

Monetary policy, capital markets and banking business

Interest rate policy and the money markets

The Governing Council of the European Central Bank did not change the Eurosystem's key interest rates in the past few months. All main refinancing operations were conducted as variable rate tenders with a minimum bid rate of 2%, and the interest rates on the marginal refinancing facility and the deposit facility were left unchanged at 3% and 1% respectively. The steady interest rate policy course was based on the assessment that the outlook for price stability in the euro area would remain favourable. While in the final quarter the leading economic indicators and confidence indicators again pointed to a moderate recovery in the real economy, the ongoing sharp rise in the external value of the euro and the continued low level of capacity utilisation seem to have limited the risks to price stability emanating from the real economy. This assessment is currently also supported by monetary indicators.

*Eurosystem
interest rates
unchanged and
stable outlook
for prices*

Market participants had expected the Governing Council's steady interest rate policy course. In the quarter under review, the overnight interest rate (Eonia) remained fairly close to the minimum bid rate on the main refinancing operations. The only major deviations were limited to the end of each reserve maintenance period and the last week in December, when financial institutions, generally for accounting purposes, endeavour to hold a greater amount of liquidity. By contrast, the interest rates on longer-term contracts in the money market were not as steady in the fourth quarter. In the light of market partici-

*Money market
interest rates*

Money market management and liquidity needs

Owing to changes in the autonomous factors, there was an overall increase of €22.8 billion (see adjacent table) in credit institutions' demand for central bank balances in the past three reserve maintenance periods. The main reason for this development was the usual seasonal increase of banknotes in circulation in the pre-Christmas period. By contrast, the changes in general governments' deposits with the Eurosystem created more liquidity. Although these deposits rose sharply in the November-December period, they fell so markedly in the December-January period that this added €11.3 billion in liquidity in the period under review. For the most part, changes in net foreign reserves and other factors offset each other. To a large extent, the changes in these two variables are a result of the quarterly valuation adjustment on 31 December 2003.

The Eurosystem offset the changes in the autonomous factors by adjusting the volumes of the main refinancing operations; these were sharply expanded in the November-December period, resulting in a total increase in monetary policy operations of €24.5 billion. The volume of longer-term refinancing operations remained unchanged. Over the Christmas/New Year period, for which it is difficult to forecast how the autonomous factors will develop, the Eurosystem did not have to use fine-tuning operations to manage liquidity in the money market.

Short-term liquidity fluctuations were offset smoothly by using the standing facilities. The largest recourse to the marginal lending facility on a single day took place on 23 December 2003, totalling €11.6 billion (Bundesbank: €5.0 billion). The credit institutions thus procured additional liquidity for the Christmas period. However, use of this facility was markedly down on the previous year, when on 23 December 2002 recourse to the marginal lending facility totalled €18.6 billion (Bundesbank: €15.1 billion).

In total, credit institutions' balances with the Eurosystem increased by €1.7 billion, which is due to an increase in the minimum reserve requirement of €1.5 billion and, to a lesser extent, to credit institutions' somewhat higher overcompliance with these requirements.

By and large, the overnight interest rate on the euro-area interbank market, measured against the average Eonia rate, remained close to the minimum bid rate for the main refinancing operations of 2.00%. Towards the end of the reserve maintenance periods, however, the Eonia sank perceptibly below the minimum bid rate. By contrast, there was only one major upward deviation between 23 December, when a level of 2.46% was attained, and 31 December. This reflected the usual slight liquidity squeeze during the holidays and around the end of the year.

1 For longer-term trends and the contribution of the Deutsche Bundesbank, see pages 14* and 15* of the Statistical Section of the *Monthly Report*. — 2 Including end-of-quarter valuation adjustments with no impact on liquidity. — 3 Including monetary policy operations con-

