TheCityUK
partnering prosperity

ARES & CO
Strategy Consulting

# SME FINANCING:
## IMPACT OF REGULATION AND THE EUROZONE CRISIS

NOVEMBER 2012

## About TheCityUK

TheCityUK is the independent, cross-sector voice for UK financial and professional services and champions the international competitiveness of the sector. Created in 2010, TheCityUK supports the whole of the sector, promoting UK financial and professional services at home and overseas and playing an active role in the regulatory and trade policy debate.

The financial and professional services sector currently accounts for 13.5% of UK GDP. The sector employs over 2 million people, more than 68% of whom work outside London, and underpins the businesses that drive jobs and growth.

TheCityUK provides constructive advice and the practitioner voice on trade policy and all aspects of taxation, regulation, and other legislative matters that affect the competitiveness of the sector. It conducts extensive research and runs a national and international events programme to inform the debate. TheCityUK is tasked with creating a new vision for the financial services sector.

TheCityUK is politically neutral.

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## About Ares & Co

Ares & Co is a boutique strategy consulting firm working with leading financial institutions and regulators throughout Europe.

The firm has a particular focus on risk management and the impact of regulation on bank and insurance company balance sheets, capital requirements, and business models.

Helping clients adapt their strategies in light of the wave of new regulation brought on by the financial crisis is Ares & Co's core activity.

The firm is European in its roots and is currently based in Paris and London.

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# FOREWORD
## FROM CHRIS CUMMINGS, CHIEF EXECUTIVE, THECITYUK

The UK debate on bank lending to SMEs continues to run and run with seemingly entrenched views. This debate is of major importance when we consider that SMEs account for 99.6 per cent of private sector businesses and 53.8 per cent of private sector employment in the UK. Therefore the UK's recovery will to a large extent depend on its SMEs leading a return to growth. This in turn depends on their ability to receive stable and sustainable funding for business expansion. A strong SME-led recovery will in turn support financial stability, including bank sector stability.

This independent report by Ares & Co has been commissioned by TheCityUK to look beyond the rhetoric into the factors impacting on banks' ability to maintain lending to SMEs. It provides a clear understanding of the issues at stake coupled with robust analysis, highlighting the impact of raising capital requirements on banks in the course of a recession. It demonstrates that deleveraging will occur when banks are unable to raise fresh capital following changes in capital requirements in a recessionary period – requiring them to adjust their balance sheets by shrinking assets. The report has also reviewed experience in other Member States including Germany, France, Italy and Spain, and reveals a number of differences in SME financing approaches across the EU.

This report poses hard questions for those who make regulatory decisions which impact upon what is sometimes referred to as the 'real economy'. I would encourage regulators to note the compelling data showing what happens when capital requirements are increased in a recessionary period and to moderate too rapid an imposition of bank capital and liquidity requirements under Basel III and CRD IV. In addition, the UK needs to learn from best practice overseas to ensure that UK SMEs enjoy similar advantages to their continental cousins. Given today's dependence of SMEs on bank lending, non-bank lending to SMEs needs to be promoted and encouraged. There are a number of exciting and innovative developments in this area including the growth of peer-to-peer lending platforms and Supply Chain Finance which can facilitate greater market capacity.

We are grateful to our colleagues at Ares & Co for producing this report which provides real insights on SME financing.

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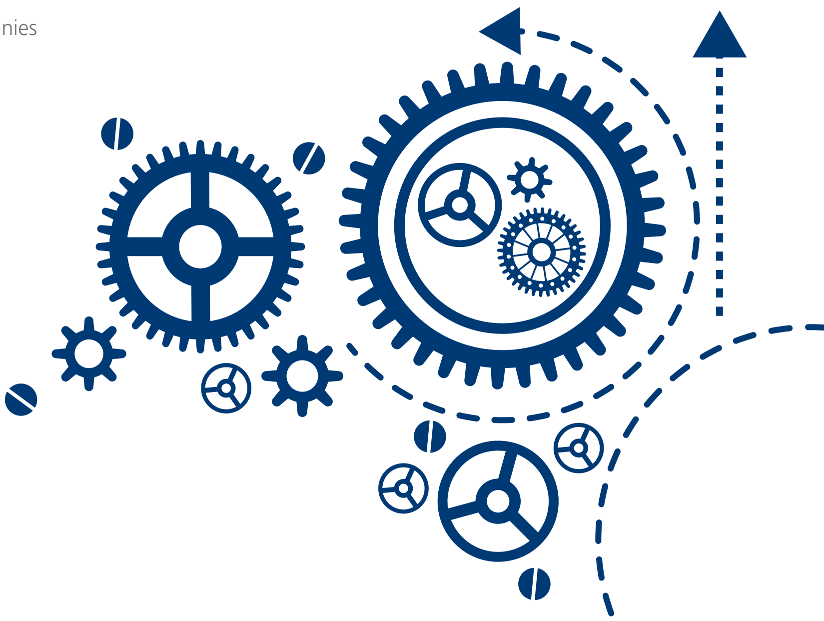


# 1. RECOMMENDATIONS

- Regulators across Europe need to note the strong data set showing what happens when capital requirements are increased in a recessionary period: banks that cannot raise fresh capital repair capital ratios by reducing their balance sheets and cutting new lending (deleveraging). This has an impact on the real economy and leads to a reduction in lending. SMEs are in the frontline as SMEs are dependent on bank finance and perceived to be a risky sector. This calls for a moderated approach to the imposition of bank capital and liquidity requirements under Basel III and CRD IV. Regulators need to have regard to the impact on the economy when designing and implementing regulations.
- State support structures for lending to SMEs need to be encouraged. These exist in a variety of forms across EU and appear to have a beneficial impact. The UK has had a relative paucity of state support structures for SME lending. We note the creation of the new "British Business Bank" announced by Vince Cable with an initial capital of £1bn aimed at SME lending. This is to be welcomed. The recent Funding for Lending Scheme in the UK is also a positive and is having beneficial market impacts. In addition, measures to reduce barriers to entry in retail and corporate banking should be encouraged.
- Non-bank lending to SMEs in the UK is very small today but needs to be encouraged to grow to complement bank lending in the current deleveraging environment as was mentioned in the Breedon report. This requires regulators to avoid cutting off non-bank lending from the outset with overbearing regulation. The negative debate on shadow banking could jeopardise the emergence of alternatives such as peer-to-peer lending platforms. Other innovative forms of financing such as supply chain finance also need to be encouraged in order to ease the funding squeeze on smaller companies.

# 2. EXECUTIVE SUMMARY

Ares & Co has produced this independent report on the topic of SME financing for TheCityUK. The objective of the report is to understand how SME financing has been affected by the banking and economic crisis over the past few years and whether opportunities exist to improve access to finance for SMEs. We have analysed in some detail the difficulties that currently exist in this regard in the UK, but also in France, Germany, Spain and Italy, and attempted to identify the root causes of these difficulties where they exist.

***SMEs and their financing – c.f. Chapter 4***

SMEs – as defined in Appendix A, as firms with less than 250 employees and either a turnover of less than €50m or a balance sheet total of less than €43m – play an important role in the European economy, contributing greatly to GDP growth through their collective importance and their ability to innovate and grow. Indeed, across Europe, they account for over 99% of companies, 65% of employment and 55% of turnover and investments. They are in many respects the backbone of the European and UK economy.

The picture in the UK is not dissimilar to Europe generally, although the UK has an SME population which is a little less important in the economy than in some other countries. Two differences stand out compared to other large European countries. SMEs share of total investment in the economy is much lower in the UK than elsewhere in Europe. Secondly, concentration of SMEs in the real estate and construction sectors – sectors that are more sensitive to economic downturn – is more pronounced in the UK than in other countries.

When SMEs need external financing banks are their almost exclusive source. Indeed, around 80% of SME financing in France and the UK, the two countries for which detailed figures are available, comes from traditional bank finance, such as loans and overdrafts. Bank-sourced financing reaches 95% when leasing and factoring for SMEs are included. Equity finance only accounts for about 5% of SME funding. Bank lending is therefore critical to SMEs as it so dominates their means of finance.

***The impact of bank regulation on bank lending to SMEs, and the real economy in recessionary periods – c.f. Chapter 5***

Economic studies show that when regulators raise bank capital standards in a recession deleveraging will occur. This cause and effect relationship is seen as a virtual certainty. The implication of deleveraging is that credit supply is reduced as bank balance sheets shrink. This will place pressure on riskier parts of the lending portfolio such as SMEs, construction, and commercial property, and cause bank loan prices to increase. These effects will worsen the recession that is underway. These various impacts are, indeed, more or less observable across Europe in the current crisis and recession. The Basel Committee calculated that the negative impact of Basel III's increased standards would be a 0.4% loss of GDP, although two of its most important members, the Federal Reserve of the USA and the Bank of Japan, said the effects could amount to 2% or more of GDP.[1]

[1] *Macroeconomic Assessment Group, "Interim Report: Assessing the Macroeconomic Impact of the Transition to Stronger Capital and Liquidity Requirements," Bank for International Settlements, August 2010.*

The International Monetary Fund (IMF) has recently reaffirmed the validity of these observations by documenting the massive deleveraging of European banks since 2008.[2] It has calculated that European banks' balance sheets could shrink a further 10% by the end of 2013 and that this could reduce credit supply in Europe by as much as 4%. The IMF estimate the resulting loss to European GDP could reach as much as 1.4% by 2013.

In order to reduce these dangers, the Basel Committee recommended a relatively gradual introduction of the new standards. European bank regulators are not following this recommendation: they have opted for a superequivalent approach on a number of points and have accelerated the introduction of certain provisions in advance of the Basel III timetable. This is particularly true of the new liquidity rules with the result that in excess of half a trillion pounds are parked on UK bank balance sheets and therefore not available to lend.[3] Similarly, the European Banking Authority's requirement that Eurozone banks achieve 9% core tier 1 capital by June 2012 front runs the Basel requirement by 6 years. It is therefore probable that UK and European bank regulators are contributing to the severity of the current recession.

A revival of the UK economy may also be hampered if there is a sharply increased demand for funding from recovering SMEs and others that is difficult to meet because balance sheets of UK banks are under continuous pressure from the regulator. The recommendations of the Vickers Commission for 17% capital in UK banks, very much higher than the already superequivalent current levels, could create such pressure on UK bank balance sheets for a long time to come.

The Financial Services Authority has in late September/early October 2012 moderated its previously uncompromising stance for strongly superequivalent capital and liquidity levels in UK banks that had resulted in possibly the toughest regime in the world. Firms participating in the Funding for Lending scheme will now receive capital "forgiveness" for lending to SMEs and guidance has been softened on capital and liquidity buffers. These measures are squarely aimed at encouraging lending by relaxing somewhat the regulatory pressure that has been driving bank deleveraging in the UK. This represents a significant change in tone and direction from the UK regulator, but still leaves the UK superequivalent to the rest of Europe, which is itself superequivalent to the Basel III regime.

***The impact of the crisis on the financing of UK SMEs – c.f. Chapter 6***

The volume of bank lending to SMEs in the UK has declined continuously since 2009. There is much debate about whether the cause of the downward trend in UK bank lending lies with decreased demand for credit from SMEs, or with a reduced supply of credit from banks. There is evidence from surveys and reports that SME demand for credit is, indeed, subdued because confidence is so low. The banks we interviewed insist that there are no lending constraints for credible applicants and that approval rates are at historic levels. Certain organisations representing SMEs continue to claim that access to credit is restricted, however. It is difficult to untangle these supply and demand effects. It seems clear that somewhat larger businesses with a credible

[2] *"Global Financial Stability Report: The Quest for Lasting Stability," International Monetary Fund, April 2012.*

[3] *"We are not risk nutters stifling the recovery," Andrew Haldane, The Times, July 11, 2012.*

application and track record will get bank finance without great difficulty. This may not be true for very small businesses with a less credible track record.[4]

There has been a drift upwards in loan pricing for SMEs which is caused by two factors: banks' funding costs and spreads. Banks' funding costs on interbank markets have been pushed gradually upwards by the Eurozone crisis which has so undermined confidence. Spreads charged to SMEs also seem to have increased, according to some of our interviewees, as prices to SMEs from the 2005/2006 period are now viewed as having been unsustainably low.

A recent development that should change this picture is the Funding for Lending scheme (FLS) introduced by the Treasury and the Bank of England. The Scheme allows banks to obtain low cost funding when they lend to SMEs. The Royal Bank of Scotland and Lloyds Banking Group have both announced discounts on lending to SMEs as a direct result of the FLS which will cause SME loans to be less expensive.

***The support structure available to SMEs in Europe – c.f. Chapter 6***

Bank lending to SMEs in France has, unlike the UK, been growing since 2010. Evidence suggests this is also the case in Germany (where direct figures are not available). Analysis and discussion with our European interviewees suggest that several factors are at play. In both France and Germany a variety of government support structures have been in place for many years that effectively underpin SME lending. These mechanisms affect both pricing and supply of SME lending. France and Germany also have a large number of small local banks that are involved in SME lending. These may contribute to improved access to finance for SMEs.

***Limited availability of alternative sources of financing – c.f. Chapter 7***

Alternative sources of financing are still very small. Most SMEs are too small to access the capital markets, and insurance companies and asset managers have limited, and selective, lending capacity. A sea change in attitudes and infrastructure would be required to alter this, and it would take in excess of ten years according to our interviewees. Even then, it would not fill the gap from bank lending, especially in some sectors. For example, of the £150bn of bank debt that will come due in the commercial real estate sector in the next 5 years, asset managers and insurance companies would provide only a fraction say £10bn to £15bn (according to interviewees). Bank lending will remain the main source of finance for SMEs in at least the short and medium term. It is therefore very important that supply of credit to SMEs from banks not be curtailed and that alternative sources of finance be allowed to grow in importance.

[4] *"SME Finance Monitor Q2: The mid-year review," BDRC Continental, September 2012.*

# 3. INTRODUCTION

Ares & Co has produced this independent report on the topic of SME financing for TheCityUK, and we are grateful to have been given the opportunity to do so. The objective of the report is to understand how SME financing has been affected by the banking and economic crisis over the past few years and whether opportunities exist to improve access to finance for SMEs. We look at the role SMEs have in the UK and European economy, the means by which SMEs have traditionally been financed, and how easy or difficult it is for them to access finance today. We have analysed in some detail the difficulties that currently exist in this regard in the UK, but also in France, Germany, Spain and Italy, and attempted to identify the root causes of these difficulties where they exist.

One issue of increasing concern is the impact of new bank capital and liquidity regulation on the ability of banks to perform their normal financing role for SMEs. The report therefore examines in some depth the way in which new bank regulation affects the lending capabilities of banks towards SMEs. It has also become clear in the course of the work that differences in the structure of the banking industry in the five countries affect access to finance for SMEs. These structural differences include the presence on the Continent of state supported entities that help SMEs. A final important issue is the capability of alternatives to bank finance to substitute for traditional bank financing. We discuss these various issues in detail in the report.

In order to develop information on these topics we have in the course of our work interviewed senior executives involved with SME lending at twenty-four leading banks and industrial organisations in the five countries, including four of the largest banks in the UK together with executives of important banks in France, Italy, and Germany. We also made extensive use of public data sources including a large amount of economic literature on SME financing. Finally, we used our own proprietary bank loan portfolio data base and economic capital methodologies to demonstrate the risk characteristics of SMEs.

The report begins by looking at the role of SMEs in the economy and their financing now and historically in these countries. There then follows a discussion on how new bank regulation causes deleveraging and credit tightness and, ultimately, reduced economic performance. We then study the impact of the crisis on lending, and relate these to the differences in bank industry structure and practices, as well as government schemes. We conclude by looking at the alternatives to bank finance when credit supply from banks is reduced.

# 4. SMEs ROLE IN THE ECONOMY AND THEIR FINANCING PATTERNS

SMEs[5] are often referred to as the backbone of the economy, contributing largely to GDP growth through their collective importance and their ability to innovate and grow. Indeed, across Europe[6], they account for over 99% of companies, 65% of employment and 55% of turnover and investments[7]. However, their capacity to access finance to expand in the current downturn is a frequent source of debate. This chapter provides a snapshot of the SME market in Europe, its importance to the economy and its means of financing.

The first part of the chapter briefly describes the SME market in the UK, France, Germany, Italy and Spain in terms of size and importance to the real economy, sector composition and recent trends since the crisis. The second part explains the financing of SMEs, which revolves for the most part around banks.

## 4.1. The UK SME sector: smaller than its European counterparts in several respects

Looking at available SME market data from Eurostat, it appears the UK's SME sector weighs relatively less in the economy than its European counterparts:

- Relative to the whole economy, it represents the lowest proportion of employment, turnover, investment, and value added amongst the five countries studied. The difference is most striking relative to investment: the share of SMEs in the UK is at least 15% less than in the other major European countries;
- It has been heavily impacted by the crisis, its value added falling by 15% to 20% two years in a row, while it only fell on average in Europe by 5% to 10% for a year.

What is more, the UK SME sector is fairly dependent on the real-estate and construction sectors, which collectively represent 31% of total SME turnover (compared to 22% in Germany and Italy for instance): these sectors are more sensitive to the downturn.

### *4.1.1. UK SMEs versus European SMEs*

**Volume of companies**

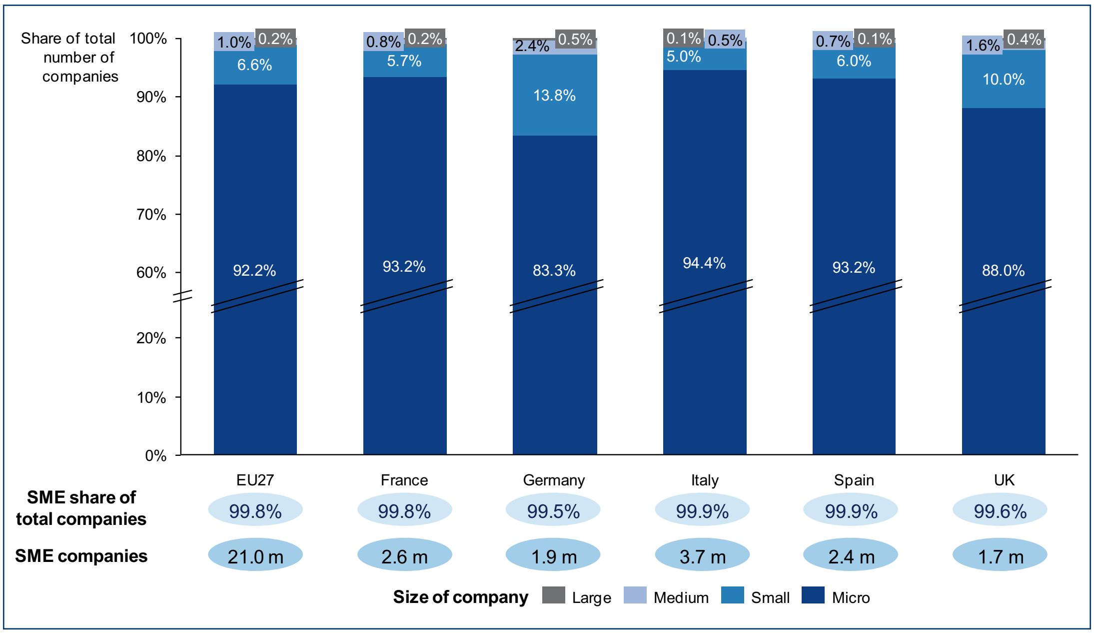
Across Europe, SMEs represent over 99% of companies, with very marginal country to country differences (from 99.5% in Germany to 99.9% in Italy and Spain). Micro enterprises also weigh heavily on the number of enterprises: 92% overall, and over 80% in all countries studied.

