

Monetary policy, banking business and the capital market

Interest rate policy and the money market

Over the past few months the Governing Council of the ECB has maintained its steady monetary policy course. The main refinancing operations continued to be conducted as variable rate tenders with a minimum bid rate of 2% while the interest rates on the marginal refinancing facility and the deposit facility remained at 3% and 1% respectively. Both nominal and real interest rates are at exceptionally low levels, lending ongoing support to economic activity. One reason for leaving the central rates unchanged was that there is still no significant evidence of domestic inflationary pressures building up in the euro area. However, there are upside risks to price stability over the medium term. Owing to the persistently high price of oil, second-round effects in the wage and price formation process cannot be entirely ruled out. In this respect, the evolution of longer-term inflation expectations needs to be monitored closely. Strict monetary policy vigilance is also necessary owing to the continued abundance of liquidity.

*Eurosystem
interest rates
unchanged*

Apart from the temporary fluctuations at the end of the quarter and at the end of the minimum reserve period, the EONIA overnight rate remained largely unchanged in the period under review. This rate was in most cases close to the marginal rate, which stood at 5 basis points above the minimum bid rate. The very short-term money market rates also remained correspondingly flat. Until early April, this had also largely been the case for the longer-term rates in the money market;

*Money market
rates*

Money market management and liquidity needs

During the three reserve maintenance periods from 19 January 2005 to 12 April 2005, euro-area credit institutions' central bank balance requirements arising from the autonomous factors determining liquidity increased by €12.7 billion in net terms. The volume of banknotes in circulation increased by €2.6 billion, which was essentially the outcome of two diverging developments. First, the volume of banknotes in circulation declined by €8.9 billion during the January/February reserve maintenance period, reducing the sharp increase occurring during the pre-Christmas period by around half. Second, the volume of banknotes in circulation increased sharply in the March/April reserve period, particularly during the week before Easter, by €9.1 billion. Liquidity needs arising from general government deposits increased markedly by €22.1 billion net during the period under review. If, in order to eliminate valuation effects, the changes in net foreign reserves and other factors are taken together, these two items resulted in a liquidity provision of €12.0 billion. The required level of minimum reserves went up by €2.3 billion, resulting in increasing demand for central bank money.

The greater need for liquidity was covered during the reporting period primarily by the longer-term refinancing operations being topped up by €11.9 billion and only secondarily by the normally more important main refinancing operations (MROs) involved in banks' refinancing being topped up by €5.3 billion. Starting with the longer-term operation on 27 January, the Eurosystem topped up the longer-term refinancing operations by expanding the volume of the individual operations from €25 billion to €30 billion.

The interest rate for overnight deposits (EONIA) was at 2.08% in January and remained mostly stable over the course of the period under review (2.06%/2.07%), and was thus at a slightly lower level compared to the three preceding periods. This development also took place in the context of the ECB's return to the allotting of the benchmark amount during the main refinancing operation of 2 March. The ECB had been allotting liquidity above the benchmark amount in the individual MROs since the November/December 2004 reserve period. The periods under review were characterised by rises in the EONIA rate at the end of each month and at the end of the quarter as well as minor deviations following the allotment of the last MRO in each reserve period.

During the reserve maintenance period which began on 19 January and which lasted only 20 days, the EONIA remained fairly stable after the allotment of the last MRO at rates of between 2.01% and 2.07%. On the last day of the reserve maintenance period, the ECB conducted a liquidity-providing fine-tuning operation totalling €2.5 billion. The EONIA stood at 2.03% on this day.

During the reserve maintenance period starting on 8 February, the market apparently assumed there was an excess of liquidity following the allotment of the last MRO. After a liquidity-absorbing fine-tuning operation was carried out with a volume of €3.5 billion on the last day of the reserve period, the EONIA rate stood at 2.01%.

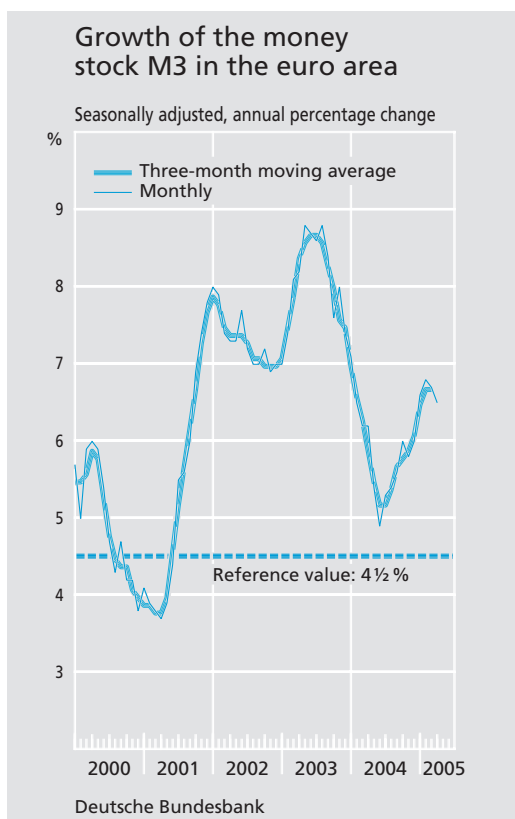
A 35-day minimum reserve period began on 9 March and included the Easter holidays. On the last day of this period, the EONIA stood somewhat higher at 2.18%. This was also due to the fact that this time the ECB, contrary to the five preceding reserve periods, did not conduct any fine-tuning operations on the last day of the reserve period as there was merely a slight liquidity deficit on the morning of that day. Net recourse to the marginal lending facility on this day amounted to only €0.9 billion. At the start of the new April/May reserve maintenance period the EONIA fell back again to 2.07%.

