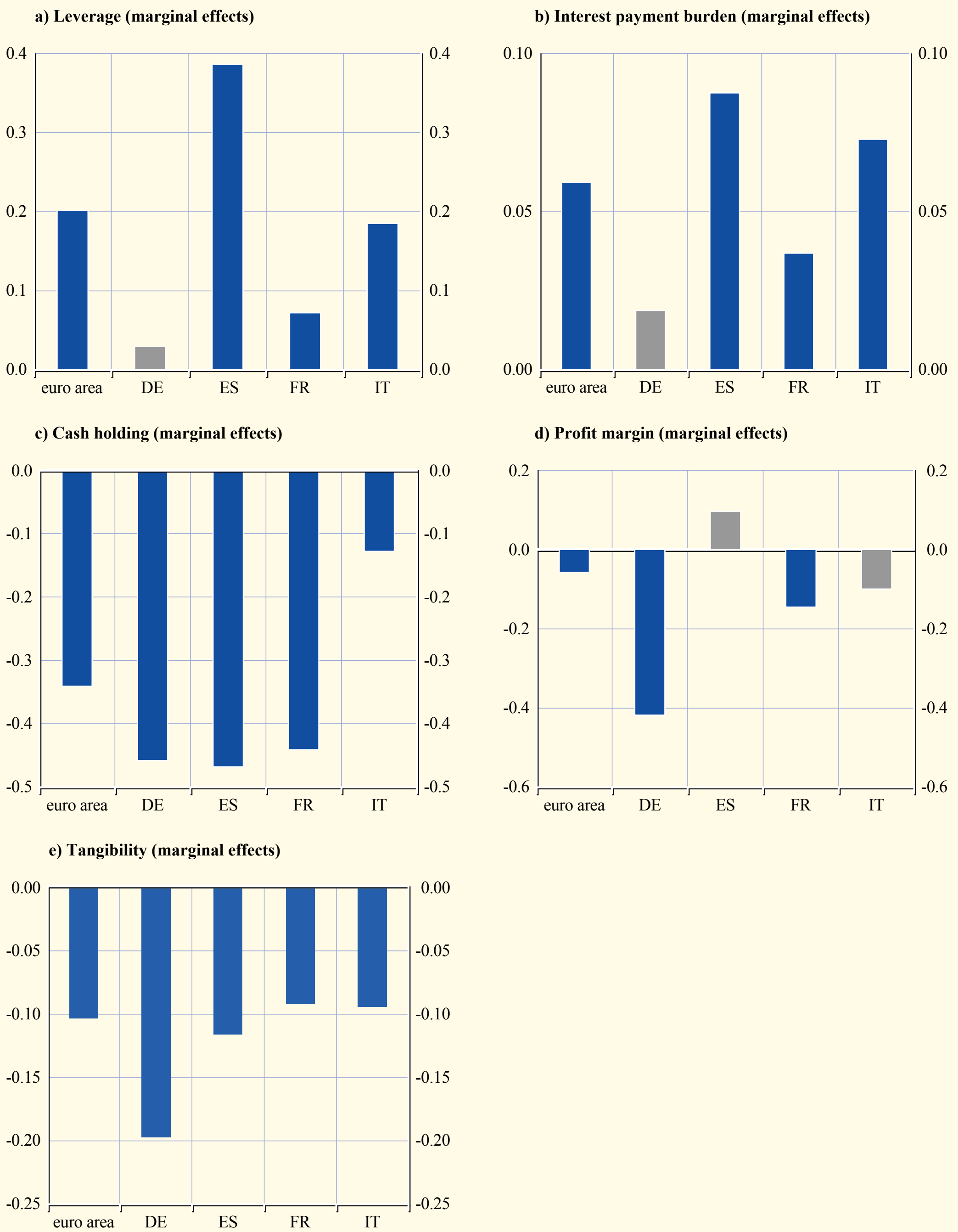
IMPACT OF SMEs' FINANCIAL POSITION ON THEIR FINANCING OBSTACLES

By exploiting a subset of SMEs in the SAFE survey, for which financial information is available, the financial obstacle indicator presented in the chart is regressed on a set of financial characteristics (profitability, liquidity, leverage and interest payment burden) and non-financial characteristics (age, size), which are commonly used in the literature to assess whether firms are financially constrained. Additional variables are included to control for the ownership of the firm, the year, and the country and sector in which the firm is located. The chart displays the marginal effects of the different variables, showing their impact for the whole euro area sample and also for selected countries. The chart confirms that firms with higher leverage and low profits are more likely to face financing obstacles, as are firms with less liquidity and collateral at their disposal. Firms with higher interest payment burdens also encounter more financing constraints. The magnitude of the marginal effects is different across countries, signalling that the financial positions of firms are much more important for discriminating against financially constrained firms in Spain and Italy than in Germany and France.[1]