*[5] SMEs are defined according to the European Commission (EC)'s definition; c.f. Appendix A.*

*[6] Europe refers to the European Union (27 countries) unless otherwise stated; c.f. Appendix A.*

*[7] Eurostat data; c.f. Appendix A.*

## Figure 1 – Share of companies by company size in 2011

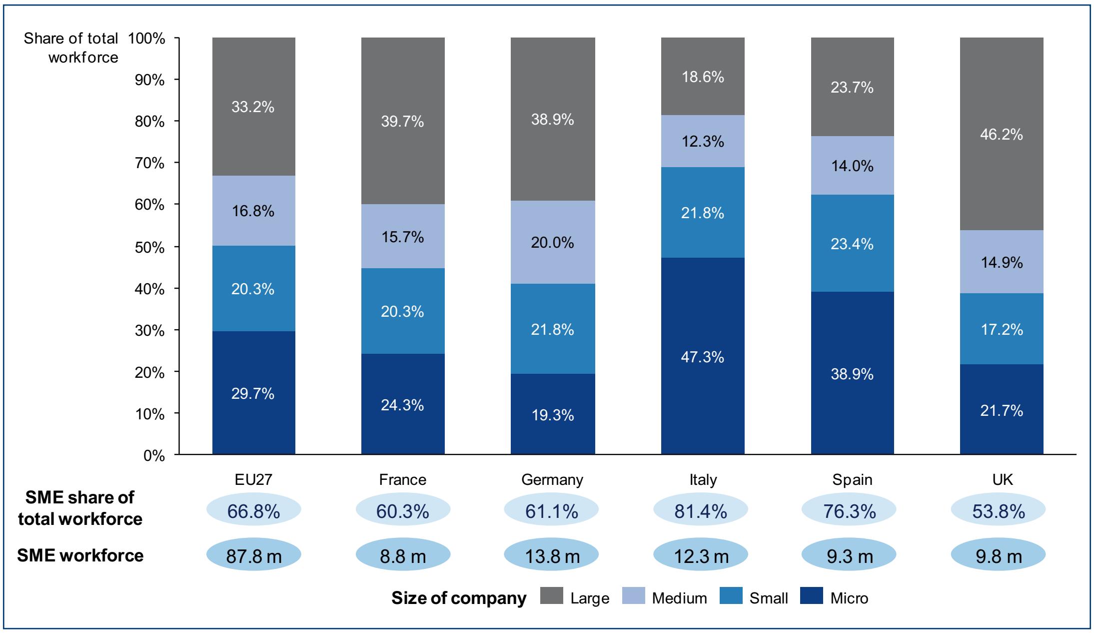



*Source: Eurostat, Ares & Co analysis*

## Employment

SMEs are also a major source of employment, accounting for ~67% of the European workforce on average, or ~88m people. However, this varies greatly from country to country. The 9.8m workers employed by the UK SME market represent only ~54%, a relatively low share of total local workforce. At the other extreme, Italy's SMEs provide work to 12.3m people, over 81% of the local population.

## Figure 2 – Share of workforce by company size in 2011

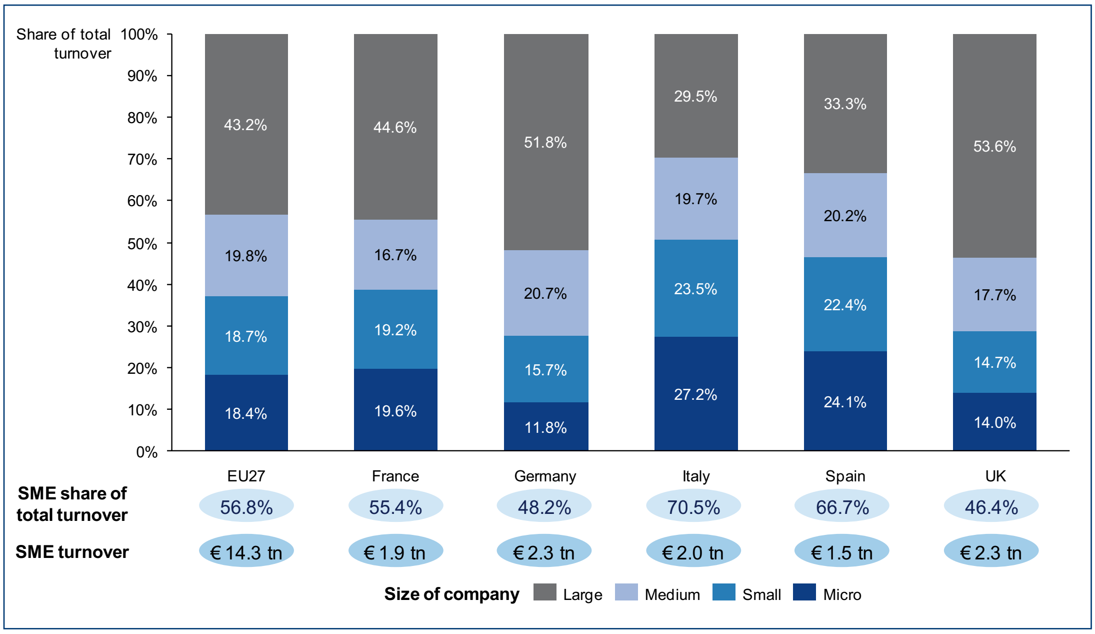



*Source: Eurostat, Ares & Co analysis*

## Turnover

SMEs generate on average in Europe over €14.3tn of turnover, more than half of company revenues. This figure falls below the 50% mark, to 46% and 48% for the UK and Germany respectively. Turnover generated by SMEs in Italy and Spain rise well beyond the average, to 71% and 67% respectively.

### Figure 3 – Share of turnover by company size in 2011

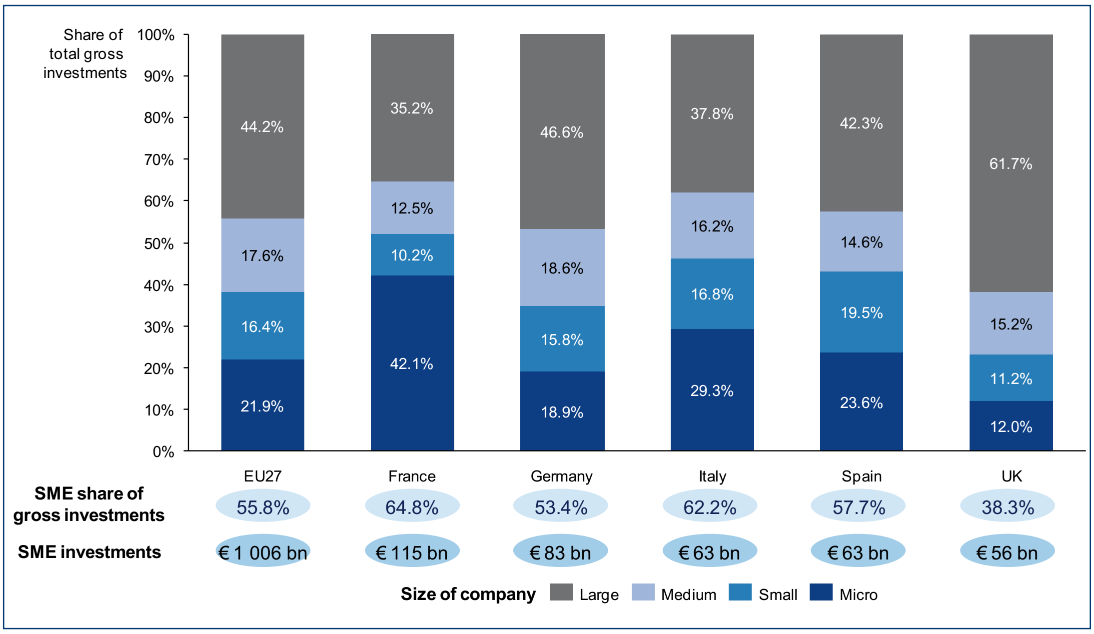



*Source: Eurostat, Ares & Co analysis*

## Investments

SMEs also invest greatly in tangible goods as a part their business, helping the real economy by fuelling growth and innovation. On average, they contribute to over half of investments across Europe and all major countries except in the UK, where SMEs investment account for less than 40% of total. Note that investments in France are not only on the high side in absolute terms (€177bn total, €115bn by SMEs, largest investments across the five countries studied) but also much more driven by micro enterprises (42% of total).

## Figure 4 – Share of gross investment in tangible goods by company size in 2011

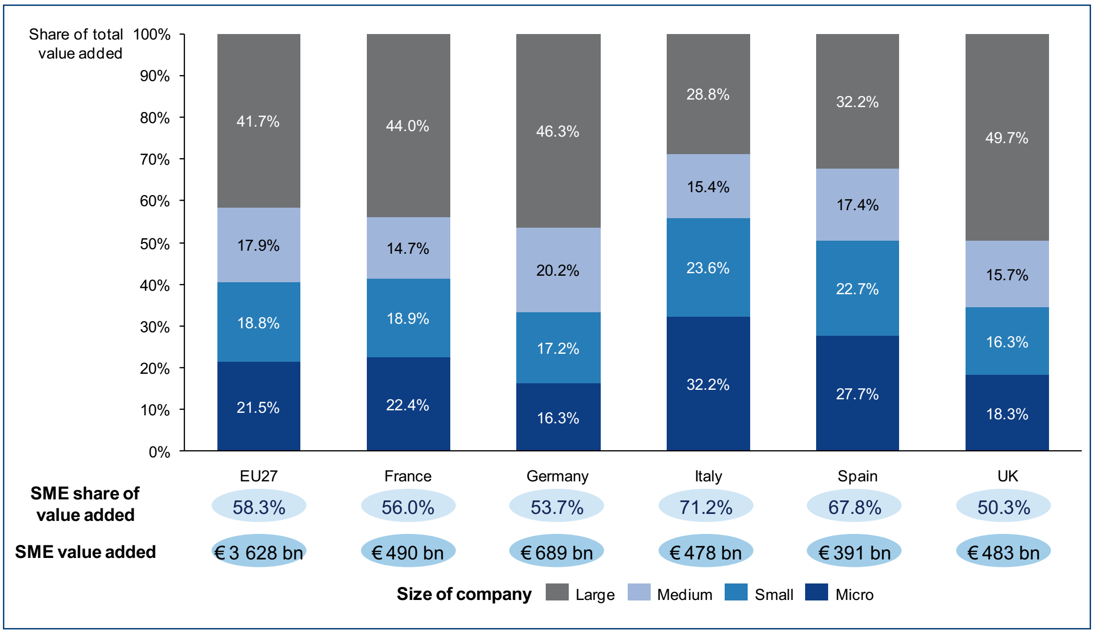



*Source: Eurostat, Ares & Co analysis*

### Contribution to the real economy

SMEs add the majority of value to the economy in each country, an indicator of contribution to national GDP. Overall across Europe, SMEs add €3.6tn of value to the economy. The share of value added from SMEs among the countries studied varies from ~50% for the UK to ~71% in Italy.

## Figure 5 – Share of value added at factor cost by company size in 2011

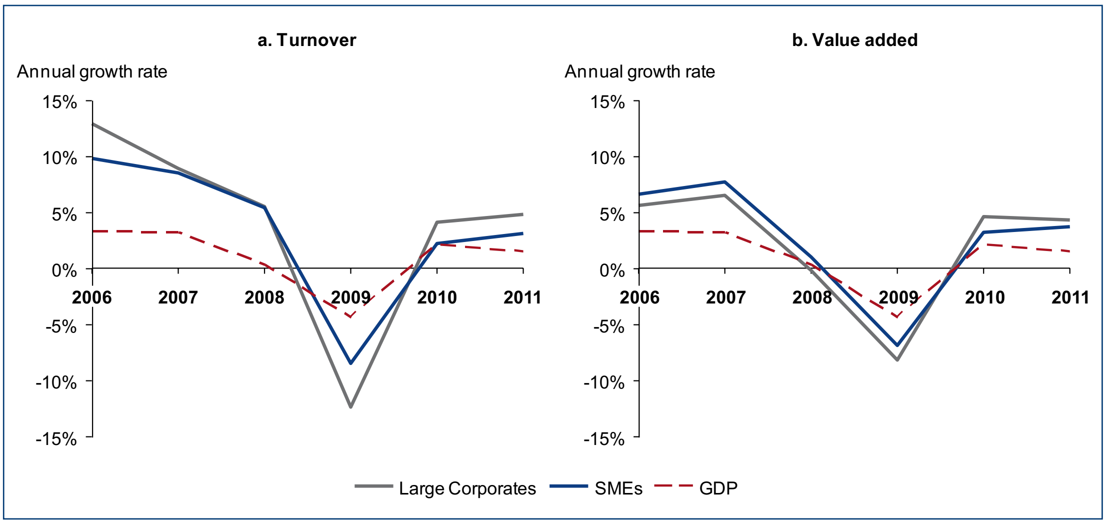



*Source: Eurostat, Ares & Co analysis*

## *4.1.2. UK SME turnover has continued to decline*

The European SME market contribution to GDP has followed roughly a similar pattern to the contribution of large corporates and to the overall economy. Indeed, annual growth rate of total turnover and value added has dipped severely in the crisis but improved since. However, while SME turnover growth used to be greater than large corporates turnover growth, this has reversed since mid 2009.

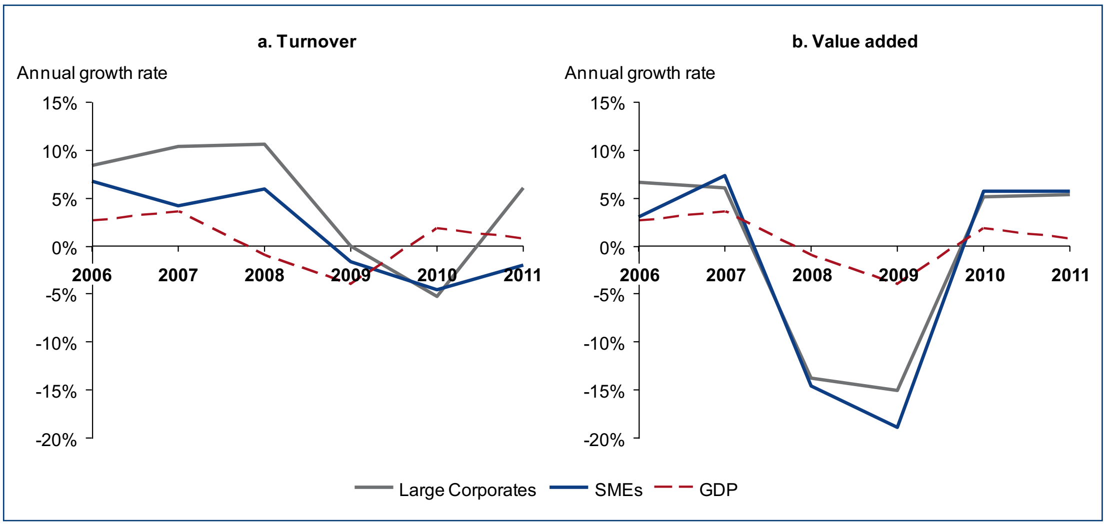
### Figure 6 – Growth rates of SME and large corporate in EU27




*Source: Eurostat, Ares & Co analysis*

In the UK, SME turnover is still decreasing year on year in the past three years according to BIS and Eurostat figures, while the rest of Europe has returned to growth, value added by both SMEs and large corporates dipped by 14% to 17% per annum during the crisis in 2008 and 2009.

### Figure 7 – Growth rates of SME and large corporate turnover and value added in the UK




*Source: Eurostat, UK Department for Business Innovation and Skills (UK BIS), Ares & Co analysis*

### *4.1.3. UK SMEs are concentrated in the real-estate, construction and distributive trade sectors*

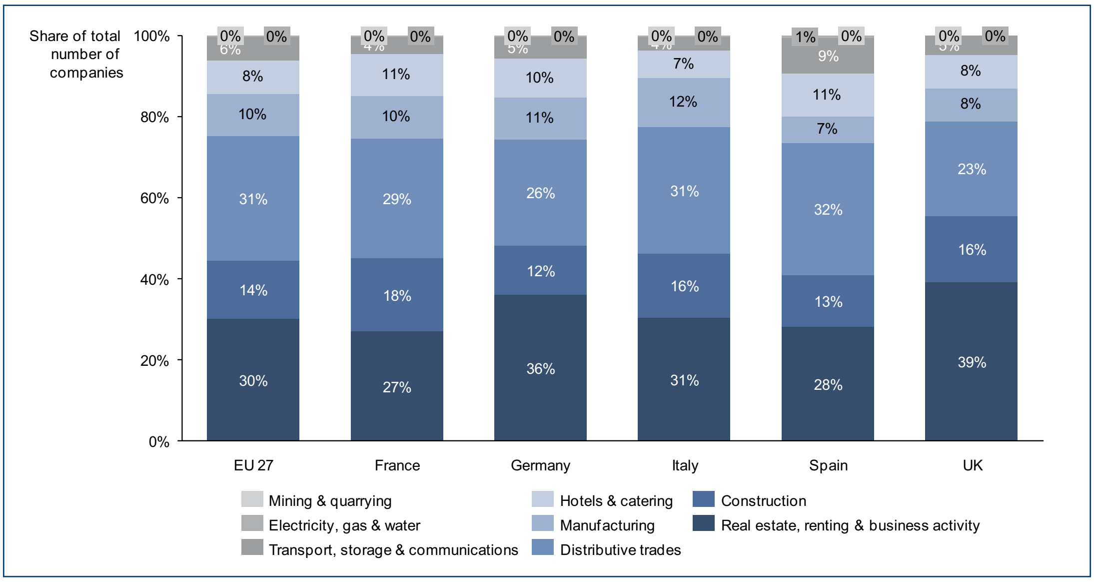
Most SMEs are concentrated around three sectors in Europe:
- Real estate, renting and business activities;
- Construction;
- Distributive trade.

These sectors represent, on average, 75% of SMEs and 68% of SME turnover.

In the UK, the first two sectors amount to 55% of SME employees for 31% of SME revenues, a higher proportion than that observed in the other four countries studied. On the other hand, distributive trades, while representing between 20% and 35% of SMEs, generate over 40% of SME turnover (except in Italy).