Factors determining bank liquidity ¹

€ billion; calculated on the basis of daily averages of the reserve maintenance periods

Item	2005		
	19 Jan to 7 Feb	8 Feb to 8 March	9 March to 12 April
I Provision (+) or absorption (-) of central bank balances by			
1 Change in banknotes in circulation (increase: -)	+ 8.9	- 2.4	- 9.1
2 Change in general government deposits with the Eurosystem (increase: -)	- 18.5	- 4.7	+ 1.1
3 Change in net foreign reserves ²	- 9.7	- 0.4	+ 1.9
4 Other factors ^{2,3}	+ 13.6	+ 3.7	+ 2.9
Total	- 5.7	- 3.8	- 3.2
II Monetary policy operations of the Eurosystem			
1 Open market operations			
(a) Main refinancing operations	+ 3.7	+ 1.2	+ 0.4
(b) Longer-term refinancing operations	+ 3.0	+ 4.2	+ 4.7
(c) Other operations	- 0.1	- 0.2	+ 0.1
2 Standing facilities			
(a) Marginal lending facility	- 0.1	- 0.0	+ 0.1
(b) Deposit facility (increase: -)	+ 0.0	+ 0.0	- 0.0
Total	+ 6.5	+ 5.2	+ 5.3
III Change in credit institutions' current accounts (I + II)	- 0.9	+ 1.3	+ 2.0
IV Change in the minimum reserve requirement (increase: -)	- 0.9	- 1.3	- 0.1

¹ For longer-term trends and the contribution of the Deutsche Bundesbank, see pages 14* and 15* of the Statistical Section of this *Monthly Report*. — ² Including end-of-quarter valuation adjustments with no impact on liquidity. — ³ Including monetary policy operations concluded in the second stage and still outstanding in the third stage of monetary union (outright transactions and the issuance of debt certificates) as well as financial assets not connected with monetary policy.



since then, however, they have fallen markedly. Thus the yield curve on the money market became discernibly flatter during the period under review. At the same time, the forward rates on three-month deposits, which reflect interest rate expectations, have declined perceptibly. At the end of the period under review, the premium on three-month deposits with a maturity of 9 to 12 months (forward rate agreements) was only around 10 basis points.

Monetary developments in the euro area

Slower rate of monetary growth

In the January to March period, the money stock M3 increased more moderately than in the second half of 2004. At a seasonally adjusted annual rate of just under 5%, M3 at

least expanded more slowly than in the fourth quarter of 2004 (over 7½%). Apart from the somewhat weaker lending to the private sector and noticeably lower inflow of money from abroad, it was again mainly greater monetary capital formation that contributed to this development. However, the strong monetary growth recorded in 2004 is still having a marked impact on the year-on-year growth rate, which from January to March averaged 6.7%.

Among the components of the money stock, the most liquid categories continued to expand exceptionally sharply in the first quarter of the year. This applies particularly to cash holdings, which in the period under review grew at a seasonally adjusted annual rate of 24%, or twice the rate of the previous quarter. Overnight deposits also grew robustly at a seasonally adjusted annual rate of just under 11½%. However, this probably reflects the large-scale switching of short-term time deposits into sight deposits. At all events, deposits with an agreed maturity of up to two years declined by just under 5½% in the period under review. In the first quarter, seasonally adjusted short-term savings deposits with an agreed period of notice of up to three months expanded by an annualised rate of just under 5½%. The development of marketable instruments, which are a component of M3 and on the whole were reduced in the first quarter, had a retarding effect on monetary growth. Of these instruments, repurchase agreements contracted, in particular, although money market funds also redeemed shares on balance. Only bank debt securities

