Bank Lending Survey: an interim assessment and current developments

It is now six years since the Eurosystem introduced a quarterly Bank Lending Survey (BLS) for the euro area. The Bundesbank collates the information supplied by the participating German institutions and publishes it as a national result. The aim of the survey is to obtain qualitative information, in particular, on the lending behaviour of the surveyed banks. The focus of interest is therefore on changes in credit standards for lending to the private sector. The period for which these data are available is now long enough to allow an interim assessment.

In Germany, a tightening of credit standards at the beginning of the survey was followed by a lengthy period of easing which continued up to mid-2007. Given the tense situation in the financial markets since then, the surveyed German institutions have noticeably tightened their credit conditions in some cases, especially for lending to enterprises. Nevertheless, these conditions are not as stringent as those applied in the euro area as whole. However, the BLS data for Germany do not, at present, indicate a supply-side credit crunch on a broad front within the banking system.

Bank Lending Survey

The Eurosystem introduced the Bank Lending Survey at the beginning of 2003 as a qualita-

Introduction of the Bank Lending Survey in 2003

tive survey among senior credit managers who deliver their assessment, principally of their institutions' lending behaviour, on a quarterly basis.[1] Given the dominant role of the banks in financing the private sector in the euro area, the BLS is designed to improve the Eurosystem's understanding of the monetary policy transmission process and, thus, ultimately assist it in its monetary policy decisions.[2] The survey provides detailed information on developments in the surveyed institutions' lending behaviour. Major factors affecting the lending decision are surveyed, for example, including the assessment of risk by the surveyed institutions, the impact of refinancing costs in the money and bond markets – which are especially significant at present – as well as possible balance sheet constraints and information on the level of competition. Additionally, the survey participants provide data on households' and non-financial corporations' credit demand as they perceive it. In this way, the BLS contributes to a better assessment of the isolated impact of the bank lending market's supply and demand sides on the observed interest rate and quantity movements.

Credit standards as key BLS variable

In the BLS, changes in credit standards play a key role for understanding the participating banks' lending behaviour.[3] For this reason, seven of the 18 questions in the questionnaire are concerned with the standards and the factors which affect them. First, a distinction is made between loans to enterprises and loans to households, with the latter being split into loans for house purchase and consumer loans. Second, two reference periods are surveyed from the banks: how

credit standards have changed over the past three months and how they are expected to change over the next three months. In addition to this information, the banks taking part in the BLS supply data on their conditions and terms for approving loans (including their margins)[4] as well as the institution-specific demand for credit and its likely determining factors.

German BLS results

From the outset, German banks have also been taking part in the Bank Lending Survey with their data being collected in interviews and incorporated into the European aggregates.[5] Their responses are also combined into a result for Germany and published and analysed on a regular basis by the Bundesbank.[6] After nearly six years' experience of

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1 The credit managers are asked to indicate trend estimates on a five-point scale.
2 For a detailed account of the background to and objectives of the Bank Lending Survey, see Deutsche Bundesbank, German results of euro-area bank lending survey, Monthly Report, June 2003, pp 67-76.
3 Credit standards are defined as internal guidelines or criteria which reflect a given bank's lending policy. They comprise the written and unwritten criteria and other practices in connection with this policy which determine what type of loans a bank regards as (un)desirable, the set geographical priorities, what collateral is deemed to be (un)acceptable and so on. Changes in the written lending policy together with changes in how it is applied are to be taken into consideration in the survey.
4 The other conditions comprise the non-interest rate charges (various types of fees, such as commitment fees for revolving credits, administrative fees, and costs for inquiries, guarantees and credit insurance), the size of the loan, collateral requirements, loan covenants, maturity, and also, in the case of loans for house purchase, the loan-to-value ratio.
5 Initially, 17 German institutions took part in the BLS. The number of surveyed German banks was increased to 30 with the survey round for the first quarter of 2008. The change to the sample was made necessary by developments in the German banking system. At the same time, the new sample takes greater account than before of the importance of smaller banks, especially in lending business with small and medium-sized enterprises. For more information, see box on page 17.
6 The aggregate survey results for Germany may be found at http://www.bundesbank.de/volkswirtschaft/vo_veroeffentlichungen.en.php.

## The adjustment of the German sample for the Bank Lending Survey

At the outset, there were 17 German banks which took part in the Bank Lending Survey (BLS) for the euro area. They were selected not only on the basis of own market share but also in accordance with the market share of the categories of banks to which they belonged. In the light of developments in the German banking industry in recent years, an enlargement of the sample was deemed to be advisable in order to ensure that the BLS responses maintained a high degree of representativeness. The sample was enlarged with the survey round in April 2008; since then, 30 German institutions have been participating in the quarterly survey.

For one thing, the sample enlargement took due account of the fact that there has been a sharp growth in new "types" of banks in recent years. These gained market shares because they adopted innovative business models – say, by means of new distribution channels or a greater specialisation in certain types of loans. The size these banks have now attained suggests that they are playing a perceptible role in determining credit supply behaviour in the German loan market. Secondly, moreover, the enlargement of the sample makes it possible to give greater consideration than before to the structure of the German banking system. Many of the credit institutions active in retail banking in Germany are relatively small, for example – not least owing to the regional principle.

Using the data on the terms and conditions for loans to enterprises, the following aims to show the effect of the sample enlargement on the German BLS results reported since April 2008 and the extent to which the new BLS banks' behaviour differs from that of the institutions which were already being surveyed earlier.

For example, in the first three quarters of 2008, the changes in the standards made by the sample of newly included banks differed only marginally from those of the earlier sample. The banks of the old sample reported a slightly stronger tightening of their credit standards in corporate lending. At the same time, the 13 newly included institutions reported that their standards were affected less strongly – in particular, by the refinancing conditions in the money and bond markets – relative to the group of 17 banks. This suggests that especially the newly included smaller banks, which obtain their funding less in the capital markets and more by means of deposits, have been the factor determining the differences between the group results. On the supply side, the greatest behavioural differences were apparent in developments in margins for average loans in the third quarter of 2008. While the banks of the earlier sample greatly increased their margins, the newly included institutions made no changes to this indicator. In terms of developments in risk awareness, which are reflected in the margin policy for riskier loans, there were hardly any differences between the two groups. Finally, the demand for bank loans observed by the new banks developed more positively over all three quarters than was the case in the old sample.