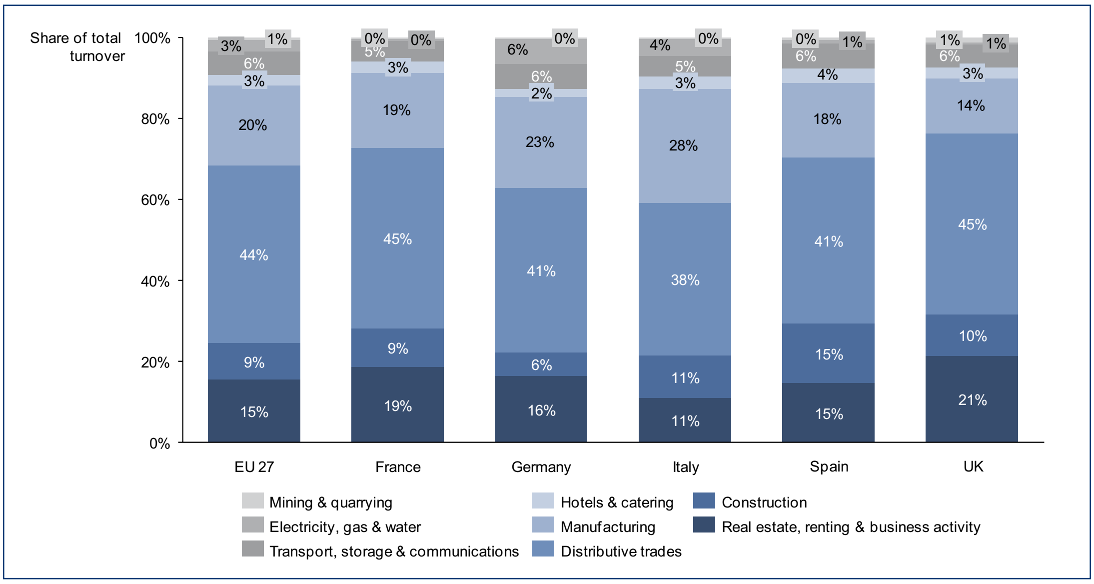
Historical data show a relatively stable sector share in the five countries studied.

## Figure 8 – Number of SMEs by sector in 2011




*Source: Eurostat, Ares & Co analysis*

## Figure 9 – Turnover of SMEs by sector in 2011




*Source: Eurostat, Ares & Co analysis*

## 4.2. Banks provide more than 80% of SME finance

Many SMEs do not seek finance externally, and rely on personal funds or company cash-flows and retained earnings to sustain their business. In Europe, 36.1% of SMEs have never required a bank loan, 39.9% have never used a bank overdraft or credit line, and 60.9% never sought grants or subsidized loans, according to Eurostat data. The proportion of "happy non-seekers" – that is, firms that do not apply for loans – reaches 30% to 50%.

However, to grow and innovate, a number of SMEs turn to external financing sources. Their first stop is usually their bank, looking for overdraft facilities and loans. Traditional bank finance (term loans and overdrafts) appears to dominate SME financing (~80%), and bank finance as a whole (including sales and asset finance) represent over 95% of SMEs' means of funding. Some other sources of financing are also sought by a smaller number of SMEs.

The following figure summarise the current status of SME financing in the UK and France. In Germany, no data exists on the SME sector per se, but we have included information on Private Non Financial Companies (PNFC) for reference.

### Figure 10 – Summary of financing means in the UK, France and Germany as of end of 2011

| | | UK | France | *Germany* | Bank vs. non-bank | Risks |
|---|---|---|---|---|---|---|
| Debt financing | Traditional bank lending | • **Loans:**<br>– **€113 bn for SMEs**<br>– *€560 bn for PNFC [1]*<br>• **Overdrafts:**<br>– **€15 bn for SMEs**<br>– *N/A for PNFC* | • **Loans:**<br>– **€184 bn for SMEs**<br>– *€781 bn for PNFC [2]*<br>• **Overdrafts:**<br>– **€9.8 bn for SMEs**<br>– *N/A for PNFC* | • **Loans:**<br>– **N/A for SMEs**<br>– *€830 bn for PNFC [2]*<br>• **Overdrafts:**<br>– **N/A for SMEs**<br>– *€64 bn for PNFC (incl. revolving loans)* | • **Banks only** | • Limited supply given current capital constraints, despite government boost |
| | Sales finance (factoring) | • **€13.3 bn for SMEs** | • **€6.5 bn for SMEs** | • N/A | • **Banks > 90%**<br>• **Non banks < 10%** | • Bank risk covered in capital standards and limited<br>• Low systemic risks for non banks |
| | Asset finance (leasing) | • **€14 bn** | • **€24 bn** | • N/A | • **Banks > 90%**<br>• **Non banks < 10%** | • Limited growth<br>• Banks pricing more for risk<br>• Concentration risk<br>• Low market risk for industrial lenders |
| | Trade finance and supplier finance | • **€5.9 bn [2]** | • **€5.2 bn [4]** | • N/A | • **Non bank only** | • Limited due to size, but potentially pro-cyclical |
| Equity financing | Venture capital[5] | • **€416 m** | • **€597 m** | • **€420 m [2]** | • **Non bank only** | • Limited supply of external equity financing due to risk of asymmetric information |
| | Business Angels[5] | • **€371 m [2]** | • **N/A** | • **€200-300 m** | | |
| | Small cap equity market[6] | • **€516 m** | • **€111 m** | • **€78 m** | | |
| *Trad. bank lend. as % of total (for SME except Germany)* | | 79% | 84% | | | |
| *Bank lending as % of total (for SME except Germany)* | | 94% | 96% | | | |

1. PNFC: Private Non Financial Corporations 2. Data for Dec 2010 3. Data for Dec 2008 4. Data for Sept 2011 5. Data relates to investment for the year (stock data unavailable) 6. Data for 2011

*Source: ABFA; AFIC; Alternext; Banque de France; BBA; BBAA; BIS; Bundesverband; BVCA; BVK; Deutsche Boerse; Deutsche Bundesbank; EBAN; ECB; EVCA; FLA; PwC; Ares & Co analysis.*

The following sections look at the various types of SME financing.

### *4.2.1. Term loans and overdrafts represent 80% of SME external financing*

When seeking external financing, most SMEs turn to debt financing, especially towards their usual banking counterparts. Term loans and the provision of overdraft facilities, as well as in some case revolving loans, represent the main methods by which SMEs seek finance from banks. In the UK, term loans and overdraft facilities to SMEs amounted to ~€113bn and ~€15bn respectively[8] at end 2011. In France for comparison, they stood at ~€184bn and ~€9bn[9].

[8] *"Banks' support for SMEs, July to December 2011", BBA, March 2012, p. 1.*

[9] *"Observatoire des Entreprises", Banque de France, December 2011 (DIREN.M.FR.CR.CD.01.N.ZZ.PM and DIREN.M.FR.CR.ME.01.N.ZZ.PM).*

### *4.2.2. Sales finance provided by banks*

Alternatively, SMEs sometime turn to sales finance as a mean to generate quicker cash-flows. Sales finance is composed of two broad activities:

- Factoring: the factoring provider pays an agreed proportion (usually 80% to 85%) of approved invoices to the company on receipt of a copy of the invoice. The balance, less a charge (usually around 0.75% to 2% of turnover), is paid upon client payment. The administrative burden (credit management and collection) falls on the factoring provider.
- Invoice discounting: it is similar to factoring, except the company remains responsible for credit management.

Sales finance is more developed in the UK (~€13.3bn advances in 2011)[10] compared to France (~€6.5bn advances in 2011)[11], though France is the second European country for factoring and discounting. Sales finance is primarily offered by banks. In the UK, based on interviews, local clearing banks account for a majority (~70%) of discounting and factoring services, foreign banks filling most of the difference (~20%), with just ~10% covered by non-bank sources.

### *4.2.3. Asset finance provided by banks*

Asset finance services to SMEs include:

- Hire purchase: the company pays a deposit and gradually pays off the remaining balance, along with interest accrued.
- Operating leases: the company borrows the asset for a particular length of time against periodic lease payments, before returning it to the lessor at the end of the lease term.
- Finance leases: it is similar to an operating lease, but the rental cost usually covers the whole cost of the asset.

Asset finance is usually used to fund plant and equipment (machinery, vehicles etc.). New leasing volumes in eight European countries (France, Germany, Italy, Netherlands, Poland, Sweden, Spain and the UK) were estimated at €78.16bn in 2010[12].

### *4.2.4. Large corporate lending to SMEs has developed post-crisis, but remains small*

Some interviewees have suggested that large corporates may in the current environment be lending to SMEs, for example to smaller suppliers or trade partners that are unable to access bank finance. This lending can arise in through supplier finance, in which firms offer to either extend the time in which invoices have to be paid, effectively extending a short term loan, or by paying less in exchange for very prompt payment. Also, SMEs have also leveraged trade or export finance. However, trade credit added up to €5.9bn at end Q4 2010 in the UK[13] and €5.2bn as of end September 2011 in France[14]. This remains a relatively minor source of SME financing.

*[10] Ares & Co analysis based on ABFA Industry Figures 2011. [11] Ibid Banque de France (DIREN.M.FR.CR.FC.01.N.ZZ.PM).*
*[12] Oxford Economics, "The Use of Leasing Amongst European SMEs", Leaseurope, October 2011. [13] Ares & Co analysis based on ONS data (NEWF - NETB).*
*[14] Ibid Banque de France (DIREN.M.FR.CR.CC.01.N.ZZ.PM).*

### *4.2.5. Venture Capital and Business angels*

Venture Capital firms and Business Angels sometimes finance SMEs by taking a stake in the company's equity. These actors also provide help to the companies they invest in, in the form of management practices and advice. In Europe, €3.8bn of venture capital was invested in SMEs in 2011[15].

### *4.2.6. Access to capital markets remains difficult*

SMEs have relatively low access to capital markets across Europe, as many SMEs are too small or do not have the future growth profile that external investors demand. Some exchanges have been set up with SMEs in mind:

- In the UK, AIM is a stock market for smaller companies compared to the Main Market of the London Stock Exchange (LSE) (number of quoted companies: 843);
- Alternext, a European platform, offers a similar service (number of quoted companies: 121);
- In Germany, the stock markets in Frankfurt, Munich, Stuttgart, Dusseldorf and Hamburg offer some services to SMEs. Also, the Corporate "Schuldschein" (a tradable note payable) loan market is fairly developed (~€8bn of debentures)[16] (number of quoted companies: 109).

MiFID 2 also contains a proposal for a new voluntary SME label to be applied to certain exchanges so as to increase their appeal to such companies.

These markets offer a funding option for companies with the highest growth prospects. At most, this option will only be suitable for a small proportion of the millions of existing companies.

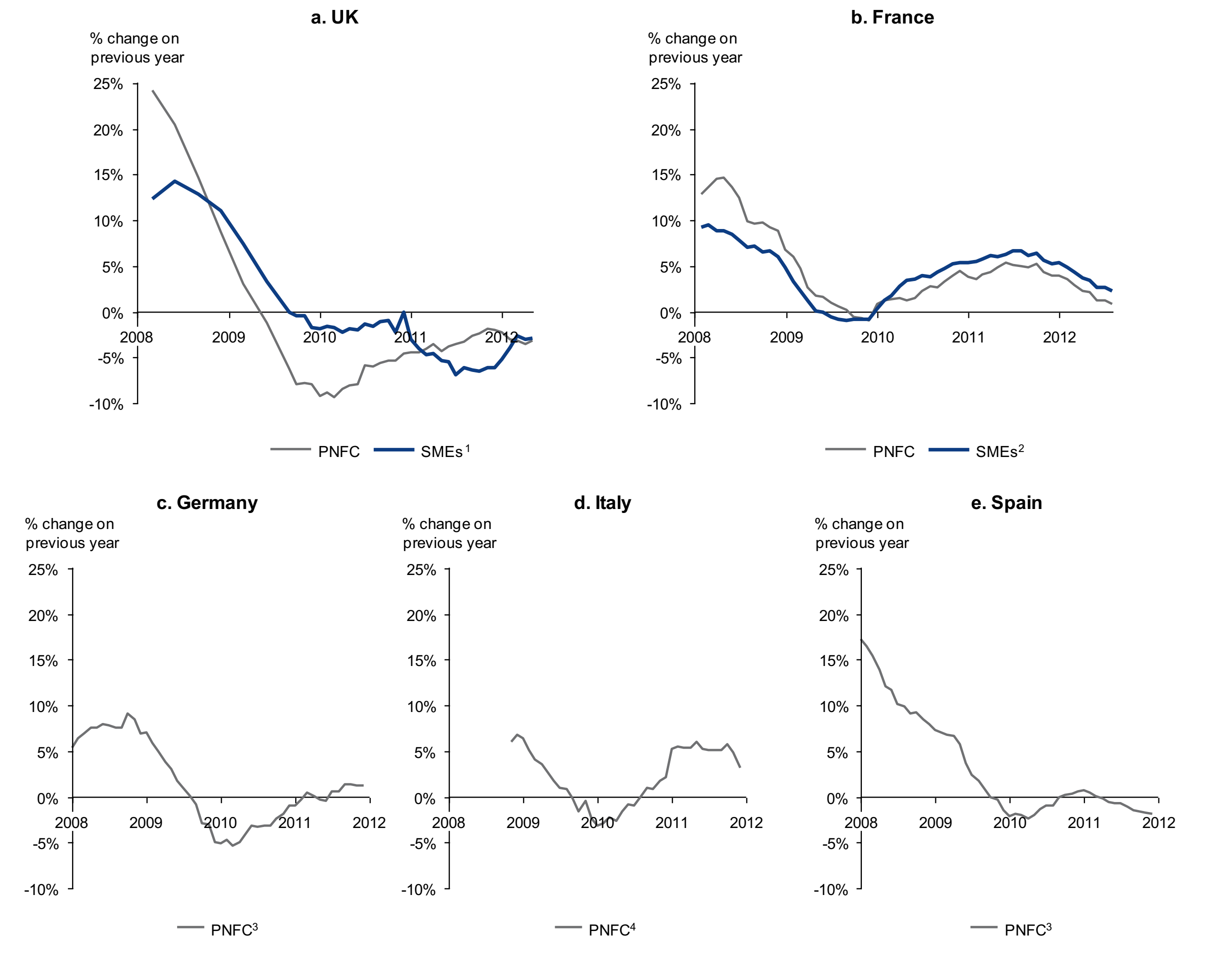
[15] *EVCA, http://www.evca.eu/knowledgecenter/statisticsdetail.aspx?id=416.*

[16] *"International Financing Review Special Report, Germany: Mixed Signals", International Financial Review, May 2012, p.33*

## 4.3. UK and European SME bank finance volumes

France, Germany, Italy and the UK all experienced a decrease in lending volumes around mid-2009 to beginning of 2010. However, lending volumes in the UK have continued decreasing since then, while growth has resumed in the other three countries, at least for public non-financial companies (PNFCs). From December 2009 to December 2011, SME lending volumes were down 7.9% in the UK but up 11.1% in France. Wider PNFC lending volumes over the same period were up 0.3% in Germany and 0.1% in Italy, but down 1.3% in Spain. PNFC lending in the UK is still in negative territory.

### Figure 11 – Changes in lending volume growths in the main European countries




1. Companies with annual bank account debit turnover less than £25 million. Data cover lending in both sterling and foreign currency, expressed in sterling terms 2. SMEs including SMEs owned by groups, independent SMEs and micro-entreprises 3. Loans to Private Non Financial Companies over EUR 1 million with an initial rate fixation, floating rate or up to 1 year 4. Loans to Private Non Financial Companies over EUR 1 million

*Source: Bank of England, ECB, Banque de France, Deutsche Bundesbank, Banca d'Italia, Banco de España, Ares & Co analysis*

# 5. THE IMPACT OF NEW BANKING REGULATION ON SMES AND ECONOMIC GROWTH

Much has been written about the impact of new regulation on banks' ability to lend in these difficult times, especially to SMEs who are often the first to suffer in a credit crunch. This chapter explains how the current round of banking regulation is constraining banks' lending behaviour towards SMEs. It is also clear that such constraints lead to negative impacts in the real economy in terms of reduced GDP growth.

The first part of the chapter briefly explains the content of the new regulation affecting banks. The second part summarises an extensive economic literature on the consequences of raising bank capital standards during a recession and its impact on lending to SMEs and the real economy. We then show data demonstrating these effects in the current crisis affecting the UK and Europe. The third part of the chapter examines the official estimates of the negative impact of Basel III in terms of reduced lending to SMEs and impact in the real economy.

## 5.1. The key regulations affecting UK and European banks: CRD IV and Vickers

For European banks, the Basel III requirements are brought into force by CRD IV. UK banks face, in addition to CRD IV, the further reforms proposed by the Independent Commission on Banking (ICB), chaired by Sir John Vickers. This section of the report summarises briefly the key aspects of the two measures. It is worth noting that the UK intends to be superequivalent to CRD IV in addition to imposing the additional requirements of Vickers.

### *5.1.1. CRD IV*

CRD IV is the European Commission (EC) implementation of Basel III as promulgated by the Basel Committee of the Bank of International Settlements (BIS). CRD IV will have the effect of turning the Basel provisions into Community law. CRD IV differs from previous capital requirement directives as it is composed of two parts:

• A regulation, including minimum core tier 1 and capital conservation buffer elements, to be implemented from 2013 without needing transcription local country laws;

• A directive, including counter-cyclical buffer, leverage ratio and liquidity elements, that will need to be enacted in each individual country before implementation.

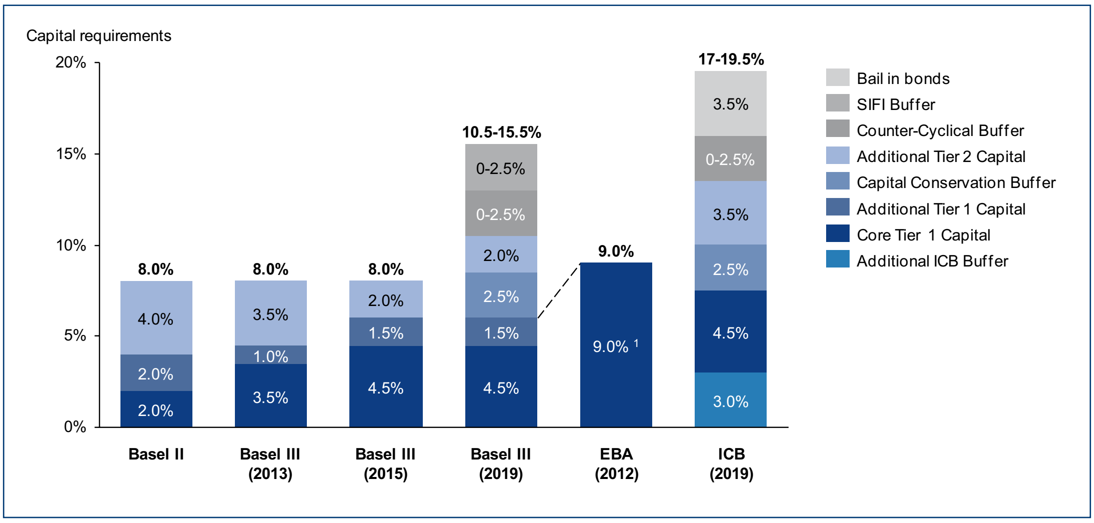
The objective is to greatly strengthen banks' resilience to crisis by requiring them to have more capital and, for the first time, specified levels of liquidity.

The key provisions of CRD IV are:

**Capital**

• Core tier 1 equity capital of 4.5% after the application of tighter definitions of what qualifies as such (compared to 2% under Basel II) to be phased in by 2015;
• Tier 1 capital of 6%, tier 2 of 2%;
• A capital conservation buffer of 2.5% to consist of common equity, in addition to tiers 1 and 2;
• A countercyclical buffer of between 0% and 2.5% of common equity or other loss absorbing capital;
• Systemically Important Financial Institutions (SIFIs) will be required to hold an extra tranche of capital of between 0 and 2.5%. Around 50 financial institutions around the globe will be affected.