1 The first variable leverage is the ratio of financial debt to total assets; interest payment burden is defined as the ratio of interest payments to earnings before interest, taxes, depreciation and amortisation plus financial revenues to total assets. Profit margin is the ratio of profit/loss for the period to sales; cash holdings are defined as the ratio of cash and cash equivalents to total assets; tangibility is the ratio of tangible fixed assets to total assets. The model controls also for size (with the logarithm of total assets), age, sector and country dummies when regressed on the euro area. It also includes dummies on ownership (whether a firm is owned by a family or an entrepreneur). All variables based on financial accounts are lagged to reduce endogeneity problems. For a similar analysis based on the SAFE survey, see Ferrando, A. and Mulier, K., "Firms' financing constraints: do perceptions match the actual situation?", ECB Working Paper No 1577, 2013, August.

Financing obstacles of SMEs and firms' determinants

(statistically significant coefficients in blue; non-significant coefficients in grey)



Sources: ECB (SAFE) and AMADEUS Bureau van Dijk; ECB calculations.
Notes: The analysis of the firms' determinants of financing obstacles are based on a probit model where the dependent variable is the financing obstacles faced by firms that applied for a bank loan in the SAFE sample. The variable is a dummy that takes value 1 if a firm has applied for a bank loan, but its application was rejected, or it has received only a limited part of the amount for which it had applied, or the firm did not take up the loan because borrowing costs were too high. In addition, it also includes cases when firms did not apply because of fear of rejection (discouraged borrowers). The probit analysis is run for a subset of firms in 11 euro area countries (Belgium, Germany, Ireland, Greece, Spain, France, Italy, Netherlands, Austria, Portugal and Finland) for which financial information is available in the period 2010-2013 (waves 3-8 of the survey). The number of observations for the whole sample is 14,000.

The euro area SME sector indeed varies across jurisdictions and industry sectors, and in terms of size, profitability and growth prospects. Given this inherent heterogeneity, several funding instruments and options should be considered to meet the needs of the different SMEs and lenders or investors. This would also imply that any policies to incentivise increased access to finance by SMEs could include both concerted actions by Member States in the EU but also national (and regional) initiatives, focusing on both the bank channel, which will remain important for SME funding, and the non-bank channel. Generally speaking, depending on the stage of development of a given SME, the best strategies to support SME financing may vary across jurisdictions.

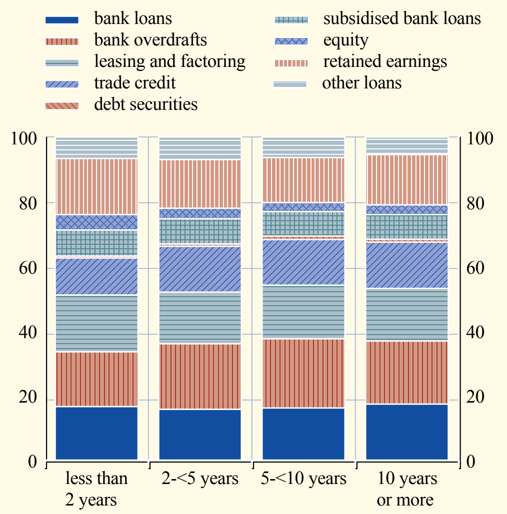
Typically, SMEs are perceived as particularly risky at their earliest stages of development, when they are often unable to generate cash flows which would allow the servicing of debt. At these early stages, SMEs' capital is raised either from the owner's assets or from relatives and friends. When available, SMEs also turn to equity investors, such as business angels and venture capital firms, to obtain financing. At later stages of development, companies can provide track records and collateral. Hence, the risks for investors decline and financial intermediaries are the most common interlocutors, but companies may also be in a position to go public.

Indeed, according to the available information from SAFE, the various financial instruments are used differently depending on the age and size of the firm (as firms become more mature and large, their access to external sources of finance increases). In the first stages of SMEs' development, recourse to bank loans and bank overdrafts are more common as firms are able to build bank relationships that allow a reduction of the informational asymmetries which are typically related to short track records.[13] However, as firms become larger they have access to a broader variety of instruments and the overall contribution of bank lending becomes slightly less important (see Charts 8 and 9). Moreover, subsidised bank loans and other loans from related companies or from individuals (e.g. family and friends) play an important role for young and small firms, while retained earnings and trade credit are used more often as firms mature.

