German results of euro-area bank lending survey

In January 2003 the Eurosystem introduced a quarterly bank lending survey of the euro area. The aim of the survey is to obtain more information on the banks' lending business than is provided by the statistics already available. From both a monetary policy perspective and a general economic perspective, the main emphasis is on distinguishing between the demand-side determinants and supply-side determinants of changes in lending business and on ascertaining the relationship between these changes and the economic cycle. This is the first time that changes in the underlying conditions for lending and their determinants are being recorded for the euro area at regular intervals. The results of the first two surveys in January and April are now available. These results have to be interpreted with care given the fact that there are only two observation periods. Nevertheless, the survey results so far available for Germany much like those for the euro area in general - indicate that the banks, on the whole, are pursuing a slightly more restrictive lending policy. This has been reflected first and foremost in higher margins, especially in the case of riskier loans, and in more stringent collateral requirements. The findings of the surveys do not indicate that there is a credit crunch.

Background and aims of the bank lending survey of the euro area

Banks' role in financing enterprises and households A euro-area bank lending survey is justified by the importance of the banks in financing enterprises and households in the euro area. In contrast to financial systems, such as that of the United States, which are more marketoriented, the euro-area economies are primarily bank-based. 1 This means, for example, that not only households but also enterprises depend mainly on the banks for their external financing and use the financial markets for only a much smaller part of this. This applies all the more to small and medium-sized enterprises (SMEs), which, in view of their lower degree of transparency with regard to their corporate activities and financial status, are particularly reliant on the banks as financial intermediaries and mostly have no access to other external sources of funds.

Lending conditions determined not only by interest rates Banks try to limit their credit risk not only by collecting and processing information on their borrowers but also by considering other factors. The components of the loan agreement which, in addition to the agreed interest rate, have a major bearing on the lending decision include the collateral provided by the borrower and other lending conditions such as limits on the credit volume, the maturity of the loan and loan covenants. These play an especially important role in determining the credit relationship between the banks and their customers and are decisive parameters for the banks' lending policy. A deterioration in a customer's creditworthiness may therefore be reflected not only in a matching increase in the risk premium on the interest rate but also in restrictions on the size of the loan or, indeed, a refusal to grant one. A bank's decision in such circumstances will be influenced by its own balance-sheet position and economic situation in relation to the structure of its credit portfolio, its capital ratio and profitability as well as the nature of its business relationship with the customer. A house bank principle, as it is called, has evolved in this context, especially in Germany: a close customer-bank relationship provides the customer – enterprises and individuals alike – with a kind of "liquidity insurance". In return for a customer's extensive use of the house bank's banking services and given the resulting additional information gained about the customer, the bank typically grants the customer more generous loans, even in times of greater economic difficulties, than it would do, or could do, as part of its normal standardised retail business.

Even so, the relationships between banks and customers are also subject to the structural transformation taking place in the banking and financial systems. As in the other euroarea countries, the banking market in Germany is characterised by a steadily increasing pressure to consolidate, technological change in the distribution channels and in the processing of deposits and loans as well as growing competition from other financial

Structural changes in the banking systems

¹ At the end of 2002, for example, the loans granted by domestic banks to the private sector amounted to 109% of GDP in the euro area and to 125% of GDP in Germany; by contrast, they amounted to only 78% of GDP in the United States (source: *International Financial Statistics*, IMF).

market players.² These changes are naturally having an impact on the financing options open to households and enterprises. Consequently, the financial conditions for enterprises and households change not only as a result of cyclical developments but also on account of structural factors. Such changes can have a significant effect on investment and consumption patterns and therefore on developments in the economy as a whole.

Importance of credit supply for monetary policy

transmission

Another factor, and one that is important from the point of view of monetary policymakers, is the particular role played by the banks' financing conditions for households and enterprises in the monetary policy transmission process. A cyclically or structurally induced change in the banks' supply of credit can alter the effect of monetary policy measures on economic agents and therefore the monetary policy transmission mechanism. Various empirical studies³ point to the influence of what is known as the credit channel on the transmission of monetary policy decisions. Consequently, a change in the key interest rates by the central bank may affect different groups of borrowers to a greater or lesser extent and may vary in its overall intensity. Firstly, this can be due simply to the lending behaviour of the bank itself (bank lending channel), which is influenced by the aforementioned balance-sheet position and economic situation of the bank. Secondly, the borrower's ability to provide the collateral needed for a loan fluctuates owing to, say, valuation changes resulting from cyclical upswings and downturns (balance-sheet channel).