Changes in the BLS indicators for loans to enterprises

Net percentages[1]
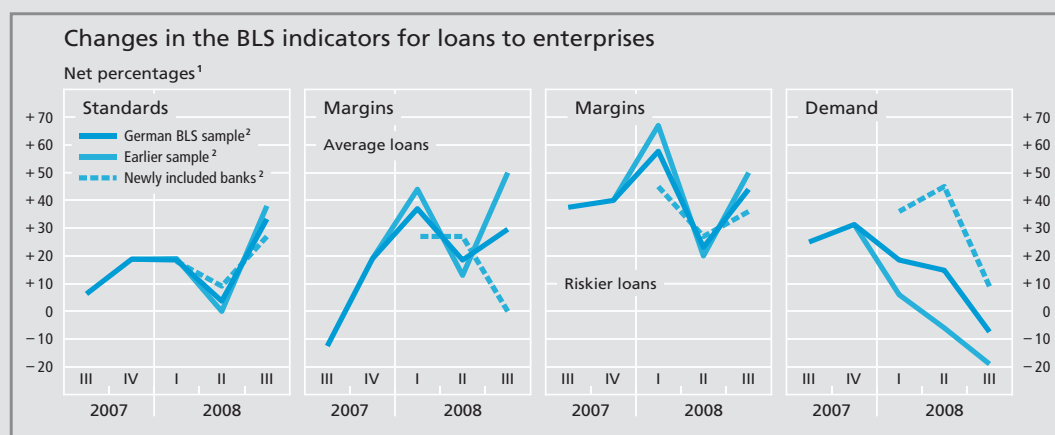
1 For supply-related questions, a positive value means that the sum of the percentage of the restrictive responses exceeds the sum of the percentage of the expansionary responses. In the case of demand-related questions, a positive value indicates a larger percentage of expansionary responses. — **2** German BLS sample: 17 banks until 2007 Q4, 30 banks from 2008 Q1; earlier sample: 17 banks, newly included: 13 banks.

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the BLS, there is now a sufficient quantity of data to allow an interim assessment from a German perspective.

Longer-term developments in German banks' lending policy

Interpretation of the BLS data

When interpreting the aggregated German BLS data in a longer-term comparison, it should be noted that the survey collects information only on changes compared with the preceding quarter. To that extent, the results do not give any indication of the level of standards and margins at a given point in time but only of changes in the level. This is very important, especially when comparing the results across individual product categories (loans to enterprises, loans for house purchase, consumer loans) since it cannot necessarily be assumed that the observed variables were initially at an identical level in all of the surveyed business areas when the survey began in 2003. This also affects comparisons between data for Germany and for the euro area as a whole, however, as the cyclical situation and profitability of German banks differed markedly from the euro-area average when the BLS was launched, for example.

Changes to the credit standards since 2003 ...

With regard to the changes in credit standards for loans to enterprises and for loans to households, the German institutions participating in the BLS stated when the survey began in 2003, that, on balance, they had tightened their standards for all surveyed types of loan (see chart on page 19).[7] From 2005 onwards, however, there was – measured by the credit standards – a steady easing

of supply-side terms and conditions which persisted until mid-2007 and even longer in the case of consumer loans. Since the beginning of the turbulence in the financial markets, however, the surveyed German institutions have been stating that that they have tightened their standards for loans to enterprises – even considerably in some cases – and that they have not continued to ease their standards for loans to households.

The influence of the various factors has changed in parallel with the developments in credit standards. During the two periods – when the BLS started and recently – in which the German BLS banks tended to report stricter lending behaviour, refinancing costs and balance sheet constraints had a noticeably restrictive effect on credit standards in business with enterprises, but played a far smaller role in the intervening period. Much the same applies to the importance of the banks' liquidity position as well as, to some extent, their perception of risk, which the BLS breaks down into the factors "expectations regarding general economic activity", "industry or firm-specific outlook" and "risk on the collateral demanded". According to the surveyed banks, only loan collateral has not been playing an increasing role as a constraining factor in the most recent available quarters.

... and the factors affecting them in corporate lending business ...

Recently, factors closely associated with risk have also had an increasing impact on the credit standards for lending to households –
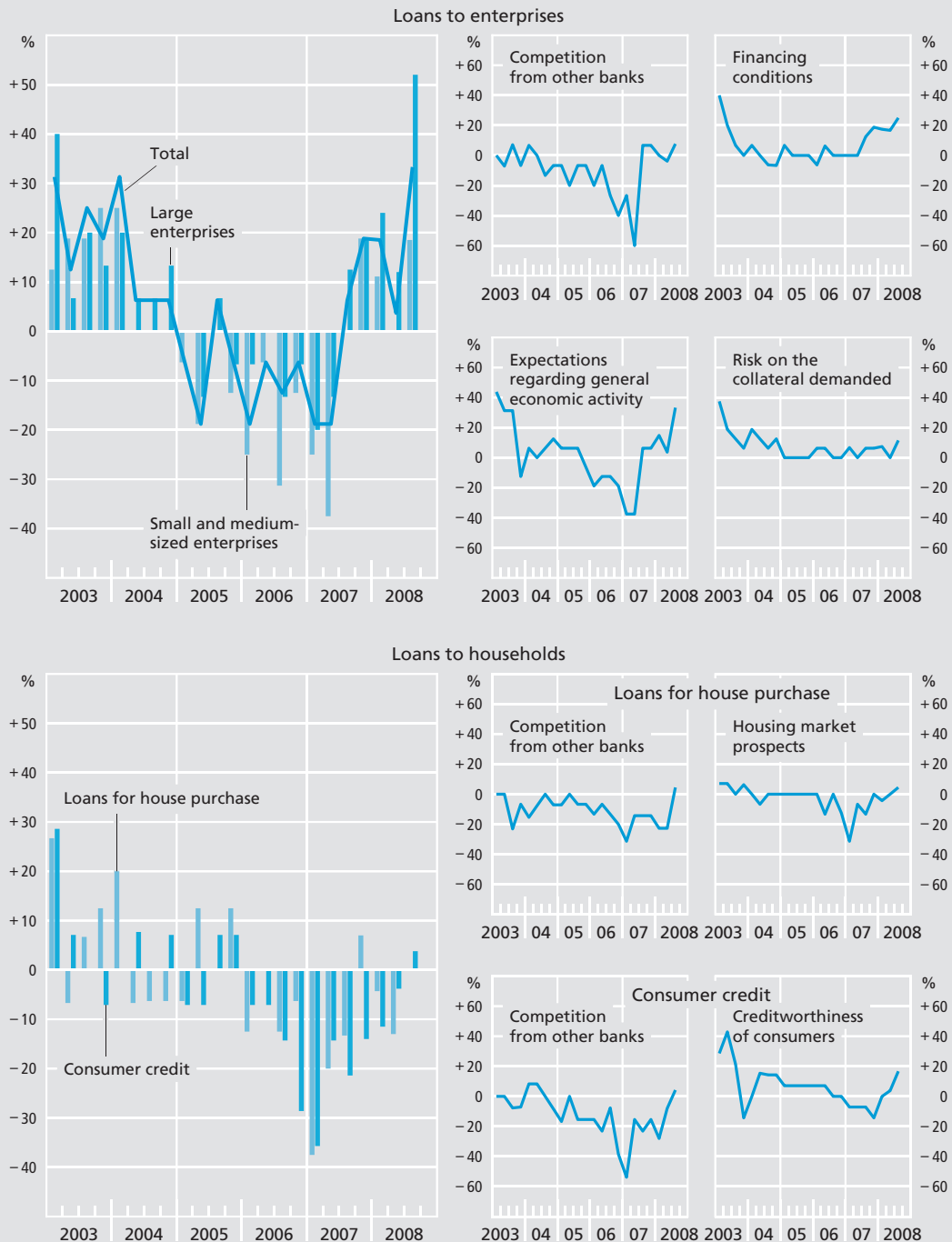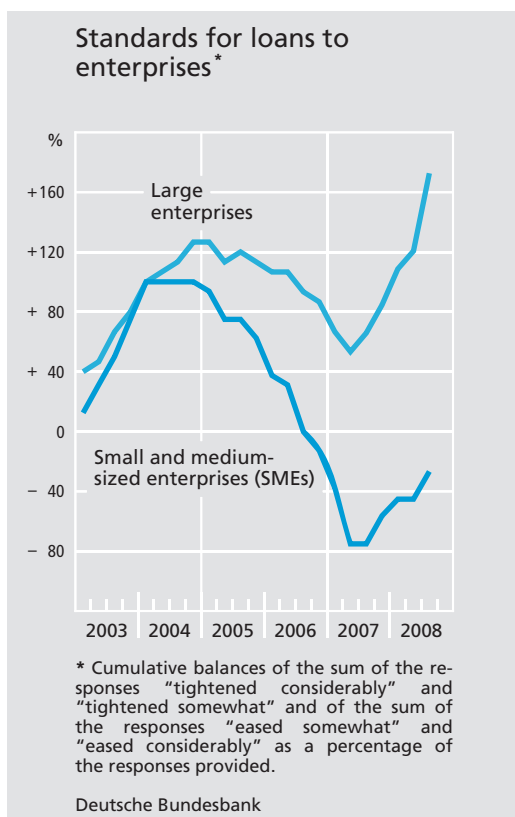
... and for loans to households