Figure 12 – Summary of capital requirements




*1. Including Capital Conservation Buffer; Source: Basel Committee, European Commission, EBA, ICB*

### Leverage Ratio

- Banks will be required to maintain a leverage ratio of 3% tier 1 capital as a share of gross (non-risk weighted) assets, to be tested during an observation period.

### Liquidity

- A liquidity coverage ratio (LCR) requiring banks to have an amount of highly liquid assets on hand to meet their funding needs in a stress scenario (30 days);
- A Net Stable Funding Ratio (NSFR) requirement which means banks must more closely match the maturity of their funding with the maturity of their lending, thus reducing the traditional mismatch upon which banks' profitability depends.

Comparing the preceding capital regime with CRD IV demonstrates the increased rigour of the new regime. For example:

- Common equity is now required to be at least 7% versus 2.0% under Basel II;
- Total capital is now required to be 10.5% versus 8% under Basel II;
- If the counter cyclical buffer of 2.5% is invoked in full that would take the total to 13%;
- If the institution is a Systemically Important Financial Institution (SIFI) then an additional 2.5% would be applied taking the potential total to 15.5% versus 8% under Basel II.

CRD IV thus represents a very significant increase in the capital and liquidity requirements placed on banks.

## *5.1.2. The Independent Commission on Banking (Vickers)*

The UK established the Independent Commission on Banking (ICB) to make recommendations to Government as to how it should respond to the financial crisis. The ICB published its final report in September 2011[17]. The Government has recently published its White Paper[18] which sets out its plans to transform the ICB recommendations into UK law.

The White Paper addresses a number of topics: those most relevant to this report are twofold. The first is ring-fencing and the second is a requirement for UK banks to hold a minimum of 17% capital. The ring fence is intended to protect retail depositors by separating the ring fenced part of a bank from riskier investment banking operations. In essence, the intent is to ensure the safety of the ring fenced part of the bank by isolating it from the rest of the bank legally, financially, and operationally. A further objective is to eliminate any future need for taxpayer bailouts of UK banks. The proposal regarding 17% capital includes a requirement for large banks to hold minimum 10% core tier 1 equity, which is 3% higher than Basel III. Whatever the composition, 17% is substantially higher than the numbers set out in CRD IV.

### *5.1.3. Timeline*

The initial 2009 proposals for Basel III suggested 2012 as the deadline for implementation. However, the Basel Committee's economists recognised the possible strains a short implementation schedule would put on the real economy. The timeline for Basel III was therefore relaxed to allow a phased implementation lasting until 2019. The authorities in both the UK and Europe, however, has implemented these proposals ahead of the recommended schedule to quite a significant extent (see Figure 13). For UK banks, it is expected that the White Paper recommendations will be carried forward into legislation and enacted during the life of the current Parliament, although not implemented until 2019.

## 5.2. Negative economic impact of raising capital standards in recessions: economic literature

Economists at central banks and other institutions have for many years studied the impact of capital standards on bank lending patterns to SMEs and others. A topic of particular interest and concern has been the impact on banks of increased capital standards when these are imposed in the course of a recession. The situation of UK and European banks at the moment is precisely this: they are required by European banking authorities to sharply increase capital and liquidity levels in the midst of a severe recession. The economic literature is therefore highly pertinent to the current economic and banking situation in the UK and Europe. This section of the report provides an overview summary of this literature.

Economists at the US Federal Reserve, the Bank for International Settlements (home of the Basel Committee), the Bank of England, and elsewhere, have produced many papers over the past 20 years on the economic effects of this scenario: that is, of placing a requirement on banks to raise capital significantly in a recessionary period. Of the many papers extant on this topic (one review of the literature has 120 papers listed in its bibliography)[19] there are several themes which are generally present:

- Faced with an increased capital requirement in a recessionary period, banks will nearly always shrink their balance sheets as a primary means to repair their capital ratios (deleverage) because the alternative of raising new equity capital is not practical;
- This deleveraging will be achieved by reducing lending or selling off assets and will be accompanied by increased risk aversion and higher prices (widening of spreads) to those who do borrow;

[17] *"Independent Commission on Banking Final Report and Recommendations," The Independent Commission on Banking, September 2011.*
[18] *"Banking reform: delivering stability and supporting a sustainable economy," HM Treasury and Department for Business, Innovation, and Skills, June 2012.*
[19] *Jackson et al (1999) "Capital Requirements and Bank Behaviour: The Impact of the Basel Accord," Basel Committee on Banking Supervision Working Paper no. 1.*

- SMEs may be victims of this process: they are viewed as the riskiest sector and therefore the most likely to suffer from reduced lending and increased risk aversion in a deleveraging process. This possibility is cited very frequently in the literature[20];
- Deleveraging may deepen the recession by denying necessary finance to large parts of the economy that are extremely dependent on banks, in particular, SMEs;

Observers of the present crisis should recognise that these themes form a good summary of what has been happening in the UK and European banking system over the past year or two. It is also consistent with the financing experience of UK and European SMEs.

There is little economic literature on the economic impact of new liquidity requirements because Basel III/CRD IV is the first ever regulation which imposes liquidity rules. The effects of liquidity requirements may be similar, however, to mandated increases in capital in terms of their impact on bank behaviour. One large UK bank we interviewed, for instance, stated that 50% of its retail deposit base had been "immobilised" by the very high liquidity coverage ratio that the FSA requires: that is, rather than having these retail funds available to lend, they instead have to be invested in high quality liquid instruments to meet the regulatory requirement for liquidity. The bank's lending capacity is thus reduced.

**Excerpts from key papers on impact of increased capital standards**

This section of the report briefly summarises some important papers from the economic literature referred to earlier by quoting relevant extracts on the points noted above.

In a paper for the Basel Committee written in 1999 on "Capital Requirements and Bank Behaviour," Patricia Jackson et al concluded the following:

*"Banks' reaction to hitting regulatory constraints on their capital ratios is likely to vary according to stage of the business cycle … raising new capital or boosting retained earnings may be easier in booms whereas cutting back loan books may be more cost effective in economic troughs … available research suggests that, in order to meet minimal capital requirements, banks are likely to cut back lending when it could be too costly to raise new capital."*[21]

UK and European banks today would have great difficulty raising new equity capital as suggested above. See Appendix B for P/E ratios and Market/Book ratios for the European banking sector. Jackson et al then explain how these factors impact GDP growth:

*"Reductions in lending by capital constrained banks could reduce (economic) output in both the short run and the long. By either cutting off bank-dependent borrowers or by forcing them to employ more costly forms of credit, a reduction in bank lending can lead to a decline in investment demand … this decline in investment demand would be contractionary for the macroeconomy in the short run as firms might delay investment plans and shed workers. Since future output is a function of current investment, foregone investment would reduce future output as well."*[22]

Writing for the Federal Reserve Bank of Chicago, Bliss and Kaufmann make similar points:

*"During economic downturns … actual levels of bank capital are likely to be declining as loans default and are charged off and loan loss reserves are replenished. If capital constraints are binding, this forces banks to reduce lending further unless they are able to raise additional capital profitably. The effective capital requirement may also*

*[20] Please refer to "Appendix C: SME lending risk and return" for additional analysis."*

*[21] Ibid, Jackson et al, p.3.*

*[22] Ibid, Jackson et al, p.29.*

*increase during downturns … and as a result … the level of earning assets that the banking system can support on the existing capital base is further reduced, giving rise to perceived credit crunches."*[23]

In another paper, VanHoose notes:

*"Virtually all studies of the microeconomic effects of bank capital regulation generate the following common conclusions: Short run effects of binding risk-based capital requirements are reductions in individual bank lending and […] increases in equilibrium loan rates."*[24]

*"It is possible that regulatory tightening of capital requirements could transmit short-term external shocks to aggregate credit and hence to the economy."*[25]

In a paper for the Bank of England, Milne and Whalley[26] demonstrate that banks are extremely sensitive to a reduction in their capital buffers and this may cause capital to become a binding constraint. So, when a bank's regulator tells it to triple its core tier 1 equity, as is currently happening, this almost automatically turns capital into a binding constraint for the bank. Everything must be managed around the capital problem. The capital of the bank is suddenly too small to support the balance sheet, or looked at the other way around, the balance sheet is too large given the amount of capital the bank has.

A binding capital constraint triggers the following kinds of bank behaviour, according to Milne and Whalley:

- Greatly increased risk aversion;
- A reduction in loan volumes;
- The crowding out of the least attractive lending opportunities (such as SMEs);
- A concerted attempt to restore capital ratios by reducing the size of the balance sheet.

Van den Heuvel, writing for the Federal Reserve Bank of New York, notes that:

*"When equity is sufficiently low, because of loan losses or some other adverse shock, the bank will reduce lending because of the capital requirement and the cost of issuing new equity."*[27]

As for the impact of all these effects on SMEs, Jackson et al state:

*"There is evidence that banks play a special role … in their lending to smaller companies, and that it may be difficult for such borrowers to find alternative sources of funding. For the US, there is some indication that particular sectors such as real estate or small companies may have been affected by pressure on bank capital in the early 1990's. Currently, the weakness of the Japanese banks may be contributing to the weakness of the economy …"*[28]

The possible macroeconomic effects are further explained by the Asian Development Bank:

*"Restricted bank lending has far reaching consequences for corporate financing. Firms can suffer from a credit crunch if bank lending falls short of demand, which curtails investment growth, and affects output growth and employment. Some have argued that contraction in bank lending played an important role in the 1990-1991 recession in the United States and the 1991-1996 recession in Japan."*[29]

[23] *Bliss, R and Kaufmann, G (2002) "Bank Procyclicality, Credit Crunches, and Asymmetric Monetary Policy Effects: A Unifying Model," FRB Chicago, p 6.*

[24] *VanHoose, D (2007) "Bank Capital Regulation, Economic Stability, and Monetary Policy: What does the Academic Literature Tell Us?" International Atlantic Society, p. 2.*

[25] *Ibid p. 2.*

[26] *Milne, A and Whalley, E (2001) "Bank Capital Regulation and Incentives for Risk Taking," Bank of England, Bank of England Working Paper Series no. 90.*

[27] *Van den Heuvel, S, (2009) "Does Bank Capital Matter for the Transmission of Monetary Policy?," Economic Policy Review, FRB New York, Vol. 8, no. 1, p. 3.*

[28] *Ibid, Jackson et al, p. 4.*

[29] *Fan, Ex and Terada-Hagiwara, A (December 2003) "Changing Bank Lending Behaviour and Corporate Financing in Asia -- Some Research Issues," Asia Development Bank, ERD Working Paper no. 49, p. 1.*

In a set of further points on the macroeconomic impacts associated with capital regulation, Bliss and Kaufmann state:

*"In addition to limiting the potential effectiveness of monetary policy in stimulating credit expansion, capital constraints may also impose a further negative effect on banking credit expansion…"*[30]

VanHoose explains that:

*"This research indicates that regulatory tightening of capital ratios can generate aggregate (economic) shocks, that capital regulation can enhance the procyclicality already inherent in banking, and that capital requirements can influence macroeconomic outcomes and alter the monetary policy transmission mechanism."*[31]

Bringing this debate right up to the present, Benoît Coeuré, an Executive Board Member of the ECB explained how extreme the situation had become amongst European banks in late 2011 and mentions the strong pressure on banks to deleverage due to their capital problems.[32] He says,

*"Banks have three ways to adjust to pressures on their funding and capital positions: they can sell assets, raise capital or reduce lending."*

He explains that the first two options were not very available for Eurozone banks at the time. Asset disposals at fire sale prices would actually impair capital values (the opposite of what was needed) while raising new equity would be extremely difficult. He continues:

*"This left banks with the third option, namely to reduce lending … This strategy, however optimal from an individual bank's perspective, would lead, if pursued collectively, to a credit crunch with significant negative consequences on the real economy … particularly dangerous for SMEs given their heavy reliance on bank funding."*

In sum, these economists and central bankers explain that when banks find themselves without enough capital in a recessionary period one of their responses will be to cut back on lending. This is because banks repair their capital ratio by reducing their balance sheets. The economists further point out the potential negative impacts on economic growth when available credit from banks to the economy is reduced by deleveraging. In effect, recessions can be prolonged and deepened by the way banks respond to pressure on their capital via deleveraging. As for SMEs, economists generally agree that they will be one of the first sectors affected by credit restrictions because they are unable to access capital other than through banks.

## 5.3. The debate over negative impact of Basel III and CRD IV

The preceding section of the paper demonstrates that economists have long understood that some negative consequences are likely to arise when regulators raise capital standards in a recession (although banks' prudential safety will be enhanced). There were relatively few attempts to quantify this negative impact.

In the wake of the 2008 Lehman Brothers collapse regulators and politicians moved swiftly to improve the stability of the financial system by sharply increasing capital and liquidity

[30] *Ibid, Bliss and Kaufmann*

[31] *Ibid, VanHoose*

[32] *"Financing the economy of the euro area: the ECB's role", Speech by Benoît Coeuré, Member of the Executive Board of the ECB, Association Francaise des Tresoriers d'Entreprise (AFTE), 11 April 2012.*

requirements for banks even as a deep recession set in. These moves triggered a debate about the costs and benefits of aggressive increases in capital and liquidity standards. The Basel Committee provided an analysis of the negative impacts of Basel III which we review below.

### *5.3.1. The magnitude of negative impact of Basel III*

The Basel Committee established in 2010 a Microeconomic Assessment Group (MAG) composed of central bank economists to examine the economic cost of Basel III. This was partly in response to a paper from the International Institute of Finance (IIF), representing banks globally, which estimated that Basel III could cause an aggregate loss of economic output amounting to 3.1% of GDP over a 5 year transition period for the United States, Euro Area, Japan, United Kingdom and Switzerland.[33]

The MAG produced several influential papers to rebut the IIF's finding that Basel III would have a large economic impact. These papers set out the MAG's forecast which showed by way of contrast a much smaller potential loss of GDP during the critical transition period. The MAG states:

***"For a 2 percentage point increase in Tier 1 and overall capital requirements, combined with other regulatory changes, the IIF's estimates suggest that GDP in the United States, the euro area and Japan will be 3.1% lower than the baseline five years following implementation. The comparable figure derived from the MAG estimates is a GDP reduction of 0.19% times two, or 0.38%, on a global basis after four and a half years."***[34]

The MAG thus rejects the findings of the IIF, although it rehearses the familiar logic of deleveraging, reduced lending, and resultant negative macroeconomic impact:

***"Banks facing stronger capital requirements … may initially increase the interest rates they charge borrowers and reduce the quantity of new lending. Any increase in the cost and decline in the supply of bank loans could have a transitory impact on (GDP) growth, especially in sectors that rely heavily on bank credit (our note … such as SMEs) ...This intuition forms the basis for the results of the MAG."***[35]

The MAG did, however, acknowledge analysis from the United States Federal Reserve Bank (FRB) that predicted much worse negative GDP impacts than the MAG consensus figure:

***"The FRB … investigated the consequences of a more severe adverse effect on credit availability. Specifically, experience over the last two decades show that periods during which banks are actively building reserves of capital are accompanied by higher spreads, tighter lending standards and a decrease in the supply of bank credit … estimates … suggest that these effects can be substantial."***[36]

The Fed's model in fact predicted a loss of GDP of 1.78% of GDP resulting from a 2% increase in capital requirements after 4 years.[37] This estimate is much higher than the headline figure from the MAG quoted earlier of just 0.38%. The Bank of Japan, in a similar vein, said that a 2% increase in target capital ratio would cause a decline in GDP of 2.4% relative to baseline after 11 quarters,[38] Japan, of course, has much experience with banking crises following the collapse of a property bubble – the same as the origin of the present crisis – as does the United States for that matter. Given the weak global recovery from the crisis, these are large numbers.

[33] *"The Cumulative Impact on the Global Economy of Changes in the Financial Regulatory Framework", International Institute of Finance, September 2011, p. ii.*

[34] *Macroeconomic Assessment Group, "Interim Report: Assessing the macroeconomic impact of the transition to stronger capital and liquidity requirements," Bank for International Settlements, August 2010, p.4.*

[35] *Ibid pp. 1-2.* [36] *Ibid p. 25.* [37] *Ibid p. 26.* [38] *Ibid p. 22.*

These divergent forecasts quantify the potential losses to GDP from Basel III's increases in capital and liquidity standards. They demonstrate that, at least in the view of American and Japanese authorities, there is a strong possibility Basel III could have a quite significant negative impact on GDP growth. That is obviously a major concern during a global recession.

The following section of the report reviews the recommendation of the MAG as to how these potential negative impacts could be mitigated.

### *5.3.2. Transitional effects versus longer term effects of increases in capital standards*

A crucial issue in the debate over the impact of Basel III or CRD IV is whether the discussion concerns the transition period during which new requirements come into force (say, two to six years) or whether the discussion concerns the longer term impact of new capital requirements. In the UK and Europe we are, at present, in the transition phase of implementing the new capital and liquidity requirements of Basel III.

Most economists agree that once the transition phase is complete and a new equilibrium has been reached with a higher level of capital in the banking system then the economic impacts from that point onwards are relatively manageable and positive from a cost benefit point of view. The transition period to this higher level is a different story, however. There can be significant negative economic impacts during this period, which may last up to 5 or 6 years, and this during what is normally a recession. Earlier sections of this paper about deleveraging, credit restriction, and negative GDP impacts are all noting the potential negatives that may emerge during this transition period.

The MAG was aware of the danger that banks might curtail credit supply in a transitional deleveraging phase. It argued for a long transition period to Basel III standards in order to mitigate negative GDP effects. It explains:

***"A key factor determining banks' response to new capital and liquidity standards is the length of the period during which the new requirements are phased in. If the transition period is short, banks may choose to curtail credit supply in order to lift capital ratios and adjust asset composition and holdings quickly. A longer transition period could substantially mitigate the impact, allowing banks additional time to adapt by retaining earnings, issuing equity, shifting liability composition and the like …. Giving banks time to use these adjustment mechanisms would almost certainly mitigate any adverse effects on lending conditions, and, eventually, on aggregate activity (GDP)."***[39]

The Basel Committee adopted the MAG's recommendation for a long transition. It lengthened the implementation period for Basel III by 7 years from 2012 to 2019.

European banking regulators have not followed the MAG's advice, however, and have accelerated the implementation schedule and been significantly superequivalent. This has led to very rapid deleveraging of the European banking system as predicted by all the economists. The data on deleveraging is reviewed in a later section. First, we briefly review the superequivalent features of the European regulatory regime that have emerged since 2008 and which have contributed to the deleveraging process.