Information on changes in bank lending behaviour is therefore important for enabling a central bank to improve its assessment of the potential effectiveness of its own monetary policy measures and to gear them to the underlying economic conditions. It is particularly important in this context to be able to distinguish between factors which affect the credit supply and those which influence the credit volume by altering the demand for credit. As a rule, the available data on changes in bank lending provide information only on transaction volumes, which do not indicate whether and to what extent changes are influenced by supply or demand. Even if these data are analysed in conjunction with the existing statistics on bank lending rates, an unambiguous interpretation is still not possible because the aforementioned factors influencing lending decisions cannot be included in the analysis.

The aim of the bank lending survey of the euro area is to close this gap. For the first time the survey provides quite detailed qualitative information on changes in bank lendContribution to analysing developments

in lending

Support for

² See Deutsche Bundesbank, Bank balance sheets, bank competition and monetary policy transmission, *Monthly Report*, September 2001, p 58 ff.

³ In the case of Germany see, for example, J Breitung, R S Chirinko and U von Kalckreuth, A Vectorautoregressive Investment Model (VIM) and Monetary Policy Transmission: Panel Evidence from German Firms, Economic Research Centre of the Deutsche Bundesbank, Discussion Paper 06/03; U von Kalckreuth, Monetary Transmission in Germany: New Perspectives on Financial Constraints and Investment Spending, Economic Research Centre of the Deutsche Bundesbank, Discussion Paper 19/01; A Worms, Monetary policy effects on bank loans in Germany: A panel-econometric analysis, Economic Research Centre of the Deutsche Bundesbank, Discussion Paper 17/01. For an overview of studies covering the entire euro area see European Central Bank, Recent findings on monetary policy transmission in the euro area, Monthly Bulletin, October 2002, pp 43-53.

ing behaviour in the euro area. This information covers not only the margins but also various loan conditions such as collateral requirements and possible volume restrictions. It also provides the banks' assessments of the factors determining their credit supply and those influencing credit demand. Consequently, the findings of the survey also make it easier to interpret existing statistics. The Federal Reserve System in the United States and the Bank of Japan already have many years' experience with similar regular surveys on lending. Surveys undertaken by the US central bank have shown that over the long term the data obtained from the surveys can help to improve the forecasting of credit growth and economic developments.4

Structure and implementation of the bank lending survey

Structure of the questionnaire

The bank lending survey is based on a guestionnaire containing a total of 18 questions on lending to enterprises and households (housing and consumer loans). The questions concentrate on developments during the previous three months, ie the first quarter of 2003 in the case of the results of the current April survey. On the supply side they concern the credit standards, their determinants and the credit terms and conditions. The changes in credit demand experienced by each individual institution and the factors influencing this are also surveyed. Furthermore, the institutions are asked to state what changes they expect both in their own lending policy and in customer demand during the following three months. In a final item the banks are asked to outline any additional factors affecting their lending behaviour over the previous three months.

Eighty-six banks, including 17 German banks, take part in the regular quarterly survey throughout the euro area. The German banks are selected to reflect the diversity of the German banking system and the various categories of banks within it. This also means that the choice of participating banks is linked not only to their respective market share of loans to enterprises and households but also to the market share of the relevant banking category. In Germany the selected banks answer the survey questionnaire by means of interviews. The interviews with the bank loan officers – usually board members or staff reporting directly to them - are conducted at the end of the guarter. In addition to the answers to the questionnaire, these interviews yield important background information on developments and determinants in the field of bank lending. This information can be used to interpret the findings. As a matter of principle, great importance is attached to the participating institutions enjoying confidentiality not only with respect to their participation but also, and more import-

Practical implementation of the bank lending survey

⁴ C Lown, D P Morgan and S Rohatgi, Listening to Loan Officers: The Impact of Commercial Credit Standards on Lending and Output, Federal Reserve Bank of New York, *Economic Policy Review,* July 2000, pp 1-16; and C Lown and D P Morgan, The Credit Cycle and the Business Cycle: New Findings Using the Survey of Senior Loan Officers, a discussion paper presented at the "2002 Bank Structure Conference" held by the Federal Reserve Bank of Chicago.