7 (Net) percentages are calculated to analyse the trend estimates recorded on a five-point scale. For the data on credit standards, positive values correspond to more restrictive standards, whereas negative values indicate an easing of loan supply conditions.

Changes in credit standards* and in selected explanatory variables**

Loans to enterprises

Total

Large enterprises

Small and medium-sized enterprises

Competition from other banks

Financing conditions

Expectations regarding general economic activity

Risk on the collateral demanded

Loans to households

Loans for house purchase

Consumer credit

Loans for house purchase

Competition from other banks

Housing market prospects

Consumer credit

Competition from other banks

Creditworthiness of consumers

* Balance of the sum of the responses "tightened considerably" and "tightened somewhat" and of the sum of the responses "eased somewhat" and "eased considerably" as a percentage of the responses provided. — ** Balance of the sum of the responses "contributed considerably to a tightening of credit standards" and "contributed somewhat to a tightening of credit standards" and of the sum of the responses "contributed somewhat to an easing of credit standards" and "contributed considerably to an easing of credit standards" as a percentage of the responses provided.

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Standards for loans to enterprises[*]

* Cumulative balances of the sum of the responses "tightened considerably" and "tightened somewhat" and of the sum of the responses "eased somewhat" and "eased considerably" as a percentage of the responses provided.

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both consumer credit and loans for house purchase. Besides expectations regarding general economic activity, these factors are primarily households' creditworthiness (for consumer credit) and the outlook in the housing markets (for loans for house purchase). As recently as 2007, these factors contributed to an easing of the credit standards before tending to exert a tightening influence of late. It is striking that collateral did not have a growing impact on the credit standards last year even in the case of consumer credit. In the period from 2005 to 2007 – and even beyond that in the case of loans to households – increasing competitive pressure in the German market contributed perceptibly to an easing, albeit to varying degrees, of the credit standards for all three types of loans surveyed in the BLS.

Breakdown by size of firm

The information on corporate lending elicited from banks taking part in the BLS is also broken down by size of firm. Data on changes in the credit standards are provided separately for small and medium-sized enterprises (SMEs) and for large enterprises.[8] Additionally, since the survey round in April 2008, information on the factors affecting changes in credit lines has also been collected separately for SMEs and large enterprises. For Germany, the cumulative changes in credit standards by size of enterprise show a more accommodating lending policy towards SMEs by the banks in the survey from mid-2004 onwards, if not earlier (see chart on this page).[9] The standards were eased noticeably more – or have been tightened less since mid-2007 – than for large enterprises. The data on the factors affecting credit standards, which are available separately for the first three quarters of 2008, show that the perception of risk as well as refinancing costs and balance sheet constraints had a smaller restrictive impact on the terms and conditions of lending to SMEs. The latter is also likely to be linked to the fact that lending business with SMEs is conducted to a greater extent by credit institutions which

8 The distinction between SMEs and large enterprises is made on the basis of their annual turnover. An enterprise is deemed to be large if its net annual turnover is more than €50 million.
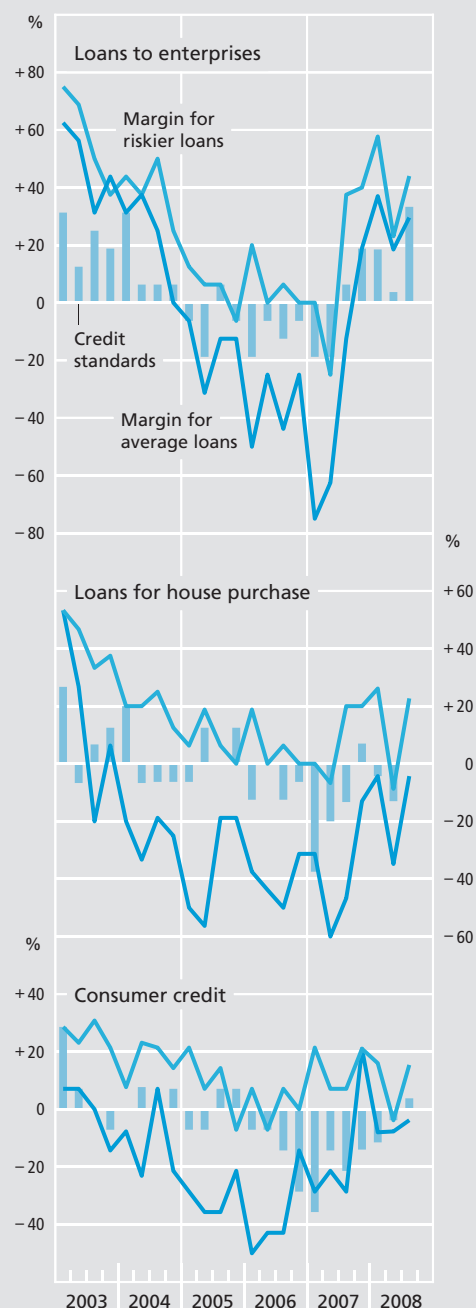**9** A number of methodological problems have to be taken into consideration when analysing cumulative changes, one being that, as mentioned above, only quarterly changes are surveyed in the BLS. To that extent, the results do not provide any indications of the level of standards but only of changes to that level. This also applies to cumulative values over several quarters. Moreover, the "point of departure" taken by these cumulative changes at the start of the BLS is unknown. This is necessarily set as equal to zero. Furthermore, the cumulative percentage values over time cannot easily be interpreted. A maximum 100% balance is possible for each reporting period, which means that the accumulation can produce percentage values far in excess of 100%.

