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**Bank survey evidence on
“bank lending to SMEs in the European Union”**

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Abstract

This paper presents and analyses the results of a survey of some 400 credit institutions in the European Union carried out by the European Investment Bank in the summer of 2003. An in-depth analysis of the survey responses of 74 participating banks leads to the following conclusions: (1) despite the downturn of the European economy, growth of EU bank lending continued at a high pace in 2000-2002; Small and medium-sized enterprises (SMEs) were contributing to credit growth at least as much as large firms; the expansion of firm credit portfolios is expected to slow down in the year 2003 across all size classes, but most strongly for large firms; banks expect unused credit lines to increase in 2003 irrespective of firm size, weakening the argument that credit rationing is hampering economic growth; (2) in contrast to conventional wisdom, survey outcomes suggest that bank consolidation is not necessarily harmful for SME lending; large banks in the EU devote almost 70% of their firm credit portfolio to SMEs (this is comparable to the involvement of small and medium-sized banks), and they do not foresee a reduction in their SME lending; it is likely that the European banking market will be increasingly dominated by commercial banks, but this change should neither be seen as a blow to SME bank finance; on the contrary, survey results indicate that commercial banks assign a higher share of their credit portfolio to small firms than savings banks and co-operative banks; (3) while bankers, on average, expect that a new Basel capital accord will make large firm lending more attractive than SME lending, they are not planning to reduce the share of SME loans in their loan portfolios; (4) although a portfolio of SME loans is hardly more risky than a portfolio of large company loans, the effective interest rate on credits to small (medium-sized) firms is on average 160 (90) basis points higher than on large company credits; neither credit risk nor loan generation costs seem sufficient to explain this mark-up, leading to the conclusion that SME lending is more profitable than large company lending; (5) a substantial number of credit institutions consider to securitize part of the SME loan portfolio in the future, but only on a limited scale.

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Bank survey evidence on “bank lending to SMEs in the European Union”

1. Introduction

This paper presents and analyses the results of a survey of credit institutions in the European Union carried out by the European Investment Bank in the summer of 2003. The main objective of the bank survey was to arrive at a better understanding of recent trends in the credit market for small and medium-sized Enterprises (SMEs) and of prospects for SME bank lending in the future. In particular, we collected information about the volume, performance and conditions of bank lending to firms in different size classes. The EIB survey on bank lending is complementary to other surveys such as the European Central Bank’s bank lending survey (ECB 2003a) recently launched for the euro area and banking reviews commissioned by competition authorities (e.g. UK Competition Commission 2002). The distinguishing feature of our survey is that it entirely focuses on bank lending to enterprises, distinguishes between small firms and medium-sized firms, covers the whole European Union, takes a medium-term perspective, and emphasizes credit availability rather than credit pricing.

Many observers of the European economy question, in general, whether SMEs have adequate access to bank finance and, in particular, whether consolidation in the European banking industry and a new Basel capital adequacy accord could adversely affect SME finance conditions. In fact, Europe’s financial landscape is experiencing sweeping changes, driven by a variety of factors, notably the introduction of the euro, deregulation and liberalisation aimed at creating the Single Market for financial services, increasing wealth, and population ageing (see Perée and Riess (2003) for an overview). These changes – in particular the restructuring, consolidation, and reorientation of banking – are likely to affect the financing of SMEs.

In January 2003, the European Investment Bank held a conference aimed at reviewing Europe’s changing financial landscape and, in particular, the impact of these changes on SME finance. The proceedings of this conference are published in the *EIB Papers*.¹ As to SME finance, the main conclusions include the following: (1) SMEs rely mainly on relationship banking for the supply of external financial debt; (2) the consensus opinion that shines through the *EIB Papers* (vol. 8., no. 2) is that persistent credit rationing was not a major problem for a typical SME in the EU during the 1990s²; (3) financial market imperfections may nevertheless curb SME growth³; (4) changes in

¹ The *EIB Papers* are freely available and can be ordered at the address mentioned on the cover page of this paper. They can also be accessed and downloaded free of charge from our website: <http://www.eib.org/efs/>.

² Credit rationing (Stiglitz and Weiss 1981) occurs when borrowers do not get as much credit as they want although they are willing to pay the going market interest rate that applies to their risk class and meet other

Europe's banking markets – including bank consolidation⁴ and Basel II⁵ – promise to foster SME finance.⁶ These predictions are well founded by carefully analysing different existing data sets, including the balance sheets and income statements of individual firms, responses of surveys held among companies, and a bank database on business loans.

That said, the data sources and survey results used in the *EIB Papers* can only provide indirect evidence of possible financing problems encountered by SMEs in the credit market since actual European aggregates of stocks and flows of bank loans are not shown. Moreover, the data are not recent enough to provide a decisive answer to the question whether SMEs currently suffer from a credit crunch. To the best of our knowledge, recent volumes of bank credit by size class are not readily available for European SMEs. This survey is a first attempt to fill this gap. It collects data on past, current, and future developments in bank lending by asking for the opinions of bankers.

The survey has been structured with a view to answering two main sets of research questions. Firstly, do SMEs have adequate access to bank credit -- at present and in the future? Secondly, do bank strategies towards SME funding differ across banks of different size and type and what expectations do bankers have for future strategies? Closely related to the latter question are topics such as the impact of bank consolidation on SME lending, the performance of bank credit to enterprises, and the securitization of SME credit portfolios.

The remainder of this paper is organised as follows: In section 2, we describe the survey and the sample selection procedure, briefly discuss the response rate and the sample characteristics of the group of participating credit institutions and, finally, explain how results are presented in subsequent sections. In section 3, we discuss whether SMEs may suffer from a credit crunch and present an outlook for credit availability in the future. Here we also show bankers' views about the most important obstacles to the development of bank lending to firms in different size classes and what

conditions set by lenders. Dietsch (2003), Hommel and Schneider (2003), and Guiso (2003) find that credit rationing is not a widespread phenomenon among SMEs in France, Germany, and Italy, respectively.

³ Wagenvoort (2003b) finds that the sensitivity of company growth to cashflow rises as company size falls, which suggests that European SMEs encountered finance constraints that prevented them from fully exploiting their growth potential.

⁴ For example, Dietsch (2003) finds that bank consolidation in France has been associated with an increase in the number of banks the average firm borrows from, and this has improved credit availability.

⁵ The Basel Committee on Banking Supervision has proposed new rules for capital requirements of internationally operating banks. The Basel II proposal partly repairs the mispricing of corporate bank loans inherent in the current (Basel I) capital adequacy framework. Dietsch (2003) applies the Basel II "Internal Ratings Based Approach" to a bank database covering all business loans above EUR 76,000 of French credit institutions; he finds that bank capital requirements on SME loans in France will under the October 2002 proposal for Basel II, on average, be substantially lower in comparison to the capital requirements under Basel I.

⁶ Wagenvoort (2003a) provides an overview of the main findings of volume 8, issue 2 of the *EIB Papers*.

bankers expect from the implementation of Basel II. Bank strategies and the performance of bank lending to firms are analysed in section 4. Section 5 concludes.

2. Survey structure, sample selection, response rate, and sample characteristics

We begin with a short explanation of the sample selection criteria and the structure of the survey, and we highlight some of the definitions used both in the questionnaire and in the description of the results.

The survey was addressed to the “director of lending operations” of 381 EU credit institutions.⁷ The initial sample contained 86 EIB business partners, so-called global loan intermediaries, and 295 other banks. Out of a total of 381 questionnaires sent out, we received 74 completed forms, i.e. one out of five contacted banks actually participated in the survey. The final sample of responding credit institutions includes 31 EIB global loan intermediaries and 43 other banks.⁸ The response rate of the network of EIB global loan intermediaries thus turned out to be more than twice as high as the response rate of the other banks. This was likely because the questionnaire was sent to a contact person at the EIB client’s credit institution whereas in other cases the name of the director of lending operations was not specified.

The questionnaire consisted of 22 multiple-choice questions, divided into 6 groups:

- (1) *Questions Q.1-Q.3: Information on the type, size and location of the reporting credit institution.*
- (2) *Questions Q.4-Q.9: Information on the structure and development of the bank’s lending to enterprises in 2000-2002.*
- (3) *Questions Q.10-Q.12: Information on the current (2003) development of the bank’s lending to enterprises.*
- (4) *Questions Q.13-Q.14: Information on the expected future development (over the period 2004-2006) of the bank’s lending to enterprises.*
- (5) *Questions Q.15-Q.19: Information on recent trends in interest rates, loan loss provisions, and profit margins on the bank’s lending to enterprises.*

⁷ The selected banks have a “country rank” (measured by bank size) less than 51 in the bank database Bankscope of Bureau Van Dijk (Brussels) or the credit institution is a business partner of the European Investment Bank. Evidently, our selection criteria lead inevitably to an over-representation of larger banks. Nevertheless, we believe that with the survey one can get the broad picture of the development of bank lending to firms in the European Union since a very high share of total bank assets is covered by the initial sample of 381 credit institutions. But one needs to be willing to assume that the banks responding to the survey are a good representation of the starting sample.

⁸ Annex A1 shows the names and location of the responding credit institutions.

- (6) *Questions Q.20-Q.22: Information on the impact of changes in Europe's financial system (e.g. the securitization of the bank's SME loan portfolio and Basel II) on enterprise lending and information on the main obstacles to bank lending.*

All possible answers to the survey questions are qualitative. However, a quantitative scale is mentioned for clarification where necessary. Where relevant, respondents were asked to provide answers separately for small firms, medium-sized firms and large firms. In defining SMEs, we adopt in this paper a similar size classification as the one used in the final consultative document on capital requirements of the Basel Committee on Banking Supervision (BIS 2003a) and, thus, consider a firm with an annual turnover of less than EUR 50 million an SME. We distinguish two SME size classes: (i) small firms have an annual turnover of less than EUR 5 million and (ii) medium-sized firms have annual turnover between EUR 5 million and EUR 50 million.⁹

Table 1. Classification of region, type, and size of credit institution

Region			
<i>East</i>	<i>West</i>	<i>North</i>	<i>South</i>
Austria	Belgium	Denmark	Greece
Germany	France	Ireland	Italy
	Luxembourg	Finland	Portugal
	Netherlands	Sweden	Spain
		United Kingdom	
Type			
<i>1</i>	Commercial bank		
<i>2</i>	Savings bank, Co-operative bank		
<i>3</i>	Mortgage bank, Investment bank, Non-bank credit institution		
<i>4</i>	Medium & long-term credit bank		
<i>5</i>	Specialised governmental credit institution		
Size^a			
<i>Small and medium-sized</i>		<i>Large</i>	
Very small	# ≤ 0.5	Large	1 < # ≤ 100
Small	0.5 < # ≤ 1	Very large	# > 100
Medium-sized	1 < # ≤ 10		

^a As measured by the bank's total assets (in EUR billion) on its balance sheet at end-2002.

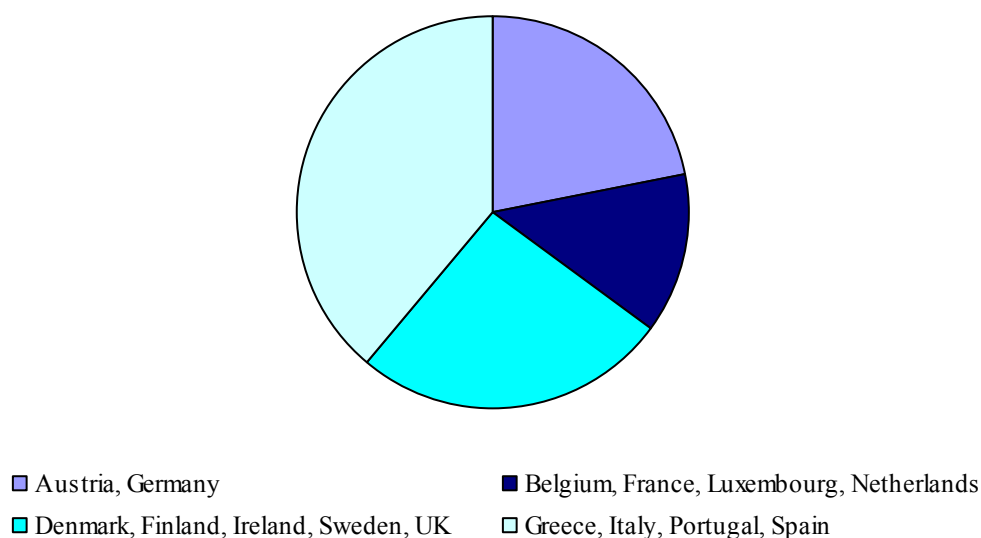
⁹ The latest Basel II proposal foresees a size correction to default correlations for medium-sized firms with an annual turnover between EUR 5 million and EUR 50 million.

Questions Q.1 to Q.3 allow sorting of the sample of participating banks on the following characteristics: bank type, geographical location, and bank size. For part of the discussion in sections 3 and 4, sorting of this kind is useful to verify whether patterns as observed for the European banking sector as a whole also apply for sub-samples. For example, a sub-sample may cover one particular region only. We consider four regions, eight types of banks, and five bank size classes (see Table 1). To enable a meaningful statistical analysis, we aggregate the relatively small number of savings banks and co-operative banks in one group; for the same reason, we combine mortgage banks, investment banks, and non-bank credit institutions in one group. Hence, below we show results for only five main types of banks. As to the grouping of banks according to size, we aggregate – again for statistical reasons – very small, small, and medium-sized banks in one category and large and very large banks in another.

The main characteristics of the sample of reporting credit institutions can be summarised as follows. Firstly, about one half of the credit institutions are commercial banks, roughly one-fifth are either savings- or co-operative banks, one in ten is a medium & long-term credit institution, one in ten is a specialised governmental credit institution, and the remaining one-tenth comprises mortgage banks, investment banks, and one non-bank credit institution (see Table Q.1 of Annex A2). Secondly, Figure 1 shows that about 40% of the responding banks are located in the south of the EU (see table Q.2 of Annex A2). About a quarter of the banks are located in the north; it is worth pointing out, however, that the Scandinavian countries are over-represented as the sample of responding banks contains only two UK banks and three Irish banks. Broadly speaking, 20% of the banks are Austrian or German, and 15 percent of the banks are located in the west of the EU. The latter region is dominated by Belgium and France, reflecting the relatively small number of banks from Luxembourg and the Netherlands in the sample of banks that were contacted. Thirdly, Table Q.3 of Annex A2 reveals that the most common size for a reporting bank is either medium (39% of the respondents) or large (42% of the respondents). Only one very small bank is included. We received completed questionnaires of five small banks (7% of the respondents) and eight very large banks (11% of the respondents).

These summary statistics clearly indicate that the regional distribution of the sample of responding banks is not perfectly aligned to that of the population of banks in the EU at large. It is impossible to say whether this biases the survey results and, if it does, how severe the bias is. However, provided that country-specific factors are not too powerful in making banks behave differently across countries (a feature that is supported by the survey results), aggregate results should not be seriously biased by stratification problems.

Figure 1. Sample distribution over the location of respondents^a



^a Figure 1 corresponds with Table Q.2 of Annex A2.

Before turning to the discussion of survey outcomes, it is useful to briefly outline how survey results are reported in the Annex and how they have been used for the discussion in sections 3 and 4. Annex A2 shows the results of the survey for the EU as a whole, with Tables Q.1–Q.22 corresponding to questions Q.1–Q.22 of the survey. As these tables indicate, not all respondent banks answered all questions. When a respondent bank did not answer to a particular question, its answer was classified “relevant information is not available”. As the tables of Annex A2 show, for some questions, the number of respondents falling into that category is quite large. In discussing the survey outcomes in sections 3 and 4, banks that did not provide relevant information on a particular question were ignored and, thus, the share of respondents providing a particular answer is computed over the number of banks that provided relevant information on the question at hand. From the difference between the presentation of the “raw” data in the annex, on the one hand, and the presentation in sections 3 and 4 on the other hand, it follows that the percentages shown for the “share of respondents” that provided a particular answer differs between the annex and the main body of the text. Obviously, the difference is particularly large in the case of survey questions for which there is a relatively high share of respondents that did not provide the relevant information. But it is clear that the discussion of the survey outcomes in sections 3 and 4 provides a more accurate picture of the actual pattern of bank behaviour in the EU than the “raw” data presented in the annex.