[39] *Macroeconomic Assessment Group, "Interim Report: Assessing the Macroeconomic Impact of the Transition to Stronger Capital and Liquidity Requirements," Bank for International Settlements, August 2010, p. 1.*

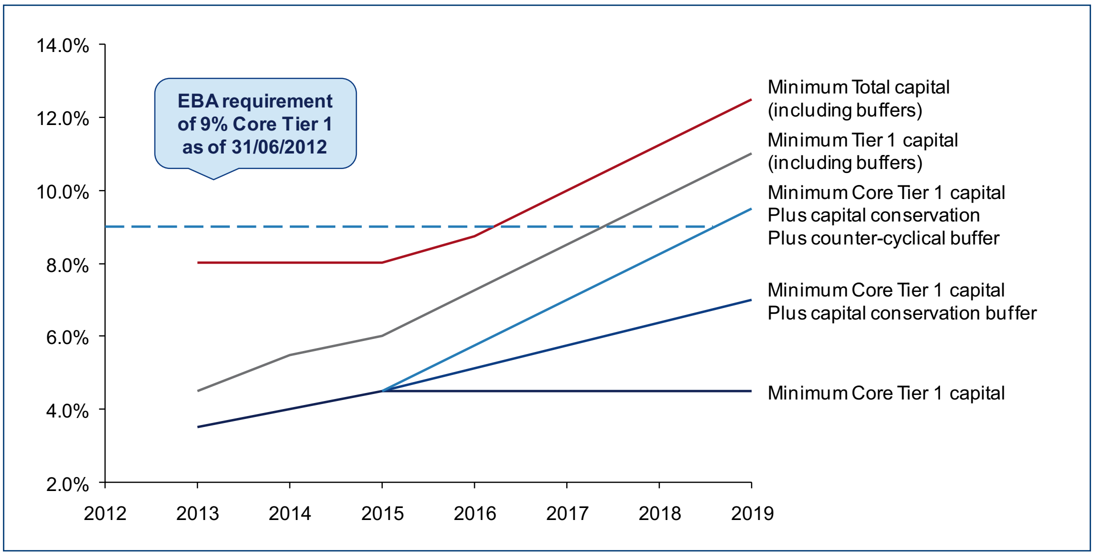
### *5.3.3. Instances of European superequivalence*

European banking regulators have been strongly superequivalent for the last few years. This position is counter to the advice of the MAG noted above and has led to rapid deleveraging of European banks. In the course of September 2012 the position of UK regulators showed signs of change regarding superequivalence.

**The European Banking Authority (EBA)**

The EBA required Eurozone banks to achieve a 9% tier 1 equity level by June 2012. The chart below displays the phased implementation of new capital levels as set out in the Basel III accords relative to the EBA's 9% requirement from June 2012. The EBA requirement was far in advance of the Basel III requirements (by 6 years) and superequivalent in the sense that it requires banks to raise nearly the full 2.5% of the countercyclical buffer even though the countercyclical buffer should be drawn down in recession, not built up to its maximum.

Figure 13 – Timeline of capital constraints under Basel III




*Note: assuming maximum countercyclical buffer and excluding SIFI buffer; Source: Basel committee, European Commission, Ares & Co analysis*

**UK authorities**

The FSA requirement for capital levels in UK banks exceeds that of the EBA by 1 or 2% such that most UK banks are holding 11% or more core tier 1 equity. The superequivalence issue that was mentioned most frequently is the FSA's LCR requirements. In the Basel accords, this requirement is meant to come into force in 2015 and means that banks must hold 30 days liquidity. Our understanding is that the FSA now requires UK banks to hold 90 days liquidity. This is greatly in excess of the Basel requirement and three years in advance of the Basel schedule. In a recent speech, Andrew Haldane of the Bank of England revealed that UK banks hold in excess of £500bn in liquid assets, probably largely due to this LCR requirement.[40] This huge sum on UK bank balance sheets is not available to lend to SMEs or anyone else.

[40] *"We are not 'risk nutters' stifling the recovery," Andrew Haldane, The Times, 11 July 2012.*

**European regulators soften their stance**

In late September/early October 2012 the FSA altered its stance on superequivalence to a degree. Banks lending to SMEs using the Bank of England's Funding for Lending programme will be allowed to treat such lending as virtually risk free in so far as capital is concerned … no additional capital need be allocated against such loans. Individual banks have been given targets for capital and told their ratios may drop below 10% so long as the capital target is met. If an upper level of the liquidity requirement is breached banks will be given time and flexibility to rebuild it.

Andrew Bailey, head of prudential regulation at the FSA, stated:

*"The goal is to avoid rapid deleveraging that would harm activity in the economy."*[41]

In a recent speech, Bailey further states that:

*"We have allowed banks to reduce the capital buffers they hold over the minimum requirements in line with new lending to the UK economy … If such extra lending boosts economic growth, it will enhance resilience in the financial system. Likewise, we have altered our guidance to banks on the liquid asset buffers that they need to maintain."*[42]

In essence, the authorities are slightly reducing capital and liquidity buffers to encourage lending and growth. The view is that growth in the economy will help financial stability in a way that more than counteracts any loss of safety from reduced buffers.

This new stance represents a marked change in the position of UK authorities who had until very recently been uncompromising in their calls for banks to raise more capital and increase buffers well in advance of other jurisdictions around the globe and to higher levels than contemplated elsewhere. It shows for the first time an awareness of the potential negative impacts on lending and GDP growth of bank regulation, especially when it is introduced very rapidly and is superequivalent.

We note that even with these changes, the UK will remain superequivalent to the rest of Europe, which is itself superequivalent to the recommendations in Basel III as noted above.

## 5.4. The IMF's "Global Financial Stability Report" and the risks of deleveraging

We have stated throughout this chapter that bank regulation may lead to deleveraging, credit contraction, and negative growth impacts.

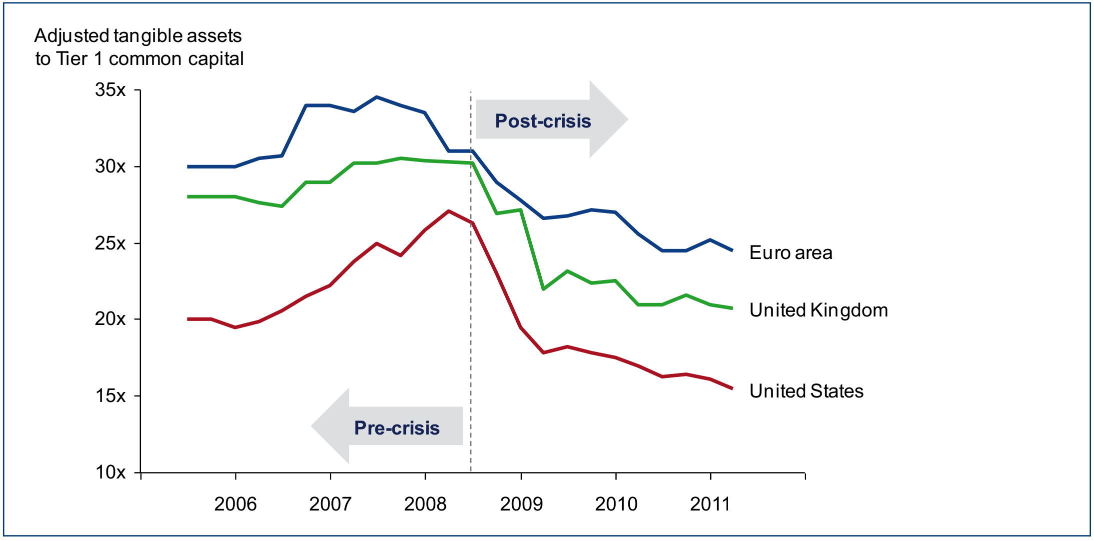
The International Monetary Fund (IMF) has produced two Global Financial Stability Reports in April and October 2012 which document European bank deleveraging.[43] The figure below shows that deleveraging since 2008 in the European banking industry has been dramatic.

[41] *"FSA eases bank rules to boost lending," Financial Times, October 10, 2012, p.1.*

[42] *"Prudential Regulation: Challenges for the Future," Speech at Edinburgh Business School, October 4, 2012.*

[43] *"Global Financial Stability Report: The Quest for Lasting Stability," International Monetary Fund, April 2012.*

## Figure 14 – Evolution of bank leverage post crisis




*Source: SNL Financial and IMF staff estimates*[44]

Looking forward, the IMF estimates in a base case projection that European banks could shed another US$2.6tn equivalent of assets by the end of 2013 (compared to beginning 2012). This sum is equal to 7% of all European banking assets. In a less favourable IMF scenario, deleveraging could be US$3.8tn equivalent, or 10% of European banking assets. In its latest report from October 2012, the IMF updates these figures by noting that deleveraging is projected to happen to an even greater extent than anticipated in its April report. The base case is now US$2.8tn of asset reduction, and, in a worst case scenario, US$4.5tn of asset reduction. Clearly, these are seismic shifts in the European banking landscape.

The IMF argues that deleveraging is necessary to clean up and stabilise the financial system in Europe. It expresses concerns throughout its report, however, that if the process should become disorderly or is poorly managed by the authorities then it could become dangerous to stability and the real economy. It is critical that policymakers manage the deleveraging process "smoothly." The IMF states simply:

*"There is a risk that a large-scale reduction in assets by European banks could lead to a credit crunch."*[45]

It explains:

*"These structural changes (deleveraging) are healthy as they will lead, over time, to a stronger and more resilient banking system. However, there is a risk that large, simultaneous asset reduction by a number of European banks could have an adverse impact on the economy and the financial system."*[46]

At another point the IMF states:

*"There is a risk that a large scale reduction in European bank assets might have serious negative repercussions for the real economy and financial markets in the euro area and beyond."*[47]

The IMF explains that these adverse impacts would arise through a decline in the supply of bank credit to those in the economy who are only able to access finance through banks. This is of course a reference to SMEs amongst others.

*[44] Ibid, International Monetary Fund, p.26. [45] Ibid p. 31. [46] Ibid p. 31. [47] Ibid p. 26*

Indeed, adding to already tight credit conditions, the IMF estimates that credit supply from banks across Europe will decline by a further 1.7% over the next year or so (base case). In a less favourable scenario, credit supply decline could amount to 4.4% over the next year or so. SMEs would be particularly negatively affected by these reductions in credit supply because of their reliance on banks for finance.

The IMF estimates that in a scenario of poorly managed deleveraging the impact on European GDP could be as great as a rather startlingly negative 1.4% by the end of 2013.

This report clearly underlines the notion that bank deleveraging, driven by regulators (and markets), has an objective economic cost which can in certain scenarios be damaging to the real economy if it leads to a credit crunch. Policymakers have an obligation to manage the process smoothly to minimise these potential negative impacts.

The sensitivity of central bankers to 'disorderly deleveraging' is clear in the comments of Benoît Coeuré of the ECB noted earlier. He says:

***"There is now strong preliminary evidence that the three year LTROs have helped banks to reduce liquidity risk and therefore allowed them to smooth the deleveraging process over a longer period of time and maintain exposure to SMEs."***[48]

These words demonstrate once again the importance of spreading the adjustment process over a number of years (as noted by the MAG) instead of compressing it by front running.

## 5.5. Bank interviewees agree that regulation is causing deleveraging

In our interviews over the past two months with banks and other business organisations we asked whether the dynamic described by the economists above was relevant to banks' situation in the UK and European economy of today. The common themes in their responses right across Europe were:

- **Deleveraging:** the majority of banks we spoke with are deleveraging, and equally so amongst the four countries considered, and this is in large measure as a response to regulation;
- **Lending cutbacks and risk aversion[49]:** British banks stated they are very cautious in their lending to the commercial real estate and construction sectors. The majority of European banks were reducing lending in these sectors. We were told that private equity as a sector is starved of investment opportunities because banks are reluctant to participate in leveraged deals;
- **SMEs:** UK banks say they are lending to credible SME applicants. Some say they are being "more selective" compared to the easy environment of 2005-2006 but say this does not represent a cutback in lending to the sector. We refer the reader to our discussion later in the paper on availability of finance for SMEs;
- **Price increases:** the majority of the banks we interviewed in all five countries stated that prices to SMEs had increased because risks have gone up in the sector or have not been properly accounted for previously. It was often stated that loans to SMEs had historically been underpriced and that banks were now rectifying this mistake. It is also true that interbank funding costs have crept up in a number of countries. The Funding for Lending scheme in the UK specifically addresses this issue.

We have seen looking "top down" from the perspective of the IMF that a huge deleveraging is occurring right across the European banking industry. Looking "bottom up" through our interviews

*[48] "Financing the economy of the euro area: the ECB's role", Speech by Benoît Coeuré, Member of the Executive Board of the ECB, Association Française des Trésoriers d'Entreprise (AFTE), 11 April 2012.*

*[49] Please refer to "Appendix C: SME lending risk and return" for additional analysis.*

with individual banks in five European countries we find the phenomenon of deleveraging in full flow as well. Our interviews with these banks demonstrate that the current situation is consistent with that discussed in the various academic papers noted earlier. Indeed, European banks are having a virtually "textbook" response to the current crisis.

## 5.6. Bank regulation is adding to recessionary forces and affecting credit to SMEs

As noted above the committee developing the cost benefit case for Basel III estimated a modest impact, but the Federal Reserve and Bank of Japan had sharply different results showing quite substantial negative impacts on GDP growth. This should call into question the prevailing assumption that Basel III will have relatively minor economic cost for the UK and Europe during the transition period to higher standards.

The Basel economists themselves recognised the potential dangers and argued for a long transition period to the higher standards of Basel III. They stated that a short transition period was likely to bring about the negative effects noted throughout this chapter, and that a long transition would mitigate this threat. European authorities have not followed this advice, however, and have been very superequivalent while introducing key measures very early compared to the Basel III schedule.

The impact of this approach are evident in the recent IMF analysis which projects that, in addition to already very extensive deleveraging, European banks will shed up to a further 10% of assets over the next year which will cause credit supply to shrink across Europe, possibly by as much as 4.4%, with knock on effects to SMEs and the real economy which, in a worst case scenario, could shrink by 1.4% as a result.

In a first sign of a new approach, the FSA has recently loosened its requirements on capital and liquidity buffers. This was done with an objective of helping banks to lend more, thus showing a welcome awareness of the negative impact discussed throughout this chapter. The FSA remains superequivalent in its overall stance, however.

Bank regulators, by raising capital and liquidity standards in a recession, will inevitably increase the severity of that recession: this much is clear from the extensive economic research discussed in this chapter. Regulators have choices, however, in the way they introduce these higher standards and they can at least minimise their impact on SMEs and the real economy, for instance, by allowing a long transition period. UK and European authorities, however, have taken a severe approach to bringing in Basel III by accelerating implementation timescales and by adding superequivalent provisions. This inevitably leads to deleveraging pressures that impact on lending to vulnerable sectors with knock-on impacts to GDP. It is therefore reasonable to suggest that the actions of European bank regulators are one of the factors contributing to the severe and lengthy UK/ European recession.

### RECOMMENDATION

Regulators across Europe need to note the strong data set showing what happens when capital requirements are increased in a recessionary period: banks that cannot raise fresh capital repair capital ratios by reducing their balance sheets and cutting new lending (deleveraging). This has an impact on the real economy and leads to a reduction in lending. SMEs are in the frontline as SMEs are dependent on bank finance and perceived to be a risky sector. This calls for a moderated approach to the imposition of bank capital and liquidity requirements under Basel III and CRD IV. Regulators need to have regard to the impact on the real economy when designing and implementing regulations.

# 6. THE IMPACT OF THE CRISIS ON SME FINANCING

Many SMEs across Europe are struggling in the current economic environment and their pessimism is apparent in the many surveys on their situation. A consistent theme is frustration and complaints about poor access to bank finance and unaffordable rates. The banks we interviewed for this work state, on the other hand, that they are maintaining or even increasing lending, and that they have no constraints from management on the amount of lending available to SMEs. They claim lower demand from SMEs is pushing volumes down (in the UK). This issue has become politicised and the statements of SMEs and banks are contradictory.

The first section of this chapter provides evidence from central banks, as well as results from surveys, on the impact of the recession on SME lending volumes and loan pricing.

The second section discusses root causes of differences between the UK and other countries in lending to SMEs based on our interviews and relevant analysis. Banking industry structure, national banking practices, and government support schemes explain some of the differences between the UK and the other European countries.

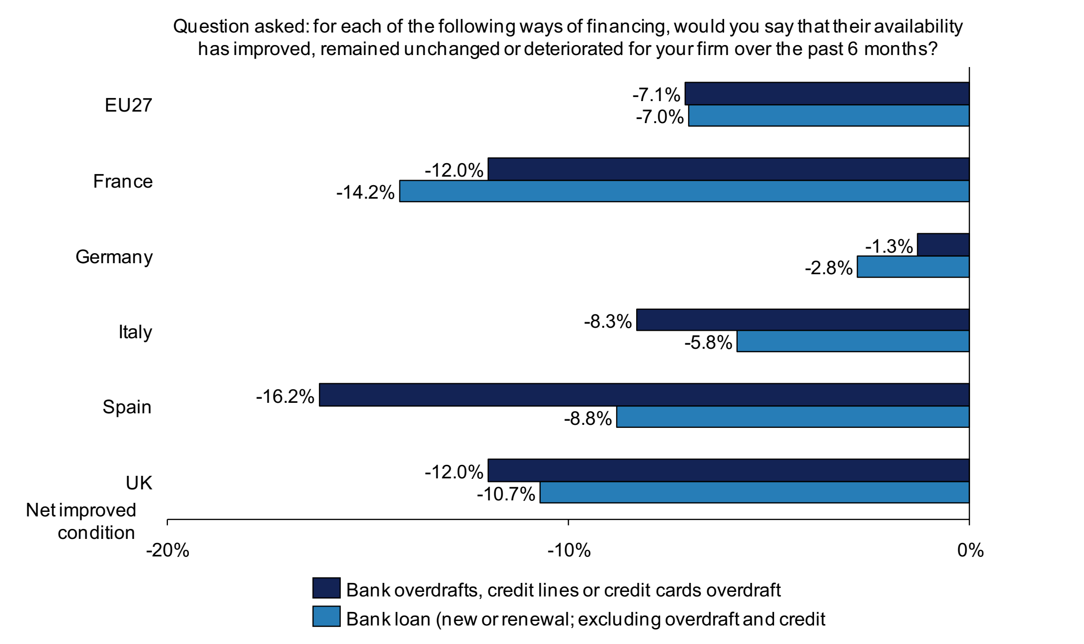
## 6.1. The availability of credit for SMEs in the UK and Europe

The volume of bank lending to SMEs in the UK has declined continuously since 2009 (see Figure 11). Lending has resumed growth in the other three European countries that we studied. In the UK there is much debate about whether the cause of the downward trend in SME lending lies with decreased demand for credit from SMEs, or with a reduced supply of credit from banks. There is evidence from surveys and reports that SME demand for credit is, indeed, subdued because confidence is so low. The banks we interviewed insist that there are no lending constraints for credible applicants and that approval rates are at historic levels. Certain organisations representing SMEs continue to claim that access to credit is restricted, however. It is difficult to untangle these supply and demand effects. The problem of SME financing is also a concern right across Europe. We briefly discuss the European situation before turning to the UK in more detail.

### *6.1.1. Europe-wide SME lending*

It is clear that European SMEs and their UK compatriots are concerned about access to finance. A notable exception is Germany where views are decidedly less negative. Our interviews with German banks indicated that not only was it business as usual for SME lending, but there was a clear sense that credit conditions had actually eased recently and funding costs were actually declining. This was because of the large inflows of funds from around Europe into the safe haven of German government bonds.