Factors determining bank liquidity ¹

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

Item	2003-04		
	24 Oct to 23 Nov	24 Nov to 23 Dec	24 Dec to 23 Jan
I Provision (+) or absorption (-) of central bank balances by			
1 Change in banknotes in circulation (increase: -)	- 3.9	- 16.7	- 11.5
2 Change in general government deposits with the Eurosystem (increase: -)	+ 4.9	- 13.6	+ 20.0
3 Change in net foreign reserves ²	+ 0.5	- 1.7	- 10.9
4 Other factors ^{2, 3}	+ 1.1	+ 2.3	+ 6.7
Total	+ 2.6	- 29.7	+ 4.3
II Monetary policy operations of the Eurosystem			
1 Open market operations			
(a) Main refinancing operations	- 2.6	+ 29.7	- 2.9
(b) Longer-term refinancing operations	- 0.0	+ 0.0	± 0.0
(c) Other operations	-	-	-
2 Standing facilities			
(a) Marginal lending facility	- 0.0	+ 0.5	- 0.3
(b) Deposit facility (increase: -)	- 0.1	+ 0.2	- 0.0
Total	- 2.7	+ 30.4	- 3.2
III Change in credit institutions' current accounts (I + II)	- 0.1	+ 0.8	+ 1.0
IV Change in the minimum reserve requirement (increase: -)	+ 0.2	- 0.7	- 1.0

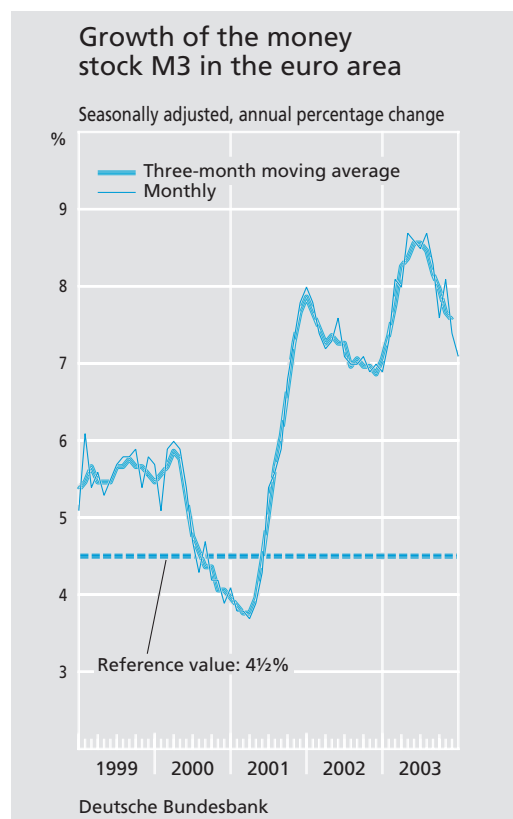
cluded in stage two and still outstanding in stage three (outright transactions and the issuance of debt certificates) as well as financial assets not connected with monetary policy.

pants' growing expectations of interest rate increases last autumn, the longer-term money market rates initially carried increasingly higher premiums. At the beginning of December, for example, the 12-month Euribor was temporarily just under 40 basis points above its rate at the beginning of the quarter. Admittedly, it has declined markedly again since then. Overall, however, longer-term interest rate expectations on the money market look set to rise.

Monetary developments in the euro area

Monetary expansion remains strong but is slowing

The money stock M3 increased sharply in the euro area in the fourth quarter, still far faster than appropriate for financing inflation-free economic growth. Monetary expansion was, however, perceptibly lower than in the first half of the year. At year-end the seasonally adjusted annualised three-month growth rate of M3 was just under 6%. The three-month moving average of annual growth rates went down from 8.2% for the July-September period to 7.6% for the October-December period. Investments in instruments not included in the money stock M3 clearly continued to become increasingly attractive. In line with more optimistic economic expectations, equity prices rose again in the fourth quarter. Capital market rates also went up during the fourth quarter. Consequently, the opportunity costs of holding cash also increased. All in all, the slowdown in monetary expansion indicates that investors' preference for liquidity has gradually begun to wane. However, if this process were to stop and, at the same time, the considerable cash hold-