⁵ This questionnaire is appended to the article entitled "A bank lending survey for the euro area" in the ECB *Monthly Bulletin* for April 2003 and is also available under "Economics", "Publications" on the Bundesbank web site (www.bundesbank.de).

antly, with regard to the information disclosed at the interview.

Analysis of survey results All of the participating national central banks pass on the individual results obtained from the survey in an anonymous form to the European Central Bank (ECB). The ECB aggregates the results for the euro area on the basis of the country weights and submits an analysis of the findings for both the euro area and the country aggregates to the ECB Governing Council for its monetary policy meeting in the following month; the weight of the German results currently amounts to 36.2%.6 In future, the results will also be published regularly in the relevant monthly reports of the ECB and the Bundesbank.

Interpretation of the results

In principle, however, the interpretation of the survey results is subject to various qualifications. Firstly, these include the qualitative and subjective character of the survey findings, ie they are not objective, quantitative data such as precise figures on credit volume but reflect tendency estimates recorded on a five-point scale. Even so, the interpretation can be improved by augmenting these estimates with "soft" information arising from additional data disclosed by the banks during the interviews. Secondly, the survey is concerned only with identifying changes; consequently, information on levels - such as the degree of restriction imposed by a bank's current lending policy – cannot be automatically derived from the survey data. Finally, any interpretation is currently subject to the qualification that there is still a lack of experience and longer-term data that would allow intertemporal comparisons, for example, over an interest rate or business cycle. During the analysis a net percentage is calculated in order to improve the quantitative assessment of the aggregated qualitative results. This net percentage is the difference between the percentage share of responses in the restrictive range less the percentage share of the responses in the expansionary range. This means that a positive value suggests a restrictive tendency while a negative value indicates an expansionary tendency.

Initial results for Germany

Generally speaking, the results of the April 2003 bank lending survey suggest that, in the case of Germany, there was a further slight tightening of the surveyed institutions' credit standards in the first quarter of 2003 although the degree of tightening was less than in the previous quarter. This applies both to lending to enterprises and to housing and consumer loans to households (see the charts on pages 72 and 75). This means that the German results are more or less consistent with those of the euro area as a whole.

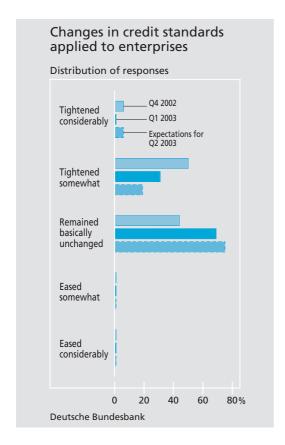
tightening of credit standards overall

Further slight

According to the data on credit standards supplied by the institutions surveyed, it was mainly loans to large enterprises in Germany that were subject to a further slight tightening in conditions during the first quarter of 2003 whereas – in contrast to the previous quarter – small and medium-sized enterprises were hardly affected by additional restrictions during this period (see the table on page 73).

More restrictive conditions for loans to enterprises

⁶ See ECB, "A bank lending survey for the euro area", *Monthly Bulletin*, April 2003, p 68.



The institutions mentioned an estimated higher degree of risk as the main reason for the tighter conditions. 7 This assessment concerned the general economic outlook, factors specific to certain sectors or companies as well as the value of collateral. The banks' financing costs and balance-sheet restrictions were also reasons for the slight additional tightening of the lending conditions. This was reflected in a further increase in margins, greater volume restrictions as well as more stringent collateral requirements and loan covenants. Furthermore, the banks, in some cases, were again somewhat more restrictive with respect to maturities (see the table on page 74).