Components of the money stock

Balance sheet counterparts

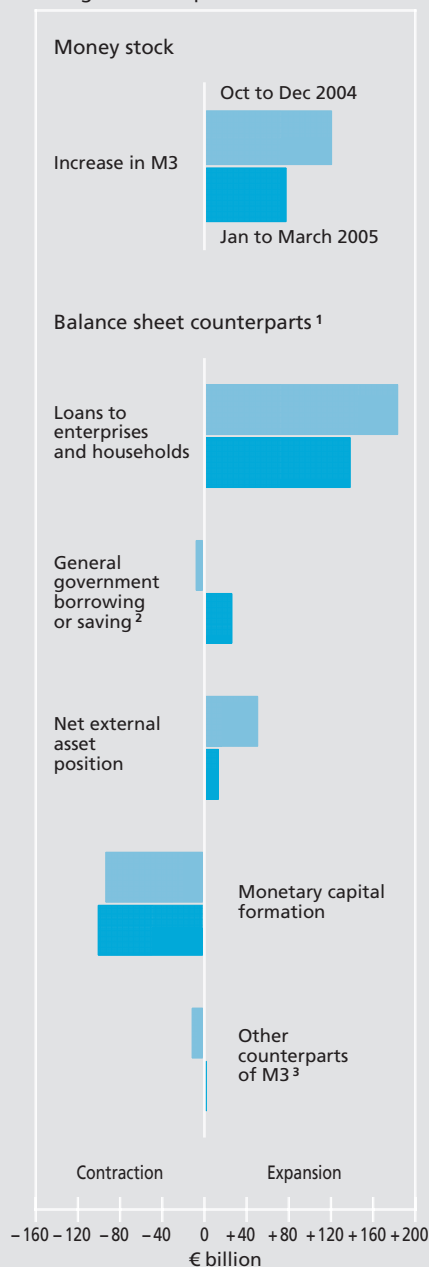
with maturities of up to two years enjoyed greater demand.

The more subdued monetary growth in the first quarter was accompanied by somewhat weaker lending to the private sector. Particularly the volume of loans to the private sector in the euro area fell vis-à-vis the fourth quarter of 2004. Between January and March, unsecuritised lending expanded at a seasonally adjusted annualised rate of 6½%, compared with 8½% in the previous quarter. In a year-on-year comparison to end-March, however, loans to the private sector were 7.6% above their prior-year level. In particular, housing loans to households contributed to the strong year-on-year rise in loans to the private sector. Approximately half of the credit growth was attributable to these loans (3¼ percentage points). The increase in unsecuritised lending to non-financial enterprises also made a significant contribution to this development (2½ percentage points). By contrast, the contributions made by consumer loans and other credit to households were much less significant (around ½ percentage point).

External transactions of domestic non-banks, which are reflected in the development of the MFI sector's net external asset position, tended to curb monetary growth in the first quarter. Longer-term investments with banks in the euro area, which again expanded considerably in the period under review, had the same effect. In particular, a large amount of bank debt securities with a maturity of over two years were sold outside the banking sec-

Euro-area M3 and its balance sheet counterparts

€ billion, seasonally adjusted, change over the period indicated



1 Changes in balance sheet counterparts are shown in terms of whether they expand (+) or contract (-) the money stock. — 2 Bank loans to general government less euro-area central government deposits with MFIs and holdings of securities issued by the MFI sector. — 3 Calculated as a residual of the other items of the consolidated balance sheet of the MFI sector.

Deutsche Bundesbank

Lending and deposits of monetary financial institutions (MFIs) in Germany *

€ billion

Item	2005	2004
	Jan to March	Jan to March
Deposits of domestic non-MFIs 1		
Overnight	+ 25.9	+ 11.4
With agreed maturities		
of up to 2 years	- 24.9	- 18.1
of over 2 years	+ 9.3	+ 6.9
Redeemable at agreed notice		
of up to 3 months	+ 0.7	+ 2.6
of over 3 months	+ 0.2	- 1.5
Lending		
to domestic enterprises and households		
Unsecuritised	- 0.3	- 5.0
Securitised	+ 2.7	+ 8.3
to domestic government		
Unsecuritised	- 2.3	+ 5.3
Securitised	+ 7.4	+ 20.1

* As well as banks (including building and loan associations, but excluding the Bundesbank), monetary financial institutions (MFIs) here also include money market funds; see also Table IV.1 in the Statistical Section of the *Monthly Report*. — 1 Enterprises, households and government excluding central government.

Deutsche Bundesbank

tor. Furthermore, longer-term time deposits also increased sharply.

In the period under review, general government borrowing or saving, by contrast, exerted a slightly expansionary effect on monetary growth. The considerable increase in loans to public authorities was accompanied, however, by a topping up of cash holdings of central government in the euro area with domestic banks, which are traditionally not included in the money stock M3.

Deposit and lending business of German banks with domestic customers

Much the same as in the euro area as a whole, the liquid bank deposits of private

non-banks, which are included in M3, recorded only a moderate increase in Germany in the first quarter of this year. However, there were marked shifts within the individual types of short-term deposits. While overnight deposits went up sharply, domestic investors massively reduced their short-term time deposits. This was influenced, however, by the short-term treasury operations of other financial intermediaries (for example, investment companies or large enterprises' financing subsidiaries). By contrast, the investment behaviour of non-financial enterprises and households during the period under review does not provide any indication of a widespread increase in German investors' liquidity preference as was the case in the wake of sliding share prices in 2001 and in early 2003.

Slight rise in short-term bank deposits

In the first quarter of 2005, overnight deposits increased particularly sharply at a seasonally adjusted annual rate of over 15%. Particularly other financial intermediaries depleted their short-term time deposits to top up their overnight deposits. Over and above this, there were considerable shifts out of short-term time deposits into repurchase agreements in the first quarter, which, from an economic point of view, represent asset-backed bank deposits and are reported separately. In the period under review, households also favoured other liquid bank deposits, including deposits with an agreed period of notice of three months, over short-term time deposits. In net terms, only short-term savings deposits at a rate of interest above the minimum rate of return were increased.