fund themselves by means of deposits rather than in the capital and money markets and which are therefore less affected by refinancing problems due to the financial market crisis. This is also indicated by a separate analysis of the German BLS results following the change to the sample in April 2008 (see box on page 17).

Developments in margins at German BLS institutions ...

Between the introduction of the BLS at the beginning of 2003 and roughly mid-2005, the German participants in the survey stated that they had widened their margins on riskier loans – in some cases perceptibly – for all types of credit (see chart on this page). In the ensuing period, however, the participating German banks made hardly any further adjustments until about a year ago. Since then, a heightened risk awareness in the wake of the financial market crisis has contributed to a further, sometimes sharp expansion of margins for riskier loans. The margins for average loans were widened less, or tightened more obviously, almost throughout the period under review; this led a perceptible dispersion of the margins in German banks' lending to the private sector. However, the data available since the survey round in April 2008, which are broken down by firm size, indicate that the German BLS institutions have adjusted their margins to varying degrees depending on the line of business. Much like in the developments in credit standards, SMEs have latterly been affected by widened margins less than large enterprises, especially in the case of average-risk loans.
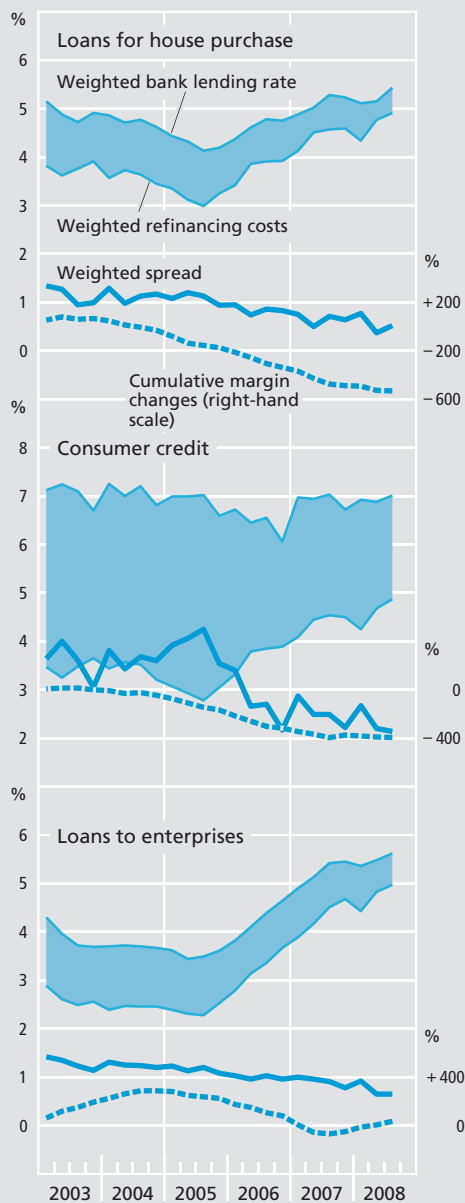

Changes in standards and margins in German banks' lending*

Loans to enterprises

Margin for riskier loans

Credit standards

Margin for average loans

Loans for house purchase

Consumer credit

2003 2004 2005 2006 2007 2008

* Balance of the sum of the responses "tightened considerably" and "tightened somewhat" and of the sum of the responses "eased somewhat" and "eased considerably" as a percentage of the responses provided.

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Margins according to the BLS and interest rates *

% Loans for house purchase

Weighted bank lending rate

Weighted refinancing costs

Weighted spread

Cumulative margin changes (right-hand scale)

% Consumer credit

% Loans to enterprises

2003 2004 2005 2006 2007 2008

* The weighted spread in each category of loan is the result of the difference between the respective bank lending rate for new business and the corresponding average refinancing costs (money market rates or rates for banks' debt securities). For bank lending rates and for refinancing costs, the average is formed using the weights of the volumes of new business of the bank lending rates in the individual maturity bands. Banks' lending rates in accordance with harmonised euro-area MFI interest rate statistics.

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The qualitative information which the surveyed institutions supply on their margin policy should be reflected in the banks' actual measured quantitative interest rate spreads, ie the difference between refinancing costs and lending rates. For Germany, a comparison of these two measures shows a largely parallel movement in the case of loans to households for consumption or for house purchase (see chart on this page). No such systematic relation is revealed for loans to enterprises.

... largely consistent with the interest rate statistics

The explanatory content of the BLS for developments in lending to non-financial corporations

As the BLS is a comparatively new set of statistics, the data from it have been used hitherto only in descriptive form for the analysis of credit developments in Germany. However, the number of observations is now probably sufficient for the information content of the BLS data to be studied using quantitative methods as well.[10] Analyses of this kind have already been performed for the United States and it is has been possible to establish the explanatory content of the US survey.[11] The data of the Fed's Senior Loan Officers Opinion Survey have been available for almost

First empirical results for Germany

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[10] Owing to their major importance for the economy as a whole, the presented analysis is confined to German banks' lending to non-financial corporations.
[11] See, for example, C S Lown, D P Morgan and S Rohatgi (2000), Listening to Loan Officers: The Impact of Commercial Credit Standards on Lending and Output", FRBNY Economic Policy Review, 6, 2, pp 1-16 or C S Lown and D P Morgan (2006), The Credit Cycle and the Business Cycle: New Findings using the Loan Officer Opinion Survey, Journal of Money, Credit and Banking, 38, 6, pp 1575-1597.

40 years, which allows a clearly greater range of empirical-analytical procedures than in the case of the European BLS.