Another feature of the manner in which the data are presented in sections 3 and 4 is worth highlighting. We compute weighted averages of the responses based on the mid-values of the indicated range for each choice. For example, the choice “increased somewhat” at question Q.4 corresponds to an increase of 3% (the mean of 1% and 5%). Likewise, the choice “increased

moderately” corresponds to an increase of 7.5%. For corner solutions, we choose the beginning of the interval. With respect to question Q.4, for instance, this means that we quantify “increased rapidly” and “decreased rapidly” by 10% and –10%, respectively.

With these explanations duly noted, we discuss next the access of SMEs to bank finance – past, present, and future.

3. SME access to bank lending

3.1 Average response across Europe

SME access to bank lending is analysed through three main questions. (1) Is there evidence that banks have reduced lending to SMEs in recent years? (2) Is there evidence that banks are going to restrict SME lending in the future? (3) What are the main obstacles holding back bank lending to small and medium-sized enterprises? To provide an answer to the first question, we look at past developments (over the period 2000-2002) in the volume of outstanding credits, the volume of leasing contracts, and the maturity distribution of the loan portfolio. Then we discuss bankers’ expectations for the year 2003.

(1) Is there evidence that banks have reduced lending to SMEs in recent years?

Table Q.4 of Annex A2 shows that, on average, total credit expansion was substantial during the period 2000-2002 despite the downturn in the European economy. More than 40% of the respondents reported that their overall credit portfolio, including both consumer and business credits, increased by more than 10% per year (the growth in credit volumes to enterprises was slightly smaller, but still about one-third of the banks saw their stock of outstanding firm credits expand by more than 10% per year). Another third of the banks increased, on average, lending volumes between 5% and 10% per year. On average, the stock of firm credits of EU credit institutions increased at an annual rate of 5.5%.¹⁰ It is thus hard to deduce that the economic slowdown itself has been the result of a sudden contraction in the availability of credit.

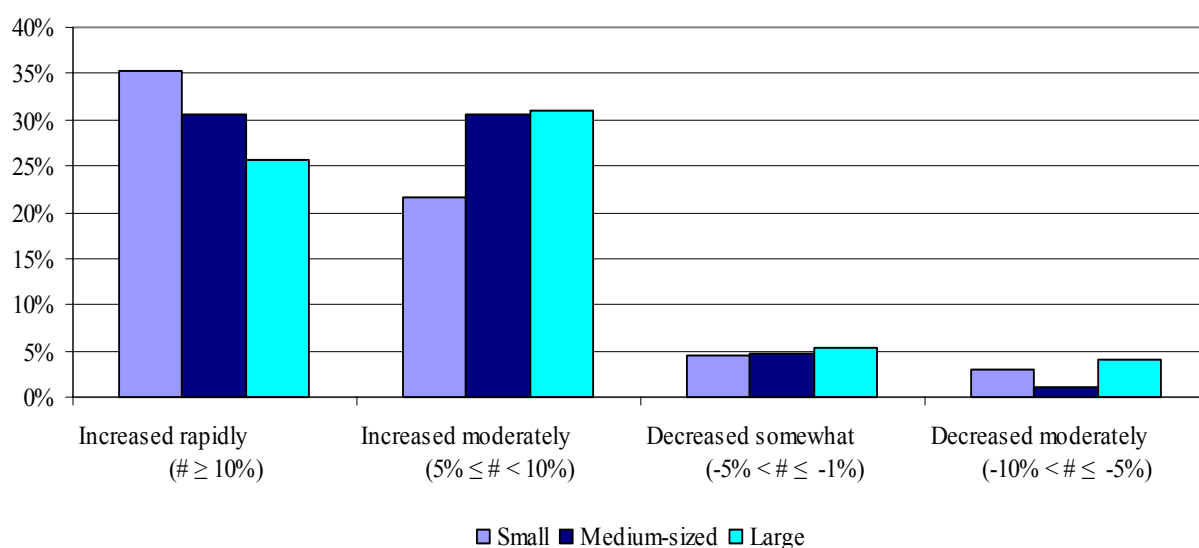
But how did SMEs participate in this growing credit market? The stock of SME credits was actually increasing slightly faster than the stock of credits to large firms. The same conclusion can be drawn for the volume of leasing contracts. Overall, in 2000-2002, no major differences in lending growth emerge between SMEs and large firms. Furthermore, we do not detect differences in their use of

¹⁰ These survey results are consistent with ECB (2003b) data, which shows the aggregate volume of loans taken by non-financial corporations between the fourth quarter of 1999 and the fourth quarter of 2002 (see Table 6.1 of the ECB *Monthly Bulletin*, August 2003.)

long-term loans vis-à-vis short-term loans, with long-term loans being those with an initial maturity of more than one year.

Figure 2 illustrates well the average development of the volume of outstanding credits to enterprises in different size classes over the period 2000-2002.¹¹ It is clear from Figure 2 that the stock of SME credits was increasing slightly faster than the stock of credits to large firms. On the left-hand side of the figure, we observe a negative relationship between firm size and rapid credit growth. Indeed, more than one-third of the banks increased their credit exposure to small firms by more than 10% per year whereas for medium-sized firms the corresponding share of respondents is slightly smaller than one-third; for large firms it is about one-quarter. At the same time, the right-hand side of the figure exhibits a positive relationship between firm size and the contraction of the credit stock. The share of banks reporting that credit volumes were shrinking is bigger for large firms than for SMEs. On average, between 2000 and 2002, the stock of credits outstanding at small and medium-sized businesses increased by 16% and 18%, respectively, whereas the stock of credits outstanding at large enterprises increased by 15%. Hence, SMEs have slightly increased their share in the overall firm credit portfolio but no major differences are found in the development of bank lending across firm size classes.

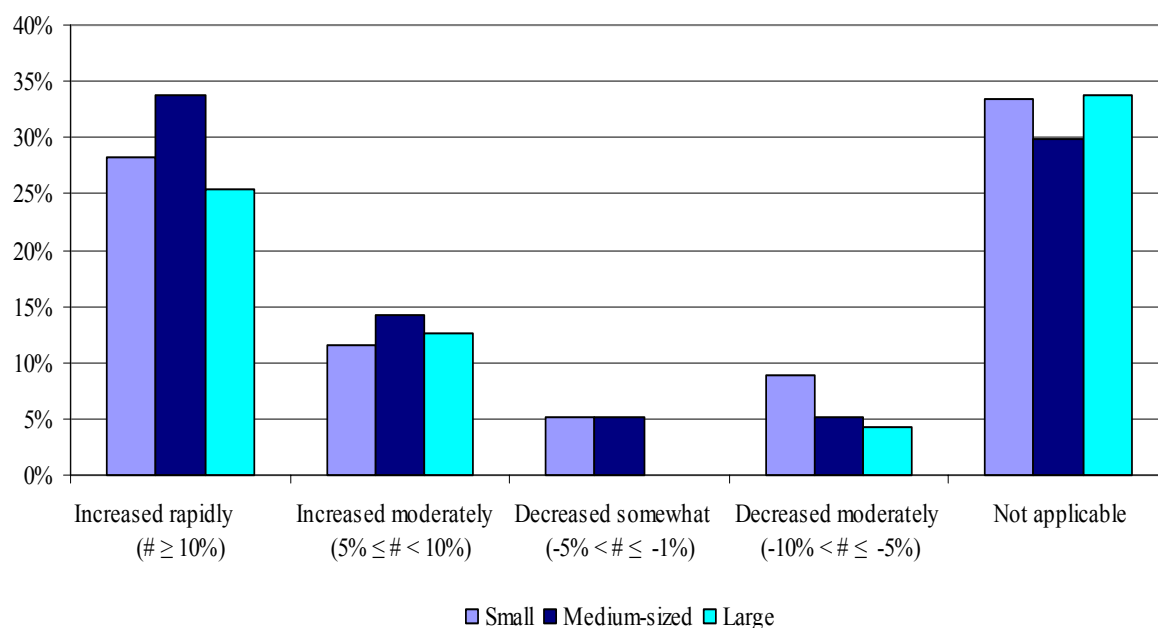
Figure 2. Average annual change in the volume of outstanding credits to firms over the period 2000-2002, by size class^a



^a Figure 2 corresponding with Table Q.5 of Annex A2.

¹¹ Figure 2 shows only four out of eight possible choices under the respective survey question Q.5. We limit the number of choices in most of the charts in order to keep them transparent. Complete survey results can be found in Annex A2.

Figure 3. Average annual change in the volume of leasing contracts over the period 2000-2002, by size class^a

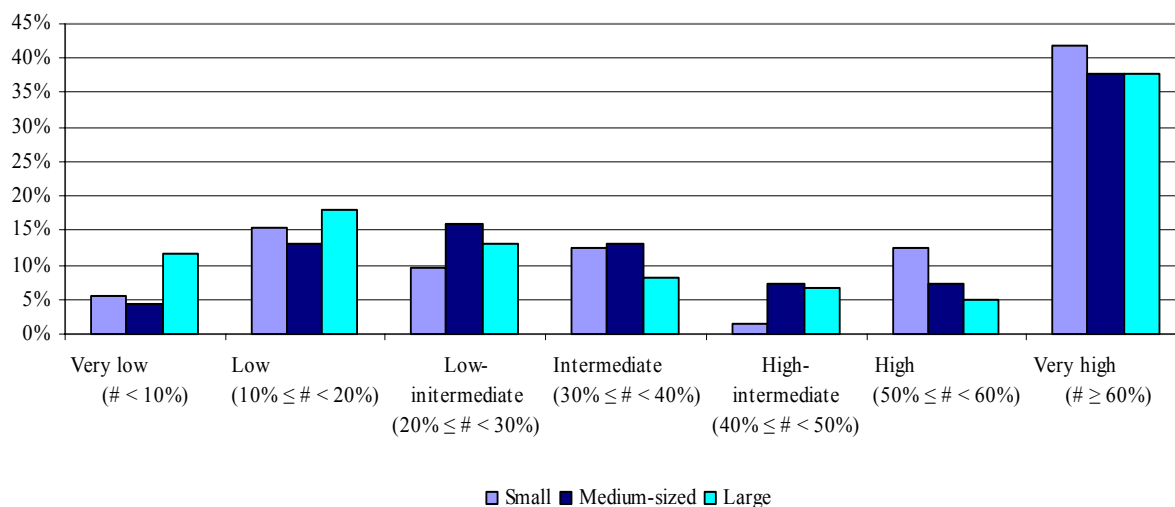


^a Figure 3 corresponds with Table Q.8 of Annex A2.

Figure 3 shows that the volume of leasing contracts was increasing faster for medium-sized firms than for small and large firms during the period 2000-2002. The development of leasing to small firms is broadly similar to the development of leasing to large firms. In 2000-2002, the stock of leasing contracts with medium-sized enterprises increased, on average, at a rate of 18% whereas it increased only by 13% in the case of small and large enterprises. Roughly one-third of the banks do not provide leasing to at least one of the firm size classes. Actually, in most of the cases those banks do not provide leasing at all. For roughly 50% of the banks, and independent of the firm size class, leasing accounts for less than 10% of the total loan book. The use of leasing as a credit instrument remains thus limited.

Moreover, we find no major differences between SMEs and large companies in their use of long-term loans vis-à-vis short-term loans. At question Q.7 (see table Q.7 of Annex A2) bankers could reveal – for each firm size class – the fraction of long-term loans in the total volume of outstanding loans to firms. The broad pattern of Figure 4 illustrates that bankers responded to question Q.7 in the same way for SMEs and large enterprises. Indeed, around 40% of the respondents report that the fraction consisting of long-term loans is higher than or equal to 60% of the underlying portfolio, independent of company size. All the other possible outcomes (for which long-term loans are less than 60% of the portfolio) are much less frequently chosen, and one cannot find a pattern that would distinguish in a consistent manner SMEs from large firms. On average, long-term loans account for 42%, 41%, and 38% of the portfolio of small, medium-sized, and large firm credits, respectively.

Figure 4. Share of responding banks for which the fraction of long-term loans (initial maturity > 1 year) in total loans to firms was in the specified range at end-2002^a



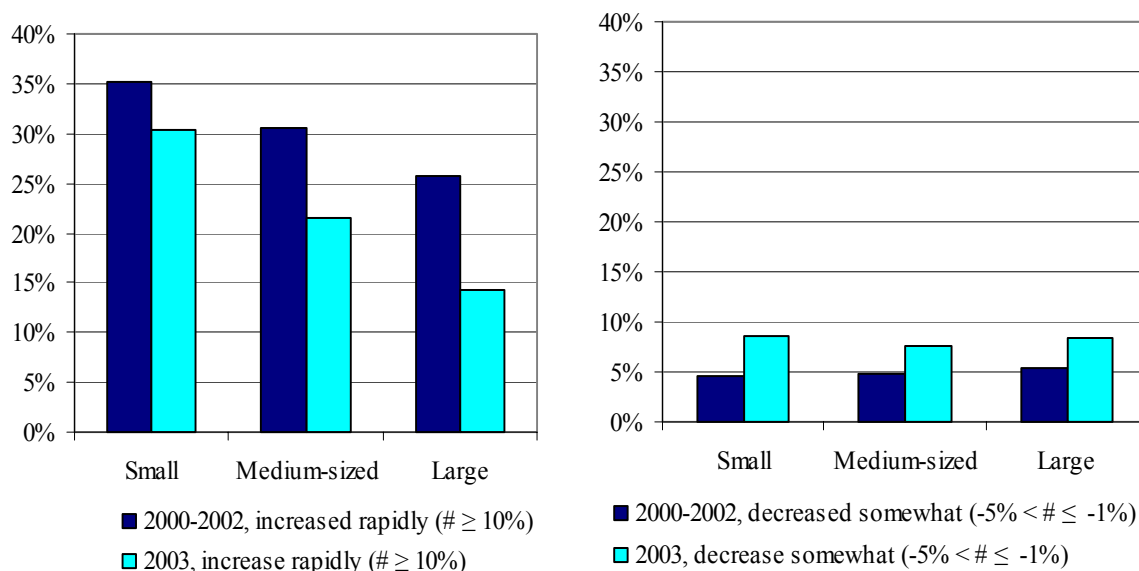
^a Figure 4 corresponds with Table Q.7 of Annex A2.

So far, we have found that over the period 2000-2002 bank lending to SMEs, both in terms of traditional credits and leasing, has grown substantially and, in fact, slightly faster than bank lending to large firms. Furthermore, as to the importance of long-term relative to short-term loans in banks' loan portfolios, we have not found major differences between SMEs and large firms. Overall, there is no indication that the availability of bank finance has weakened for SMEs. Do bankers expect these developments to continue in the year 2003?

Banks expect credit growth to slow down somewhat during the year 2003. To compare current developments with the average development over the past three years, Figure 5 presents both the 2000-2002 average and the 2003 outcome for two possible answers that bankers could give out of 7 multiple-choices regarding the development of the volume of outstanding credits to firms. We observe that the choice "increase rapidly" (i.e. with more than 10%) was crossed by a substantial lower number of credit institutions for the year 2003 in comparison to the period 2000-2002 (the bars for 2003 are lower than the bars for 2000-2002 in the left panel of Figure 5). At the same time, more credit institutions expect to shrink somewhat the stock of outstanding credits to firms (the bars for 2003 are higher than the bars for 2000-2002 in the right panel of Figure 5). The expected reduction in the overall growth rate of the credit stock is much more pronounced for large firms than for SMEs. Taking into account all choices made by the responding banks, we find that – on average – small firms are expected to receive almost as much new credits in 2003 as they received in the past. By contrast, new credits to large firms are expected to nearly halve. More precisely, on average, lending growth is expected to be 4.4% for small firms and 2.9% for large firms in 2003 whereas during the

last three years the average annual growth rate was 5.2% and 4.8%, respectively. Lending to medium-sized firms is expected to drop from the past three-year average of 5.6% to 4.1% in 2003.