Sharp increase in overnight deposits ...

... alongside steep fall in short-term time deposits

*Sharp increase
in longer-term
bank deposits*

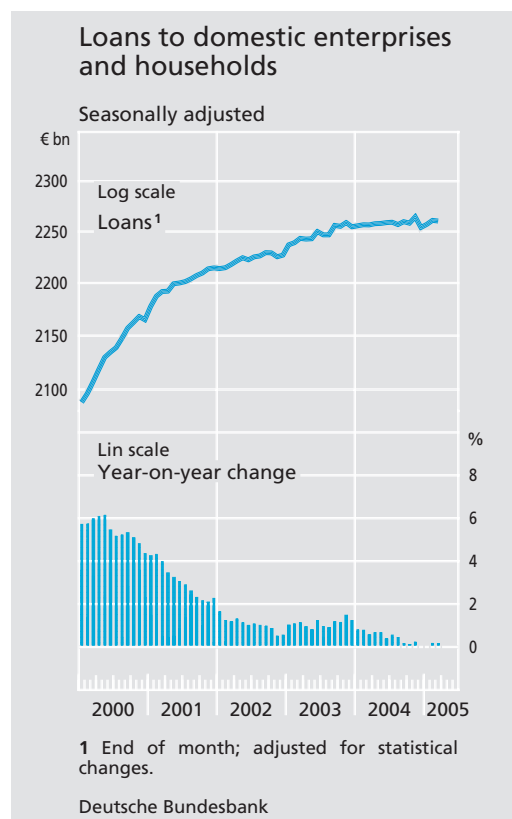
The longer-term bank deposits of the domestic private sector rose again sharply during the January to March period. It was mainly time deposits redeemable at notice of over two years which increased. As in the previous quarters, domestic insurance corporations especially invested in such deposits. By comparison, households preferred longer-term savings deposits (redeemable at notice of over three months) in the period under review.

*Further fall
in lending*

Lending by German banks to domestic non-banks declined somewhat in the first quarter. This particularly applies to lending to government in Germany, where both loans and the outstanding volume of securities of domestic public borrowers decreased. By contrast, banks lent more to private domestic non-banks. However, this increase was mostly due to a perceptible increase in short-term loans to other financial intermediaries. By comparison, medium-term and long-term loans to domestic private non-banks rose only slightly. In the past 12 months, the only longer-term bank loans to increase were housing loans to households. By contrast, other forms of unsecured lending to households as well as loans to domestic enterprises decreased.

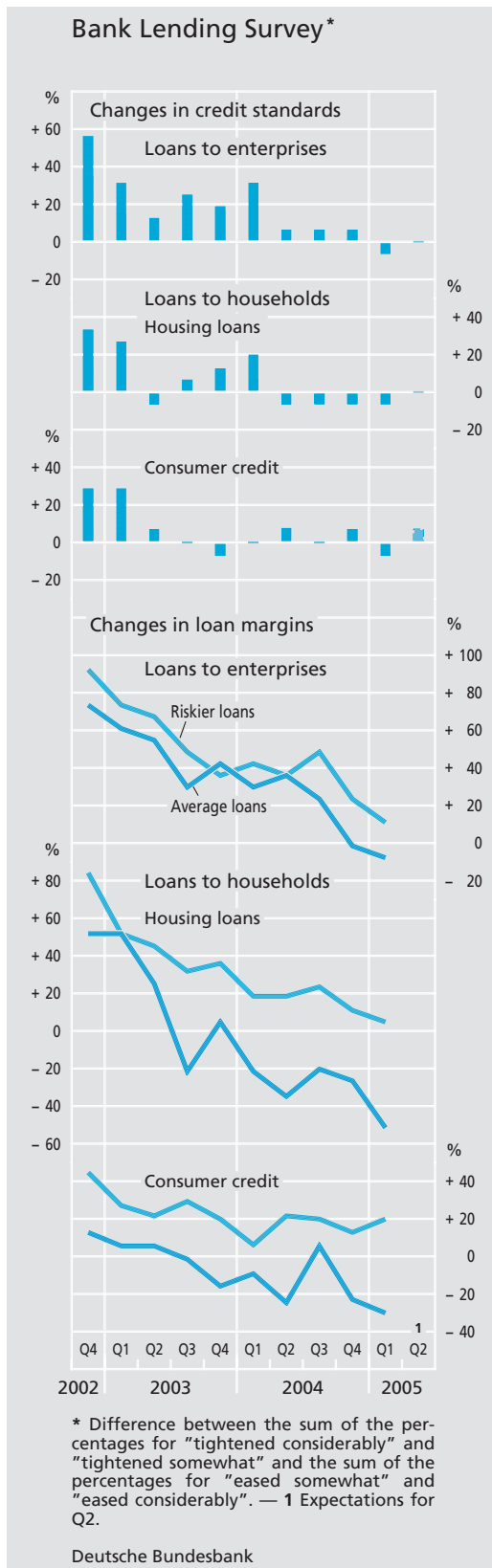
*Small volume
of lending
predominately
demand-driven*