Differences in the use of the various financing instruments are also present across countries (see Chart 10). For instance, bank credit is on average used more by French SMEs, while Italian and Spanish firms more often consider

Chart 8 Use of financing instruments by euro area SMEs by age

(contributions in percentages; average 2009-2013)

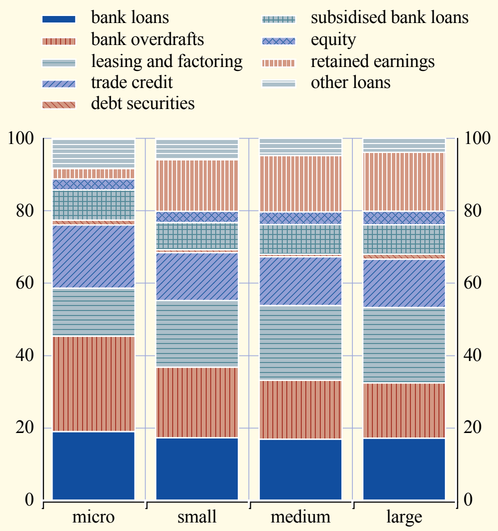


Sources: ECB (SAFE) and ECB calculations.
Note: The bars show the sum of the percentages of SMEs that reported having used a specific instrument between 2009 and 2013.

13 See also Chavis et al., "The Impact of the Business Environment on Young Firm Financing", Policy Research Working Paper series, the World Bank, 2010.

Chart 9 Use of financing instruments by euro area non-financial corporations by size

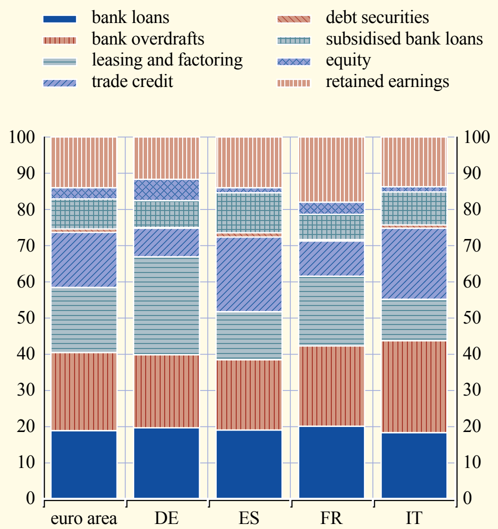
(contributions in percentages; average 2009-2013)



Sources: ECB (SAFE) and ECB calculations.
Note: The bars show the sum of the percentages of non-financial corporations that reported having used a specific instrument between 2009 and 2013.

Chart 10 Use of financing instruments by SMEs in selected euro area countries

(contributions in percentages; average 2009-2013)



Sources: ECB (SAFE) and ECB calculations.
Note: The bars show the sum of the percentages of SMEs that reported having used a specific instrument between 2009 and 2013.

trade credit and subsidised bank loans.[14] Leasing, by contrast, is much more developed as a financial instrument among German SMEs.

In particular, according to a European Commission survey[15], in 2011 at least 50% of German SMEs used leasing, hire-purchase or factoring, and around 40% in France, while the fraction was relatively smaller (around 25%) in Spain and Italy. When firms were asked about the reasons for leasing an asset, price considerations (price of leasing relative to other financing forms) seemed to be the most important factor.[16]

Interestingly, the reasons for leasing assets vary according to size classes. For example, medium-sized enterprises seem to lease owing to price considerations, better cash flow management and the absence of the need to provide collateral. In contrast, micro-enterprises consider tax benefits alongside price considerations as the main reasons for leasing.

The ability of SMEs to revert to alternative external sources of finance is even more limited once they are constrained in their access to bank loans. However, empirical evidence (see Box 2) indicates that financially constrained firms between 2009 and 2013 were trying to replace bank loans with other types of loan obtained from individuals (e.g. family and friends) as well as from related companies and shareholders. They also tended to use trade credit, while market-based instruments

14 Credit guarantee schemes are used widely across economies as an important tool to ease the financial constraints of SMEs and start-ups. For a review of additional measures to support SME financing introduced by several euro area governments during the crisis, see "Divergence in financing conditions of small and medium-sized enterprises (SMEs) in the euro area", special feature of the ECB report entitled "Financial integration in Europe", 2014.
15 European Commission, "SMEs' Access to Finance Survey 2011", 2011.
16 Oxford Economics, "The Use of Leasing Amongst European SMEs", a report prepared for Leaseurope, November 2011, and Kraemer-Eis, H. and Lang, F., "The importance of leasing for SME financing", EIF WP 15, 2012.

or even grants or subsidised loans appeared to be a less common instrument. The analysis in the box does not explicitly consider crowdfunding (although the category "family and friends" could partly include it), which is becoming a new type of market-based finance that could help to stimulate the economic recovery by channelling capital to SMEs. In general, crowdfunding is a term describing the use of small amounts of money, obtained from a large number of individuals or organisations, to fund a project, a business or personal loan, or other needs. This money can be channelled through different vehicles, for example through an online web-based platform. Although the market is growing fast, crowdfunding is still on a small scale. According to a recent study by IOSCO, it accounts for approximately USD 6.4 billion globally.[17]

The differences in the access to and use of various financial instruments imply that different policies implemented by various policy-makers with different merits would need to work, ideally in a coordinated manner. Thus, potential instruments and options should ideally include various aspects such as enhancing the role of leasing, factoring, private equity and mini-bonds as well as expanded stock markets for smaller firms, which could serve as a complement to traditional bank lending in order to broaden SMEs' access to funding. Several initiatives in these fields are under way, as Section 4 indicates below.