## Figure 15 – SME sentiment on availability of bank financing in 2011

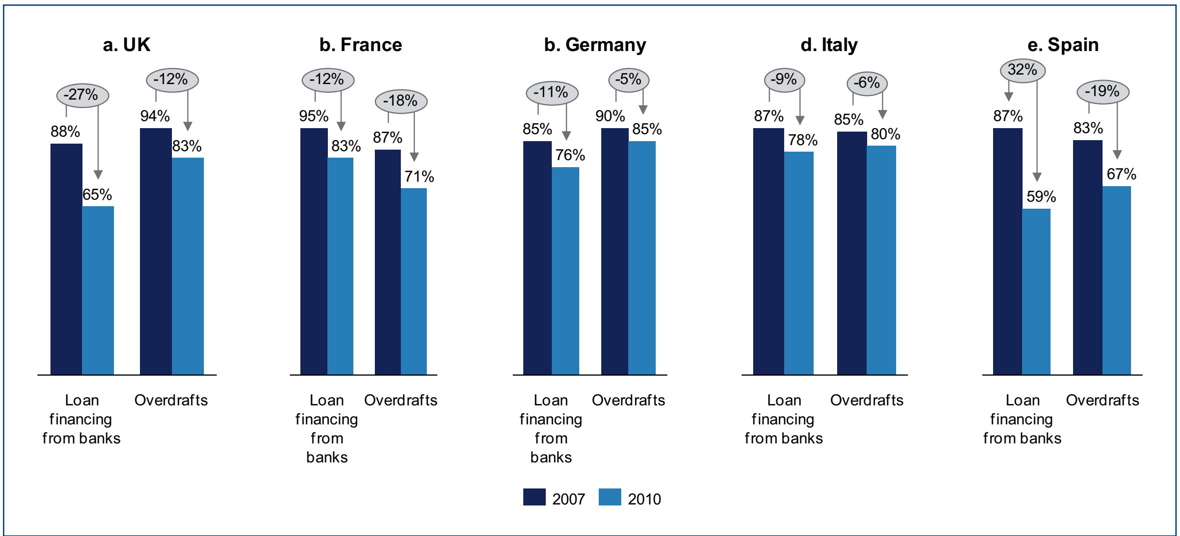



*Source: IPSOS Mori survey for the European Commission, Ares & Co Analysis*

An authoritative source of information for overall SME credit availability in the Eurozone is the European Central Bank (ECB).[50] According to the latest ECB survey on SME financing across Europe, 20% of SMEs reported a lack of availability of bank loans, which is up from 14% in the previous survey. 13% had had their loan applications rejected which is the highest level since 2009, and up from 10% in the previous survey. The ECB's conclusion is that SMEs are facing stress in their financing.

The Figure below is a comparison of loan success rates right across the countries in our study based on Eurostat data. Some caution is necessary as the figures date from 2010. Success rates for credit are clearly down as a result of the crisis right across Europe, although the scale of decline differs by country. Spain has the highest credit rejection rates in 2010 for both loans and overdrafts, and the biggest percentage decline in those acceptance rates. The UK has the second highest acceptance rate for overdrafts in 2010, but shows a sharp decline in acceptance rates for loans between 2007 and 2010.

## Figure 16 – Success rate of application by type of financing




*Source: Eurostat, Ares & Co Analysis*

[50] *"Survey on the Access to Finance of Small and Medium Sized Enterprises in the Euro Area", European Central Bank, October 2011 to March 2012.*

### *6.1.2. SME financing in the UK*

As noted already, the volume of lending to SMEs has been in decline in the UK for several years. This has led to debate as to whether this decline is a supply or demand led phenomenon. The evidence on this question takes the form of surveys of large numbers of SMEs that ask questions about access to finance.

In the UK the most often cited authoritative source on SME financing is the SME Finance Monitor which surveys some 5000 SMEs on a quarterly basis and has been doing so since the summer of 2011. The Business Finance Task Force (which was set up in July 2010 to monitor SME lending and investigate avenues for improving access to finance) committed to fund and publish this independent survey on SME lending on a quarterly basis. BRDC Continental is in charge of running the SME Finance monitor. The Survey Steering Group includes five of the UK's biggest banks, representatives from the Treasury and BIS, and several business organisations. Certainly the UK banking community accepts its findings as the most credible source of information on SME access to finance.

The most recent results of the SME Monitor (fifth in the series) were released in early September for Q2 2012.[51]

We report briefly on the findings from this latest survey. Only 43% of SMEs are actually using external finance and 34% of SMEs class themselves as "permanent non-borrowers." We report below other main findings from the Management Summary, quoting from the authors;[52]

- "In Q2 2012, 11% of SMEs reported having applied for a new or renewed facility in the 12 months prior to interview. This proportion has been stable since Q3 2011;
- 75% of overdraft applications (excluding automatic renewals) were successful and these SMEs now had a facility, and when automatic renewals are included this figure increases to 9 out of 10. For loans, the figure was 59% (successful applications);
- Success rates remain higher for larger SMEs and those with a minimal or low risk rating. Almost 90% of those with a new/renewed facility said they were satisfied with it;
- Those applying for new funds were less likely to be successful (58% now have a loan/overdraft facility) than those applying for a renewal of facilities (90%). Amongst applicants for new money, those applying for their first ever loan/overdraft were much less likely to be successful (43%) than those who had borrowed before (73%);
- 34% of all loan applications and 21% of all overdraft applications were declined (the equivalent of 2% and 1% of all SMEs);
- In Q2 2012, 14% of SMEs thought that they would apply for new or renewed funding in the next 3 months, down slightly from 16% in Q1;
- Confidence amongst these future applicants that the bank will agree to their request is now at the lowest level seen in this study, with 39% confident of success (compared to 52% in Q1 2012). This is due to declining confidence amongst SMEs with fewer than 10 employees (37% from 52%) as confidence amongst larger SMEs remained unchanged (60%);
- 10% of SMEs were "would be seekers" who would have liked to apply for funding but, for a variety of reasons, did not do so. In Q2, "would be seekers" of overdrafts typically mentioned either the process or the principle of borrowing as the main barrier to an application (31% and 29%). They were less likely to mention discouragement as a barrier (25%) than "would-be

[51] *"SME Finance Monitor Q2: the mid-year review," BDRC Continental, September 2012.*

[52] *Ibid p.11-12.*

seekers" of loans (35%), for whom it continues to be the most mentioned barrier. This remains more likely to be indirect discouragement, where the SME assumes they will be turned down and so does not ask."

The BDRC report[53] provides a large number of detailed breakdowns of many different aspects of SME financing. For our purposes we summarise what we view as some of the key observations throughout regarding the likelihood of an SME getting finance. These are:

- Applications for overdrafts are generally more successful than for loans (75% vs. 59%);
- A very young or start up business is considerably less likely to get finance than a more mature business (for loans … 49% unsuccessful rate for start-ups, 39% unsuccessful rate for businesses of 2-5 years, 18% for businesses of 15+ years);
- A very small or small business is less likely to get finance (for loans: 0 employees unsuccessful rate is 41%, 1-9 employees is 28%, 50-249 employees is 6%);
- A first applicant is less likely to get finance than a client seeking renewal (43% vs. 73%);
- Companies in the construction or hotel/restaurant industries are less likely to get finance than, say, companies in manufacturing (for loans: 40% and 34% unsuccessful rate respectively for construction and hotels/restaurants, vs. 20% unsuccessful rate for manufacturing);
- Companies presenting a high risk profile (bounced cheques, CCJs, other credit problems) are less likely to get finance for obvious reasons.

Although it is perhaps a caricature, we might say that a start-up company in the construction business applying for its very first loan and having only one employee will have difficulty getting finance. By way of contrast, a manufacturing company that has been in business for 20 years and employs 250 people that wishes to renew its overdraft has a very high probability of succeeding (if it presents relatively low risk).

It is rather difficult to know how to interpret all these figures from BDRC as the SME Finance Monitor did not begin until well after the financial crisis and subsequent recession. Historic comparables from before the crisis are therefore not available. BDRC, the authors of the Survey, do not offer an overall conclusion as to the accessibility of finance for SMEs. It might seem problematic that in several dimensions up to 40% of SME applicants fail to get finance, but it is not possible to know whether this is different from historical averages. Also, banks should not be lending to companies where a very high risk of loss exists and it is not possible for external commentators to judge this creditworthiness issue with regard to the SMEs that do not succeed in their applications for credit.

The complexity of the debate is evident from the Federation of Small Businesses' (FSB) latest publication which points to a worsened perception of access to credit, with only 6.7% of small businesses rating access as good or very good, against 72.8% as poor or quite poor. The FSB[54] further state that more small firms were rejected in Q2 2012 than in Q1 2012. Indeed, almost half of applicants were turned down on their request for financing according to the FSB.

We spoke with four leading UK banks about their SME lending. All stated that they were lending extensively to SMEs, that their approval rates were high and unchanged, that there were no constraints from management on their lending levels and that there was no great squeeze on SME lending. They said that the problem was lack of demand from SMEs. Clearly in making these statements the banks tend to have a different view than some business organisations that claim credit is tight and often unavailable to their members. There was some consistency between our bank interviews and the BDRC results, however. Very small, very young businesses with an

[53] *"SME Finance Monitor Q2: the mid-year review," BDRC Continental, September 2012.*

[54] *"FSB Voice of Small Business Index", Federation of Small Businesses, Quarter 2 2012, p.30.*

unprofessional approach were seen as difficult lending prospects in the present environment. Construction and property were seen as very risky sectors with some anecdotal evidence of reluctance to lend in this area. References were made to the environment in 2005-2006 when credit was available in abundance for SMEs, too much so in retrospect. Despite this, all our bank interviewees seemed to want to find good SME lending candidates and to lend money to them, and report that their acceptance rates were consistent with historic levels.

In sum, it is quite difficult to draw a clear conclusion about the supply versus demand questions in SME lending, despite the considerable quantity of figures available.

### *6.1.3. Lending prices have increased: Funding for Lending programme should help*

There appears to be a drift upwards in loan pricing for SMEs which is caused by two factors: banks' funding costs and spreads. Banks' funding costs have been pushed gradually upwards by two crisis related factors: the Eurozone crisis has undermined confidence in banks such that credit to them is priced higher; a second factor, according to several bank interviewees, is the new liquidity coverage ratio rule. UK banks are setting aside very substantial liquid resources that might once have been put into the interbank funding market. A reduced supply of funds therefore leads to higher prices in the bank funding market. The other element in SME pricing is spreads charged to SMEs. These also seem to have increased, according to at least a few of our interviewees, as prices to SMEs from the 2005/2006 period are now viewed as having been uneconomic and needing to be redressed. The impact of both these factors (funding costs and spreads over the bank rate) has been mitigated by the low overall interest rate environment.

According to the FSB in the UK, many small businesses (61.5%) find credit to be quite or very unaffordable, despite the Government's National Loan Guarantee scheme – which has since been superseded by the Funding for Lending scheme – which aims to cut the cost of loans by up to 1%, and the fact that more than half were offered a rate under the 5% mark[55]. Overall, it seems the UK SME lending market is under greater pressure than some of its European counterparts.

Banks are also more likely to adjust the terms on which they lend. As longer maturity loans require higher capital provisions and cost relatively more from a refinancing perspective, banks prefer shortening loan maturity where possible. Many interviewees confirmed they require more collateral or guarantees from SMEs, whether on director's private securities or company holdings, so as to minimise risks and underlying capital consumption.

Our interviewees in Europe, with the exception of Germany, confirmed that margins over base rates charged to SMEs have tended to increase since 2009 or 2010, even if overall financing cost is still currently low compared to historic rates when base rates were much higher. Reasons cited for those margin increases are threefold:

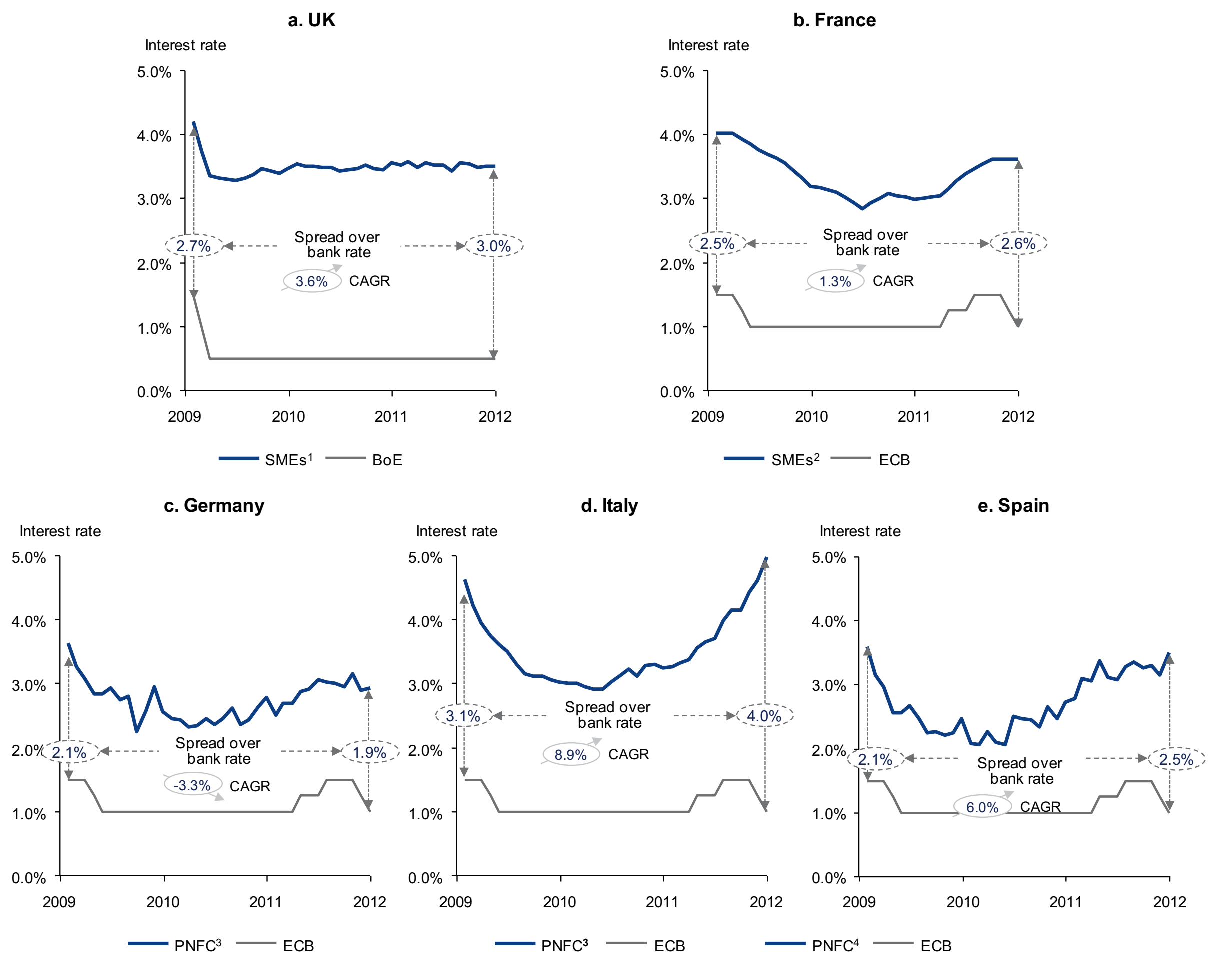
- **Pass on increased bank cost to clients**, to maintain stable bottom line profitability figures: banks have seen their own cost of financing SME increase in recent years, due to both regulation (increased capital requirements, higher provisions, etc; c.f. chapter 5) and to the liquidity crisis and resulting rise in refinancing costs. The latter is especially true for countries, such as Italy or Spain, that are currently suffering from the sovereign debt crisis. Banks are forced to pass on part or all of those costs to clients to maintain profitability levels.

[55] *"FSB Voice of Small Business Index", Federation of Small Businesses, Quarter 2 2012, p.32.*

- **Readjust to "sounder" pricing mechanism:** several interviewees suggested that granting credit pre-crisis was "too easy" and that prices offered were much below real cost. Banks were competing heavily for market share using loans as a loss leader, while not paying sufficient attention to risk measures. The increase in margins somewhat counters that past abnormal effect and created a new normal.
- **Price out certain clients:** the level of interest rates and margins on a loan will influence demand, and in effect, act as a selection tool, excluding companies with lower ability to pay. However, some interviewees did mention this could have an adverse selection effect, as more risky businesses, or companies close to bankruptcy, might be willing to accept much higher prices than more stable enterprises.

The Figure below provides evidence of widening spreads in the different countries.

## Figure 17 – Median interest rate charged to SMEs in the main European countries




1. Companies with annual bank account debit turnover less than £25 million. Data cover lending in both sterling and foreign currency, expressed in sterling terms 2. SMEs including SMEs owned by groups, independent SMEs and micro-entreprises 3. Loans to Private Non Financial Companies over EUR 1 million with an initial rate fixation, floating rate or up to 1 year 4. Loans to Private Non Financial Companies over EUR 1 million

*Source: Bank of England, ECB, Banque de France, Deutsche Bundesbank, Banca d'Italia, Banco de España, Ares & Co analysis*

In Germany both base rates and margins over base rates charged to corporations have tended to decrease in recent years. Local interviewees explained this phenomenon two ways:

- **"Flight to quality"** in Europe, out of Southern countries towards Germany, effectively improving refinancing costs of Germany as a sovereign and of German companies;
- **Access to government backed schemes:** government programs, especially through KfW, a state-owned development bank designed to the German economy, have helped provide banks with cheap funding especially for SMEs.

As a result, German banks servicing SMEs have had relatively lower costs than their European counterparts, and been able to support their borrowing clients with less difficulty.

Evidence from central banks does tend to confirm those statements, as shown in Figure 14. Margins over base rates have crept up in the UK (by 3.6% a year on average), France (by 1.3% a year on average). The increase has been more pronounced for Italy (by 8.9% a year on average) and Spain, countries which have been hit to a greater extent by the sovereign debt crisis. In Germany, as confirmed by the interviews, margins have gone slightly down (3.3% a year on average).

## 6.2. A different financing environment for SMEs on the Continent

A number of factors make for a different lending environment for SMEs in the UK relative to the Continent. Interviews performed across France, Germany, Italy and the UK tended to bring these factors into prominence. Three themes differentiate the Continental SME lending environment from the UK SME lending environment and appear to have an impact on SME access to finance. These are:

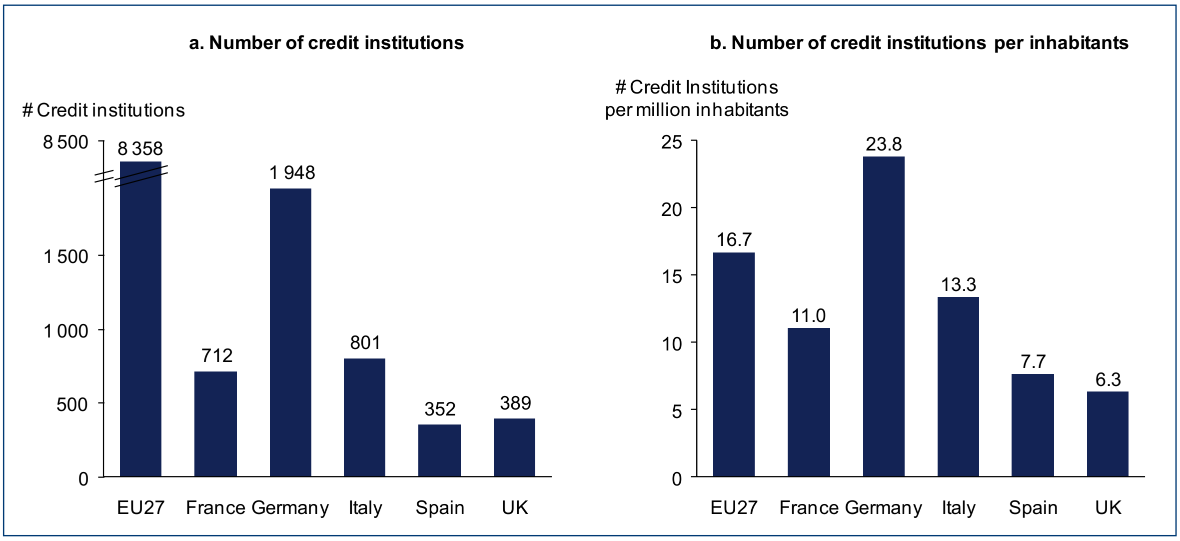
- The European banking sector is characterised by the presence of a large number of small and medium sized mutual, cooperative, and other kinds of banks, with a strong regional flavour: these types of bank are much less present in the more concentrated UK banking sector;
- Banking practices and attitudes sometimes differ considerably in Europe from the UK, partly as a result of these structures;
- Government or quasi government entities to help SMEs are more widespread on the Continent, and less so in the UK.