The results of the Eurosystem's bank lending survey¹ indicate that the continued low level of lending in the first quarter of 2005 was primarily due to lower credit demand. As a result, on balance, the respondent banks eased their credit standards for loans to enterprises slightly for the first time since the survey began in the fourth quarter of 2002. The credit standards for housing loans and consumer loans likewise tended to be slightly ex-



pansionary. According to the respondent banks, this was the result of increasing competitive pressure, particularly in the area of consumer loans. Furthermore, the credit margins for average-risk exposures narrowed particularly for housing loans, and to a lesser degree for consumer loans and loans to enterprises. Margins widened further, albeit more weakly on the whole only in the case of riskier loans. Respondent banks reported that the generally more favourable financing conditions during the reporting period coincided with a further decline in credit demand. Banks attributed this mainly to an ongoing

¹ For more information on the bank lending survey, see Deutsche Bundesbank, German results of euro-area bank lending survey, *Monthly Report*, June 2003, pp 67-76. The aggregate survey results for Germany can be viewed under http://www.bundesbank.de/volkswirtschaft/vo_veroeffentlichungen.en.php.



fall in financing needs for fixed investment as well as households' low consumer confidence.

For the second quarter of 2005, the credit institutions do not expect enterprises' or households' demand for credit to change considerably and anticipate that credit standards will remain unchanged. Hence the German survey results regarding the supply side were more or less in line with the results for the euro area as a whole. Demand for credit, however, continued to be much weaker in Germany.²

Demand for credit again weaker than in the euro area as a whole

In the first quarter of 2005, domestic banks' rates for new lending to the private sector were slightly lower overall. Above all, short-term loans to enterprises, housing loans and consumer loans became cheaper. By contrast, there was a mixed development in the area of long-term lending. Whereas the corresponding rates for loans to non-financial enterprises barely changed, the rates for housing loans went down again. The rates for consumer loans increased considerably. At the end of the period under review, German banks were charging non-financial enterprises between 4.2% and 4.7% for new long-term lending depending on the loan amount. They charged 4.5% for loans for house purchase with an interest rate fixation of over ten years and 8.9% for long-term consumer loans.

Lending rates falling slightly on the whole

The rates in domestic credit institutions' deposit business changed only marginally during the first three months of 2005 for the

Little change in deposit rates

² See European Central Bank, *Monthly Bulletin*, May 2005, pp 17 ff.

second quarter in a row. While the rates on savings deposits declined slightly, there was a slight increase in the rates on time deposits. Towards the end of the period – depending on the maturity – the rates on households' time deposits were between 2.0% and 2.8%, while those for enterprises were between 2.0% and 3.6%. At the end of the quarter, banks were paying 2.1% for savings deposits with a notice period of up to three months and 2.5% for longer maturities.

Securities markets

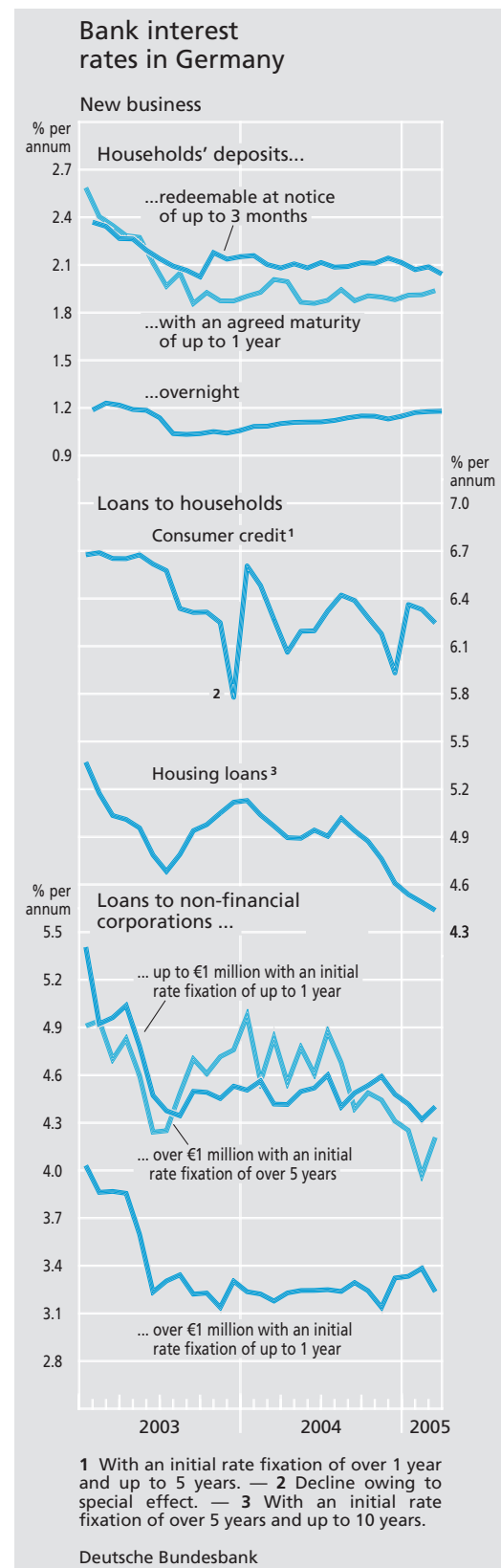
Financial markets driven by unfavourable cyclical expectations and heightened risk aversion