17 See "Crowd-Funding: An Infant Industry Growing Fast", IOSCO, February 2014.

Box 2

USE OF ALTERNATIVE SOURCES OF FINANCE BY SMES DURING THE FINANCIAL CRISIS

Following the work by Casey and O'Toole[1], the use of four specific sources of external finance – trade credit, other loans (informal or from a related company), market financing (which includes debt securities issuance, equity provided by the owners or by external investors and subordinated loans) as well as grants and subsidised loans – is regressed on the financing "obstacles" indicator and on a set of control variables. The dependent variables are defined as categorical ones that take value 1 if the firm has used a specific source of finance in the preceding six months; 0 otherwise. The regressors control for size, age, sector and variables, summarising the firm's operating conditions, the overall macroeconomic climate and the frictions in the financial markets.

The table reports the marginal effects of the different firm characteristics on the use of alternative sources of finance. Starting from the first column, it can be seen that financially constrained firms are 7% more likely to use trade credit and 20% more likely to use funds from friends, family or from related companies. There is no indication that financially constrained firms are replacing loans with market-based instruments, grants or subsidised loans. The latter result is somewhat surprising given the fact that credit guarantee schemes were the most common measure implemented by governments during the financial crisis. The main purpose of these measures was to induce banks to reopen their lending facilities, thereby reducing the additional risks that they needed to take on their balance sheets when granting new loans. The empirical result might be related to the fact that financial intermediaries are directly involved in the choice

1 See Casey, E. and O'Toole, C., *Bank-lending constraints and alternative financing during the financial crisis: Evidence from European SMEs*, ESRI Working Paper 450, 2013. The authors find that credit-constrained firms are more likely to use trade credit facilities, informal loans, other company loans and grants or subsidised loans.

of eligible firms; hence, firms that were already denied bank loans could find it difficult to apply for the schemes. Furthermore, financially constrained firms in distressed countries found it more difficult to access alternative sources of finance, as demonstrated by the negative but statistically significant coefficient on the interaction term.[2]

Effects of financing constraints on the use of alternative sources of finance

(marginal effects; percentages)

	Trade credit	Stat. sign.	Other loans (informal or other company)	Stat. sign.	Market financing	Stat. sign.	Grants - subsidised loans	Stat. sign.
Financing obstacles $_{t-1}$	7	***	20	**	6		5	
Financing obstacles $_{t-1X}$								
distressed countries	-6	*	-12	**	-8		-4	
small	6	***	3	***	-2		8	***
medium	6	***	8	**	-1		14	***
Age > 10 years	2		1	***	1		-3	*
Family-owned	4	**	-10	**	1		3	
Manufacturing and mining	10	***	3	***	5	**	-1	
Construction and real estate	9	***	0	***	2		4	*
Wholesale and retail trade	6	***	0		-2		0	
General economic outlook	3	*	4	***	8	***	10	***
Profit growth	6	***	2		-1		1	
Distressed countries	32	***	17	***	11	***	11	***

Sources: SAFE and ECB calculations.
Notes: The estimation is based on a panel probit model with random effects with cluster robust standard errors. It is run for eleven euro area countries (Belgium, Germany, Ireland, Greece, Spain, France, Italy, Netherlands, Austria, Portugal and Finland) between 2009 and 2013. Distressed countries are: Ireland, Greece, Spain, Italy and Portugal. The dependent variable is a categorical one that takes value 1 if the firm has used a specific source of finance in the preceding six months. Additional regressors not reported in the table are: GDP growth and ten-year government bond yields. Stars indicate statistically significant at * p<0.10, ** p<0.05 and *** p<0.01.

2 In a recent speech, B. Cœuré (2013) pointed out that it has proved difficult for some government support measures aimed at alleviating SMEs' access to finance to reach the policy targets.

EUROSYSTEM TOOLS AND INITIATIVES

The Eurosystem has at its disposal various tools that are currently helping to restore the normal functioning of the monetary policy transmission mechanism, thereby facilitating the financing of SMEs as well. Given the bank-based nature of the euro area financial system, the main channel through which the ECB's monetary policy impulse reaches the real economy is through bank lending rates. Through its monetary policy implementation, the Eurosystem controls very short-term interest rates. Changes in these interest rates are then transmitted to other interest rates and are thus an important driver of the cost of bank funding in the euro area. In normal times, the Eurosystem implements monetary policy through liquidity-providing operations with maturities of one week and three months. It also undertook longer-term operations during the crisis, including the two longer-term refinancing operations that were conducted in December 2011 and February 2012. These operations helped to facilitate financing of SMEs by providing longer-term funding for banks, because their maturity better matched the maturity of the banks' loans.