Correlation analysis indicates that credit standards lead loans

Owing to the comparatively short observation period and the associated small quantity of data, the options for analysing the German BLS data are severely limited. In simple correlation analyses, it is possible to ascertain from the BLS, first of all, that credit standards lead credit developments (see the box on pages 24-25). By contrast, there is no obviously discernible lead for the demand observed by the BLS participants. Rather, it cannot be ruled out that the BLS data on demand follow the credit aggregate. Nevertheless, when interpreting these results, it should be borne in mind that the data do not yet contain a complete cycle for interest rates or the economy.

Regression analysis indicates importance of demand for developments in long-term lending

In a further stage, there is an analysis of the extent to which BLS data on credit supply and demand in a simple regression model can explain credit developments in Germany.[12] In view of the short observation period, however, no account can be taken of the leading indicator property of the BLS credit standards ascertained in the correlation analysis as compared with actual credit developments. The fact that the (simultaneous) BLS supply variable lacks significance is unsurprising given that there is no contemporary correlation. By contrast, in the case of long-term loans to enterprises, the BLS demand is a robustly significant explanatory factor. This suggests that, in the past (almost) six years, growth in long-term corporate lending in Germany has been determined in large part by demand-side factors. For short-term loans to enterprises, it

was not possible to identify any significant dependencies from the survey data. Owing to the fact that relationship banking continues to be of major importance in Germany, however, short-term loans are likely to be geared, at least to a certain extent, to the liquidity needs of long-standing customer relationships and therefore be less dependent on pre-defined terms and conditions.

Special questions on the specific impact of the financial market crisis

Ad hoc questions since autumn 2007

After the start of the financial market turbulence in the summer of 2007, the following autumn round of the BLS asked, for the first time, additional questions on the specific direct or indirect impact of the financial market crisis on banks' lending. These ad hoc questions asked the banks' managers what effect the turmoil in the credit markets was having on their credit standards, for example. The information obtained showed the extent to which the financial market crisis was contributing to a tightening of credit standards.

Situation in the financial markets having perceptible impact on credit standards for corporate loans ...

The credit standards for loans to enterprises were tightened somewhat on average by the surveyed institutions throughout the period under observation. There was a very marked tightening in the third quarter of 2008, however, when the financial market crisis dramatically came to a head in the wake of the insolvency of the US bank Lehman Brothers (see chart on page 26). Up to mid-2008, developments in the credit standards and the

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12 For the advantages and drawbacks of the analytical methods used, see the box on pages 24-25.

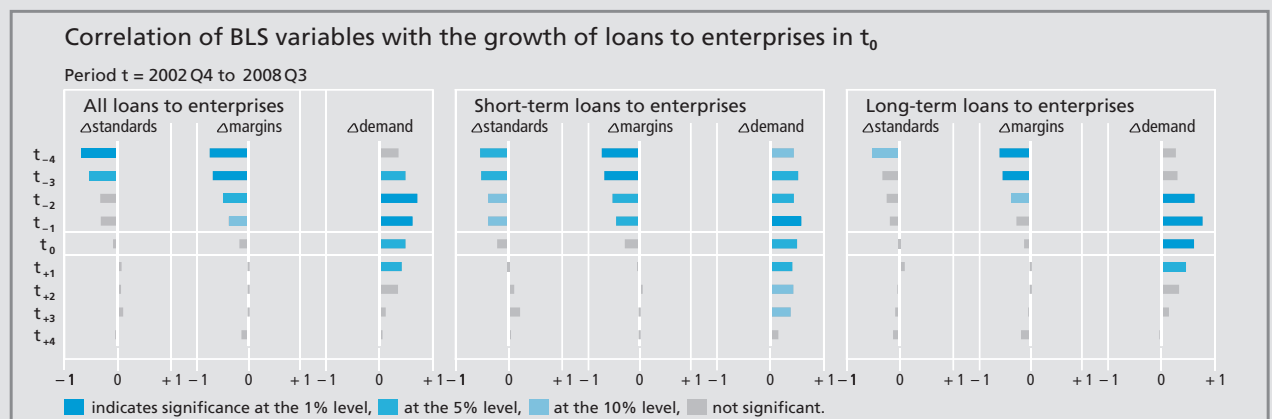## The explanatory power of the BLS variables for developments in loans to enterprises

Not only in the light of the current situation, the extent to which the observed developments in loans are driven by the supply or the demand side is very important for the monetary policy assessment. Since there is only a limited possibility of making a clear-cut distinction between supply and demand variables using macroeconomic measurement variables, loan equations typically make use of approximation values such as gross domestic product or the investment ratio for the demand side as well as an interest rate spread to capture the supply factors.[1] However, such a classification is not always without ambiguity, for example in cases where both the loan supply conditions and the loan demand conditions are cyclically sensitive. In such cases, the Bank Lending Survey (BLS) can provide valuable information for a separate treatment of loan demand and loan supply as determinants in a loan equation.

In the BLS, the institutions are asked, among other things, how much they have changed their standards for loans to enterprises, loans for house purchase and consumer credit over the past three months, whether they have increased or decreased their margins, and how the demand for the different types of loan has developed. The corresponding net balances can be used as alternative indicators of a change in the supply of credit ($\Delta supply_t$) and of an adjustment of the demand for credit ($\Delta demand_t$), respectively.[2] The investment ratio ($ratio_t$) is included in the estimation equations as a further factor affecting the nominal development in loans.

$$\Delta \ln K_t = \beta_0 + \beta_1 \Delta demand_t + \beta_2 ratio_t + \beta_3 \Delta supply_t + u_t$$

The estimation is made on the basis of quarterly data for the period 2002 Q4 to 2008 Q3 and relates solely to loans to enterprises. In order to avoid structural breaks, only the BLS data of the 17 banks from the original sample are used. The growth rate of German banks' loan portfolios $\Delta \ln K_t$ with non-financial corporations in the euro area is chosen as dependent variable. The investment ratio $ratio_t$ is the relationship between nominal gross fixed capital formation and nominal gross domestic product. For the supply side, the obvious thing is to include, instead of an interest rate spread, the net balance of the responses to the BLS question on the change of the margins for loans to enterprises ($\Delta supply_t = \Delta margin_t$) in the estimation. Moreover, in an alternative specification, the net balance of the responses to the question on the change in the credit standards ($\Delta supply_t = \Delta standards_t$) is included as a more broadly defined measure of the supply conditions. Owing to the high correlation between these two supply variables and the associated risk of multicollinearity, two separate equations are estimated, each with only one of the two supply-related variables.