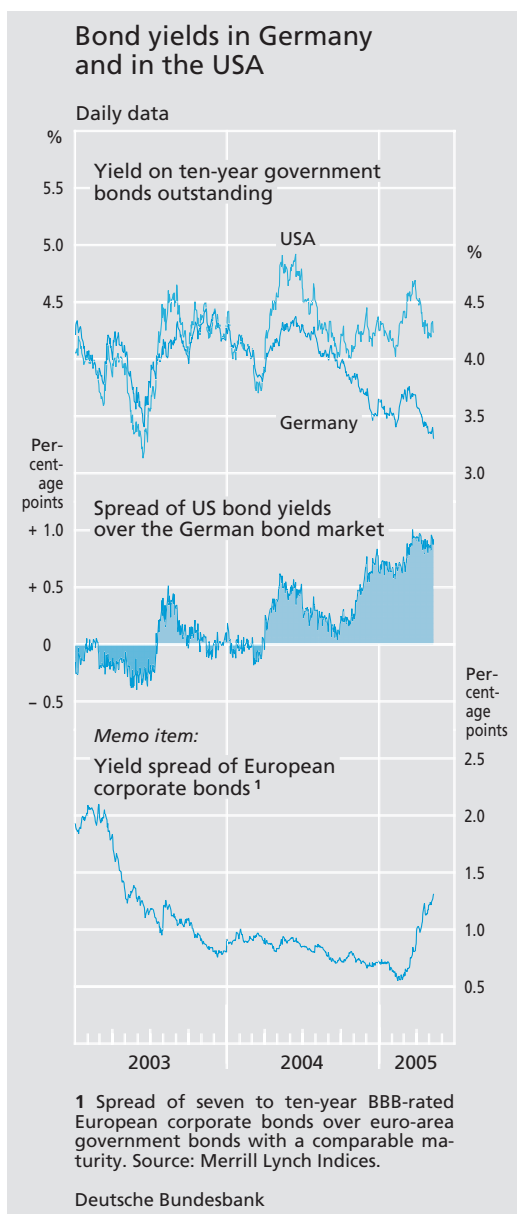
The situation on the German and European capital markets increasingly reflects the dampened expectations for economic activity and a drop in investors' willingness to take risks. Against this background, the yield on ten-year German government bonds (Bunds), after having risen temporarily in February, fell back below the 3½% mark and subsequently to a historical low. Given the basically constant inflation expectations,³ this also indicates a corresponding decrease in real interest rates.

Slight fall in share price level

In mid-February, the rally on the equity markets which had lasted for two years, came to a temporary halt. In the second half of April, share prices then sagged noticeably. In Germany, the broad CDAX share price index has lost 1¾% since the start of the year. In the rest of the euro area, share price movements were somewhat more positive. However, other euro-area countries likewise recorded

³ According to surveys by Consensus Economics.





marked swings in the period under review. For a time, European share prices were over 5% above the levels seen at the start of the year before doubts about the pace of the economic upturn caused prices on the European stock exchanges to recede. However, in the assessment of the financial analysts, the short-term earnings outlook for listed enterprises has developed positively. These estimates suggest that, on a long-term compari-

son, equities still have a relatively low valuation. Thus in April, the price-earnings ratio of German blue chips, calculated on the basis of equity analysts' earnings estimates for the next 12 months, was 12 – clearly below the average level recorded since 1988 ($16\frac{3}{4}$).⁴ The enterprises contained in the EuroStoxx index were valued at a similar level.

The yield spreads on BBB-rated corporate bonds, after having fallen to the lowest level since the start of monetary union, have widened markedly since February. As the *Monthly Report* went to press, BBB-rated European corporate bonds were yielding 132 basis points above government bonds, compared with a yield spread of less than half of this amount in early March. All the same, this is well below their long-term average value since 1999, which, in conjunction with the exceptionally low capital market rates, continues to suggest favourable financing conditions in the capital market.

The increase in the yield spreads is apparently a result of both higher default risk premia and higher liquidity premia which emerged on the European capital markets, too, following profit warnings and the subsequent rating downgrades of General Motors and Ford. At all events, the premia on credit default swaps have also increased for European enterprises without there being any concrete signs of

Increase in yield spreads on corporate bonds ...