In addition, the Eurosystem's collateral framework allows a broad range of assets to be used as collateral in Eurosystem liquidity operations. Collateral availability helps to determine counterparties' ability to obtain central bank funding. At the same time, risk mitigation measures are also necessary to protect the Eurosystem's balance sheet at all points of the economic cycle.

Loans to SMEs can constitute eligible Eurosystem collateral in several ways. First, individual credit claims are eligible collateral, provided they fulfil certain criteria. Credit claims are currently one of the largest asset classes pledged as collateral in Eurosystem liquidity operations, representing about €316 billion after haircuts (at the end of May 2014). The total amount has fluctuated over time; its current level is about 25% below its peak in the second quarter of 2012, but about 25% above the end-2008 level. A subset of this total amount is loans to non-financial corporations (NFCs), including SMEs, coming to about €56 billion. The remaining parts relate to loans to public sector entities and others. These are spread across more than 160,000 individual loans, ranging from very small amounts to over €2 billion, where loans to SMEs are most likely to be those of a smaller size. Loans of less than €1 million constitute around 70% of all credit claims on NFCs accepted as collateral.

Second, an SME loan can also be used in the pool of an SME asset-backed security (ABS), which is also an eligible asset class. Eligible SME ABSs correspond to EUR 57.8 billion in nominal values (as at end-May 2014). Recently, SME loans have also been used in a structured covered bond that is also eligible for Eurosystem collateral purposes and in public sector covered bonds, the cover pools of which consist of government-guaranteed loans to SMEs, which are also eligible for Eurosystem collateral purposes. Third, non-financial corporate bonds are also accepted as collateral, although these bonds are most likely to be issued by medium-sized companies, in addition to large companies, rather than by smaller firms. Finally, since February 2012 the (temporary) additional credit claims (ACC) framework has been in place, whereby other performing credit claims, including other NFC and SME loans, can be pledged with participating national central banks.[18] At end of May 2014, this amounted to approximately €62 billion. The total amount is composed of NFC loans (about 29%), loans to the public sector and loans to private households. The median size of each ACC is around €127,000.

In addition, the Eurosystem lowered its minimum rating requirements in December 2011 and again in June 2012 for some ABSs, including those backed by SME loans. And on 18 July 2013, amid the significant improvements in transparency achieved by the ABS loan-level data initiative (see Box 3 for SME ABSs), the Governing Council decided to introduce measures to reduce ABS minimum rating requirements and haircuts.[19] Specifically, the credit rating requirement at issuance for the ABSs subject to loan-level reporting requirements was lowered to at least two "single-A" (A-) ratings, down from two "triple-A" (AAA-) ratings. In addition, haircuts were lowered by 6 percentage points to 10% for ABSs with at least two single-A ratings (i.e. those eligible under the permanent framework), and by 4 percentage points, to 22%, for ABSs with at least two triple-B ratings (i.e. those eligible under the temporary framework). These decisions allow euro area banks to borrow larger volumes using the same quantity of collateral and consequently encourage banks to extend more credit to SMEs.

Finally, in order to enhance the functioning of the monetary policy transmission mechanism by supporting lending to the real economy, the Governing Council of the ECB decided on 5 June 2014 to conduct a series of targeted longer-term refinancing operations (TLTROs) aimed at improving bank lending to the euro area non-financial private sector over a period of two years, and to intensify preparatory work related to outright purchases of simple and transparent ABSs with underlying assets consisting of claims against the euro area non-financial private sector.

18 Unlike credit claims in the permanent collateral framework, the ACC framework is a non-risk sharing regime which also allows performing loans to be accepted that do not meet the eligibility criteria set forth in the Single List (e.g. a slightly higher probability of default on the underlying assets).

19 Such changes introduced de facto into the permanent collateral framework securities that had been made eligible by the temporary framework introduced in December 2011. However, ABSs with at least two triple-B ratings remain acceptable only in the temporary framework. Moreover, to be eligible collateral, ABSs still need to be rated by at least two different credit agencies.

Box 3

INSIGHTS FROM THE SME ABS LOAN-LEVEL DATA

The Eurosystem's ABS loan-level data initiative, which was announced at the end of 2010, is a key measure to improve, for the Eurosystem and market participants, the transparency and timeliness of ABS collateral. Loan-level requirements must be satisfied by any ABS transaction for it to be an eligible Eurosystem collateral instrument. Given the large use of ABSs as collateral to obtain liquidity from the Eurosystem, originators have a powerful incentive to respect these requirements.