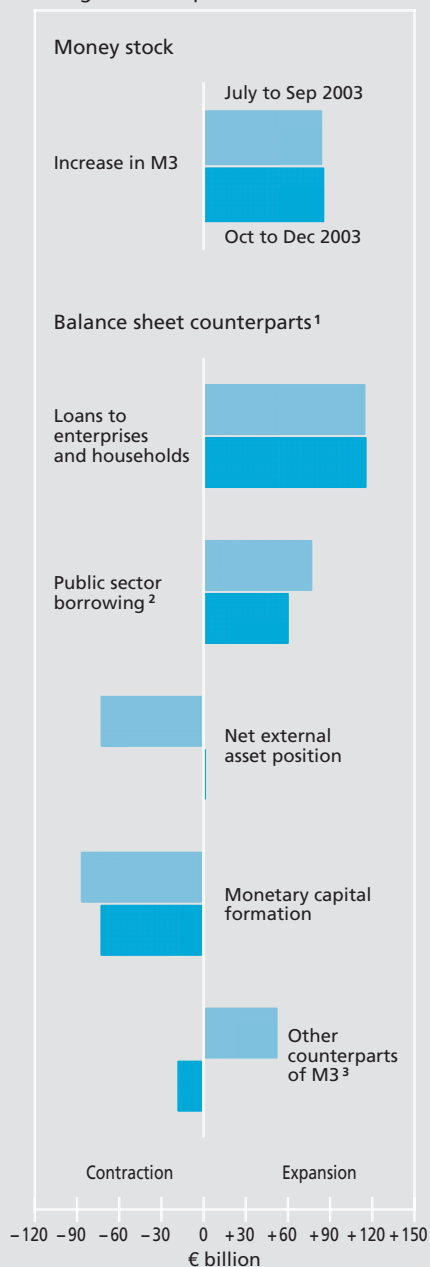
ings were to be used increasingly for consumption spending and investment, prices would be at risk. Bearing this in mind, monetary developments must continue to be observed closely.

Of the individual components of M3, overnight deposits rose substantially in the fourth quarter. Their seasonally adjusted annualised growth rate fell, however, from just under 10% in the third quarter to 6% in the quarter under review. Cash holdings continued to expand strongly at a rate of 26%. Overall, the money stock in the narrow monetary aggregate M1 therefore grew by a good 8½% in the fourth quarter. Although there was only a moderate increase in other short-term bank deposits (excluding overnight deposits), investment in the marketable financial instru-

Components of the money stock

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 general government deposits and holdings of securities issued by the MFI sector. — ³ Calculated as errors and omissions from the remaining items of the consolidated balance sheet of the MFI sector.

Deutsche Bundesbank

ments included in the money stock M3 grew considerably in seasonally adjusted terms. As was the case in the previous quarter, money market fund shares were in particular demand. In the period under review, repo transactions, money market paper and short-term bank debt securities also posted marked growth. In the previous quarters these instruments had still mainly been on the decline.

As regards balance sheet counterparts, lending to enterprises and households in the euro area, in particular, stimulated monetary growth in the period under review. There was a particularly steep rise in loans to the private sector. At an annualised three-month rate of just over 6%, these instruments expanded somewhat more strongly than the monetary aggregate M3. Favourable financing conditions together with expectations of an economic recovery are likely to have again prompted private non-banks to borrow funds.

Balance sheet counterparts

In addition, monetary financial institutions (MFIs) granted a perceptible volume of lending to general government in the euro area. In non-seasonally adjusted terms there was an increase of €24.7 billion in this lending in the October-December period. There was a particular surge in loans to government authorities (+€21.4 billion) in the quarter under review. The distinct reduction in central government deposits also stimulated monetary growth in the fourth quarter.

Foreign payment transactions had no expansionary effects on the money stock M3 in the period under review. After the elimination of

seasonal effects, the net external asset position of the MFI sector, which reflects payments between non-banks and the non-euro-area countries, remained unchanged in the fourth quarter. The renewed acceleration of monetary capital formation, however, dampened monetary growth. Consequently, from October to December, the seasonally adjusted annualised three-month growth rate of longer-term financial liabilities of the banking sector (excluding capital and reserves) increased to 9%. Again, sales were mainly of bank debt securities outside the MFI sector; longer-term time deposits also increased considerably again. Furthermore, the reduction in deposits redeemable at notice of over three months practically came to a standstill in the last three months of the year. Overall, the rise in capital market yields has probably fuelled longer-term investment activity in the banking sector.