Figure 5. Expectations about changes in the volume of outstanding credits to firms in 2003, by size class^a



^a Figure 5 corresponds with Table Q.5 and Table Q.10 of Annex A2. .

These findings confirm the hypothesis that the behaviour of SMEs and large firms differs in terms of how they adjust their external debt finance to changes in the business cycle. This point was made by Wagenvoort (2003b) who concludes that SMEs appear to be less flexible than larger firms in adjusting the structure of the liability side of their balance sheets to changing growth opportunities. In general, there exists a strong link between company growth and financial debt. The financial debt ratio increases when a firm expands, and it falls when a firm shrinks. What is more, the financial debt ratio increases (falls) the faster, the faster the firm grows (shrinks). This behaviour helps firms to adjust to changing growth opportunities. For instance, an increase in financial debt helps a firm to grow faster in an expansion, essentially overcoming a lack of shareholder funds. In other words, once retained earnings are exhausted, a firm needs to look for external finance, and if it goes first to the bank and/or debt market before raising external equity, its financial debt ratio rises. Likewise, when a firm is not growing, the financial debt ratio is likely to fall, as new borrowing is limited and existing debt is paid back. Probably the most striking message is, however, that small firms seem to have less flexibility in adjusting their financial debt ratio: the ratio increases (falls) at a slower rate in fast-growing (fast-shrinking) small firms than in fast-growing (fast-shrinking) large firms. Our interpretation of this result is that small firms have less flexibility in adjusting financial debt in response to changing growth conditions. When growth prospects are good, small firms may find it difficult to fully exploit their growth potential. Likewise, when growth prospects are bad, small firms

may keep more financial debt on their balance sheets than large firms to avoid financing problems as and when growth prospects improve.

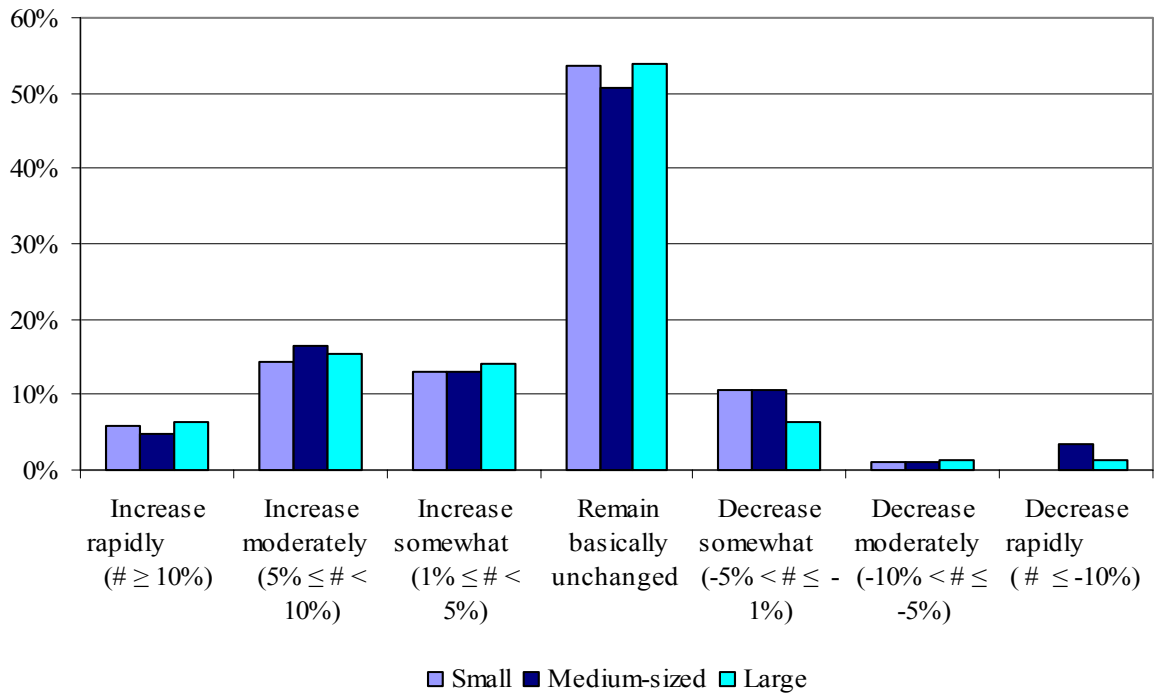
Such an interpretation could indicate that SMEs indeed encounter finance constraints, either due to market imperfections in the credit markets and/or market imperfections in the equity market. Credit rationing may be the ultimate result of imperfections in the credit markets. For instance, asymmetric information between the lender and the borrower may lead to problems of moral hazard and adverse selection. These problems may prevent the interest rate to converge to a level where the demand of credit can be met by sufficient supply.

Figure 6 does not support the view that credit rationing is a significant problem in 2003. On average, unused credit lines are expected to increase in 2003 without much difference across size classes. It is difficult to argue that companies are credit constrained if at the same time unused credit lines are not utilised. After all, a company in need of credit can tap previously negotiated credit lines in times when new credits are difficult to get.¹² In contrast to what the rationing hypothesis suggests, we find that unused credit lines, on average, are expected to increase during 2003. The left-skewed distribution in Figure 6 illustrates this: a higher stock of unused credit lines is more likely to be the outcome than a lower stock of unused credit lines, and this holds true for firms of all sizes. On average, an increase of 1.6%, 1.3%, and 1.8% is expected for small, medium-sized, and large firms, respectively. 50% of the respondents expect that the stock of unused credit lines will remain basically unchanged. Only 5% of the respondents reported that unused credit lines are expected to decrease by more than 5%. While this could be weak evidence of credit rationing being relevant for some firms, it does not suggest that credit rationing is a widespread phenomenon.

To summarize the main developments expected for 2003: notwithstanding a continuation of positive credit growth, the expansion of company loans is expected to slow down across all size classes but especially for large firms. We also observe a slight increase in unused credit lines and thus conclude that in reality credit rationing is not a widely spread macroeconomic phenomenon.

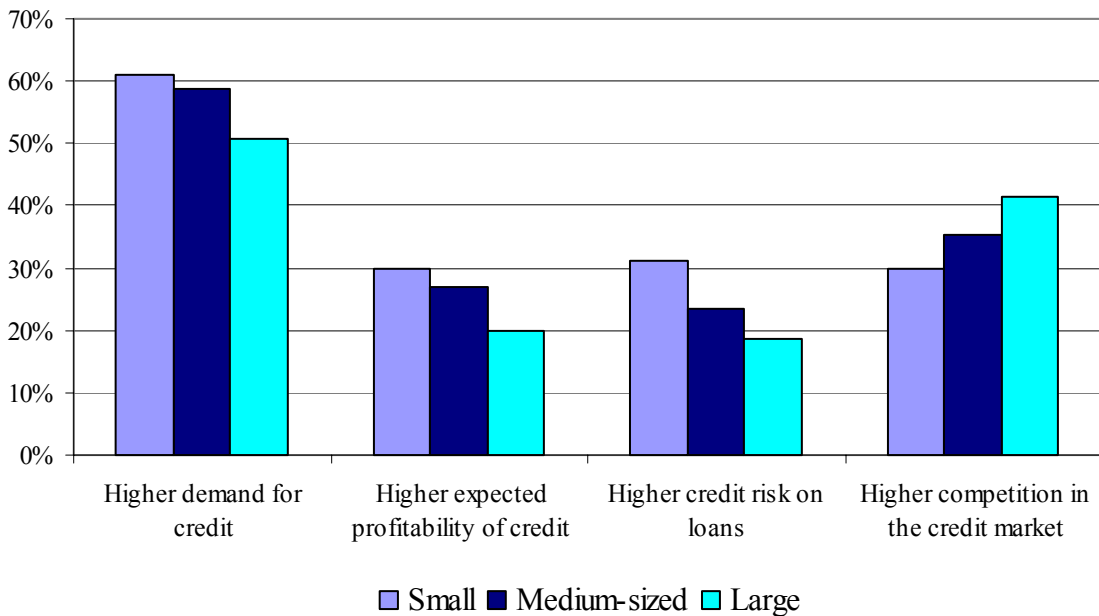
¹² According to Berger and Udell (1992), borrowers who signed debt contracts with credit commitments are by definition free of credit constraints. They conclude that equilibrium credit rationing is not a significant macroeconomic phenomenon for the US credit market between 1977 and 1988.

Figure 6. Expectations about changes in the volume of unused credit lines to firms in 2003, by size class.^a



^a Figure 6 corresponds with Table Q.11 of Annex A2.

Figure 7. Main reasons for the current development of bank lending to firms, by size class^a



^a Figure 7 corresponds with Table Q.12 of Annex A2.

Concerning question Q.12, bankers could provide their views on what they see as the main reasons for the development of bank lending in 2003. Figure 7 contains the four most important reasons crossed by the respondents out of a total of 13 possibilities (see Table Q.12 of Annex A2).¹³ Higher demand for credit, a higher expected profit margin on credit, higher credit risk, and more competition in the credit market are the four main explanations. On the one hand, higher demand for credit and a higher expected profit margin suggest strong credit growth. On the other hand, an increase in credit risk and competition may point to a less expansionary behaviour of banks towards lending to enterprises. Around 60% of the banks report higher demand for credit as an important reason to explain the current development of SME bank lending. Somewhat surprising, still around 50% of the banks report the same factor as important for large firms despite the fact that the growth of large firm credit is expected to slow down substantially (see Figure 5). However, higher demand for credit and a higher profit margin is less often chosen to be an important reason for large firms than for small firms. But higher competition in the credit market is more often chosen for large firms than for small firms. This may explain why the reduction in credit growth is increasing with company size. The responses for medium-sized firms are in between the ones for small firms and large firms. For instance, 35% of the responding banks consider higher competition in the credit market as a main factor driving their lending to medium-sized firms, which is half way between the figure for small firms (30%) and large firms (around 40%). Depending on which firm size is considered, between 3% and 8% of the respondents mentioned other factors not included in the list of multiple-choices as important. For example, one respondent argued that a low interest rate environment is an important factor. Another respondent, filling in the questionnaire for a specialised governmental credit institution, revealed that her bank is withdrawing from the credit market. This explains why for this bank the stock of credits to small firms decreases rapidly.

Having discussed past and very recent developments in bank lending, we will now turn to the second question raised at the beginning of this section.

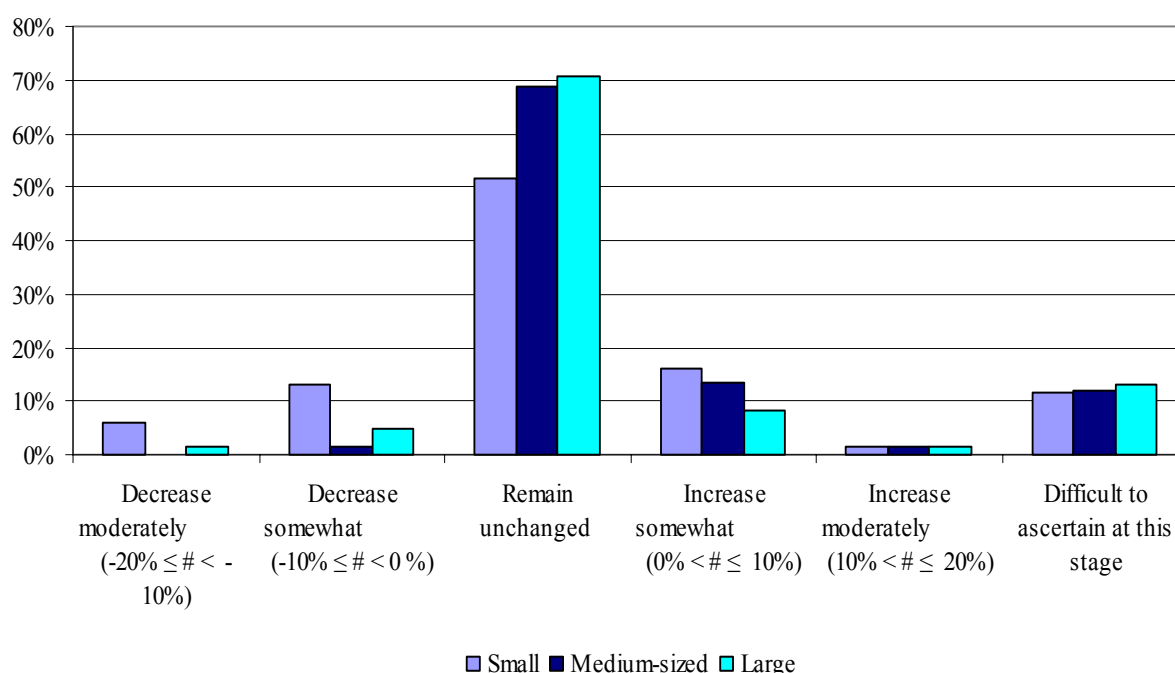
(2) Is there evidence that banks are going to restrict SME lending in the future?

By comparing the survey outcomes for question Q.6 and Q.13, we constructed the expected change in the composition of the enterprise loan portfolio across firm size classes over the period 2004-2006 (see Figure 8). About 10% of the banks providing relevant information at both questions find it difficult to make a prediction at this stage. Bankers with a view on future developments are distributed as follows over the multiple choices. For large companies, 70% of the respondents foresee that the share of these companies in the loan portfolio remains unchanged. The remaining 20% of respondents are equally distributed between those expecting an increase in the portfolio share of large

¹³ We consider a reason important when the corresponding “normalised share” is higher than 10%. For the definition of “normalised share” see notes to Annex 2.

firms and those expecting a decrease in the portfolio share of large firms. Thus, on average, bankers expect that in the future the ratio of SME lending to large firm lending will remain constant. For medium-sized firms, as for large firms, 70% of the respondents do not expect a change. However, the remaining 20% of respondents tend to be located at choices indicating that the portfolio share of medium-sized firms will increase somewhat. Logically, this must then come at the expense of the portfolio share of small firms. Indeed only 50% of the respondents, in comparison to 70% for medium-sized and large firms, predict that the portfolio share of small firms will remain unchanged and a small majority of the remaining 40% (we recall: 10% no prediction, 50% no change) of the respondents expect that the portfolio share of small firms will decrease. On average, however, the increase of the portfolio share of medium-sized firms and the decrease of the portfolio share for small firms is with 0.6% not economically significant compared to the end-2002 portfolio shares of 35% and 31% for small and medium-sized firms, respectively. To conclude, there is no indication that in the near future banks will reduce their SME lending.