Eurosystem SME ABS loan-level data

(as at May 2014)

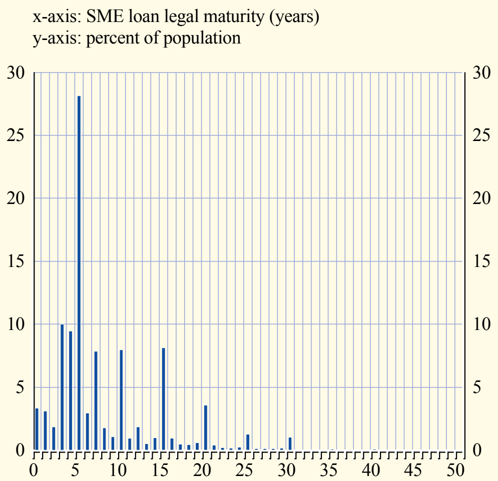
Country	Eligible amount (EUR billions)	Number of tranches	Number of loans (millions)
Belgium	14.0	4	0.23
France	3.9	7	0.21
Germany	0.9	2	0.03
Italy	14.7	31	0.24
Netherlands	10.8	2	0.02
Portugal	2.3	3	0.04
Spain	11.1	65	0.33
Total	57.7	114.0	1.10

Source: Eurosystem loan-level data.
Note: Refers to countries where the assets are originated.

Eurosystem loan-level reporting requirements began on 3 January 2013 for SME ABSs, and are set out in templates posted on the ECB's website. Data must be provided on a quarterly basis and are stored in a data repository, the European Data Warehouse, where it is available to investors for a small subscription fee.

As a result of these requirements, the Eurosystem now holds standardised tranche and loan-level data for 114 senior SME ABS tranches[1], worth about €57.7 billion as of May 2014, and including about 1.1 million loans (see the Table above for a country breakdown). The submissions contain both mandatory loan-level fields (such as repayment frequency,

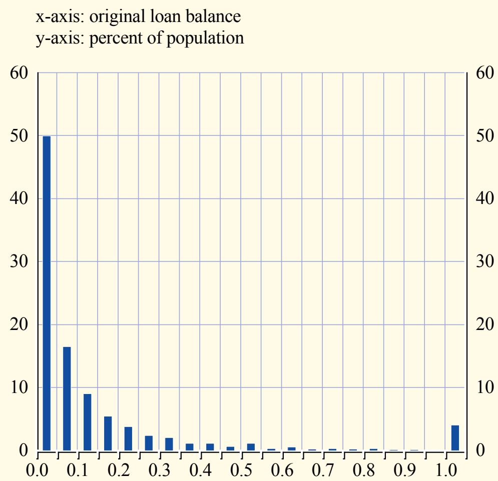
Chart A Maturity (years) breakdown of SME ABS loan-level data



Source: Eurosystem loan-level data.

Chart B Size breakdown of SME ABS loan-level data, by original loan balance

(EUR millions)



Source: Eurosystem loan-level data.

1 Only senior ABS tranches are eligible Eurosystem collateral within an ABS transaction.

current interest rate, original loan balance, and borrower Basel III classification), and optional fields (such as next payment date, loan purpose, and equivalent S&P/Moody's/Fitch/internal bank ratings).

Although the database is relatively new and still developing, it offers an interesting dataset for investigating the features of SME loans in ABSs. For example, Chart A above illustrates the maturity breakdown of SME loans in ABSs. The vast majority of the one million loans appear to be below ten years' maturity, and about one-half below five years' maturity. This picture appears relatively consistent across countries, although Dutch SME loans tend to be extended for relatively longer maturities. At the same time, Chart B suggests that most of the loans are relatively small: out of a total of 1,118,359 loans, 548,728 have an original balance below €50,000, of which 337,518 have an original balance below €25,000.

All in all, the share of SME-related collateral in the total collateral stock of the Eurosystem is significant.

At the same time, the Eurosystem has further tools at its disposal. Thanks to its role in financial markets, the Eurosystem can help to coordinate the actions of counterparties and to provide solutions to market failures, i.e. the Eurosystem can act as a catalyst. The various actions taken by the Eurosystem in this function have concerned, among others, securitisation, covered bonds and the money market.

In addition, by setting explicit transparency requirements for EU ABSs in its ABS loan-level data initiative, the Eurosystem has been able to contribute to improving market participants' confidence in the credit quality of these assets. As a result of the network effect generated by introducing transparency as a collateral eligibility requirement, market participants now expect most traditional ABS instruments (such as residential mortgage-backed securities (RMBSs) and SME ABSs) issued in the euro area to provide loan-level data. This virtuous circle is helping to remove the stigma of US sub-prime RMBSs that has been attached to many well-performing EU ABSs, including SME ABSs.