The estimations are carried out for the credit market as a whole[3] as well as separately for short and long-term loans. As part of the BLS, the $\Delta demand_t$ and $\Delta standards_t$ variables are surveyed for each market segment individually as well as for the market as a whole and are incorporated accordingly into the respective estimations. Since the data on the change of the margins are collected separately only for average and riskier loans, but not for different maturities,

Correlation of BLS variables with the growth of loans to enterprises in t_0

Period t = 2002 Q4 to 2008 Q3

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the margin change for average loans is included ín all three estimations as $\Delta margin_t$.

In order to gain an initial impression of the relationship between each individual BLS variable and the credit growth, correlation coefficients are calculated for different time lags and leads. In all three market segments, it becomes evident that the change in credit standards runs ahead of credit growth, at times markedly. No significant simultaneous correlation between these two variables is discernable in any of the three cases. The change in the margins reveals a similar picture: the highest correlation in each case is between the margin change and the credit growth observed four quarters later. No clear time lead is evident for the demand for either loans as a whole or for short-term loans: the change in demand both runs ahead and lags behind credit growth, with the highest correlation coefficient resulting in the case of a time lead for the change in demand of two quarters or one quarter, depending on the credit aggregate under consideration. By contrast, in the case of long-term loans, the change in demand is apparently almost contemporaneous and, moreover, relatively strongly correlated with credit growth. The cited results show that there are, at times, strong links between the BLS variables and credit growth. However, the informative value of correlation coefficients is generally limited: they give no indication of a causal relationship. Furthermore, no more than two variables at

a time can be considered using this method of analysis, ie correlation analysis does not allow the possibility of isolating the effect of an explanatory variable on an explained variable by means of adjustment for the effects generated by other explanatory variables. This can be done only by a regression analysis.

However, owing to the short observation period, no lagged endogenous or exogenous variables can be incorporated into the regression equations, which are estimated using the ordinary least squares method. Nevertheless, even initial estimates may give some clues as to how credit developments depend on the BLS variables. As soon as there is a large enough sample which allows lagged variables to be introduced into the equations, it should be possible to make a further improvement to the quality of the estimates. However, the explanatory power of all the equations is already comparatively high and the designated tests do not indicate any misspecifications. All significant explanatory variables display the expected sign. In all the estimates, the coefficient for the investment ratio differs statistically significantly from 0. The investment ratio has a positive effect on credit growth. In addition, the growth of long-term loans to enterprises is significantly positively dependent on the BLS demand for credit at the same point in time, which was already possible to surmise on the basis of the correlation analysis.[4]
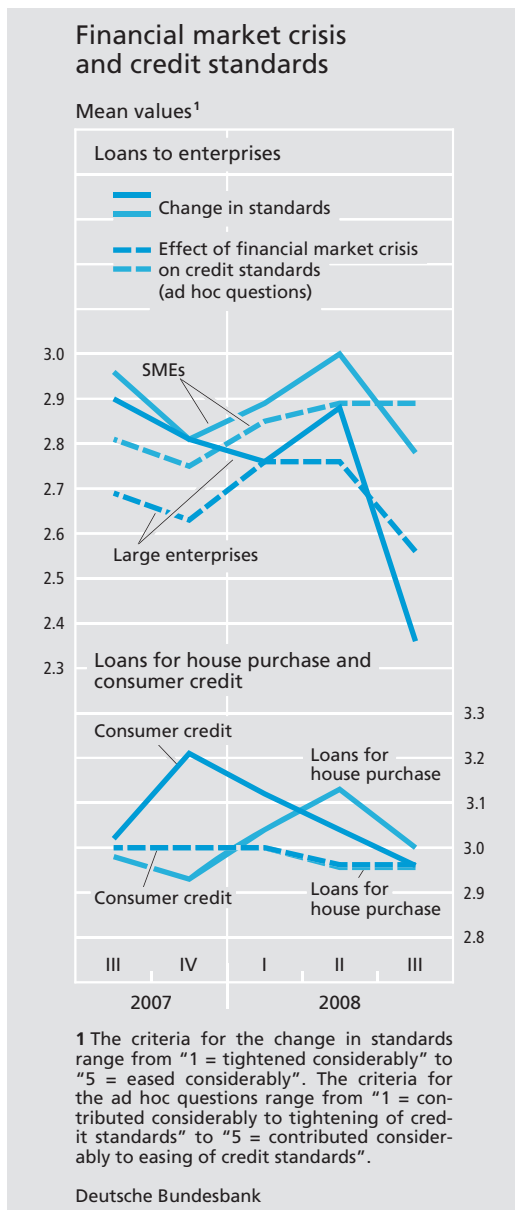
Factors affecting growth of loans to enterprises [5]

Period: 2002 Q4 to 2008 Q3

Variable	all loans to enterprises		short-term loans to enterprises		long-term loans to enterprises	
Constant	− 0.23976*** (0.06026)	− 0.23697*** (0.05944)	− 0.49694*** (0.15328)	− 0.47093*** (0.14649)	− 0.07280* (0.04104)	− 0.07781* (0.04182)
$\Delta demand_t$	0.00011 (0.00009)	0.00011 (0.00009)	0.00011 (0.00042)	0.00016 (0.00039)	0.00014** (0.00006)	0.00013** (0.00006)
$Ratio_t$	1.25257*** (0.33228)	1.33579*** (0.32696)	2.73087*** (0.84621)	2.58186*** (0.80696)	0.45656* (0.22682)	0.45656* (0.23065)
$\Delta standards_t$	− 0.00005 (0.00011)		− 0.00041 (0.00031)		0.00008 (0.00008)	
$\Delta margin_t$		− 0.00002 (0.00006)		− 0.00017 (0.00012)		0.00002 (0.00004)
$\bar{R}^2$	0.59	0.59	0.51	0.51	0.51	0.49
LM(1)	0.26	0.22	0.22	0.16	0.79	0.83
DW	1.53	1.51	1.50	1.45	1.96	1.91
White	0.79	0.90	0.18	0.19	0.85	0.59
Number of observations	24	24	24	24	24	24

provide information on the percentage of banks that have tightened or loosened standards, the mean values incorporate the actual spread of the data. — **3** The overall aggregate comprises short, medium and long-term loans. — **4** Very similar results are produced if the respective net balances in the estimates are replaced by the corresponding mean values. — **5** *** indicates significance at the 1% level, ** at the 5% level, * at the 10% level, standard errors in parentheses. $\bar{R}^2$= correlated coefficient of determination; LM(1) test for serial correlation (p-value); Durbin Watson (DW) test for serial correlation (DW statistics); White test for heteroscedacity (p-value).

Financial market crisis and credit standards

Mean values[1]

Loans to enterprises

— Change in standards

- - Effect of financial market crisis
on credit standards
(ad hoc questions)

SMEs

Large enterprises

Loans for house purchase and consumer credit

Consumer credit

Loans for house purchase

Consumer credit

Loans for house purchase

III   IV   I   II   III

2007   2008

1 The criteria for the change in standards range from "1 = tightened considerably" to "5 = eased considerably". The criteria for the ad hoc questions range from "1 = contributed considerably to tightening of credit standards" to "5 = contributed considerably to easing of credit standards".