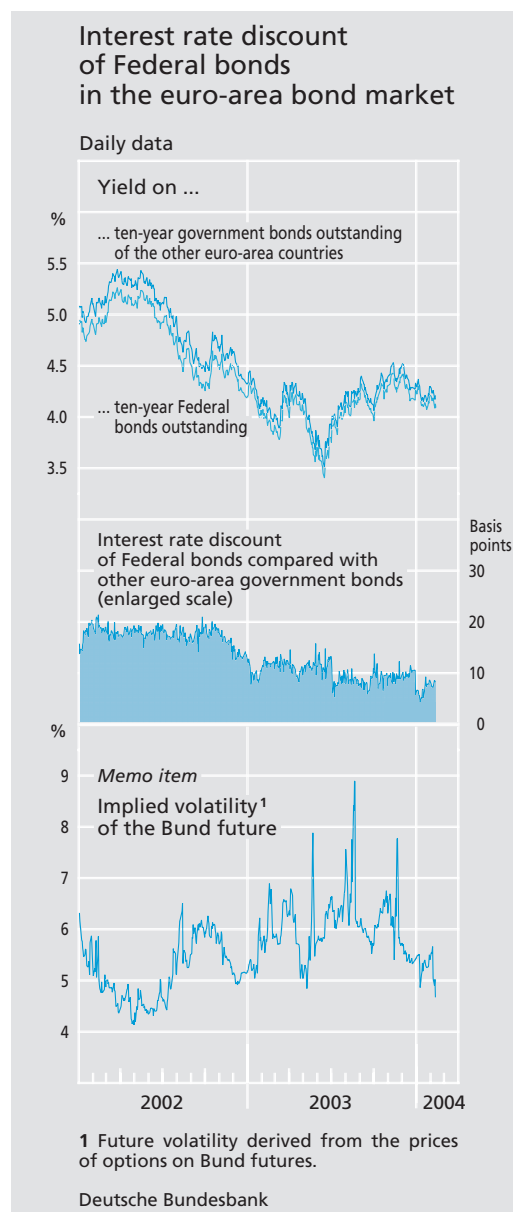
Securities markets

Financial markets affected by brightened economic expectations

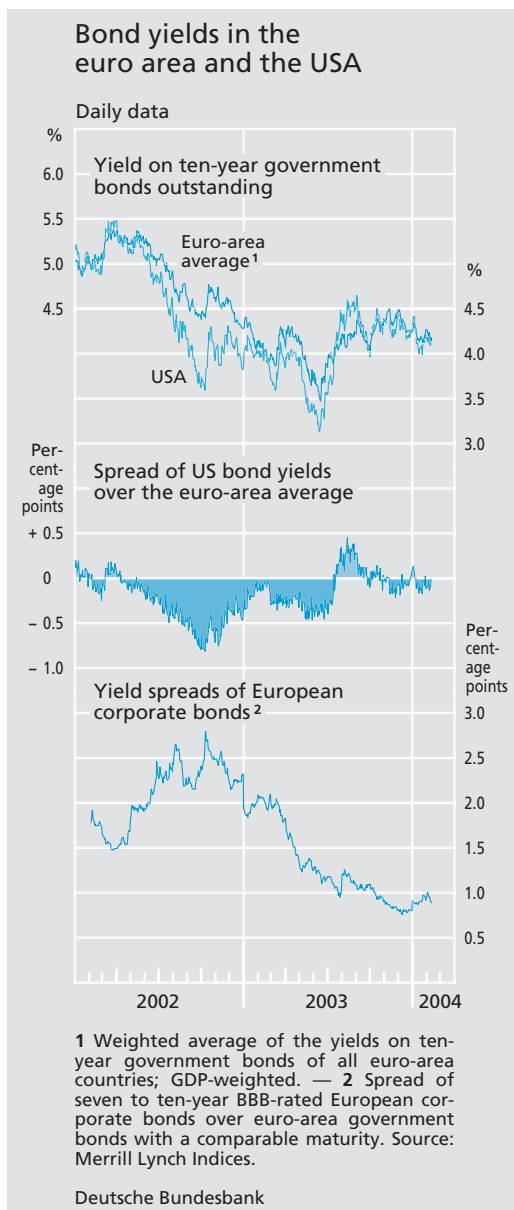
In the final months of 2003, the euro-area financial markets continued to gain confidence on the back of the brightened economic outlook. There was, for instance, a slight yield increase in the bond markets, while greater profit expectations led to rising prices, in particular in the equity markets.

On balance, slight increase in capital market rates

During the last quarter of 2003, the yields on ten-year euro-area government bonds, at around 4½%, topped their mid-June low by nearly a percentage point. Since early December, the European capital market rates have declined again somewhat; recently, however,



they were still around 4¼%. At the same time, the US interest rate advantage, which back in August had exceeded ⅓ percentage point, largely levelled off in the fourth quarter. In mid-February the ten-year capital market rates in the euro area were actually ⅒ percentage point above the yields on US Treasuries.



Continued slight interest rate discount of Federal Bonds over other euro-area government bonds

By and large, the German market followed suit. As in the previous quarter, the average interest rate discount on ten-year Federal bonds was just under $\frac{1}{10}$ percentage point below the average of other euro-area government bonds. Around the turn of the year, however, the interest advantage of the Bund on the euro bond market declined to only around 5 basis points in the period under re-

view, which in part reflects the ongoing tense budgetary position in Germany.