4 RECENT POLICY INITIATIVES TO PROMOTE SME FINANCING IN THE EURO AREA

Due to the detrimental impact of the financial and real economy crises on SMEs, several policy initiatives have been put in place to promote SME financing in the euro area. The need for such initiatives was first highlighted in the Green Paper by the European Commission entitled "Long-Term Financing of the European Economy" in March 2013, and then followed up by the communication from the Commission to the European Parliament and the Council on 27 March 2014.[20] In this communication, the Commission presented its road map for long-term financing of the economy and highlighted a number of proposed action points in a wide range of areas. Some action points were dedicated to improving SMEs' access to finance, while others might positively influence their funding situation in an indirect way. In particular, the Commission aims to conduct a mapping of the EU and national legislation and practices affecting the availability of SME credit information, with a view to considering possible EU-wide approaches to the credit

20 See http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2013:0150:FIN:EN:PDF and "COM(2014) 168 final", 27 March 2014.

scoring industry and assessing the feasibility of increasing the comparability of SME data across the EU. The lack of adequate, comparable, reliable and readily available credit information on SMEs was also brought to the fore by a High Level Expert Group (HLEG) report[21], which contains various short-term and medium-term recommendations for both public authorities and market participants, touching on financial regulation, market infrastructure, information transparency, taxation, bankruptcy frameworks and the rules constraining cross-border investments.

The Commission in its communication in March 2014 also proposed to revive the dialogue between banks and SMEs, particularly with regard to feedback provided by banks on loan applications and the assessment of best practices for helping SMEs to access capital markets.

The European Commission also highlights crowdfunding (as discussed above) as a potential measure to improve SME access to finance. In this respect, it proposes to carry out a study to explore market developments and the potential of crowdfunding to finance research and innovation and to assess the possibilities of using public funds to support projects through this type of funding.

CAPITAL MARKET SOLUTIONS

The communication on long-term financing by the European Commission in March 2014 also strongly supports the development of capital market options for SME financing. One such option includes developing a high-quality segment in the securitisation market and potentially provides preferential regulatory treatment compatible with prudential principles. The securitisation of SME loans could gain from this potential development and therefore function as a complement and alternative to traditional bank financing, supplemented by a range of recommendations to facilitate such a development both in the regulatory sphere and through risk-sharing policy initiatives. Although it is the second-largest ABS market (after RMBSs), the EU SME ABS sector remains small compared with overall securitisation activity, constituting around 8% of the total outstanding. This corresponds to about €130 billion outstanding[22], most of which since 2008 has been retained on originators' balance sheets for use in borrowing from central banks.[23]

Another approach to unblocking SME credit could be to draw on the public sector's role in resolving market failures that go beyond information asymmetries. In such cases, as regards SME lending, banks are unwilling to roll over lending (or only at higher interest rates) to firms, which increases their inability to meet current payments or at the very least curtails their growth prospects, which in turn holds back the macroeconomic recovery and further increases banks' risk aversion. In this regard, national development banks (NDBs) or promotional banks such as the Kreditanstalt für Wiederaufbau (KfW) in Germany and the Instituto de Credito (ICO) in Spain, and the pan-European European Investment Bank Group (EIB Group, including the European Investment Fund (EIF)) are active in providing both SME finance directly and also guarantees for SME lending. For example, the EIB signed loans worth EUR 18.5 billion for SMEs and mid-caps in 2013, and additional amounts were committed by the EIF for SME securitisations. Harnessing NDBs' comparative advantage in terms of low funding costs (which could be passed on to clients) as well

21 Following the publication of the Green Paper, the Informal ECOFIN Council invited the Economic and Financial Committee (EFC) to consider setting up a High Level Expert Group (HLEG). The HLEG final report "Finance for Growth" of 11 December 2013 included a comprehensive list of short and medium-term recommendations, including at the EU level, focusing on access to financing for SMEs and infrastructures: http://europa.eu/efc/working_groups/hleg_report_2013.pdf

22 See AFME, "Securitisation Data Report Q4:2013".

23 SME ABSs issuance has also been modest since 2008, for several reasons: regulatory uncertainty surrounding the treatment of securitisation in capital and liquidity requirements, weak macroeconomic environments translating into poor transaction economics, and stigma effects on EU ABSs arising from US subprime RMBS issues; increased risk aversion towards SMEs and poor documentation standardisation and transparency are also important factors. Although some progress has been made in overcoming these barriers, they remain important in terms of securitisation becoming considered a widespread, viable, and long-term solution for SME funding.

as their knowledge of national markets could also be helpful, particularly if there were enhanced cross-border cooperation between NDBs. An example of the latter is the agreement between Germany (KfW) and Spain (ICO) in July 2013, whereby both institutions agreed to contribute €800 million to finance SMEs in Spain.