We present information on these themes below.

### *6.2.1. The diverse banking systems in continental Europe*

The fragmented nature of European banking compared to the UK is clear from Figure 18.

## Figure 18 – Differences in structure of banking systems in Europe




*Source: ECB[56], Ares & Co analysis*

### France

In France, there were 712 credit institutions in 2010, classified in six categories:

- **Commercial banks:** including the large universal banks, such as BNP Paribas and Société Générale;
- **Mutual or Cooperative banks**: including some of the large local, regional or national cooperative organisation, such as BPCE (Banques Populaires – Caisses d'Epargnes), Crédit Agricole or Crédit Mutuel;
- **Financial societies:** financial services companies that specialise in certain types of credit or activities, whether it be consumer credit, SME lending, factoring or leasing;
- **Municipal credit banks:** 18 public credit institutions that provide local credit facilities and social aids;
- **Specialised financial institutions:** three institutions that are mandated by the state to achieve certain specific goals, such as offer financing to SMEs;
- **Subsidiaries of Foreign Banks.**

Even if the largest French universal bank accounts for most of the French banking sector's assets, the network of mutual and cooperative banks, as well as the specialised financial societies and institutions, some of which support the SME market in general or even the construction sector in particular (for example BTP Banque) help to secure access to finance for SMEs. Consolidation has nonetheless taken place, in France, as the number of credit institutions has fallen by about 66% since 1990.

### Germany

The German banking system stands on four pillars[57]:

- **Privately-owned commercial banks**, accounting for 36% of total banking system assets, and dominated by three large banking groups : Deutsche Bank (who also owns Postbank, another large German bank), Commerzbank, and Hypovereinsbank (owned by UniCredit Group);
- **Public sector banks**, including local Sparkassen (savings banks) and regional Landesbanks, accounting for 31% of assets;

[56] *"EU Banking Structures", European Central Bank, September 2010, p. 34; 47.*
[57] *"Germany: Technical Note on Banking Sector Structure", International Monetary Fund, December 2011, p.4-5; 25.*

- **Cooperative banks**, that account for more than half of institutions by number and 11% of assets;
- **Other specialized banks** (for example mortgage), building and loan associations, accounting for the remaining 22% of assets.

Consolidation has been taking place since 1990 (~46% reduction in the number of banks), but with close to 2000 institutions in 2010, Germany is still the most fragmented banking system studied. SMEs depend greatly on Sparkassen and cooperative banks for funding, which collectively amount to some 1500 institutions.

### Italy

In Italy, the banking system is entirely private, and rests on four types of banks[58]:

- **212 banks established as joint-stock companies**, or Società per Azioni (SpA), that account for close to 80% of the Italian banking business (deposits and loans);
- **37 cooperative banks**, managing ~10% of the Italian banking busines ;
- **404 mutual banks**, representing 6 to 8% of the Italian banking business;
- And **77 branches of foreign banks**.

Since 1990, the Italian banking market has consolidated (~37% reduction in the number of banks), but the Italian banking market is still the second most fragmented in the five countries studied.

### Spain

The Spanish banking system is composed of two broad classes of banks:

- **Commercial banks**, including large often internationally active banks and medium and small private sector banks, more present in the commercial sector, especially in construction and real-estate; collectively commercial banks managed ~60% of Spanish banking assets, through ~15,000 branches; the 2 largest banks, Banco Santander and BBVA, account collectively for 33% of Spanish banking assets.
- **Savings banks (or cajas de ahorros)**, owned by depositors, employees, founders and local government in different proportions, and which performed social functions. These savings banks represent around 40% of total banking assets, and have a network of some 25,000 branches. They are heavily involved in supporting SMEs, especially in riskier sectors of the economy[59].

With the recent banking crisis in Spain, consolidation is taking place, with a 15% reduction in number of branches[60], and the transformation of savings banks into commercial banks.

### The UK

The UK banking sector is by way of contrast relatively concentrated. While more than 300 banks and building societies have the right to take deposits in the UK, the five largest banks – namely Barclays, HSBC, Lloyds Banking Group, Santander UK and RBS – collectively manage 65% of the banking systems assets, and 79% of lending[61]. The seven largest - including Nationwide and Standard Chartered – manage 71% of assets and 89% of lending. This concentration is a result of decades of consolidation:

[58] *"Statistical Bulletin", Banca d'Italia, Quarter 2 2012, p.2-3.*

[59] *"Spain: The Reform of Spanish Savings Banks Technical Notes", International Monetary Fund, June 2012.*

[60] *"Spain: Financial Stability Assessment", International Monetary Fund, June 2012, p.1.*

[61] *"United Kingdom: Financial System Stability Assessment", International Monetary Fund, July 2011, p.57.*

- "Of the 16 clearing banks present in 1960, fifteen are now owned by the four big UK banking groups: RBS, Barclays, HSBC and Lloyds Banking Group (LBG)"[62];
- "The number of societies declined from over 700 in 1960 to just 52 today"[63].

Hence, UK SMEs must seek finance primarily from a small number of large banks. This is why it is important that the UK encourages the creation of new banks, by reducing potential barriers to entry, especially regulatory (capital, liquidity, etc.) and supervisory (governance, reporting) barriers.

### *6.2.2. UK versus continental European banking practices*

Banking practices also seem to differ from country to country, depending on the type of banking structure and the consequent competitive environment. The following qualitative comments are from our interviews in the five countries. These comments are qualitative and are based on a relatively few interviews. We believe, however, that the findings have integrity based on our experience as a firm working in the European banking industry.

UK interviewees in large banks tend to describe a relatively centralised or regional lending process for SMEs that is not branch based, with Relationship Managers having set lending limits. If the SME applicant is very small then it is likely that credit scoring software will play a major role in the lending decision for efficiency reasons, and this will cause a further degree of centralisation. Managing a loan process can be costly, it was explained to us, and if the ultimate credit is small the activity may be unprofitable if automation does not play a role via credit scoring.

In continental Europe, by way of contrast, the existence of networks of regional banks will, by its nature, give rise to a more decentralised lending environment with a number of actors present. Also, smaller regional banks may not have the sophistication necessary to deploy credit scoring tools when lending to smaller SMEs. Finally, large multi-national banks in these European countries must compete with these small banks for the business of SMEs. The small banks, we were told, sometimes compete hard to get SME business. All these factors may lead to a rather different flavour for SME lending on the Continent compared to the UK.

One interviewee at a large Continental bank gives a sense of some of these differences:

***"In the current competitive environment, we cannot do any business with SMEs unless our pricing is in line with the mutual banks' pricing… The loan is therefore often a loss leader. But it enables us to win the relationship with the client, both the SME as a business and the entrepreneur or manager as a retail individual. Having this relationship helps us: one, we can minimise our risks by analysing the behaviour of the individual and pre-empting any issues; two, we can cross-sell a number of other products."***

Once again, in the UK, interviewees gave a slightly different sense of the process. Particularly for small SMEs where credit scoring plays a large role, that of decision maker almost, the entrepreneur may have less opportunity to explain his/her situation to a bank decision maker and thus attempt to influence the process. We did not find evidence that this would be the case on the Continent. Also, European bankers we interviewed said they would always look at the personal situation of the entrepreneur in making an SME credit decision, credit scoring being a simple facilitator for decision making. It was less clear that this would always be done in the UK, especially, once again, for very small SMEs.

We believe that these structural and behavioural elements create a different environment for SME lending in the European countries we studied compared to the UK. We do not attempt to say that one is better than another.

[62] *"Evolution of the UK banking system", Bank of England, 2010 Q4, p.323.*

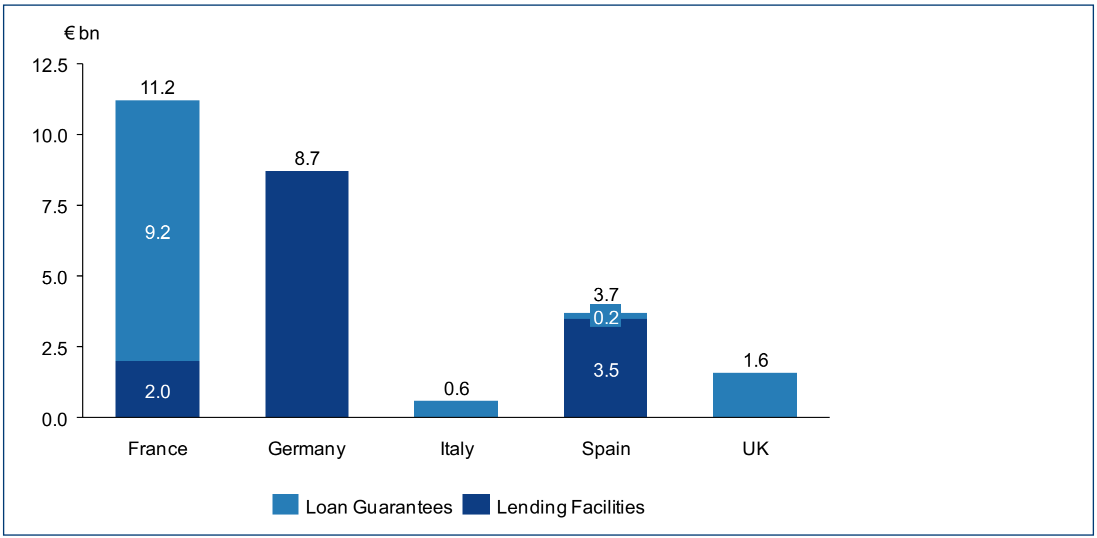
[63] *Ibid.*

### *6.2.3. Government support schemes for SMEs in Europe*

Financing schemes backed by government are also different in their prevalence and importance. France and Germany's government-backed schemes are very important, while the UK is looking to develop in types of schemes and amounts of financing available.

All major European countries extend some loan or guarantee schemes towards companies. However, the total amount guaranteed or financed, as well as the split between guarantees and actual state financing does vary. Lending facilities are most important in Germany (~€8.7bn in 2011), through KfW, a state-owned bank that helps finance the Germany economy and beyond. They also exist in France through Oséo (~€2bn), one of the state's specialized financial institutions, mandated to finance companies and in Spain through ICO (~€3.5bn), a state-owned corporate entity attached to the Ministry of Economy and Competitiveness. Some countries extend guarantees on loans: that is the case of France through Oséo (€9.2bn), or the UK, Italy and Spain, albeit with lower volumes. KfW has been in existence since 1948, and its SME support programme dates from 1971, while the antecedents of Oséo date back to 1996 (Banque du Développement des PME).

Figure 19 – Estimated lending and guarantee schemes in Europe in 2011




*Source: OECD, ECB, Oséo, KfW, ICO, EIB, Ares & Co analysis*

Actual state lending facilities have an important impact on pricing. Interviewees in Germany pointed out that the KfW facilities enable access to cheap funding, and have contributed to the downward pressure on margins over base rate. KfW has kept its funding cost low, and passed those low rates to the banks, which seem to pass these on to SMEs.

Government also provide other schemes to help promote SMEs, notably through pro-investment measures, taxation incentives or export facilitation. The OECD compiled a list of schemes put in place in main European countries in the immediate aftermath of the crisis. It appears that UK did not have as many schemes in place compared to other continental European countries, such as France. However, some export facilitation and monitoring now exists.

## Figure 20 - Summary of European government policy responses to the crisis 2008-2009

| | | UK | France | Germany | Italy | Spain |
|---|---|---|---|---|---|---|
| Enhancing SME access to liquidity, especially to bank lending | Creating and extending loans & guarantee schemes | ✓ | ✓✓✓ | ✓✓✓ | ✓ | ✓✓ |
| | Mediation and monitoring | | ✓ | | ✓ | |
| Strengthening pro-investment measures | | | ✓ | ✓✓ | ✓ | ✓ |
| Strengthening capital base and private equity and venture capital | | ✓✓ | ✓✓ | ✓✓ | ✓✓ | ✓ |
| Supporting sales, cash flows and working capital | Alleviating working capital in the economy | ✓✓ | ✓ | | ✓ | |
| | Reducing and easing tax payments | | ✓ | | ✓✓ | |
| | Export facilitation | | | ✓ | ✓✓ | ✓ |
| | Easing procurement payment procedures | ✓ | ✓ | | | |

*Source: OECD[64], ECB, Ares & Co analysis*

Governments also support the economy through funds or schemes aimed at taking stakes in equity of SMEs or mid cap firms. In France, CDC Entreprise, founded in 1994, and the more recent Fond Stratégique d'Investissement (FSI), created in 2008, invested a couple of billion euros in new companies in 2011. In Germany, KfW also provides equity investment opportunities for SMEs. In the UK, the Business Finance Taskforce led to the creation of the Business Growth Fund in October 2011. This fund has invested around £60m as of 31st May 2012, but committed £2.5bn to support SMEs and mid caps.

Overall, it appears that the lack of state lending facilities and limited availability of SME promoting government schemes – or late implementation of such schemes – weighs on the UK's economy compared to France and Germany.

### *6.2.4. The Funding for Lending Scheme (FLS) and the British Business Bank*

The situation in the UK has changed recently with the Funding for Lending scheme introduced over the summer 2012 by the Treasury and the Bank of England. Much has been written about the terms of the scheme, which came into effect on August 1st 2012, so we will not explain the details of it here. Essentially, it addresses the drift upwards in UK bank funding costs by offering a mechanism to UK banks to fund themselves in the interbank market at or close to the BOE's base rate with an initial volume of £80bn available on these special terms. There is presumably an inbuilt assumption that lower pricing of loans will result in improved volumes of lending. The scheme does not offer any guarantees to banks concerning the security of loans made under the scheme so the BOE does not appear to be taking risk away from the banks. It is aimed at both the mortgage and SME markets, so it is conceivable it will have more impact in residential lending than in business lending.

[64] *"The Impact of the Global Crisis on SME and Entrepreneurship Financing and Policy Responses", OECD, 2009*

It is still too early to provide a full assessment of the impact of the FLS as it has only been in operation since August, although it has been welcomed by many commentators. It has certainly had an impact on loan pricing. Royal Bank of Scotland and Lloyds Banking Group have both announced programmes aimed at SMEs offering interest rates discounted by 1% to 1.6%. Lloyds has drawn £1 bn from the scheme in September. In the mortgage market, NatWest, HSBC, Santander, and Nationwide have cut rates to below 3%, but only for borrowers with a 40% deposit.[65] These are important and significant changes. Further, the FT notes in a recent article that bank funding costs have fallen by 0.5% and credits the FLS for this impact.[66] These are all strong positives.

However, the same article quotes Alastair Ryan, European banks analyst at UBS:

***"Funding for lending will help banks' margins, but it won't move the needle on lending volumes unless regulators ease capital constraints on banks."***[67]

On another front, Vince Cable announced end of September 2012 the need for a new "British Business Bank", which will operate at arms-length from the government and have the mandate to lend into the economy through banks and other financial institutions, probably in a similar manner to Kfw. With £1 bn of capital injected by the government, it is expected to support £10bn of new lending to the economy. More elements are expected shortly from the government on this topic. This new bank should help alleviate some pressure off SME financing, especially in conjunction with the FLS and easing on capital and liquidity constraint.

## RECOMMENDATION

State support structures for lending to SMEs need to be encouraged. These exist in a variety of forms across EU and appear to have a beneficial impact. The UK has had a relative paucity of state support structures for SME lending. We note the creation of the new "British Business Bank" announced by Vince Cable with an initial capital of £1bn aimed at SME lending. This is to be welcomed. The recent Funding for Lending Scheme in the UK is also a positive and is having beneficial market impacts. In addition, measures to reduce barriers to entry in retail and corporate banking should be encouraged.

[65] *"Funding for lending bank scheme launched," BBC NEWS BUSINESS, 1 August, 2012.*

[66] *"Banks benefit from Funding for Lending," Financial Times, September 9, 2012.*

[67] *"Banks benefit from Funding for Lending," Financial Times, September 9, 2012.*

# 7. ALTERNATIVE SOURCES OF SME FINANCE

SMEs are highly dependent on banks for their financing as was demonstrated in the first chapter of this paper. There are good practical and theoretical reasons for this. The credit situation of individual SMEs is opaque. Only banks have the infrastructure to gather detailed information from SMEs seeking credit and to analyse, on a case by case basis, their creditworthiness and thus make a determination to lend or not to lend. Banks are also able to monitor the finances of their SME customers over time to detect emerging problems in order to safeguard their loans and reduce their risks. Banks as a result provide the great majority of finance to SMEs around the world. It is therefore a particular concern when banks are deleveraging as some SMEs will have almost nowhere else to go for finance, at least in the short term.

Many commentators have recently taken a more positive view on SMEs financing prospects by highlighting the emergence of some alternatives to banks in the financing of SMEs. This chapter of the paper examines some of these alternative sources of finance to assess their viability as an alternative to bank finance. They include:

- **Capital markets**, especially small cap stocks and bonds markets, securitisation or equipment finance;
- **Non-bank lenders**, such as asset management firms and insurance companies;
- **Equity financing** through private equity and business angles;
- **Other alternative sources of financing**, such as peer-to-peer lending or supply chain finance.

However, whilst most interviewees agreed that alternative sources of financing for SMEs should be strongly encouraged, there seems to be a consensus on their limits:

- Volumes of lending by these actors will remain relatively small, and hence cannot substitute for bank lending;
- Lending from these actors will focus on some part of the economy only (higher quality end, or seed/start-up high risk high return type enterprises), not on the bulk of SMEs.

Several interviewees mentioned the need for a change in mentality to build alternative finance and reduce dependence on bank lending, though when asked how long this would take, the average time cited was 10 years. As one said:

*"Europe is far behind the United States in the use of non-bank alternatives to finance of SMEs. More than 80% of SME finance in Europe comes from banks; in the US, the figure falls to, what, less than 50% or 60%. It'll take another 10 years for Europe to achieve that level, even for the UK, though they're Anglo-Saxon..."*

## 7.1. Capital markets

Many countries have tried developing capital markets aimed at smaller cap companies. However, there are several issues limiting their success according to interviewees:

- Cost of listing: this includes not just the admission fees (that will reach anywhere between €5k and €100k depending on the market capitalization and the exchange concerned), annual fees (usually between €5k and €10k), but also other costs, such as brokerage costs, or internal company costs to ensure the minimum standards set by the exchange are met in terms of management, governance, processes, reporting, etc. It all adds up to in excess of several hundred thousand Euro, a hefty sum for many SMEs;
- Changes in management processes and governance: the flotation involves a number of changes to management, either operationally (financial reporting, market updates, etc) or structurally (involvement of external shareholders). This can be a big change for most SMEs;
- Demand: Investors on those markets are more specialist than on mainstream stock exchanges, as the underlying stock credit ratings are lower.