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corresponding part played by the financial market crisis ran in parallel. The tightening of credit standards may therefore probably be explained in large part by the financial market turbulence. The stronger adjustments to the standards for loans to large enterprises were, however, affected more noticeably by the situation in the financial markets. By contrast, the actual tightening in both credit categories in the third quarter of 2008 was somewhat

sharper than suggested by the impact of the financial market crisis taken in isolation. This permits the conclusion that, to a considerable extent, these strong adjustments in the third quarter of 2008 were due to factors not directly connected with the financial market turbulence. The banks stressed, in particular, the restrictive effect of the expectations regarding the general economic outlook as well as industry or firm-specific factors. Nevertheless, with the growing duration of the crisis and given their obvious knock-on effects on the real economy, it is becoming increasingly difficult to isolate and identify the specific impact of developments in the financial markets.

For changes in the standards for loans for house purchase and consumer credit, a slightly constraining effect of developments in the financial markets was reported only in the second and third quarters of 2008. Nevertheless, the relevant credit standards remained largely unchanged in the third quarter of 2008 after having been eased somewhat, in fact, in the second quarter.

... and loans to households weaker

Since the autumn quarter of 2007, the participants in the survey – in response to the additional questions – have been reporting persistent problems in their wholesale funding, ie their borrowing in the markets beyond ongoing refinancing through customer deposits. Access to funding in the unsecured interbank money market, through the issuance of debt securities or through other markets was hampered. Just under two-thirds of the German banks participating in the BLS usually make use of these refinancing sources. Of these banks, 50% to 60% reported that

Problems in wholesale funding markets

their hampered access to wholesale funding was having a slight or considerable impact on the quantity that they were willing to lend out (see chart on this page).[13] However, for the majority of banks which answered these questions, only a slight effect on the quantity and margin was reported.

Hampering effect especially on securitisation and risk transfer

More than anything else, the securitisation of loans and the use of credit transfer instruments was evidently possible only to a very limited extent. Almost all the banks which use these sources of funding were feeling marked restrictions, which were reflected in most cases just as strongly in the quantity lent as in the margins. In this connection, however, it should be borne in mind that the banks which make any use at all of these severely affected refinancing instruments account for only just over one-third of the BLS sample. Seen in that light, it should not be concluded that the German banking system has been especially heavily affected by the above-mentioned funding problems on a broad front.[14]

## German banks' lending policy compared with the euro area

Standards in Germany recently tightened less than in euro area as a whole: for loans to enterprises ...

Comparing the German BLS data with the data for the euro area as a whole (including Germany) reveals a number of, in some cases, marked differences in developments in credit

13 The additional question on how far funding problems affect the quantity banks are willing to lend and the margin at which funds are lent has been asked unchanged since the fourth quarter of 2007.
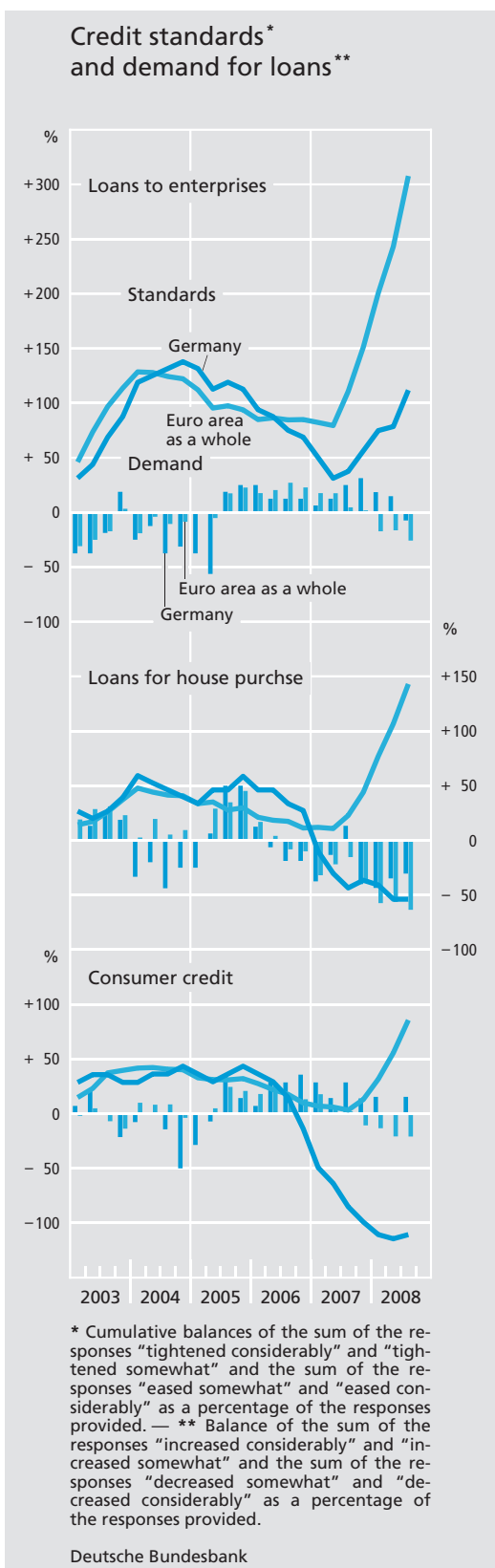**14** For a more detailed comparison with the results for the euro area as a whole, see pages 28-29.

Wholesale funding and lending during the financial crisis*
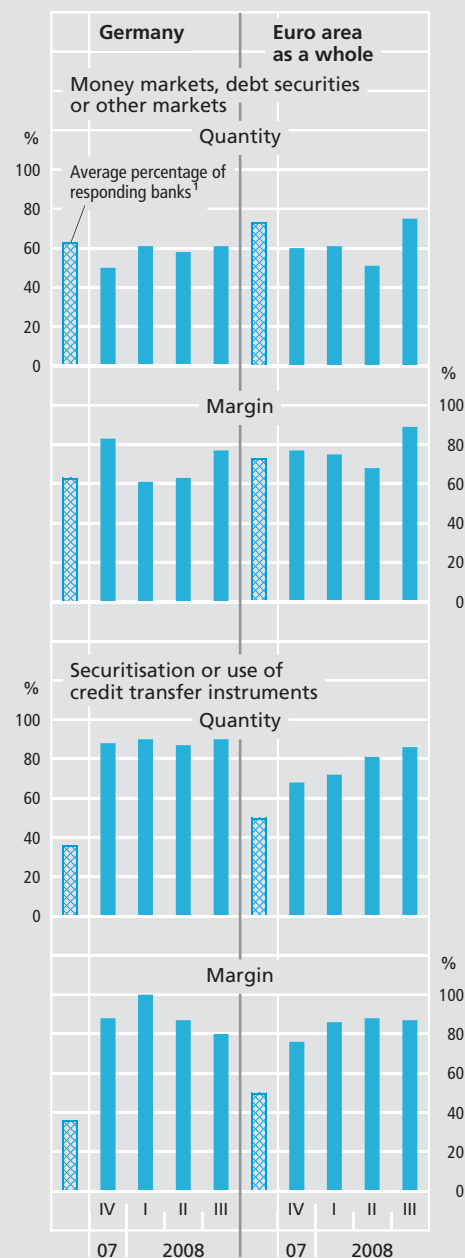
* Banks reporting a considerable impact or some impact of the financial market turmoil as a percentage of the banks which reported that they were active in the respective market. — **1** Banks which reported that they were active in the respective market as a percentage of all the German banks participating in the BLS; average over the period 2007 Q4 to 2008 Q3.