In the case of the banks surveyed it was mainly the demand for credit from large enter-

prises that showed a slight average decline in the first quarter of 2003. The surveyed institutions believe that, as in the previous quarter, this was due primarily to a reduction in the financing required for fixed investment. In the case of about half the banks, however, debt restructuring and the absence of alternative sources of finance increased the demand for bank credit. This means that, as in the previous quarter, the survey responses in the area of corporate credit in the first guarter of this year do not indicate that the sluggish growth in lending during this period was due primarily to factors on the supply side; the survey results show that the somewhat more restrictive lending policy was accompanied by a slight fall in demand. This is true regardless of company size or credit maturity and is somewhat inconsistent with the assessments expressed by the banks in the previous quarter which suggested that there would be a tightening of the credit standards, especially for small and medium-sized enterprises as well as for short maturities.

The banks participating in the survey assumed that there would again be a slight tightening of their credit standards, especially for small and medium-sized enterprises, in the second quarter of 2003 (see adjacent chart). At the same time, they expected that, in line with their forecast for the previous quarter, there would be virtually no change in the overall demand for credit during this

Corporate demand for credit also declines

Banks forecast persistent weakness in corporate lending in second quarter

⁷ Even so, this could partly be a reflection of a deterioration in the creditworthiness of borrowers, which is to be attributed to the demand side. This would be the case if, when considering loans, the banks responded simply to the increase in credit risk without altering their risk sensitivity.

Changes in the credit standards applied to enterprises over the past three months

Percentage distribution of responses	Percentage	distribution of	responses
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			Loans to	small						
			and medium-		Loans to large					
	Total		sized ent	erprises	enterpris	es	Short-term loans		Long-term loans	
Item	April	January	April	January	April	January	April	January	April	January
Tightened considerably	_	6	_	13	7	13	-	6	6	19
Tightened somewhat	31	50	19	50	33	47	25	38	19	31
Remained basically unchanged	69	44	75	38	60	40	75	56	75	50
Eased somewhat	-	-	6	-	-	-	-	-	-	-
Eased considerably	_	-	-	_	_	_	_	-	_	
Net percentage 1	31	56	13	63	40	60	25	44	25	50
Memo item										
Number of responses	16	16	16	16	15	15	16	16	16	16

¹ Difference between the sum of the percentages for "Tightened considerably" and "Tightened somewhat"

and the sum of the percentages for "Eased somewhat" and "Eased considerably".

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period. It is therefore only in the case of large enterprises that a slight decline in credit demand was expected; by contrast, a slight rise in demand was expected from small and medium-sized enterprises. The expectations for the second quarter of 2003 therefore indicate a difficult environment for borrowers, especially small and medium-sized enterprises and those seeking short-term credit.

The banks participating in the survey again tightened their credit terms and conditions slightly for households, too. The results of the April survey are consistent with those from the first round of the bank lending survey in January, which indicated a more restrictive lending policy in the final quarter of 2002 (see the chart of page 75). In both survey rounds these results applied to housing loans

and consumer loans and were above the declining average in the euro area, especially for the first guarter of 2003.

Regarding the causes of the further slight tightening of the credit standards for granting housing loans to households in the first quarter of 2003, most respondents mentioned their risk assessment of the general economic outlook whereas the prospects for the housing market, the most important explanatory factor in the previous quarter, were now virtually irrelevant on the supply side. In addition, a fairly small number of the banks surveyed gave their financing costs and balance-sheet restrictions as reasons for their more restrictive lending policy. As in the previous quarter, the more stringent credit terms and conditions were reflected primarily in a

Housing loans

Banks also more restrictive vis-à-vis households

Changes in the credit terms and conditions applied to enterprises over the past three months

Percentage	distribution	of resp	onses

referriage distribution of responses														
	Tighter conside		Tightened basically somewhat unchanged		ly	Eased somewhat		Eased considerably		Net percentage 1		Memo item Number of responses		
Item	Apr	Jan	Apr	Jan	Apr	Jan	Apr	Jan	Apr	Jan	Apr	Jan	Apr	Jan
Price														
Your bank's margin on average loans (wider margin = tightened, narrower margin = eased)	13	6	50	69	38	25	-	_	_	_	63	75	16	16
Your bank's margin on riskier loans	38	44	38	50	25	6	_	_	_	_	75	94	16	16
Other terms and conditions														
Non-interest-rate charges	6	6	25	25	69	69	-	-	-	-	31	31	16	16
Size of the loan or credit line	6	13	56	40	38	47	_	_	-	-	63	53	16	15
Collateral requirements	6	19	50	44	44	38	-	-	-	-	56	63	16	16
Loan covenants	7	7	60	40	33	53	-	-	-	-	67	47	15	15
Maturity	6	13	31	31	63	56	-	-	-	-	38	44	16	16

¹ Difference between the sum of the percentages for "Tightened considerably" and "Tightened somewhat" and the sum of

the percentages for "Eased somewhat" and "Eased considerably".