Elsewhere, instruments created via private placement (PP) markets can also improve capital market access for SMEs as an alternative to bank funding. For example, Schuldscheindarlehen – a cross between a bond and a syndicated loan – in Germany is an established domestic private placement market, with approximately €12 billion of financing per year. Several recent initiatives on developing a PP market are under way along the lines of the US private placement model (USPP). In France the Euro PP market initiative (sponsored by the Banque de France) aims to help medium-sized French companies to access new sources of financing, and has raised about €7 billion since its first issuance in September 2012.[24]

REGULATORY INITIATIVES

Financial regulation in the EU has also been adapted in recent years in order to facilitate the financing of SMEs. The Capital Requirements Regulation (CRR) and the Capital Requirements Directive IV (CRD IV) of 27 June 2013 include a correcting factor to lower the capital requirements related to credit risk for exposures to SMEs.[25] Moreover, the revised Markets in Financial Instruments Directive (MiFID II) is creating a dedicated trading platform labelled "SME growth market" to make SME markets more visible and liquid, which should help attract risk-averse investors. Other regulations have reduced the administrative burden for SMEs as regards reporting (Prospectus and Transparency Directives) and simplifying the preparation of financial statements (Accounting Directive). On the investment side, the European Commission has created a special EU passport for fund managers investing in start-up SMEs and social businesses. It has also proposed a new investment fund framework (European Long-Term Investment Funds, or ELTIFs) for participants seeking to invest in companies and projects over the long term.

Perhaps more broadly, the establishment of a banking union, including the Single Supervisory Mechanism (SSM) and the comprehensive assessment currently taking place, will increase confidence in the banking system and hence improve SMEs' access to finance, given the natural reliance of SMEs on bank finance.

Lastly, in addition to EU regulatory changes, several national initiatives have recently been launched in order to facilitate SME access to funding. In particular, on 19 February 2014, the Italian parliament approved a decree law introducing a new category of covered bonds – Obbligazioni Bancarie Collateralizzate or OBCs – which may be backed by corporate bonds, loans to SMEs, shipping loans, lease and factoring receivables, and tranches of securitisations backed by these assets. Also, on 28 February 2014, the Spanish government approved a new SME financing law, which aims to foster alternatives to bank funding for SMEs by, among other measures, improving firms' access to the alternative stock market and also giving more flexibility to allow venture capital firms to invest greater amounts at earlier stages of an SME's development.

24 A Euro PP is a medium or long-term financing operation between an enterprise, whether listed or not, and a limited number of institutional investors, and is based on ad hoc documentation negotiated between the borrower and the investors, and generally includes an arranger.
25 The factor is equal to 0.7619.

5 CONCLUSIONS

SMEs in the euro area are usually more dependent on banks than larger enterprises owing to their typically more opaque balance sheets and corporate capabilities as a result of less informative financial statements and shorter track records. Banks can in part mitigate these informational asymmetries and higher transaction costs for potential investors by establishing long-term and in-depth lending relationships, making it easier to assess the creditworthiness of their borrowers. Nonetheless, in economic downturns or times of crisis these informational asymmetries weigh particularly hard on SMEs' opportunities to obtain financing, and credit sources – including bank credit – tend to dry up for small firms more rapidly than for large companies. Therefore, the lack of funds, alongside a generally stronger dependence on the domestic economic and sovereign environment, disrupts the business and investment activities of small firms to a greater extent.

Given the inherent heterogeneity of the SME sector in the euro area, several funding instruments and options should be considered to meet the needs of the different SMEs and lenders or investors. Indeed, alongside policies at national level, several initiatives were put in place during the crisis by supranational institutions to promote SME financing in Europe. Many of these initiatives are now being enhanced, in particular following the recent communication by the European Commission on long-term financing. EU financial regulations have been amended in order to facilitate the financing of SMEs, and national development banks are being active in facilitating SMEs' access to finance, including by fostering cooperation among themselves.

The Eurosystem has also taken a number of actions that are currently helping to restore the normal functioning of the monetary policy transmission mechanism, thereby facilitating the financing of SMEs. At the same time, the Eurosystem has further tools at its disposal. In addition, the Eurosystem has worked to increase confidence in securitisation markets to foster banks' lending capacities, chiefly by establishing transparency requirements, which have also helped to mitigate stigma effects attached to SME ABSs. In this respect, the joint paper between the ECB and the Bank of England entitled "The case for a better functioning securitisation market in the European Union", published on 30 May 2014, is a contribution towards a revitalisation of the securitisation market, which can complement other long-term wholesale funding sources for the real economy, including SMEs.

Moreover, the Eurosystem can help to coordinate the actions of counterparties and to provide solutions to market failures by acting as a catalyst. In this respect, the ECB will continue to investigate how to stimulate efforts by the private sector to improve the funding conditions of SMEs and support initiatives taken by the European institutions.

Finally, structural policies aiming to develop a financial system that offers a broader range of financing alternatives and instruments can help to improve SMEs' capital structures and financing situations. In addition, a more balanced and harmonised fiscal treatment of firms' debt and equity financing could strengthen SMEs' capital bases, enhance their internal financing capacity and also improve their creditworthiness, a crucial element for them to access external financing. Moreover, measures enhancing the level of competition in the product and factor markets are instrumental in reallocating resources towards better performing SMEs and thus increasing the overall competitiveness of the euro area.