Figure 8. Expectations about changes in the composition of the enterprise loan portfolio over the period 2004-2006, by size class^a



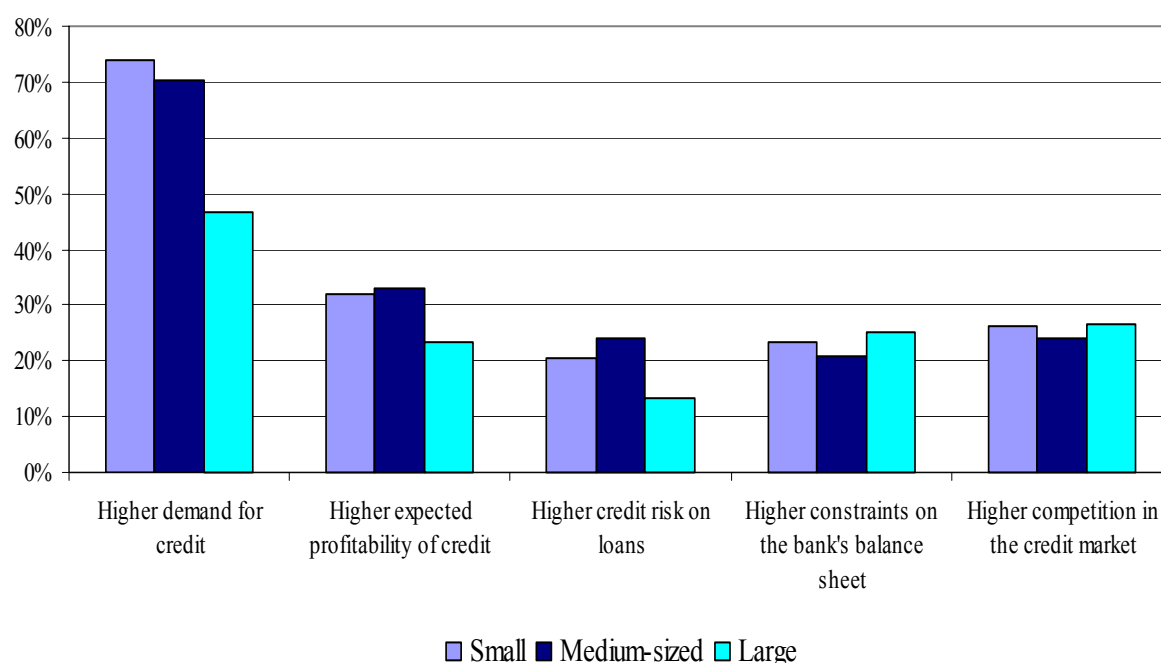
^a Figure 8 corresponds with Table A2.1 of Annex A2.

Five important factors are mentioned that explain future developments in bank lending (see Figure 9).¹⁴ The four main reasons explaining very recent developments (i.e. higher demand for credit, higher expected profitability, higher credit risk, and more competition in the credit market) are also

¹⁴ Based on “normalised shares” exceeding 10% (see Table Q.14 of Annex A2).

important drivers of future bank lending. In addition to these four factors, roughly one out of five respondents indicate that constraints on the bank's balance sheet will become important as well in the near future. These constraints may follow from capital adequacy requirements, the bank's liquidity position etc. The global pattern of Figure 9, which shows important reasons for future developments, is very similar to the one of Figure 7, which shows reasons for very recent developments. Again, a higher demand for credit is seen by far the most – and for the near future even by more – bankers as an important reason. The findings summarized in Figures 8 and 9 implicitly mean that bankers do not expect the transformation of the European Banking sector, including the process of consolidation and new legislation regarding bank capital adequacy, to be necessarily harmful for the financing of SMEs.

Figure 9. Main reasons for the future development of bank lending to firms, by size class^a



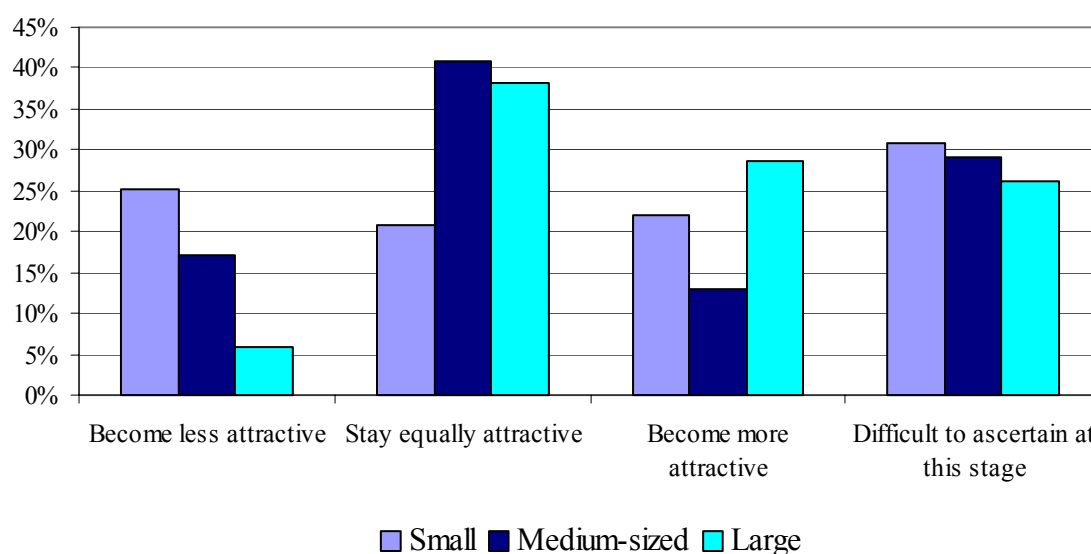
^a Figure 9 corresponds with Table Q.14 of Annex A2.

To follow up on the last point, bankers were asked to assess whether or not a new Basel accord on capital requirements of internationally operating banks would impede SME bank lending. In April 2003, the Basel Committee on Banking Supervision issued its final consultative document on capital requirements of internationally operating banks (BIS 2003a). The Basel II proposal partly repairs the mispricing of corporate bank loans inherent in the current capital adequacy framework by allowing banks to set capital requirements as a function of a firm's credit rating and to take into account portfolio diversification effects. As argued by many practitioners and politicians, the recommendations put forward by the Basel Committee in the 2nd consultative document of January 2001 would likely have put SMEs at a disadvantage in comparison to large firms. Among others, Hommel and Schneider (2003) and Dietsch (2003) argue that this general conclusion is no longer

valid since the Basel Committee published a revised recommendation in October 2002. The results of the third Quantitative Impact Study (BIS 2003b) evaluating the revised proposal show that capital requirements for loans to SMEs will generally be no higher than currently. Indeed in many cases they are expected to be lower and to fall by more than for large firms.

It is important to note, however, that the quantitative impact studies initiated by the Basel Committee focus only on the legal capital requirement and do not take into account additional costs, which banks may be unable to avoid if they need to comply with a new, administratively more demanding capital adequacy framework. For large firms, these costs can be spread out over a relatively large loan amount and thus may be insignificant in comparison to the costs of holding the required capital. For SMEs, however, administrative costs are likely to be a higher proportion of the loan amount. Against this background, our survey question related to Basel II is broadly formulated by inviting bankers to present their views on whether a new Basel accord would make lending to large firms more attractive in comparison to lending to small and medium-sized businesses.

Figure 10. Expectations about lending to firms if the October 2002 proposal for a new Basel Capital Accord is implemented, by size class^a



^a Figure 10 corresponds with Table Q.21 of Annex A2.

A remarkable finding is that roughly one out of four bankers, after several rounds of Basel II discussions, still finds it difficult to assess the possible impact of Basel II on firm lending (see Figure 10). Around 40% of the bankers are of the opinion that lending to medium-sized firms and large firms stays equally attractive as under current legislation. With respect to small firms, substantially less bankers are of this opinion: only 20% of the respondents reply that Basel II will be neutral for small

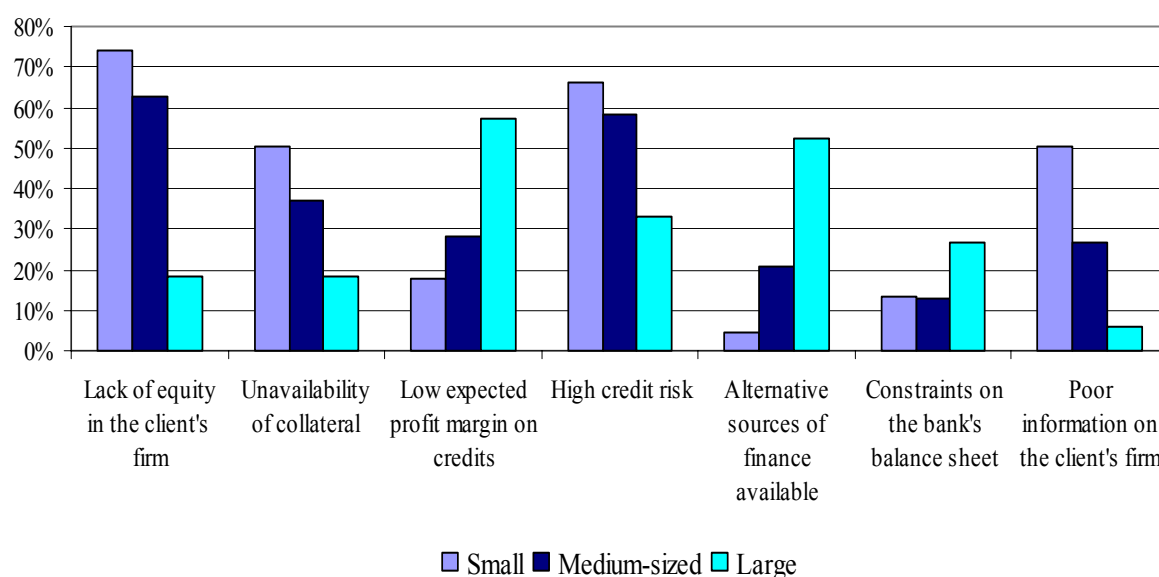
firm lending. It is worth pointing out that among those bankers who expect Basel II to have an impact on small firm lending, about half think that Basel II will stimulate lending while the other half anticipates a negative impact. In other words, there will be banks reducing small firm lending but this reduction in supply is likely to be offset by other banks increasing small firm lending, although the latter ones may come in slightly fewer numbers. From Figure 10 we derive that, broadly speaking, the same result is expected for medium-sized firms. In contrast to this outcome, on balance there is no doubt that bankers' expectations hint at Basel II making large company lending more attractive. Thus, on average, bankers take the view that a new Basel capital accord will make large firm lending more attractive than SME lending.

Overall, the survey does not support fears that banks, in general, will restrict SME lending in the future. One should keep in mind that banks are likely to meet fierce competition from both other banks and from capital markets when competing for larger corporate clients. Indeed, we recall from Figure 8 that bankers do not expect at all that large companies will increase their share in the overall enterprise loan portfolio over the medium term. Still, there are obstacles to SME lending, which brings us to the next and final question of this section.

(3) What are the main obstacles holding back bank lending to SMEs?

There are four obstacles to small firm bank lending leaping to the eye in Figure 11. More than half of the respondents see a lack of equity in the client's firm, unavailability of collateral, high credit risk and, last but not least, poor information on the client's firm as an important impediment to small firm lending. Out of these four obstacles only two, that is, a lack of equity and high credit risk, are perceived as almost equally important for lending to medium-sized firms. For the other two factors, less than 50% of the respondents believe that they are relevant for medium-sized firms. Overall, obstacles to the supply of loans seem to be less of a problem in the case of medium-sized firms than in the case of small firms. Only two factors are highly relevant for large firms, and these are completely different from those that are highly relevant for SMEs. Indeed, more than 50% of the respondents argue that a low expected profit margin on large company credits is an important issue and, directly related to this, bankers observe that alternative sources of finance are available to larger clients. At the same time, poor information on the client's firm, for instance, is in only 6% of the cases seen as an important issue for large corporations. Thus, there are striking differences in the obstacles most relevant for the development of bank lending to firms of different sizes. According to bankers, a low equity base, in comparison to company risk and available collateral, is the main problem with the financing of SMEs. Low expected profitability is the main problem with bank credits to large firms.

Figure 11. Main obstacles to the development of bank lending to firms, by size class^a



^a Figure 11 corresponds with Table Q.22 of Annex A2.

Before concluding section 3, we briefly look at regional differences, keeping in mind that so far we have presented EU-wide average responses.

3.2 Regional differences

Table A3.1 and Table A3.2 of Annex A3 show the development of bank lending to firms (across size classes and by region) over the period 2000-2002 and in 2003, respectively. There are some regional differences worth highlighting. Firstly, bankers located in Mediterranean countries report substantially higher credit growth for SMEs than bankers in other regions. In contrast, Austrian and German firms have increased lending volumes less quickly than the European average. One should bear in mind, however, that the Austrian and German *Mittelstand* (i.e. Austrian and German small and medium-sized enterprises) are much more indebted than their peers in other European countries. Two-thirds of German firms report equity ratios below 20 percent and 41 percent of German firms report equity ratios below 10 percent. This compares to a European average equity ratio of 35% (see Wagenvoort (2003b)). It should thus not come as a surprise that credit expansion is limited for SMEs in the East. Secondly, one striking outlier in Table A3.2 is the western region. In 2003, on average, the stock of credits outstanding at medium-sized companies in the Benelux and France is not expected to grow and a negative growth rate is actually expected for large companies. In sum, regional differences matter to some extent but it is worthwhile highlighting that for none of the EU countries bankers report a contraction of the SME credit portfolio over the period 2000-2003. This brings us to the conclusions of section 3.

3.3 Conclusion

There is no such thing as a general “credit crunch” for small and medium-sized enterprises in the European Union. On the contrary, we observe that (1) bank loans and leasing contracts to SMEs have grown, and are expected to grow, substantially and slightly faster than in the case of large firms; (2) unused credit lines are expected to increase in 2003 across all size classes; (3) banks do not seem to restrict long-term loans to SMEs (the share of such loans in the enterprise portfolio is comparable across firm size classes); and (4) bankers, on average, are not planning to reduce the share of SME loans in their loan book in the future – although bankers expect a new Basel capital accord to make large firm lending more attractive than SME lending.

Next, we will investigate whether bank strategies towards SME funding differ across banks of different size and type and discuss bankers’ expectations about their future strategies.

4. Bank strategies and the performance of bank credit

This section presents further empirical justification for a positive outlook for SME bank finance in the years to come. Firstly, we investigate the possible impact of bank consolidation on SME lending (section 4.1). Secondly, we analyse how bank credits are priced across firm size classes and derive relative levels of expected profitability (section 4.2). Thirdly, we present bankers’ views on the importance of the securitization of SME loan portfolios (section 4.2). We note that throughout section 4 only EU average responses are presented.

4.1 Bank consolidation

Bank consolidation has raised the fear that banks may reduce their participation in the SME loan market segment. Such fears are based, for instance, on the US bank market, where a clear relationship has been established between bank size and SME lending, with large banks devoting a lesser portion of their assets to small business loans.¹⁵ Static analysis of the US market suggests that SME lending would fall by more than a half if all small and medium-sized banks, with total assets of less than \$10 billion, were to be consolidated into larger institutions.¹⁶

European bankers also have started a wave of mergers and acquisitions due to increased competition and uncertainty in a rapidly changing financial sector.¹⁷ The process of bank consolidation is likely to

¹⁵ See, among others, Berger et al., 1998.

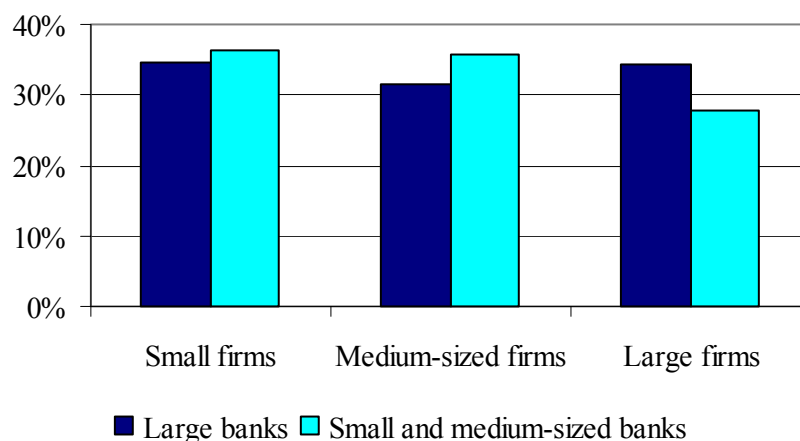
¹⁶ In a dynamic setting, however, this result does not hold. Recent studies on the effects of bank mergers and acquisitions in the United States find that a possible decline in small business lending due to consolidation is mostly offset by the reaction of other existing (smaller) banks and new entrants, the so-called *de novo* banks.

¹⁷ Boot (2003) explores the main forces that drive the bank consolidation process.

continue in the future as important differences in the cost efficiency of credit institutions remain.¹⁸ As a result of intensified competition, we expect managerially inefficient banks to be overtaken by best practice banks. The latter are more often found among large banks than among small ones, making it likely that large banks will gain market share.