All in all, most interviewees would agree that capital markets are suitable for a small but important category of SMEs with the highest growth potential, often in innovative or capital intensive sectors of the economy, such as technology. For the bulk of SMEs, this is probably not the case.

Also, we believe securitisation is not a very feasible alternative source of financing to SMEs. Individual SMEs do not have the sufficient size to securitise their loans. What is more, some securitisation figures published in Europe by AFME[68] show considerable decline post crisis. This implies that securitisation of SME loans, whilst it could, if further developed, drive the cost of financing slightly down, will take a considerable amount of time to develop in any significant way. The informational problems relating to SMEs remain a difficulty. However, following the Breedon report, a working group is currently working on the promotion of SME securitisation, and it could help change the negative market sentiment still surrounding securitised products.

## 7.2. Non bank institutional lenders

Looking at press releases since the beginning of the year, there are numerous articles about non traditional lenders, mainly asset managers and insurance companies, stepping into the financing of the real economy, especially into commercial real estate loans[69]. From the interviews conducted, the rationale for those actors to step in is twofold:

- They seek higher returns on funds by investing in the corporate realm, as sovereign bonds yields are now too low to generate the required proceeds;
- Insurance companies see an opportunity to take on part of the business that banks have vacated due to high capital requirements under Basel rules.

Some suggested that the risk of non traditional actors taking on the role of banks can be alleviated through partnerships for instance between banks, that provide the risks systems, evaluations and advice, and insurance companies, who provide the investments. Such partnerships are emerging in France, for instance between AXA and Société Générale[70].

[68] *"Securitisation Data Report", AFME, Q1 2012.*

[69] *"M&G steps up purchases of prime property", The Financial Times, 6 February 2012; "Financing crisis: Insurers move to fill the funding gap", 2 March 2012; "L&G enters property lending", 30 April 2012; "M&G in £266m property financing deal", 2 May 2012; "Schroders eyes property loans market", 4 June 2012.*

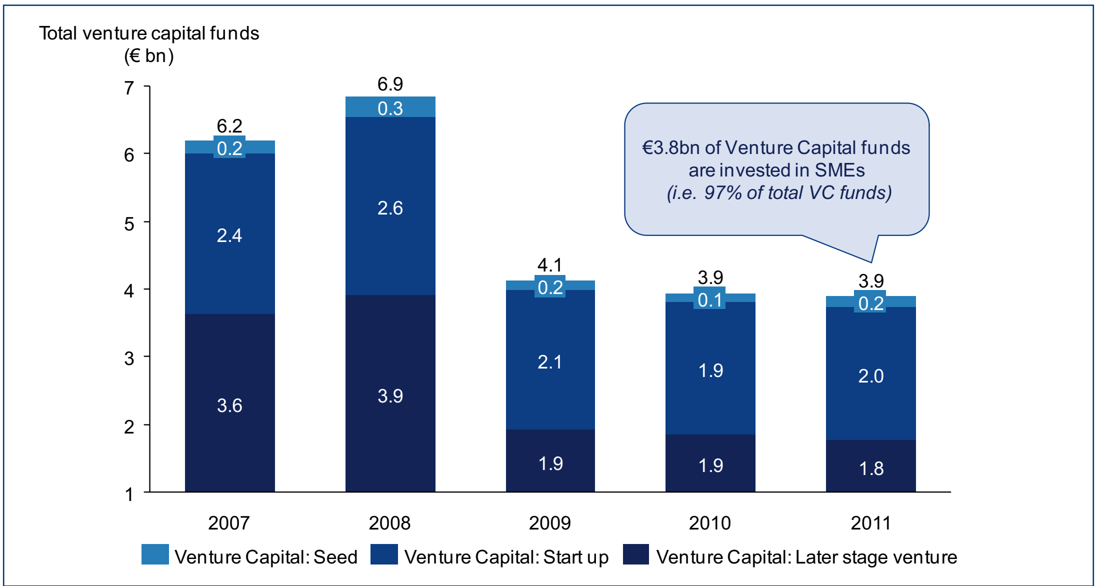
[70] *"AXA and Société Générale partnership sign first financing deal", AXA, Société Générale, 1 August 2012*

What is more, our interviews also made clear that asset managers and insurers are extremely selective in the deals they finance, mainly through private placements: it needs to be high quality and visible. That means only a narrow slice of the economy is concerned. What is more, those traditional lenders are not investing into the SME segment, but rather into the lower end of large corporate segment, looking mostly at a minimum investment of £100m. Furthermore, the total funds allocated to that segment are fairly limited, probably just a few billion pounds for the UK. This is obviously not enough to compensate for the decrease in total outstanding loans to private non-financial companies (which represent around a £150bn decrease between end 2009 and end 2011[71]), let alone the gap in SME financing. However, these alternative sources have an important contribution to make and their growth should be encouraged.

## 7.3. Equity financing for seed and start-up

Venture capital funds, as discussed in chapter 4, provide external equity financing means to SMEs, and contribute to the growth and experience of their targets. However, the crisis has had a large impact on the investment profile of those actors, and levels remain about 40% below their 2007 pre-crisis levels.

### Figure 21 – Venture capital investment activity evolution in Europe




*Source: EVCA, PEREP_Analytics[72], Ares & Co Analysis*

Furthermore, venture capital funds tend to select their investment in the high growth space, such as life sciences, computer and consumer electronics, communication or energy and environment[73]. What is more, equity financing is not considered by most SMEs, as they do not wish to share the ownership of the company, and risk interfering in management issues.

Most interviewed banks considered nonetheless that venture capital funds were necessary to fund SMEs, especially early stage business, where the risk return profile made being a debtor less attractive than being a part-owner. They viewed those funds not at all as rivals, but rather as complements, specialised in providing access to a subset of SMEs.

[71] *Breedon et al, "Boosting Finance options for business, Report of industry-led working group on alternative debt markets", Department for Business Innovation and Skills, March 2012, p.13.*

[72] *http://www.evca.eu/knowledgecenter/statisticsdetail.aspx?id=416.*

[73] *"European Small Business Finance Outlook", European Investment Fund, May 2012, p. 21.*

## 7.4. Other alternative sources of financing

Whilst the first UK peer-to-peer lending company was created in 2005, this activity took off post-crisis. Other companies emerged in 2010 which offered a platform between private individual investors and individuals, entrepreneurs and small companies.

These investments carry default risks from borrowers, exacerbated by the fact that credit scoring for individuals, entrepreneurs or small companies rely on only a few sources: credit reference agencies and personal details or history. The risk of asymmetric information, that is of lenders not being aware of key elements that would influence their lending decision and the pricing, is higher for those individual lenders, than for banks, whose database and knowledge of personal clients can contribute to more informed decisions. Therefore, some type of investor protection rules would need to be put in place.

The contribution of peer-to-peer lending is relatively small: volumes as of beginning of 2012 in the UK were less than £200m[74], and represent less than 2% of unsecured personal loans[75]. All interviewees agreed that peer-to-peer lending did not represent a real alternative to bank lending, even if volumes grew several fold in the next couple of years. Over time, alternative sources such as peer-to-peer lending would help to complement bank lending.

On another front, supply chain finance is also playing a more important part in financing for SME. Late October, the UK government has announced the Supply Chain Finance scheme, under which a number of large corporates have agreed to advance payments approved to their suppliers at lower interest rates than those suppliers could obtain on the market. This scheme will help smaller SMEs obtain finance at lower rates, by leveraging the credit worthiness and cash flows of their larger corporate clients. Such type of schemes had already been implemented by a couple of corporates in the UK, but this move to a larger scale is another step forward.

**RECOMMENDATION**

Non-bank lending to SMEs in the UK is very small today but needs to be encouraged to grow to complement bank lending in the current deleveraging environment, as was mentioned in the Breedon report. This requires regulators to avoid cutting off non-bank lending from the outset with overbearing regulation. The negative debate on shadow banking could jeopardise the emergence of alternatives such as peer-to-peer lending platforms. Other innovative forms of financing such as supply chain finance also need to be encouraged in order to ease the funding squeeze on smaller companies.

[74] *"A guide to Peer-to-Peer Lending", Marketviews, 2012*

[74] *Ibid Breedon et al, p.35*

# APPENDIX A: DEFINING SMES

For the purpose of this paper, we shall define SMEs according to the European Commission's standard criteria, that is, an SME is a company that has both:

• less than 250 employees; and

• either a turnover of less than €50m or a balance sheet total of less than €43m.

## Figure A1 - Company classification

| Company category | Employees | Turnover | or | Balance sheet total |
|---|---|---|---|---|
| Large | ≥ 250 | > € 50 m | | > € 43 m |
| SMEs | < 250 | ≤ € 50 m | | ≤ € 43 m |
| • Medium-sized | 50 to 250 | €10m to €50m | | €10m to €43m |
| • Small | 10 to 50 | €2m to €10m | | €2m to €10m |
| • Micro | Less than 10 | Less than €2m | | Less than €2m |

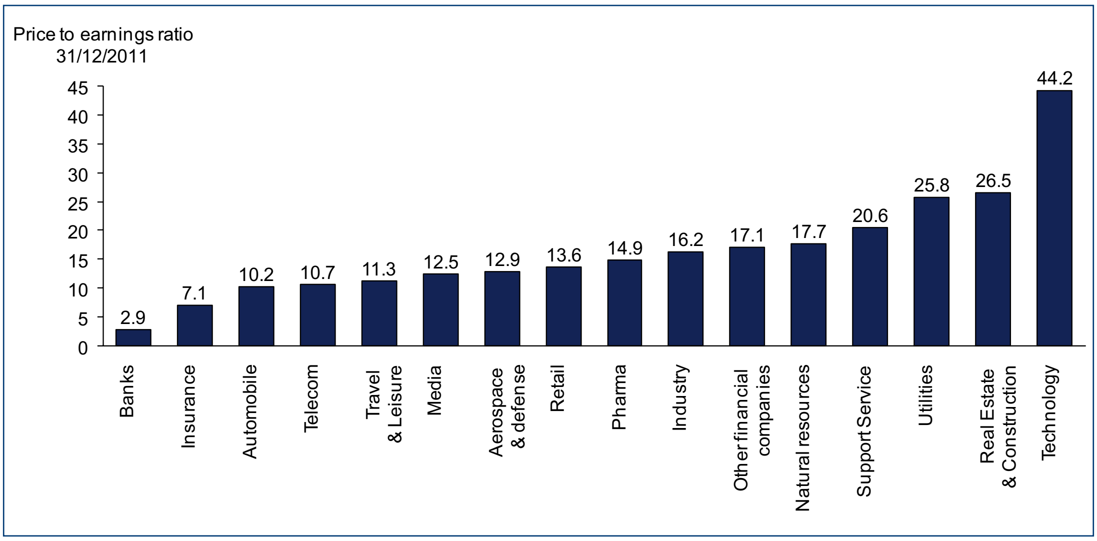
*Source: Eurostat*

Market data for the SMEs are available from the European Commission's Eurostat website on the 27 constituent countries of the European Union, which we will refer to as Europe or EU27. Data from 2008 are estimates from Eurostat.

# APPENDIX B:
# WHY BANKS CANNOT RAISE EQUITY IN THE CURRENT ENVIRONMENT

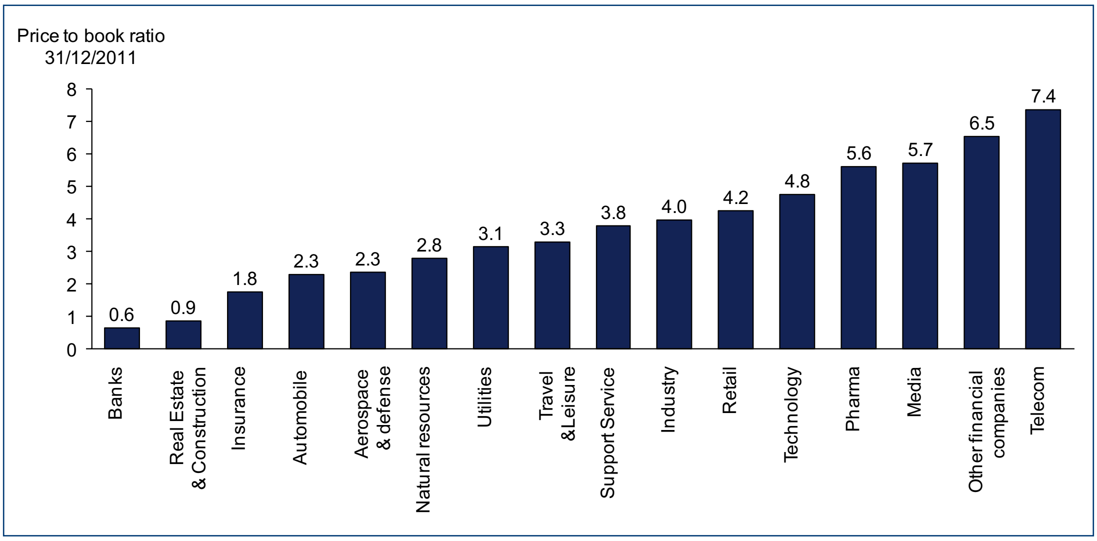
In the current environment, it is difficult for UK banks to raise equity. Their price earnings and price to book ratios are so low, that raising equity would severely dilute existing shareholders. For information, UK banks P/E average ratio has fallen from 9.7x at end 2007 to 2.9x at end 2011, a fall of ~70% in 5 years, due to losses at RBS and Lloyds. Their P/B average ratio has fallen from 1.7x at end 2007 to 0.6x at end 2011, a fall of over 60% in 5 years.

## Figure B1 – Price earnings ratio per sector for FTSE 100 companies




*Source: FTSE 100 data from Selftrade, Ares & Co analysis*

## Figure B2 – price to book ratio per sector for FTSE 100 companies

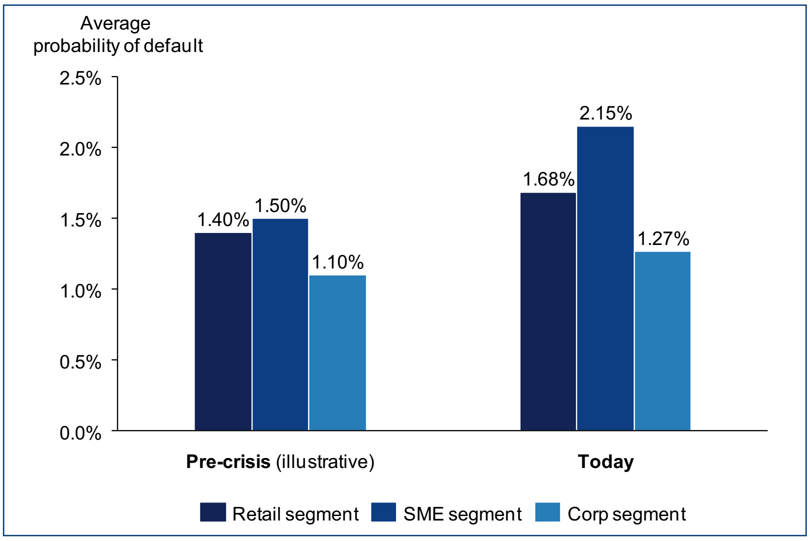



*Source: FTSE 100 data from Selftrade, Ares & Co analysis*

# APPENDIX C:
# SME LENDING RISK AND RETURN

To test the point about SMEs perceived riskiness we used our risk specialists to calculate the probability of default (PD) for SMEs versus other main lending sectors in a typical European bank. The chart below shows the PD of SME loans relative to lending to large corporates and retail customers in two periods.

## Figure C1 – Changes in probability of default by sector

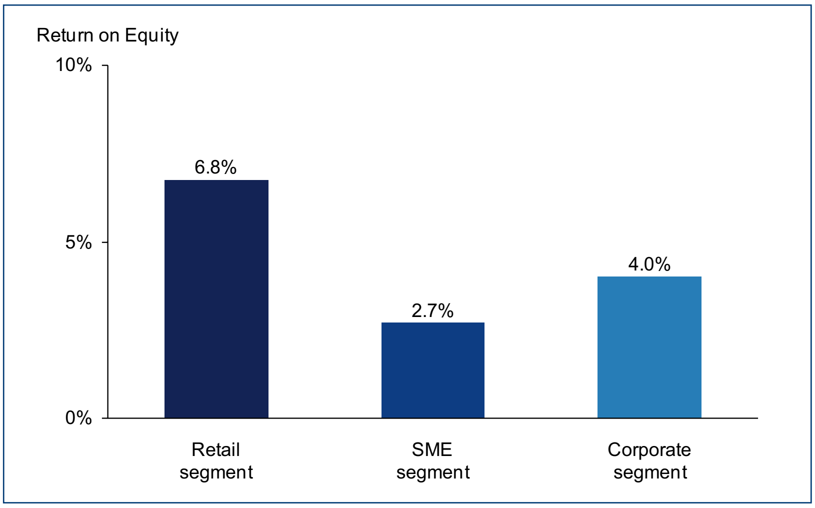



*Source: Ares & Co analysis*

It is clear from the data that SMEs are more risky than the other two sectors and that PDs for SMEs worsen more than those for retail customers and large corporates in recessionary times.

This extra riskiness is translated into an extra allocation of capital to SMEs. This results in return on capital for SMEs that is lower than for large corporates and retail customers.

## Figure C2 – Business line profitability differences




*Source: Ares & Co analysis*

These charts demonstrate why, in a credit constrained environment, SMEs may have more difficulty than other sectors in obtaining finance.

# APPENDIX D: LIST OF ACRONYMS

| | |
|---|---|
| ABFA | Asset Based Finance Association |
| AFIC | Association Française des Investisseurs pour la Croissance |
| AIM | Alternative Investment Market |
| BBA | British Bankers Association |
| BBAA | British Business Angels Association |
| BdF | Banque de France |
| BIS | Bank of International Settlements |
| BOE | Bank of England |
| BOJ | Bank of Japan |
| BTP | Bâtiment et Travaux Public (French construction industry) |
| BVCA | British Private Equity & Venture Capital Association |
| CRD | Capital Requirements Directive |
| EBA | European Banking Authority |
| EBAN | European Business Angels Network |
| EC | European Commission |
| ECB | European Central Bank |
| EVCA | European Venture Capital Association |
| Fed | Federal Reserve System |
| FLA | Finance and Leasing Association |
| FSA | Financial Services Authority |
| FSB | Federation of Small Businesses |
| GDP | Gross Domestic Product |
| ICB | Independent Commission on Banking |
| ICO | Instituto de Crédito Oficial |
| IFR | International Financing Review |
| IMF | International Money Funds |
| LCR | Liquidity Coverage Ratio |
| LSE | London Stock Exchange |
| LTRO | Long Term Refinancing Operation |
| MAG | Macroeconomic Assessment Group |
| NSFR | Net Stable Funding Ratio |
| OECD | Organisation for Economic Co-operation and Development |
| PNFC | Private Non Financial Company |
| R&D | Research and Development |
| SME | Small and Medium Enterprises |
| UK | United Kingdom |
| UKBIS | UK Department of Business Innovation and Skills |

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- HSBC
- Hypovereinsbank
- Intesa Sanpaolo
- Legal and General
- Lloyds TSB
- M&G Investments
- Santander UK
- Société Générale
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