... suggests greater risk aversion on the part of investors

⁴ When comparing the current earnings outlook with past performance account must be taken of the fact that, from April 2005, the earnings forecasts already include changes reflecting the international accounting standards (IFRS) and are currently higher than the previous earnings which were reported in accordance with the German Commercial Code. This will probably push down the PER by approximately $\frac{3}{4}$ of a point.

similar problems in the corporate sector in the euro area. Given the steady upward trend in expected corporate earnings in the euro area, the ratings situation in the market as a whole is still favourable. In the first quarter of the year, rating agencies gave more rating upgrades than downgrades to European firms. It therefore seems likely that the increase in the yield spreads is primarily the result of greater risk aversion on the part of market participants, who are now demanding higher premia for an unchanged risk level.

Increased borrowing on the capital market

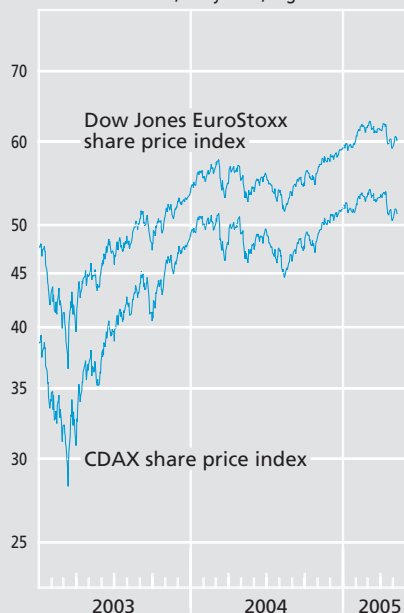
The low interest rate level was accompanied by lively issuing activity on the German bond market. Gross sales of domestic debt securities came close to reaching a new record high with a market value of €335 billion. After taking account of redemptions and changes in issuers' holdings of their own bonds, German issuers raised funds amounting to €61 billion. At the same time, sales of foreign bonds and notes in the German market raised €53½ billion net. Hence total funds raised in the first quarter of 2005 totalled €114½ billion, compared with only €4 billion in the fourth quarter of 2004.

Banks raise more funds

Domestic credit institutions attracted the lion's share of these resources (€31½ billion), after having redeemed bonds and notes totalling €20½ billion in the fourth quarter of 2004. In the first quarter of 2005, debt securities issued by specialised credit institutions (€24 billion) and other bank debt securities (€18½ billion) were also in demand. By contrast, net sales of mortgage Pfandbriefe totalled only €3 billion, while public Pfandbriefe were actually sold on balance (-€14 billion).

Equity prices in Germany and in the euro area

March 2000 = 100, daily data, log scale



Source: Deutsche Börse AG.

Deutsche Bundesbank

In the quarter under review, general government tapped the capital market for €22½ billion. Three-quarters of this sum was raised by central government (€16½ billion), which was mainly active in the longer-term maturity segment. It issued ten-year Bunds for €9½ billion and 30-year Bunds for €7 billion net. At the short end of the maturity range, it sold two-year Federal Treasury notes (Schätze) totalling €3½ billion and redeemed €6 billion net worth of five-year Federal notes (Bobls). State government added €6½ billion to its capital market debt.

Moderate borrowing by general government

Despite the low yields for corporate bonds, non-financial corporations primarily issued money market paper (€4 billion net). They sold longer-term corporate bonds in the amount of only €2½ billion (net).

Short-term debt incurred by enterprises

Measuring the liquidity and default risk component of corporate bond spreads

Interest rate spreads on corporate bonds reflect both compensation for the default risk of the bond and a premium for the lower liquidity of such bonds vis-à-vis government bonds. An increase in the spread may therefore be an indication of a higher default risk or of lower market liquidity. However, spreads may also rise if market participants demand greater compensation for the same level of risk. The determinants of the various components of the spread cannot be observed directly. A comparison with the premia on credit default swaps (CDS), however, gives some insight into the relative importance of default and liquidity premia.

With a CDS, the risk shedder transfers the default risk of the underlying (eg a bond) to the risk taker in return for the regular payment of a premium. In contrast to the interest rate spreads on bonds, these CDS premia should, for a number of reasons, not contain any major liquidity premia: a new contract can be concluded at any time, short positions can be entered into easily and, according to empirical studies, information is processed more quickly on the CDS market than on the bond market.¹

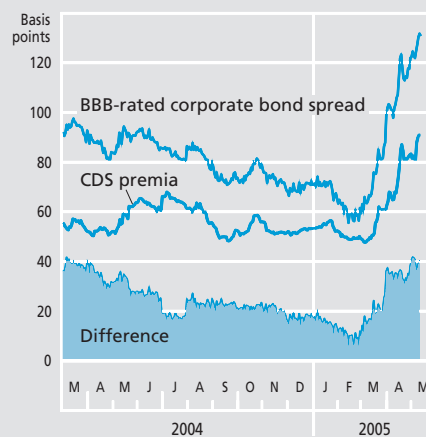
Apart from a few minor distorting factors, CDS premia should therefore essentially reflect the expectation of default and the corresponding risk premium, which varies with investors' level of risk aversion.²

The adjacent chart shows the movement of the interest rate spreads on European BBB-rated bonds compared with the CDS premia on the bonds contained in the corresponding index.³ During the observation period it became apparent, that, in line with corresponding studies for the United States,⁴ more than half of the spreads are attributable to default risk premia. Furthermore, it can be seen that the share attributable to default risk has remained relatively constant until quite recently. This suggests

that the decline in the interest rate premia up to March 2005 was attributable only very marginally to an improved credit worthiness. Instead, it is likely that market participants demanded a lower liquidity premium. This may be the result of greater market liquidity or lower risk aversion to liquidity shortages. One reason for the possible decline in the level of risk aversion could be the search for yield during phases of low capital market rates.