To shed light on the possible effects of bank consolidation on SME lending, we derive from the survey outcomes whether (1) there is a relationship between bank size and SME lending in the European Union; (2) there is evidence that large banks have reduced their stock of SME credits in the past; (3) there is evidence that large banks expect to retreat from the SME credit segment in the future; and (4) whether banks of different types (commercial versus savings banks etc.) have different SME lending strategies (if yes, bank mergers and acquisitions between banks with different organisational/ownership structures could potentially affect the financing of small and medium-sized businesses).

Figure 12. Composition of the enterprise portfolio (across size classes) at end-2002, by bank size^a



^a Small and medium-sized bank = balance sheet total at end-2002 is smaller than EUR 10 billion.
Large bank = balance sheet total at end-2002 is larger than EUR 10 billion.

(1) Is there a relationship between bank size and SME lending in the European Union?

Figure 12 illustrates that small and medium-sized banks tend to lend, on average, more to SMEs and less to large firms in comparison to large banks.¹⁹ That said, the differences between bank size classes are relatively small and not at all comparable to the differences observed for the US market (see above). Indeed, on average, SME loans account for 66% of the firm credit portfolio of large banks, which is only a little less than the corresponding share of 72% for small and medium-sized banks.

¹⁸ See, among others, Schure, P., Wagenvoort, J.L.M. and O'Brien, D. (2004).

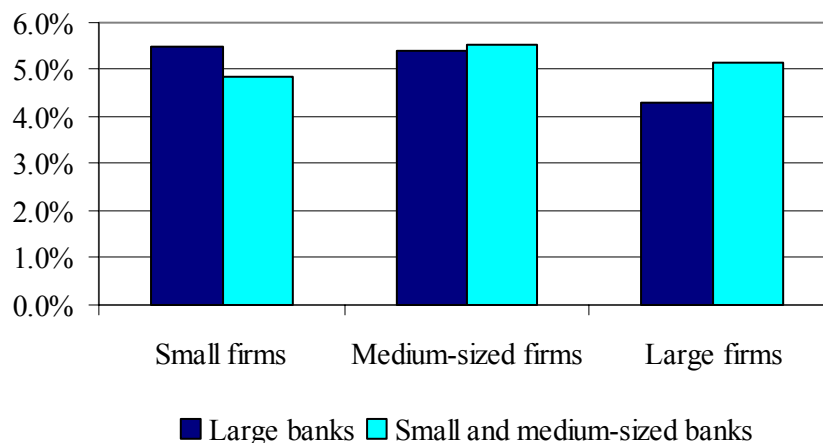
¹⁹ See Table 1 of section 2 and note (a) to Figure 12 for the used definition of bank size.

Thus, in contrast to the situation in the US, the survey results reveal for the European bank market only a very weak relationship between bank size and the share of the loan portfolio devoted to SME credits.

(2) Is there evidence that large banks have reduced their stock of outstanding SME credits in the past?

As Figure 13 shows, lending to SMEs in 2000-2002 followed broadly the same pattern for all bank sizes. There is no evidence that large banks have been playing a less important role in the financing of SMEs than small and medium-sized banks. On average, large banks actually increased small firm lending slightly faster than small and medium-sized banks. With respect to lending to medium-sized firms, we do not find significant differences between banks of different size. Somewhat surprising, we find that, on average, small and medium-sized banks have increased lending volumes to large firms slightly faster than large banks. Hence, the small differences in the composition (SMEs versus large firms) of the firm credit portfolios across bank size classes, which we have detected when answering the previous question, have shrunk over the past three years.

Figure 13. Average growth rate of the volume of outstanding credits to firms over the period 2000-2002, by bank size ^a and firm size class



^a Small and medium-sized bank = balance sheet total at end-2002 is smaller than EUR 10 billion.
 Large bank = balance sheet total at end-2002 is larger than EUR 10 billion.

(3) Is there evidence that large banks will retreat from the SME credit segment in the future?

Splitting Figure 8 of section 3 by bank size reveals that banks of all sizes have, on average, similar expectations about the expected change in the composition of their firm credit portfolio (across firm size classes) over the coming three years. We recall from the previous section that, overall, it is expected that the SME share in the total European banks' credit portfolio will remain the same.

(4) Do banks of different type (commercial versus savings banks etc.) have different strategies to SME lending?

Mergers and acquisitions in the European banking sector do not only create bigger credit institutions but may also involve changes to the legal entity, organisation, and the type of ownership structure of the merging institutions. For example, a commercial bank may acquire a co-operative bank and dismantle the co-operative ownership structure of its new subsidiary. In general, co-operative banks and savings banks are thought to be especially important for small business lending because of their knowledge of local credit markets. Suppose the commercial banking sector is less involved in SME financing than the savings banking sector. In this case, an acquisition of a savings bank by a commercial bank would harm SME financing if the commercial bank restructures the savings bank's assets along the commercial bank model. In practice, however, the distinction between bank types is blurred. But more important, is it really true that SME lending is less important for commercial banks than it is for co-operative banks and/or savings banks?

Figure 14. Composition of the enterprise portfolio (across size classes) at end-2002, by bank type

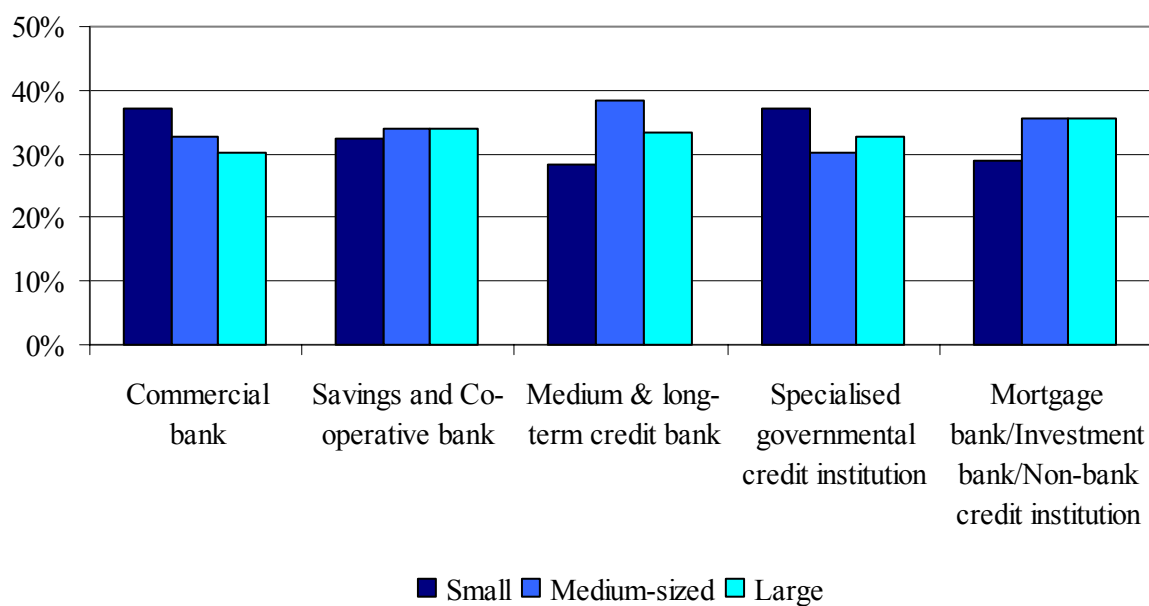


Figure 14 sheds light on this question. It shows that the survey outcomes does not support the view that savings banks and co-operative banks are more active than commercial banks in the SME credit segment. On the contrary, we find that, on average, commercial banks tend to assign a higher share of their enterprise loan portfolio to SMEs and a lower share to large firms in comparison to savings banks and cooperative banks. More specifically, on average, commercial banks lend 70% of their firm credit portfolio to SMEs whereas these businesses account for 66% of the portfolio of savings

and co-operative banks. In particular, commercial banks are more active in small firm lending whereas the differences between, on the one side, commercial banks and, on the other side, savings banks and co-operative banks are very small when it comes to lending to medium-sized firms. Regarding the other types of banks, Figure 14 shows the following: firstly, the share of small firms is relatively low for our group of mortgage banks/investment banks/non-bank credit institutions and the group of medium & long-term credit institutions; secondly, these patterns are not observed for medium-sized firms; roughly speaking, using portfolio composition as measure for lending priorities, banks of all types are equally involved in lending to medium-sized firms.

The evidence summarized in Figures 13 and 14 provides insights into the question of whether bank consolidation is bad for SME lending and, by extension, whether SMEs should fear or, on the contrary, perhaps embrace a European banking market that is likely to be increasingly dominated by large commercial banks. Overall, there is no evidence shining through the survey outcomes suggesting that bank consolidation in the EU has been or will be detrimental to the credit availability of SMEs. Firstly, survey results suggest that large European banks are involved in SME lending to a similar degree as small and medium-sized banks. So far, large banks have not reduced lending to SMEs, and bank managers of large institutions are not expecting to do so in the coming years. Secondly, a reallocation of European bank assets from savings banks and co-operatives to commercial banking does not necessarily harm the credit availability of SMEs. We shall leave it at that and move on to the pricing and profitability of bank loans across firm size classes.

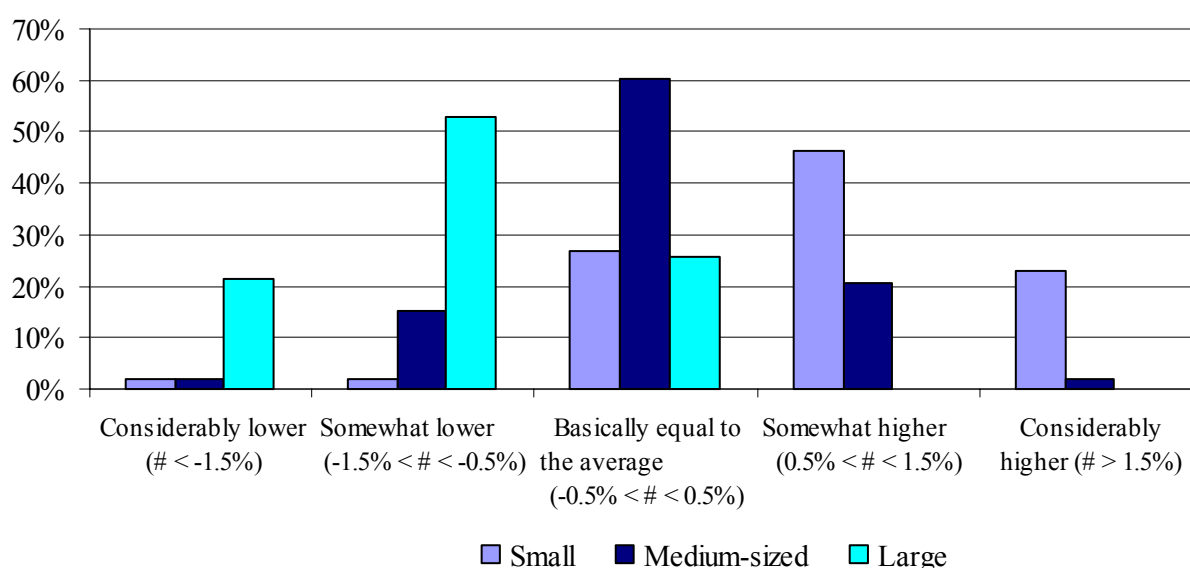
4.2 Pricing, profitability, and risk

The expected net return on a credit is equal to the expected payoff minus the costs of generating the loan. The expected payoff itself is a function of the price of the credit, the probability that the bank's client will honour the debt contract, and the recovery rate on the net present value of the loan if the borrower defaults. In the remainder of this section, we will discuss these factors against the backdrop of the strategic question: is lending to SMEs more or less profitable than lending to large firms?

To begin with the price of credit, Figure 15 shows to which extent the effective interest rate on credits, within a certain firm size class, deviates from the average interest rate over all size classes. We find a strong negative relationship between the price of credit and company size. Medium-sized firms pay the average interest rate. About 60% of the banks report that for this group of borrowers the interest rate deviates less than 50 basis points from the average interest rate; the other 40% of the respondents are almost symmetrically distributed around the outcome "basically equal to the average". In the case of large firms, the distribution of respondents is clearly skewed in the direction of lower than average interest rates. This is because 50% of the banks report that large firms pay between 50 and 150 basis points less than the average rate, and another 20% of the banks report that

large firms pay at least 150 basis points less than the average rate. None of the banks report that the effective interest rate on credits to large firms is higher than the average rate and only about 25% of the banks report that it is basically equal to the average. Now let us look at how much small firms pay. In contrast to large firms, according to 50% of the banks, small firms pay between 50 and 150 basis points more than the average rate; 20% of the banks reveal that the interest rate exceeds the average by more than 150 basis points. The share of respondents who indicate that small firms pay lower than average interest rates is smaller than 5%, and only about one out of four bankers asks small firms to pay the average rate. We derive from Figure 15 that, on average, small companies pay an interest rate that is at least 160 basis points above the rate paid by large firms. Medium-sized firms on average are charged at least 90 basis points more than large firms. Thus, large firms obtain credits at more favourable terms than SMEs.

Figure 15. Percentage of banks reporting that the interest rate on loans (of the respective size class) was in the specified range relative to the average interest rate (2000-2002)^a

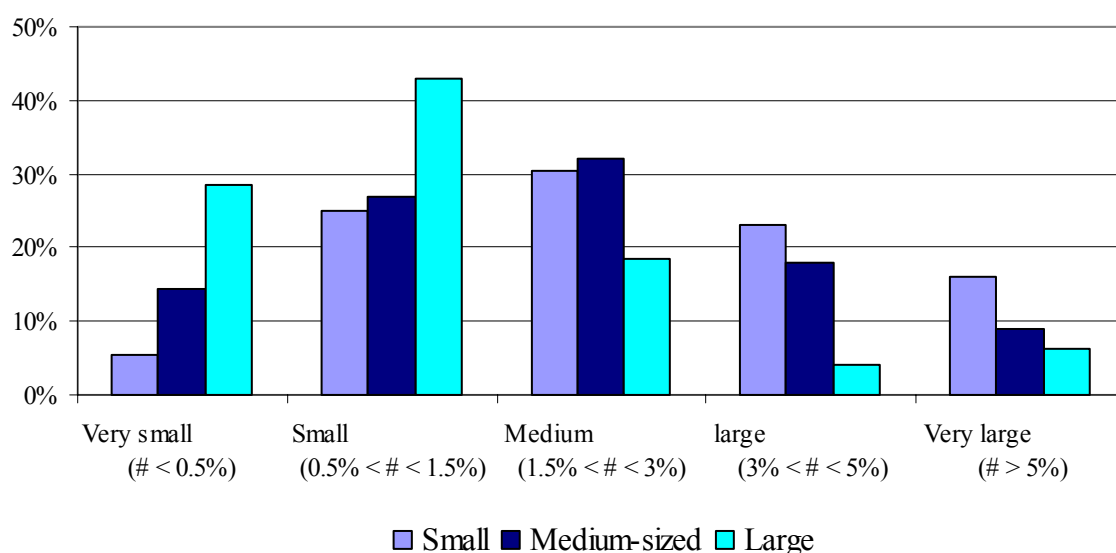


^a Comparison applies to the average interest rate for a particular firm size class relative to the average interest rate over all size classes; interest rates are effective interest rates, compounded annually. Figure 15 corresponds to Table Q.15 of Annex A2.