The interest rate swing in the euro-area capital markets and in the United States in the second half of 2003 initially began as a correction of the extremely low level of interest rates relative to growth and inflationary expectations. By contrast, in the final months of 2003 the more favourable economic outlook and the associated improvement in earnings prospects, in particular, gained in importance. With inflationary expectations virtually unchanged, long-term real interest rates in the USA, most recently at around 2% (calculated on the basis of survey results on inflationary expectations), have doubled since their low in the summer of last year. Interest rates have increased in the euro area and in Germany as well, albeit only around half as much, to roughly 2½% in January this year. Consequently, real capital market rates have continued to be far below their average of 3% since the start of monetary union and even further below the long-term average in Germany (just over 3½%).

Real rate of interest remains low

The more optimistic outlook for the euro area and for the German economy have had a marked impact on the equity market. The ongoing share price increases which began in the spring of last year continued well into the new year. Compared to broad share price indices such as the Dow Jones EuroStoxx and the CDAX, European share prices rose by 17% and German equities gained 23% between the beginning of October and mid-February, ie more strongly than American equities, which may also be due to a recent

Strong share price gains

surge in takeover rumours. Bank shares, in particular, made a major contribution to the pronounced gains in the German equity market. Telecommunication, media and technology shares also recorded above-average gains.

Share price uncertainty abates once again

Both the implied risk premia calculated using the dividend discount model and the declining implied volatilities of options on the Dow Jones EuroStoxx 50 and the DAX show that the price gains were accompanied by waning risk aversion and a much lower share price uncertainty in connection with rising confidence in future economic developments. European shares are currently up by more than half and German equities by around 80% on their March 2003 lows. Whereas the German blue chips included in the DAX are still nearly 50% below their historical highs, the smaller companies listed in the MDAX have again reached their early 2000 level.

Optimistic earnings expectations...

The recovery of European and German share prices are in line with analysts' persistently optimistic corporate earnings estimates. The year-on-year earnings expectations for German listed companies are especially favourable. Whereas the estimates for shares listed in the DAX have risen 15% between October and January, the estimates for shares in the Dow Jones EuroStoxx have been revised upwards by 8%. The valuation level of German shares therefore remained virtually unchanged at a level somewhat below the long-term average despite share price gains. Based on the expected earnings for the next 12 months, the average price-earnings ratio

... and virtually unchanged valuations

Price movements and profit estimates for European and German public limited companies

Monthly data



¹ March 2000 = 100; source: Deutsche Börse AG. — ² Based on year-on-year I/B/E/S analyst estimates. Source: Thomson Financial Datastream.