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Credit standards* and demand for loans**

* Cumulative balances of the sum of the responses "tightened considerably" and "tightened somewhat" and the sum of the responses "eased somewhat" and "eased considerably" as a percentage of the responses provided. — ** Balance of the sum of the responses "increased considerably" and "increased somewhat" and the sum of the responses "decreased somewhat" and "decreased considerably" as a percentage of the responses provided.

Deutsche Bundesbank

standards. For loans to enterprises, both the German and other European banks taking part in the BLS initially stated that, on balance, they had been tightening their standards in commercial banking business on the whole up to 2004, although the lending restrictions in Germany were less pronounced (see chart on this page). While the process of easing began as early as mid-2004 in the case of the euro-area banks overall, the German banks followed with a time lag of roughly one year. As a result, the cumulative changes in the credit standards for Germany from the end of 2004 onwards are greater than those for the euro area as a whole. As the credit standards in Germany were eased somewhat more considerably in the ensuing period, however, their cumulative values since the beginning of 2006 have been lower again than the corresponding data for Europe overall. In the wake of the financial market turbulence since mid-2007, this gap has clearly widened since the German banks in the BLS stated, especially at the beginning of the crisis, that they were less affected by it than the banks surveyed in the euro area as whole. Moreover, up to as late as mid-2008, the German banks were faced with a growing demand for credit, while demand in the euro area overall had been declining since the start of 2008.

The picture is similar for loans to households for house purchase and for consumer credit, where the cumulative credit standards for Germany and for Europe as a whole have diverged recently. German borrowers were either less affected by the tightening of credit standards or benefited from a further easing. In both loan categories, the cumulative Ger-

... and for loans to households

man values were still higher than the corresponding figures for Europe as a whole up to mid-2006 or the end of that year. For loans for house purchase, this has been the case since the BLS has been in existence, in fact. Up to about one year ago, however, the German banks participating in the survey had been encountering a consistently weaker growth in demand. Since then, the demand for loans for house purchase at the German banks has been somewhat more robust, however. This is also the case for demand for consumer credit at the German institutions, which was mainly positive up to the third quarter of 2008.

Stronger restrictive impact of financial market turbulence in euro area ...

A comparison of the responses to the additional "ad hoc" questions on the effect of the financial market turmoil on Germany and the euro area as whole shows that the impact on credit standards in the euro area overall was more marked than in Germany. In the euro area overall, a larger percentage of the banks' managers than in Germany reported, especially in the third quarter of 2008, that the situation in the financial markets had contributed considerably or somewhat to the tightening of credit standards for loans to enterprises. The financial market crisis had less effect on the credit standards for loans to households in both reporting groups, although the impact in this category of loans was also greater in the euro area as a whole than in Germany.

... and more widespread difficulties in refinancing than in Germany

The hampering of refinancing options in the wholesale markets affected the BLS banks in the euro area overall somewhat more strongly than the German banks in the survey (see

chart on page 27). The percentage of surveyed banks in the euro area as whole using the unsecured money market, debt securities or other markets for funding, at around 75%, is somewhat higher than in Germany. Added to this is the fact that, especially recently, the negative impact of refinancing difficulties on the quantity of loans and on the margins was stronger than in Germany. In the preceding quarters, there was no discernible significant difference between the two areas. The effect of the restricted possibilities of securitisation and of credit risk transfer on the banks that use these instruments was, in the past, greater in Germany than in the euro area as a whole, although the levels have converged somewhat of late. Nevertheless, these problems are likely to have left their mark more clearly in the euro area as a whole than in Germany since, in the overall aggregate, roughly half of the surveyed banks fund themselves through securitsations and credit risk transfer, while only one-third does so in Germany.

Conclusions

In the past six years, the German BLS data have made a major contribution to explaining lending behaviour in Germany as well as the demand for bank loans and have helped in gaining a better understanding of overall developments in German banks' lending.

At present, the BLS provides some indications of restrictive supply-side effects on loan developments. Refinancing costs and balance sheet constraints have been playing a major

No general shortage in the banks' supply of loans at present

role in developments in credit standards since the beginning of the financial market crisis. There were, however, additional factors in the most recent available survey round, in which there was a very marked tightening of credit standards: the impact of the deterioration in the general economic situation and the increasing importance of industry or firm-specific developments. A tightening of credit standards in periods of economic slowdown is not an untypical reaction in lending behaviour, however. Furthermore, it should be noted that the cited factors – and therefore also the observed adjustments in lending policy – are by no means exhibited to the same degree by all of the banks. All in all, no general credit crunch can be discerned at present on the basis of the BLS data.

Slight decline in demand for loans

On the demand side, in the third quarter of 2008 the survey participants observed a slightly declining demand for credit from en-

terprises for the first time in about three years. This was due mainly to a smaller demand for bank loans for investment purposes. At the German BLS institutions, this decline in demand was especially marked in the case of loans to small and medium-sized enterprises. At the same time, these firms were affected less than large enterprises by tighter credit standards. It should be noted, however, that the currently available data were collected as long ago as the end of September/early October 2008. More recent surveys among borrowers, especially among small and medium-sized enterprises in Germany, essentially confirm this assessment, however.[15]

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15 See, for example, DIHK (2008), Die Auswirkungen der Finanzmarktkrise aus Sicht der Unternehmen, flash survey of November 2008, www.dihk.de (German only), Ifo Institute (2008), Credit Constraint Indicator, From the Ifo Business Survey for December 2008, www.ifo.de, BDI (2008) BDI-Mittelstandspanel, Ergebnisse der Online-Mittelstandsbefragung Herbst 2008, www.bdi.eu (German only).