The rise in the interest rate spreads since mid-March, by contrast, is attributable to both higher default risk premia and higher liquidity premia. This suggests that particularly market participants' general risk aversion has increased, after having fallen considerably previously. This is consistent with the observation that on other markets, too, such as the European equity markets, the recent relatively high level of liquidity appears to have hardly waned at all.⁵

Corporate bond spreads and CDS premia



Sources: Bloomberg and Datastream.

1 See R Blanco, S Brennan, I W Marsh, *An Empirical Analysis of the Dynamic Relationship Between Investment Grade Bonds and Credit Default Swaps*, forthcoming in the Journal of Finance. — 2 The distorting factors include the cheapest-to-deliver option linked to a CDS, counterparty risk and the uncertainties associated with the definition of the default event. — 3 The corresponding credit default swaps were obtained for the bonds included in the Merrill Lynch BBB Index (residual maturity of 7 to 10 years) for the respective residual maturity and the average premium was calculated. This can only serve as an approximation of the default risk of the index, however. First, credit derivatives with a matching

maturity only exist for 26 of the 38 bonds contained in the Merrill Lynch index, although an analysis of the yields of the bonds for which no CDSs are available shows that the resulting distortion is not significant. Second, the length of the available time series varies. — 4 See F A Longstaff, S Mithal, E Neis, *Corporate Bond Yields: Default Risk or Liquidity? New Evidence from the Credit-Default Swap Market*, forthcoming in the Journal of Finance. — 5 This is suggested by indicators of illiquidity on the equity market, which are based on the influence which a certain trading volume has on the share price.

*Purchases of
debt securities*

Foreign investors and domestic credit institutions were the main purchasers in the bond market, investing similar amounts in debt securities (€53½ billion and €46½ billion respectively). Credit institutions purchased foreign debt securities, in particular (€34½ billion). Over and above that, they also purchased government debt securities. Domestic non-banks also purchased mainly foreign debt securities on balance (€19 billion).

*Increased
activity on the
equity market*

Issuing activity in the German equity market picked up in the first three months of 2005. Sales of new shares issued by domestic enterprises increased to €2 billion, compared with €1½ billion in the first quarter of last year. On balance, German shares were purchased by credit institutions (€1½ billion) and foreign investors (€3½ billion). In the first quarter, domestic non-banks reduced their holdings by €3 billion, thus continuing the trend of the previous quarters. By contrast, foreign equities were hardly in demand.

*Specialised
mutual funds
and foreign
mutual funds
popular*

Sales of mutual fund shares were buoyant in the first quarter of 2005. In net terms, €24 billion worth of mutual fund shares were sold, compared with €12½ billion in the first quarter of 2004. Sales concentrated mainly on shares in foreign funds (€14½ billion) and specialised funds (€9 billion), which doubled and trebled respectively. By contrast, investors lost interest in domestic mutual funds open to the general public. Sales of these mutual fund shares dropped from €3 billion in the first quarter of 2004 to merely €½ billion. In particular, mixed funds (-€2 billion), share-

Investment activity in the German securities markets

€ bn			
Item	2004	2005	2004
	Oct to Dec	Jan to Mar	Jan to Mar
Bonds and notes			
Residents	- 18.5	60.8	42.7
Credit institutions	2.5	46.4	55.3
of which			
Foreign bonds and notes	17.3	34.6	23.4
Non-banks	- 21.0	14.4	- 12.6
of which			
Domestic bonds and notes	- 21.9	- 4.6	- 16.3
Non-residents	22.6	53.7	51.2
Shares			
Residents	4.6	- 1.5	1.5
Credit institutions	11.0	1.5	6.7
of which			
Domestic shares	8.8	2.3	7.4
Non-banks	- 6.4	- 3.0	- 5.2
of which			
Domestic shares	- 6.3	- 4.0	- 6.1
Non-residents	0.5	3.7	0.0
Mutual fund shares			
Investment in specialised funds	7.4	8.9	2.8
Investment in funds open to the general public	- 6.5	0.4	2.8
of which: Share-based funds	1.1	- 1.8	0.6

based funds (-€2 billion) and open-end real estate funds (-€½ billion) recorded outflows of resources. Bond-based funds and money market funds, by contrast, recorded inflows amounting to €2½ billion and €2 billion respectively.

As usual, domestic non-banks were again the most active investor group, investing primarily in foreign mutual funds (€11 billion) and only to a lesser extent in domestic funds (€5½ billion). Credit institutions invested €3½ billion in both domestic and foreign mutual fund units; by contrast, foreign investors' purchases of German mutual fund shares remained virtually unchanged.