A remarkable finding of the survey is that prices of large company loans are much less differentiated than prices of loans to SMEs. In other words, on average, the effective interest rate varies relatively little between different large corporations. More specifically, about one-third of the bankers report that the difference between the lowest and the highest effective interest rate on small company loans is larger than 300 basis points (half of them actually charge an additional 500 basis points on the most expensive credits); one-third of the bankers report an interest differential between 150 basis points

and 300 basis points; for only one-third of the banks it is smaller than 150 basis points (see Figure 16). Compared to these figures, the interest differential on large company loans appears small since more than 70% of the respondents reveal that the variation in interest rates for these borrowers is smaller than 150 basis points. This implies that for a large majority of banks the risk profile of their large corporate clients is basically the same or, more likely, it could mean that these banks do not sufficiently differentiate prices.²⁰ A high level of competition in the market for large company credits limits the power of bank managers to set prices. Bankers may actually cross-subsidize credit products to large clients with the view that higher margins can be obtained on their other products, such as investment banking services, payment services, and insurances.

Figure 16. Difference between the smallest and the highest effective interest rate^a on credits to firms within each size class, at end-2002^b



^a The effective interest rate is the nominal rate compounded annually.

^b Figure 16 corresponds with Table Q.16 of Annex A2.

To elaborate on the substantial price difference between SME credits and large company credits, banks, in general, defend a higher risk premium on small business loans by arguing that expected default probabilities are negatively related to firm size. The risk premium explanation, however, is not as straightforward as it looks at first sight. It is true that on an individual basis smaller firms are riskier than larger firms.²¹ But it is also true that simply comparing small and large firms individually is inappropriate since credit risk can partially be diversified away for smaller firms. A well-diversified basket of many small borrowers could be less risky than a portfolio of the same size

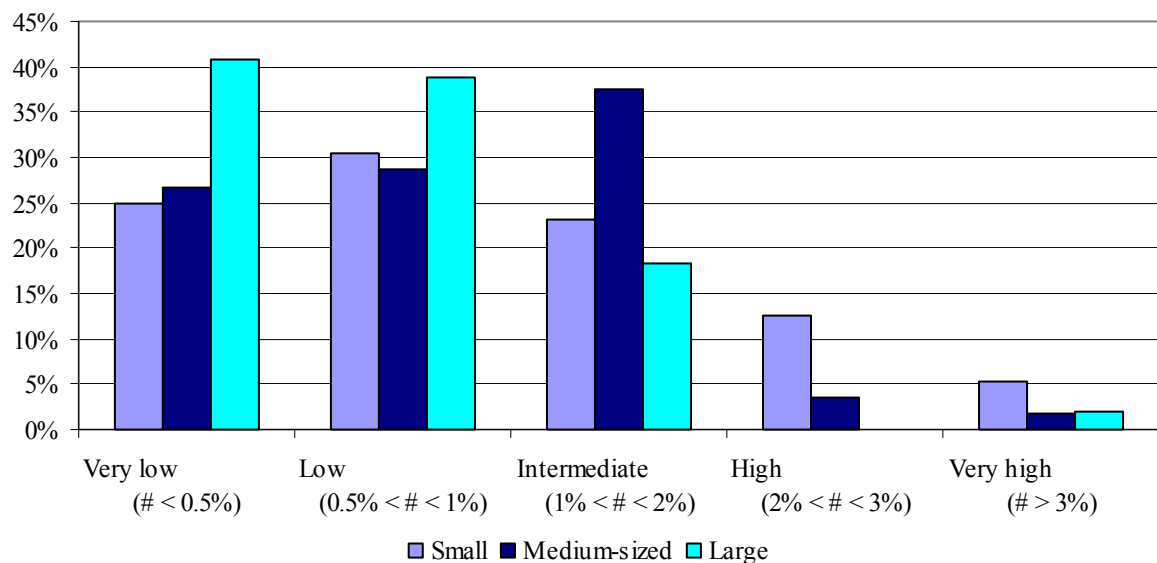
²⁰ For comparison, the spread between an AA-rated euro corporate bond and euro bonds rated BBB- or lower is potentially much higher than 150 basis points. For instance, at the beginning of this year the average difference between the yield on an AA-rated bond and a BB-rated bond was as high as 500 basis points.

²¹ See, among others, Dietsch (2003).

comprising loans to large customers. To investigate the riskiness of a portfolio of loans, the survey included a question on loan loss provisions, which is a concept of risk that is slightly broader than default probabilities. Loan loss provisioning in principle takes into account both the likelihood of default and the expected recovery rate.

Survey results reveal that the risk premium argument cannot provide the full explanation of our finding that SMEs pay on average substantially higher interest rates. There is empirical evidence that, on average, loan loss provisions are indeed lower for a portfolio of large firm credits in comparison to a portfolio of small firm credits. For large firms, about 80% of the banks report loan loss provisions that are smaller than 1% of the respective portfolio whereas for small firms only about 55% of the banks report loan loss provisions that are smaller than 1% of the respective portfolio (see Figure 17). We find that, on average, loan loss provisions are 34 (22) basis points higher on credits to small firms (medium-sized firms) in comparison to credits to large firms.

Figure 17. Expectations about the ratio of loan loss provision to the outstanding amount of firm credits in 2003, by size class^a



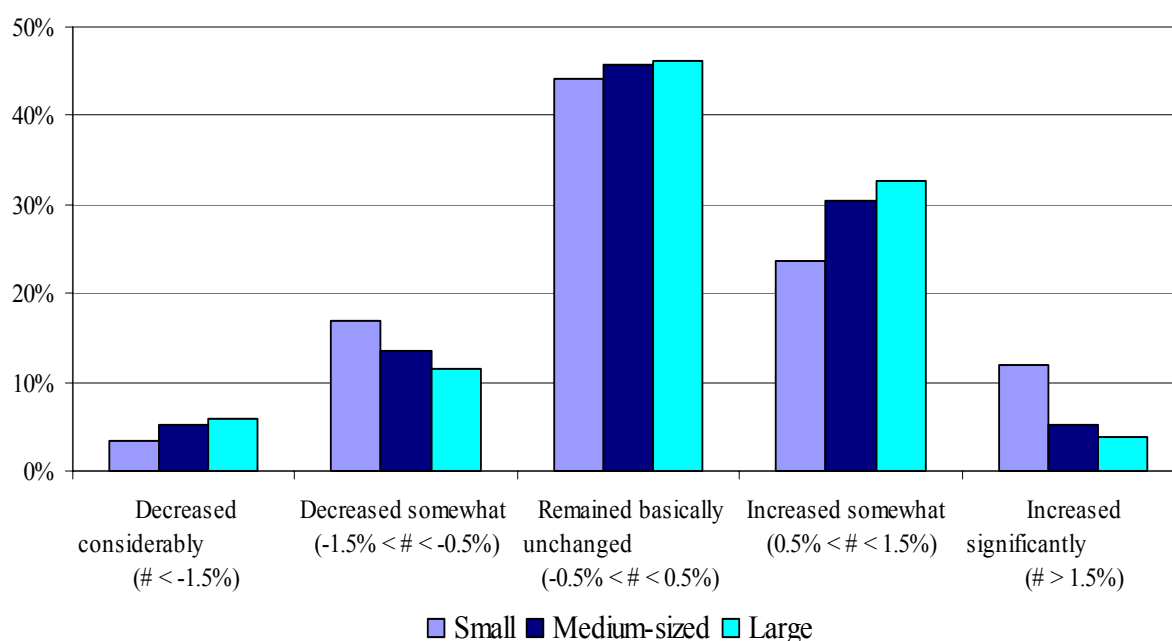
^a Figure 17 corresponds with Table Q.19 of Annex A2.

By combining Figure 15 and Figure 17 we find that, in comparison to large firm credits, the *ex post* risk adjusted return is, on average, 126 (=160-34) and 68 (=90-22) basis points higher on loans to small and medium-sized enterprises, respectively. Evidently, part of the higher margin on SME loans is needed to cover loan generation costs. It is indisputable that there are economies of scale in the production of credits. Screening, monitoring and administration costs, as a percentage of the loan amount, are decreasing with the size of the loan. The production of SME credits is thus more

expensive than the production of large company credits irrespective of credit risk. However, the difference in the risk-adjusted returns seems too large to be justified on the ground of loan generation costs only. Hence, SME lending seems more profitable than traditional bank lending to large corporations. This conclusion is consistent with the finding in section 3 that a low expected profit margin is the most important obstacle to large firm lending according to a large majority of bankers.

We now dig slightly deeper into the issues of profitability and risk of firm credits. Firstly, we evaluate in Figure 18 and Figure 19, which show developments in the average profit margin and loan loss provisions in 2000-2002 respectively, whether profit margins and credit risk on bank loans in the EU have changed in recent years. Secondly, keeping in mind that in some situations credit risk can be transferred to third parties, Figure 20 shows whether bankers believe that the securitization of SME loans will become more important in the near future.

Figure 18. Average development of the profit margin on firm credits over the period 2000-2002, by size class^a

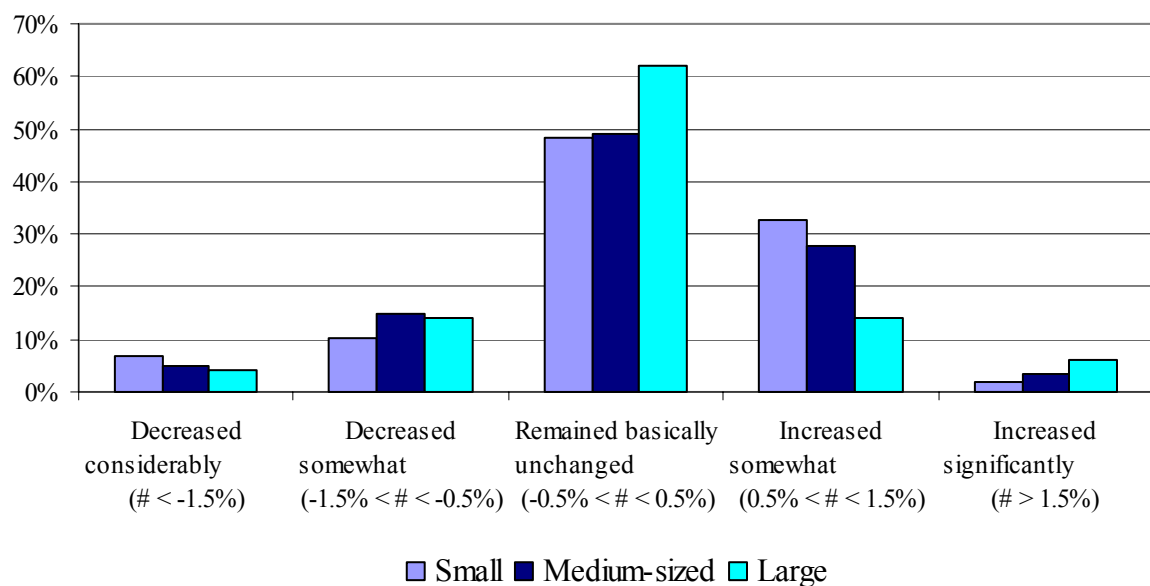


^a Figure 18 corresponds with Table Q.17 of Annex A2.

The distribution of Figure 18 is skewed to the right, indicating that, on average, the profit margin on firm credits has increased over the last three years. Estimates suggest an increase in the average profit margin of around 20 basis points. Furthermore, there are no important differences in the development of the profit margin between firm size classes. It is remarkable that profit margins on SME credits increased further because, on average, loan loss provisions on SME credits increased by some 10-15 basis points. Indeed, Figure 19 is skewed to the right for SMEs, but it is not for large firms. Thus, the

number of bankers who reported a decrease in loan loss provisions on large company credits is basically equal to the number of bankers who reported an increase in loan loss provisions on large company credits. It turns out that European banks so far have suffered relatively little from the downturn of the European economy. One reason for this could be that banks have transferred credit risk to third parties.

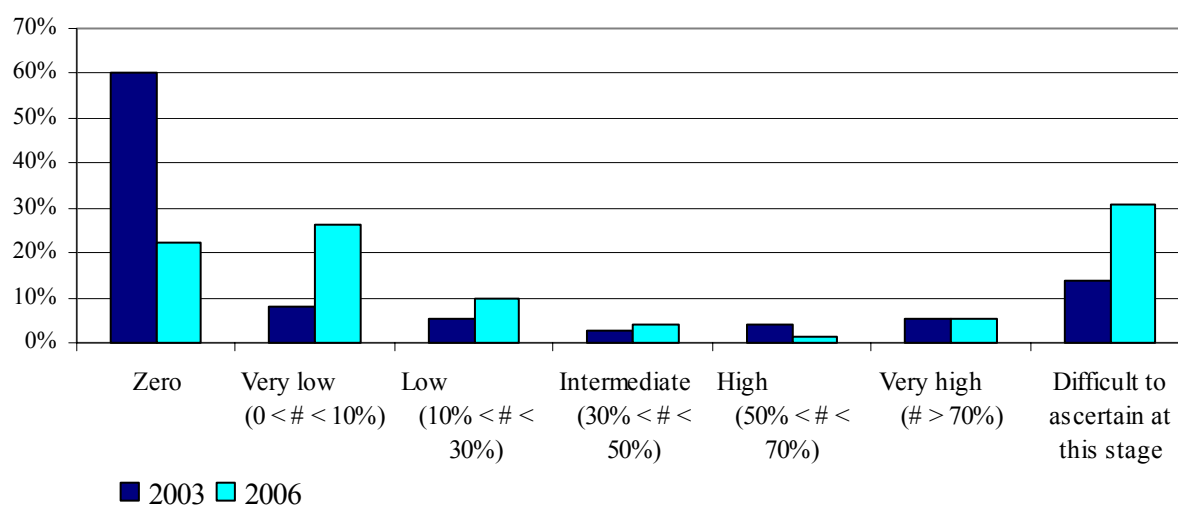
Figure 19. Average development of the ratio of loan loss provisions to the outstanding amount of firm credits over the period 2000-2002, by size class^a



^a Figure 19 corresponds with Table Q.18 of Annex A2.

As briefly argued above and indirectly shown in Figure 17, a substantial part of the credit risk on individual SME credits can be diversified by the construction of sufficiently large portfolios. The diversification premium is unlikely to reach its maximum at the level of individual bank portfolios. For one thing, because the pooling of bank credit portfolios may lead to a more balanced credit risk exposure over different regions and/or industries. Therefore, it seems that individual banks may reap economic benefits from transferring (part of) the credit risk to third parties, such as insurance companies and other investors on the capital markets, who may construct highly diversified investment portfolios. Securitization of bank credits is one way of transferring risk. In general, securitization is also a way for banks to free some of their regulatory capital. Against this background, are banks expecting to securitize SME loans on a large scale across the EU?

Figure 20. Expectations about the share of the SME loan portfolio that will be securitized^a



^a Figure 20 corresponds with Table Q.20 of Annex A2.

Figure 20 shows bankers' expectations about the share of the SME loan portfolio expected to be securitized in 2003 and by end-2006. More than 60% of the respondents expect that no securitization at all will be done in 2003. For 2006, this percentage drops to about 20%. Thus, an increasing number of bankers consider to securitize part of the SME loan portfolio. That said, the expected scale on which securitization may take place, as measured by the share of the loan portfolio, remains very limited. That it will be less than 10% of the 2006 loan portfolio is the most frequent answer. On average, the share of securitized SME credits is expected to increase from 10% in 2003 to only 14% in 2006. We conclude that bankers do not expect that securitization of SME credits will happen on a large scale in the near future. To find out what are the main barriers to securitization is an interesting topic for future research.

4.3 Conclusion

To summarize the main findings of section 4 on bank consolidation and the performance of firm credits, we find that the prospects of SME bank lending are good.

Firstly, it is likely that the consolidation of the European banking sector will continue with the acquisition and restructuring of inefficient credit institutions. This may lead to a change in both the size and the type of the merging banks. In general, it is expected that in the future a larger share of total European bank assets will be controlled by large commercial banks. Our survey outcomes show that, although large banks still lend less to SMEs than small and medium-sized banks, the gap is relatively small and narrowing. Concerning the type of bank, we find that, in contrast to conventional wisdom, commercial banks are more involved in SME lending than savings banks and co-operative banks. More precisely, the share of loans to small firms in a typical commercial bank's credit

portfolio is higher than the share of small business credits in a portfolio of a typical savings bank or co-operative bank, and for medium-sized firms no significant differences are found. Hence, bank consolidation does not necessarily harm SME lending.