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slight increase in margins in general and for riskier exposures in particular. On the demand side, by contrast, the banks believed that, on average, there had been no change in the first quarter of 2003; however, there were considerable variations from one institution to another. Demand, the banks said, had been influenced, on the one hand, by special factors and by anticipatory effects in connection with the expected abolition of the grant to home buyers. On the other hand, demand had been depressed, as in the previous quarter, by the lack of consumer confidence in particular and by the outlook on the housing market. The banks taking part in the survey expected no significant changes in their own lending policy in the second guarter of 2003. At the same time, however, they assumed an-

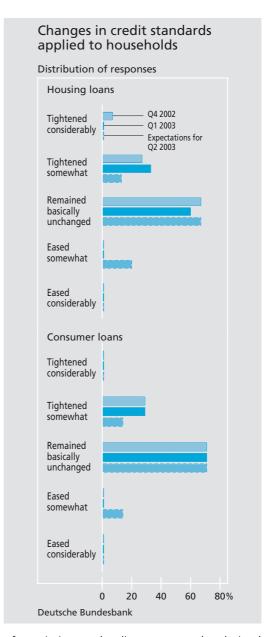
other slight reduction in households' demand for housing loans.

As in the previous guarter, the banks participating in the survey slightly tightened their credit terms and conditions for consumer loans in the first quarter of 2003. They gave risk assessment with respect to the general economic outlook and the creditworthiness of households as the reasons for this. Accordingly, the main indication of the slight tightening of credit standards was again an increase in the margins for riskier exposures in the credit terms and conditions. This time, too, the assessments of the banks surveyed produced a very mixed picture on the demand side, with considerable differences from institution to institution, although these differences more or less cancelled out. Ac-

Consumer loans cording to the banks, subdued consumer confidence continued to have a curbing effect on demand in some cases. Generally speaking, the banks surveyed did not expect a further change in their credit standards in the second quarter of 2003. By contrast, the picture with regard to expected demand for consumer loans was also fairly mixed this time and showed a slightly rising tendency on average.

Conclusions

Contribution of bank lending survey to monetary and macroeconomic assessment Owing to its qualitative data on the banks' lending behaviour, the bank lending survey of the euro area is likely to make a major contribution to the interpretation of the macroeconomic and monetary situation in the euro area. It is the first comprehensive survey of the European banks' lending business and can therefore augment the wide-ranging statistics already available with valuable information on the banks' lending business on both the supply side and the demand side. The results available so far are already providing important initial data on the current credit terms and conditions applied by the banks in the euro area. When interpreting these findings, however, it must be remembered that they are qualitative, subjective data which can do no more than give a general indication of changes. The extent to which this is reflected quantitatively in the credit volume or in the interest rate margins and ultimately affects the development of the economy cannot yet be gauged owing to the absence of a longer-term observation period. Assessments of levels - for example, the general degree



of restriction on lending – cannot be derived at this point either.

The initial survey results for Germany indicate that, overall, the banks were somewhat more restrictive in their lending in the final quarter of 2002 and the first quarter of 2003. This is very largely in line with the general euro-area trend. These changes were reflected primarily in the margins, especially in the case of riskier

Greater risk awareness among banks

loans, and to some extent stricter additional credit conditions relating to collateral, volume and maturity. This probably reflects a further increase in the banks' general risk awareness. In the case of the banks surveyed, credit demand, especially from enterprises, declined further whereas demand from households in the first quarter of 2003 largely remained unchanged. The banks taking part in the survey signalled another slight tightening of their

lending policy in the area of loans to enterprises in the second quarter of 2003 whereas their policy for housing and consumer loans would remain largely unchanged. Generally speaking, the results therefore suggest that current credit developments are being affected not only by discernible weakness on the demand side but also by supply-side factors in some cases. The survey did not provide any indication of a credit crunch.