Secondly, our analysis of credit performance across firm size classes hints at relatively high risk-adjusted profit margins on SME loans in comparison to the returns on large firm credits. In such an environment bankers should prefer SME credits to large-company loans. Prices of credit are relatively low and little differentiated for large companies due to the force of competition, which is coming from both peer credit institutions and capital markets. *Dis*-intermediation is less likely to affect SME credits since banks often have a comparative advantage over financial markets when it comes to small firm lending due to their valuable relationships with small business clients and their knowledge of the local credit market. Nevertheless, substantial economic benefits may be reaped from diversifying credit risk on small business loans via global capital markets. As a consequence, an increasing number of bankers consider to securitize part of the SME loan portfolio.

5. Summary and conclusions

In the summer of 2003, the European Investment Bank carried out a survey among credit institutions in the EU with a view to charting recent developments of and prospects for SME bank lending. An in-depth analysis of the survey responses of 74 participating banks, of which 31 are EIB global loan intermediaries, leads to the conclusions that in recent years bank lending to SMEs has grown substantially and more rapidly than lending to large firms (main finding of section 3) and that the transformation of European banking sectors is likely to foster bank lending to small and medium-sized businesses in the near future (main finding of section 4). In what follows, we will briefly summarize the main arguments and empirical evidence.

It is often claimed that SMEs in the EU generally suffer from a credit crunch, a situation made worse by the recent economic downturn. The bank survey results clearly reject such a hypothesis. On average, access to bank lending was not restricted for SMEs, neither to the credit market in general nor to specific segments such as leasing products. Overall, credit growth has been substantial and SMEs have actually slightly increased their share in the total enterprise loan portfolio of European banks. The downturn in the European economy itself is thus not triggered by a sudden contraction in the supply of bank credit. Expansion of firm credit portfolios is expected to slow down in the year 2003 across all size classes but most strongly for large firms. Furthermore, we observe that bankers expect a slight increase in unused credit lines in 2003. Obviously, this makes it difficult to argue that

companies are credit constrained. We thus conclude that credit rationing is not a widely spread macroeconomic phenomenon in the EU.

Regional differences in the EU are important to a certain extent. For instance, bank lending to SMEs has grown faster in the Mediterranean countries than in Austria and Germany. One should bear in mind, however, that the Austrian and German *Mittelstand* companies appear over-indebted in comparison to their peers in other European countries. It should thus not come as a surprise that credit expansion is limited for the *Mittelstand*.

According to bankers, the main obstacle to SME lending is a low equity base, in comparison to company risk and available collateral. If a lack of equity is the main finance constraint, additional debt does not seem to be the appropriate recipe to solve for financial market imperfections. Public policy in support of SMEs needs to be designed in such a way that relief is offered where finance constraints are most binding.

Structural changes in European banking, such as the introduction of new technologies, legislation and the single currency, require that bank managers adjust their strategies. For that reason there has been a wave of mergers and acquisitions. Bank consolidation may lead to a change in both the size and the type of the merging banks. In general, it is expected that in the future a larger share of total European bank assets will be controlled by large commercial banks. Our survey outcomes show that large EU banks lend only slightly less (in percent of their firm credit portfolio) to the group of SMEs than small and medium-sized banks. Moreover, this difference between small and medium-sized banks on the one side and large banks on the other side has shrunk over the past three years. Thus, there are no signs that large banks are retreating from the SME credit segment. Furthermore, survey results indicate that commercial banks assign a higher share of their credit portfolio to small firms than savings banks and co-operative banks. Therefore, we conclude that there is no evidence that bank consolidation is necessarily harmful for SME lending.

We believe that the prospects for SME bank lending are good. The main reason for this is that the SME loan market is an area where banks still have a comparative advantage over financial markets due to asymmetry of information between lenders and borrowers. In such an environment relationship banking may create value. Information problems are less relevant for the financing of large corporations as shown by our survey results. As a consequence, large corporations may tap capital markets, and often do so at more favourable conditions than can be offered on bank credits.

Despite the fact that bankers expect a new Basel capital accord to make lending to large firms relatively more attractive than lending to SMEs, there is no empirical evidence shining through the

survey outcomes showing that banks are planning to reduce the share of SME loans in their loan book in the future. One reason for this result is that the market for large company credits is highly competitive and, as a consequence, profit margins are relatively low. On the other hand, the SME credit market remains attractive.

Bankers report that the main problem with bank credits to large firms is low expected profitability. Prices of credit are relatively low and little differentiated for large companies due to the force of competition, which is coming from both peer credit institutions and capital markets. We find that, on average, the effective interest rate on loans to small (medium-sized) firms is 160 (90) basis points higher than on loans to large firms. Credit risk alone cannot explain these differences since, on average, loan loss provisions are only 34 (22) basis points higher on credits to small firms (medium-sized firms) in comparison to credits to large firms. If one is willing to accept that loan generation costs cannot fully explain the observed difference in risk-adjusted returns between firm size classes, one comes to the conclusion that SME lending is more profitable than traditional bank lending to large corporations.

Rather surprising, survey outcomes reveal that profit margins, on average, have improved by about 20 basis points on firm credits across all size classes despite the downturn of the economy. The transfer of credit risk, to insurance companies for instance, is one of the reasons why banks have been relatively immune to deteriorating economic conditions. Securitization of bank credits is one way of reaching such a risk transfer. Four out of five respondents expect to securitize part of the SME loan portfolio in the future compared to only two out of five today. However, bankers' expectations are that securitization will only take place on a very limited scale, covering on average less than 15% of the portfolio of small and medium-sized business loans.

Annex A1 List of participating credit institutions

Table A1.1 List of participating credit institutions^a

Name	Location
A/S Arbejdernes Landsbank	DENMARK
AIB Bank	IRELAND
ALM Brand Bank	DENMARK
Alpha Bank AE	GREECE
AXA Bank Belgium n.v.	BELGIUM
Banca Agricola Mantovana S.P.A.	ITALY
Banca Delle Marche SpA	ITALY
Banca Medio Credito SpA	ITALY
Banca Popolare dell'Emilia Romagna SCARL	ITALY
Banca Popolare di Lodi	ITALY
Banca Popolare di Sondrio	ITALY
Banco BPI, SA	PORTUGAL
Banco di Brescia SpA	ITALY
Banco di Sardegna	ITALY
Banco Espírito Santo, S.A.	PORTUGAL
Banco Internacional de Crédito	PORTUGAL
Bank of Scotland (Ireland) Limited	IRELAND
Banque Generale du Luxembourg	LUXEMBOURG
Barclays Bank	UNITED KINGDOM
BAWAG	AUSTRIA
Caixa Geral de Depósitos	PORTUGAL
Caixa Sabadell	SPAIN
Caja de Ahorros de Vigo, Ourense e Pontevedra - Caixanova	SPAIN
Caja de Ahorros y Monte de Piedad de Gipuzkoa y San Sebastian - Kutxa	SPAIN
Caja Duero	SPAIN
Cassa di Risparmio di Padova e Rovigo SPA	ITALY
Crédit Coopératif	FRANCE
Credit Sofider	ILE DE LA REUNION
Danish Ship Finance	DENMARK
Deutsche Bank AG	GERMANY
Deutsche Bank SAE (Spain)	SPAIN
Deutsche Bank SPA	ITALY
Deutsche Postbank AG	GERMANY
Dexia Credit Local	FRANCE
EFIBANCA S.P.A.	ITALY
Erste Bank der Oesterreichischen Sparkassen AG	AUSTRIA
EURAL N.V.	BELGIUM
FIH	DENMARK
Finibanco	PORTUGAL
FINNVERA PLC	FINLAND
Frankfurter Sparkasse 1822	GERMANY
GE Capital Bank GMBH	AUSTRIA
Grupo Santander	SPAIN
Hamburger Sparkasse AG	GERMANY
Hypo Alpe-Adria-Bank AG	AUSTRIA
Institut Català de Finances	SPAIN
Instituto de Credito Oficial (ICO)	SPAIN
Interbanca SpA	ITALY
Investkredit Bank AG	AUSTRIA

KBC Bank NV	BELGIUM
Laiki Bank (Hellas) S.A.	GREECE
Landesbank Saar	GERMANY
Mercator Bank	BELGIUM
MPS Merchant S.P.A.	ITALY
National Bank of Greece S.A.	GREECE
Nideroosterreichische Landesbank-Hypothekenbank AG-Nö Hypo-Bank Nord/LB	AUSTRIA
Nordea Bank Danmark A/S	GERMANY
NORDEA Bank Sweden	DENMARK
Nordea Kredit Realkreditaktieselskab	SWEDEN
OKO Bank-OKO Osuuspankkien Keskuspankki Oyj	DENMARK
Österreichische Hotel- und Tourismusbank GmbH	FINLAND
Piraeus Bank	AUSTRIA
Raiffeisenlandesbank Niederösterreich-Wien AG	GREECE
Raiffeisenlandesbank Oberösterreich	AUSTRIA
Raiffeisenlandesbank Steiermark	AUSTRIA
RCI Banque	AUSTRIA
Ringkjøbing Landbobank (DK)	FRANCE
Sachsen LB	DENMARK
SNS Bank NV	GERMANY
Spar Nord Bank A/S	NETHERLANDS
Swedish Export Credit Corporation (SEK)	DENMARK
Sydbank	SWEDEN
Venantius AB (publ)	DENMARK
Vorarlberger Volksbank reg. Gen mbH	SWEDEN
	AUSTRIA

^aFrom 75 credit institutions, who reported that they would participate, we received 73 questionnaires. One Belgium bank returned the questionnaire but did not reveal its name. The total number of completed questionnaires is thus equal to 74.

Annex A2 Survey results (average response)

Notes:

Table Q.1 – Table Q.22 correspond to questions Q.1 – Q.22 of the survey respectively.

The “number of respondents” in the tables of Annex A2 shows the number of credit institutions out of 74 participants that have chosen the respective outcome.

The “share of total number of respondents” below is equal to the share of respondents who have crossed the respective outcome. The sum of these percentages (over the possible outcomes) does not necessarily add up to 100 as respondents may cross more than one possible outcome.

The “normalised share” below adds up to 100 over the possible choices and is calculated as follows: For each respondent answers are scaled by the total number of outcomes crossed by that respondent at the respective question. For example, a respondent who reveals that her credit institution is both a commercial bank and an investment bank will be assigned 0.5 to the outcome “commercial bank” and 0.5 to the outcome “investment bank”. The denominator (the total number of respondents) in the calculation of “normalised share” is thus fixed at 74. Results are rounded to integers.

The outcome “relevant information is not available” may also include “no answer” (none of the outcomes was chosen), “no logic answer” (for instance when the sum of chosen shares explaining the portfolio composition exceeds 100) or “not applicable” (for instance, when respondents left a question unanswered for one size class of companies because possibly their credit institution does not lend to these enterprises).

In this survey small enterprises are firms with an annual turnover of less than EUR 5 million. Medium-sized enterprises are firms with an annual turnover between EUR 5 million and EUR 50 million. Large enterprises are firms with an annual turnover of more than EUR 50 million.

Table Q. 1 Type of credit institution

	Number of respondents	Share in total number of respondents	Normalised share
Commercial bank	44	59%	55%
Savings bank	11	15%	12%
Co-operative bank	7	9%	9%
Mortgage bank	3	4%	2%
Investment bank	5	7%	3%
Medium & long-term credit bank	8	11%	9%
Specialised governmental credit institution	7	9%	9%
Non-bank credit institution	1	1%	1%
			100%

Table Q.2 Location of credit institution

	Number of respondents	Share in total number of respondents	Normalised share
Austria	11	15%	14%
Belgium	5	7%	7%
Denmark	9	12%	12%
Finland	2	3%	3%
France	4	5%	4%
Germany	7	9%	8%
Greece	4	5%	5%
Ireland	3	4%	3%
Italy	14	19%	17%
Luxembourg	1	1%	1%
Netherlands	1	1%	1%
Portugal	6	8%	7%
Spain	8	11%	10%
Sweden	5	7%	6%
United Kingdom	2	3%	2%
			100%

Table Q.3 Size of credit institution^a

	Number of respondents	Share in total number of respondents
Very small (# < EUR 500 m)	1	1%
Small (EUR 500 m ≤ # < EUR 1 bn)	5	7%
Medium (EUR 1 bn ≤ # < EUR 10 bn)	29	39%
Large (EUR 10 bn ≤ # < EUR 100 bn)	31	42%
Very large (EUR 100bn ≤ #)	8	11%
Total	74	100%

^a As measured by the bank's balance sheet total at end-2002.

Table Q.4 Average annual change in the volume of outstanding credits over the period 2000-2002

	Total (to consumers, firms etc.)		To enterprises	
	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents
Change per annum in per cent				
Increased rapidly ($\# \geq 10\%$)	31	42%	23	31%
Increased moderately ($5\% \leq \# < 10\%$)	18	24%	23	31%
Increased somewhat ($1\% \leq \# < 5\%$)	9	12%	16	22%
Remained basically unchanged	3	4%	3	4%
Decreased somewhat ($-5\% < \# \leq -1\%$)	4	5%	2	3%
Decreased moderately ($-10\% < \# \leq -5\%$)	2	3%	2	3%
Decreased rapidly ($\# \leq -10\%$)	1	1%	3	4%
Relevant information is not available	6	8%	2	3%
Total	74	100%	74	100%

Table Q.5 Average annual change in the volume of outstanding credits to firms over the period 2000-2002, by size class

	Small firms		Medium-sized firms		Large firms	
	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents
Change per annum in per cent						
Increased rapidly ($\# \geq 10\%$)	23	31%	19	26%	14	19%
Increased moderately ($5\% \leq \# < 10\%$)	14	19%	19	26%	17	23%
Increased somewhat ($1\% \leq \# < 5\%$)	12	16%	13	18%	10	14%
Remained basically unchanged	10	14%	7	9%	7	9%
Decreased somewhat ($-5\% < \# \leq -1\%$)	3	4%	3	4%	3	4%
Decreased moderately ($-10\% < \# \leq -5\%$)	2	3%	1	1%	3	4%
Decreased rapidly ($\# \leq -10\%$)	1	1%	1	1%	1	1%
Relevant information is not available	9	12%	11	15%	19	26%
Total	74	100%	74	100%	74	100%

Table Q.6 Number and share of responding banks for which small, medium-sized, and large enterprise lending (in % of the total enterprise loan portfolio) fell in the specified range at end-2002

Share in per cent	Small firms		Medium-sized firms		Large firms	
	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents
Very low (# < 10%)	7	9%	2	3%	11	15%
Low (10% ≤ # < 20%)	9	12%	8	11%	10	14%
Low-intermediate (20% ≤ # < 30%)	9	12%	14	19%	5	7%
Intermediate (30% ≤ # < 40%)	7	9%	19	26%	5	7%
High-intermediate (40% ≤ # < 50%)	5	7%	6	8%	8	11%
High (50% ≤ # < 60%)	6	8%	2	3%	6	8%
Very high (# ≥ 60%)	11	15%	2	3%	4	5%
Relevant information is not available	20	27%	21	28%	25	34%
Total	74	100%	74	100%	74	100%

Table Q.7 Number and share of responding banks for which the share of long-term loans (initial maturity exceeding 1 year) in total loans to firms was in the specified range at end-2002.

Share of long-term loans in total (in %)	Small firms		Medium-sized firms		Large firms	
	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents
Very low (# < 10%)	3	4%	2	3%	5	7%
Low (10% ≤ # < 20%)	8	11%	7	9%	8	11%
Low-intermediate (20% ≤ # < 30%)	5	7%	8	11%	6	8%
Intermediate (30% ≤ # < 40%)	7	9%	7	9%	4	5%
High-intermediate (40% ≤ # < 50%)	1	1%	4	5%	3	4%
High (50% ≤ # < 60%)	7	9%	4	5%	2	3%
Very high (# ≥ 60%)	22	30%	19	26%	17	23%
Relevant information is not available	21	28%	23	31%	29	39%
Total	74	100%	74	100%	74	100%

Table Q.8 Average annual change in the volume of leasing contracts over the period 2000-2002, by size class

Change per annum in per cent	Small firms		Medium-sized firms		Large firms	
	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents
Increased rapidly (# ≥ 10%)	16	22%	19	26%	13	18%
Increased moderately (5% ≤ # < 10%)	7	9%	8	11%	7	9%
Increased somewhat (1% ≤ # < 5%)	2	3%	2	3%	4	5%
Remained basically unchanged	4	5%	4	5%	5	7%
Decreased somewhat (-5% < # ≤ -1%)	3	4%	3	4%	0	0%
Decreased moderately (-10% < # ≤ -5%)	5	7%	3	4%	2	3%
Decreased rapidly (# ≤ -10%)	1	1%	1	1%	3	4%
Not applicable	19	26%	17	23%	18	24%
Relevant information is not available	17	22%	17	23%	22	29%
Total	74	100%	74	100%	74	100%

Table Q.9 The total volume of leasing as a percentage of the total volume of outstanding credits to firms (of the respective size class), at end-2002

Share in per cent	Small firms		Medium-sized firms		Large firms	
	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents
Zero	22	30%	18	24%	19	26%
Very low (# < 10%)	26	35%	29	39%	27	36%
Low (10% ≤ # < 20%)	7	9%	6	8%	3	4%
Intermediate (20% ≤ # < 30%)	4	5%	4	5%	1	1%
High (30% ≤ # < 40%)	1	1%	1	1%	1	1%
Very high (# ≥ 40%)	2	3%	2	3%	2	3%
Relevant information is not available	12	16%	14	19%	21	28%
Total	74	100%	74	100%	74	100%

Table Q.10 Expectations about the development of the volume of outstanding credits to firms in 2003, by size class

Change per annum in per cent	Small firms		Medium-sized firms		Large firms	
	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents
Increased rapidly (# ≥ 10%)	21	28%	15	20%	9	12%
Increased moderately (5% ≤ # < 10%)	12	16%	18	24%	13	18%
Increased somewhat (1% ≤ # < 5%)	14	19%	14	19%	13	18%
Remained basically unchanged	12	16%	14	19%	17	23%
Decreased somewhat (-5% < # ≤ -1%)	6	8%	5	7%	5	7%
Decreased moderately (-10% < # ≤ -5%)	2	3%	2	3%	4	5%
Decreased rapidly (# ≤ -10%)	1	1%	1	1%	1	1%
Relevant information is not available	6	8%	5	7%	12	16%
Total	74	100%	74	100%	74	100%

Table Q.11 Expectations about the development of the volume of unused credit lines to firms in 2003, by size class

Change per annum in per cent	Small firms		Medium-sized firms		Large firms	
	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents
Increased rapidly (# ≥ 10%)	4	5%	3	4%	4	5%
Increased moderately (5% ≤ # < 10%)	9	12%	10	14%	9	12%
Increased somewhat (1% ≤ # < 5%)	8	11%	8	11%	8	11%
Remained basically unchanged	33	45%	32	43%	31	42%
Decreased somewhat (-5% < # ≤ -1%)	7	9%	7	9%	4	5%
Decreased moderately (-10% < # ≤ -5%)	1	1%	1	1%	1	1%
Decreased rapidly (# ≤ -10%)	0	0%	2	3%	1	1%
Relevant information is not available	12	16%	11	15%	16	22%
Total	74	100%	74	100%	74	100%

Table Q.12 Main reasons for the current development of bank lending to firms, by size class

	Small firms		Medium-sized firms		Large firms	
	Share in total number of respondents	Normalised share	Share in total number of respondents	Normalised share	Share in total number of respondents	Normalised share
Lower						
Demand for credit	11%	5%	16%	7%	16%	6%
Expected profitability of credit	15%	5%	14%	5%	16%	6%
Credit risk on loans	12%	4%	15%	5%	12%	5%
Constraints on the bank's balance sheet ^a	7%	2%	12%	3%	15%	5%
Competition in the credit market ^b	18%	5%	8%	3%	1%	0%
Competition from market financing	7%	3%	1%	0%	3%	1%
Higher						
Demand for credit	53%	23%	50%	25%	38%	20%
Expected profitability of credit	26%	10%	23%	10%	15%	5%
Credit risk on loans	27%	9%	20%	7%	14%	5%
Constraints on the bank's balance sheet ^a	16%	4%	11%	3%	11%	3%
Competition in the credit market ^b	26%	8%	30%	11%	31%	11%
Competition from market financing	9%	2%	11%	3%	16%	5%
Other factors ^c	8%	6%	5%	4%	3%	2%
Relevant information is not available	13%	13%	15%	15%	25%	25%
Total		100%		100%		100%

^a Due to capital requirements, liquidity position etc.

^b From banks and non-banks.

^c Other factors mentioned: "A government sponsored loan scheme has stopped", "The company's assignment is to return the loan commitments to the regular credit market", "a difficult macroeconomic environment, problems with public deficit and low public investment" and "low interest rate".

Table Q.13 Number and share of responding banks expecting small, medium-sized, and large enterprise lending (in % of the total enterprise loan portfolio) to fall in the specified range at end-2006

Share in per cent	Small firms		Medium-sized firms		Large firms	
	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents
Very low (# < 10%)	7	9%	1	1%	11	15%
Low (10% ≤ # < 20%)	6	8%	6	8%	7	9%
Low-intermediate (20% ≤ # < 30%)	8	11%	10	14%	5	7%
Intermediate (30% ≤ # < 40%)	8	11%	18	24%	6	8%
High-intermediate (40% ≤ # < 50%)	4	5%	8	11%	5	7%
High (50% ≤ # < 60%)	7	9%	3	4%	5	7%
Very high (# ≥ 60%)	7	9%	1	1%	4	5%
Difficult to ascertain at this stage	12	16%	13	18%	12	16%
Relevant information is not available	15	20%	14	18%	19	25%
Total	74	100%	74	100%	74	100%

Table A2.1 Expected change in the composition of the enterprise loan portfolio over the period 2004-2006, by size class

Change in percentage points	Small firms		Medium-sized firms		Large firms	
	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents
Decrease rapidly (# < -20%)	0	0%	1	1%	0	0%
Decrease moderately (-20% ≤ # < -10%)	3	4%	0	0%	1	1%
Decrease somewhat (-10% ≤ # < 0%)	7	9%	1	1%	2	3%
Remain unchanged	26	35%	34	46%	32	43%
Increase somewhat (0% < # ≤ 10%)	8	11%	7	9%	4	5%
Increase moderately (10% < # ≤ 20%)	1	1%	1	1%	1	1%
Increase rapidly (20% < #)	0	0%	0	0%	0	0%
Difficult to ascertain at this stage	6	8%	6	8%	6	8%
Relevant information is not available	23	32%	24	33%	28	39%
Total	74	100%	74	100%	74	100%

Table Q.14 Main reasons for the future development of bank lending to firms, by size class

	Small firms		Medium-sized firms		Large firms	
	Share in total number of respondents	Normalised share	Share in total number of respondents	Normalised share	Share in total number of respondents	Normalised share
Lower						
Demand for credit	4%	1%	4%	1%	9%	4%
Expected profitability of credit	8%	4%	9%	4%	11%	4%
Credit risk on loans	9%	3%	9%	4%	15%	5%
Constraints on the bank's balance sheet ^a	5%	3%	5%	2%	8%	3%
Competition in the credit market ^b	9%	4%	4%	2%	3%	2%
Competition from market financing	7%	2%	7%	2%	4%	2%
Higher						
Demand for credit	51%	23%	47%	23%	28%	14%
Expected profitability of credit	22%	8%	22%	8%	14%	5%
Credit risk on loans	14%	5%	16%	8%	8%	2%
Constraints on the bank's balance sheet ^a	16%	6%	14%	5%	15%	8%
Competition in the credit market ^b	18%	6%	16%	5%	16%	6%
Competition from market financing	8%	3%	11%	4%	16%	5%
Other factors ^c	1%	1%	0%	0%	0%	0%
Relevant information is not available	31%	31%	33%	33%	40%	40%
Total		100%		100%		100%

^a Due to capital requirements, liquidity position etc.

^b From banks and non-banks.

^c Other factors mentioned: "The company's assignment is to return the loan commitments to the regular credit market."

Table Q.15 Number and share of banks reporting that the interest rate on loans (of the respective size class) was in the specified range relative to the average interest rate (2000-2002)^a

	Small firms		Medium-sized firms		Large firms	
	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents
In percentage points						
Considerably lower (# < -1.5%)	1	1%	1	1%	11	15%
Somewhat lower (-1.5% < # ≤ -0.5%)	1	1%	8	11%	27	36%
Basically equal to the average lending rate	14	19%	32	43%	13	18%
Somewhat higher (0.5% < # ≤ 1.5%)	24	32%	11	15%	0	0%
Considerably higher (# > 1.5%)	12	16%	1	1%	0	0%
Relevant information is not available	22	29%	21	28%	23	31%
Total	74	100%	74	100%	74	100%

^a Comparison applies to the average interest rate for a particular firm size class relative to the average interest rate over all size classes; interest rates are effective interest rates, compounded annually.

Table Q.16 Difference between the smallest and the highest effective interest rate on credits to firms within each size class, at end-2002

	Small firms		Medium-sized firms		Large firms	
	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents
In percentage points						
Very small (# < 0.5%)	3	4%	8	11%	14	19%
Small (0.5% ≤ # < 1.5%)	14	19%	15	20%	21	28%
Medium (1.5% ≤ # < 3%)	17	23%	18	24%	9	12%
Large (3% ≤ # < 5%)	13	18%	10	14%	2	3%
Very large (# > 5%)	9	12%	5	7%	3	4%
Relevant information is not available	18	24%	18	24%		34%
Total	74	100%	74	100%	74	100%

Table Q.17 Average development of the profit margin on firm credits over the period 2000-2002, by size class

	Small firms		Medium-sized firms		Large firms	
	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents
In percentage points						
Decreased considerably (# < -1.5%)	2	3%	3	4%	3	4%
Decreased somewhat (-1.5% ≤ # < -0.5%)	10	14%	8	11%	6	8%
Remained basically unchanged	26	35%	27	36%	24	32%
Increased somewhat (0.5% < # ≤ 1.5%)	14	19%	18	24%	17	23%
Increased considerably (# > 1.5%)	7	9%	3	4%	2	3%
Relevant information is not available	15	20%	15	20%	22	30%
Total	74	100%	74	100%	74	100%

Table Q.18 Average development of the ratio of loan loss provisions to the outstanding amount of firm credits over the period 2000-2002, by size class

	Small firms		Medium-sized firms		Large firms	
	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents
In percentage points						
Decreased considerably (# < -1.5%)	4	5%	3	4%	2	3%
Decreased somewhat (-1.5% ≤ # < -0.5%)	6	8%	9	12%	7	9%
Remained basically unchanged	28	38%	30	41%	31	42%
Increased somewhat (0.5% < # ≤ 1.5%)	19	26%	17	23%	7	9%
Increased considerably (# > 1.5%)	1	1%	2	3%	3	4%
Relevant information is not available	16	21%	13	18%	24	33%
Total	74	100%	74	100%	74	100%

Table Q.19 Expectations about the level of the ratio of loan loss provision to the outstanding amount of firm credits in 2003, by size class

	Small firms		Medium-sized firm		Large firm	
	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents
In per cent						
Very low (# < 0.5%)	14	19%	15	20%	20	27%
Low (0.5% ≤ # < 1%)	17	23%	16	22%	19	26%
Intermediate (1% ≤ # < 2%)	13	18%	21	28%	9	12%
High (2% ≤ # < 3%)	7	9%	2	3%	0	0%
Very high (# > 3%)	3	4%	1	1%	1	1%
Difficult to ascertain at this stage	13	18%	13	18%	12	16%
Relevant information is not available	7	9%	6	8%	13	18%
Total	74	100%	74	100%	74	100%

Table Q.20 Expectations about the share of the SME loan portfolio that will be securitized

	By the end of the year 2003		By the end of the year 2006	
	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents
In per cent				
Zero	44	59%	16	22%
Very low (# < 10%)	6	8%	19	26%
Low (10% ≤ # < 30%)	4	5%	7	9%
Intermediate (30% ≤ # < 50%)	2	3%	3	4%
High (50% ≤ # < 70%)	3	4%	1	1%
Very high (# > 70%)	4	5%	4	5%
Difficult to ascertain at this stage	10	14%	22	30%
Relevant information is not available	1	1%	2	3%
Total	74	100%	74	100%

Table Q.21 Expectations about lending to firms if the October 2002 proposal for a new Basel Capital Accord is implemented, by size class

	Small firms		Medium-sized firms		Large firms	
	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents	Number of respondents	Share in total number of respondents
Compared to the current Basel Accord						
Become less attractive	17	23%	12	16%	4	5%
Stay equally attractive	14	19%	28	38%	24	32%
Become more attractive	15	20%	9	12%	18	24%
Difficult to ascertain at this stage	21	28%	20	27%	16	22%
Relevant information is not available	7	9%	5	7%	12	16%
Total	74	100%	74	100%	74	100%

Table Q.22 Main obstacles to the development of bank lending to firms, by size class

	Small firms		Medium-sized firms		Large firms	
	Share in total number of respondents	Normalised share	Share in total number of respondents	Normalised share	Share in total number of respondents	Normalised share
Lack of equity in the client's firm	66%	25%	54%	24%	15%	6%
Unavailability of collateral	45%	15%	32%	11%	15%	6%
Low expected profit margin on credits	16%	5%	24%	9%	47%	25%
High credit risk	59%	22%	50%	20%	27%	11%
Alternative sources of finance available ^a	4%	2%	18%	7%	43%	20%
Constraints on the bank's balance sheet ^b	12%	4%	11%	5%	22%	10%
Poor information on the client's firm	45%	15%	23%	9%	5%	1%
Other factors ^c	4%	2%	4%	2%	5%	3%
None	0%	0%	0%	0%	1%	0%
Relevant information is not available	11%	11%	14%	14%	18%	18%
Total		100%		100%		100%

^a To the bank's client.

^b Due to capital requirements etc.

^c Small: "low expected profit margin to firm", "very depending on one person (owner)". Medium-sized: "low expected profit margin to firm", "Insufficient RAROC/ROE". Large: "Low expected profit margin to firm", "Insufficient RAROC/ROE", "Bank strategic".

Annex A3 Survey results (by region)

Table A3.1 Average growth rate of the volume of outstanding credits to firms over the period 2000-2002, by region^a and firm size class^b

	Small	Medium-sized	Large
East	2.0%	4.5%	5.0%
West	3.9%	1.3%	1.7%
North	3.8%	4.6%	5.2%
South	7.4%	7.5%	5.6%
Full sample	5.2%	5.6%	4.8%

^a East = Austria and Germany
 West = Belgium, France, Luxembourg and Netherlands
 North= Denmark, Ireland, Finland, Sweden, and United Kingdom
 South= Greece, Italy, Portugal and Spain

^b Figure A3.1 corresponds with Table Q.5 of Annex A2.

Table A3.2 Average expected growth rate of the volume of outstanding credits to firms in 2003, by region^a and firm size class^b

	Small	Medium-sized	Large
East	1.4%	1.6%	2.4%
West	4.5%	0.0%	-1.1%
North	2.8%	3.1%	2.8%
South	6.6%	5.7%	3.7%
Full sample	4.4%	4.1%	2.9%

^a East = Austria and Germany
 West = Belgium, France, Luxembourg and Netherlands
 North= Denmark, Ireland, Finland, Sweden, and United Kingdom
 South= Greece, Italy, Portugal and Spain.

^b Figure A3.2 corresponds with Table Q.10 of Annex A2.

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