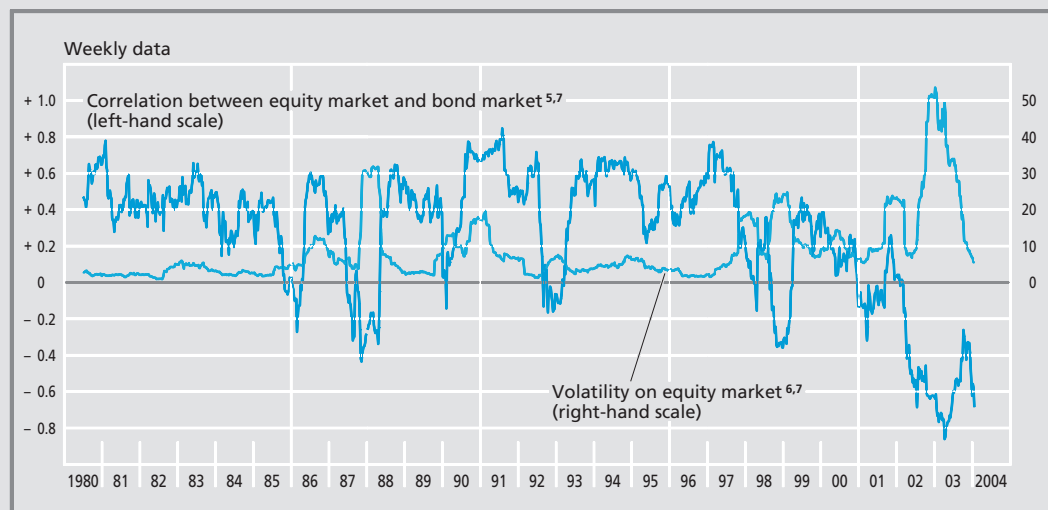
Deutsche Bundesbank

Link between equity market and bond market performance

In the past few years, the German capital markets were characterised by a diverging trend in total returns between the equity market and the bond market.¹ While, with some exceptions, the German share index (DAX) lost around three-quarters of its value between March 2000 and March 2003, in the same period the yields on ten-year government bonds fell from approximately 5½% to below 3½% by the middle of 2003; their prices rose accordingly. By historical standards, a negative correlation like this between the equity market and the bond market tends to be an exception. If the relation between these two markets is observed over a longer period of time, it can be seen that, on average, since the start of the 1980s there has been a positive correlation between the weekly yields (correlation coefficient of 0.28). In line with this correlation, falling equity prices are generally accompanied by falling bond prices and thus higher yields. If one assumes that today's equity prices reflect their future discounted dividends and bond prices their future interest payments, this positive correlation can be explained to an extent by the fact that the two markets depend on a common discounting factor.² Even so, the sustained negative correlation in the past few

years shown in the chart below appears to have temporarily replaced the basic positive correlation.

Recent studies focus on the role of uncertainty in the equity markets as one explanation for the time variability in the correlation of both markets.³ This is based on the observation that periods of negative correlation are often accompanied by marked volatility in the equity markets and a great degree of price uncertainty, as measured in terms of the implied volatility of options on the equity market. It becomes clear, for example, that following the stock market crash of 1987 or during the Russia financial crisis of 1998, movements in the equity and bond markets were divergent. This indicates that in times of crises investors shift their assets away from equities and purchase bonds, which they perceive to be safer (flight to quality). Bundesbank analyses on equity market volatility show that the volatility of the DAX has clearly increased since the end of the 1990s and has subsequently been at a significantly higher level than was previously the case.⁴ It may therefore be assumed that the negative correlation is being driven by equity market volatility in this recent period, too.



1 Total returns comprise both price movements as well as dividends and interest payments. — 2 This correlation applies unequivocally only where the changes in the discounting factor are explained by a change in the real rate of interest and not by a change in inflationary expectations. The relatively weak positive correlation can therefore be explained by the existence of a number of contrasting factors (see J Y Campbell, J Ammer (1993), What moves the Stock and Bond Markets? A Variance Decomposition for Long-Term Asset Returns, *Journal of Finance*, Vol 48, pp 3-37). — 3 See *IMF Global Financial Stability Report*,

September 2003, Chapter III. — 4 See T Werner, J Stapf (2003), *How wacky is the DAX? The changing structure of German stock market volatility*, Discussion Paper 18/2003, Deutsche Bundesbank. — 5 Rolling correlation (six-month time frame) of weekly DAX yields and of a bond market index based on ten-year Bunds (total return indices). In the event of a positive (negative) correlation, rising equity prices are accompanied by rising (falling) prices in the bond market and falling (rising) yields. — 6 Rolling variance (six-month time frame) of weekly DAX yields. — 7 Source: Thomson Financial Datastream, Bundesbank calculations.

is 15.7, ie slightly higher than for the Dow Jones EuroStoxx price index (15.2).

Interest premia on non-top-rated corporate bonds still low

Financing conditions in the corporate bond market also remained favourable in the fourth quarter. In much the same way as in the United States, the interest premia on seven to ten-year BBB-rated bonds have stabilised at a low level vis-à-vis government bonds with the same maturities. At the beginning of February they were just under 1 percentage point. European BBB-rated bonds were temporarily priced as low as 75 basis points above government bonds. Consequently, the interest rate premium reached its lowest level for several years. Above all, the low interest premia appear to continue to reflect investors' increased demand for higher-interest-bearing investments. Even so, several of the variables relevant to the valuation of corporate bonds also developed favourably: share prices rose further while equity market volatility fell. In addition, estimates of credit risk are also stabilising. Consequently, the ratio of corporate rating downgrades to upgrades by rating agencies did not deteriorate further in the fourth quarter after having been far higher at the start of the year. However, in the months under review, there were still more company downgrades than upgrades.

Sales and purchases of securities

Increasing sales of bonds and notes

In the fourth quarter of 2003, the economic recovery was also reflected in the sales figures in the securities markets. However, its prime impact was on the equity market (see page 30).

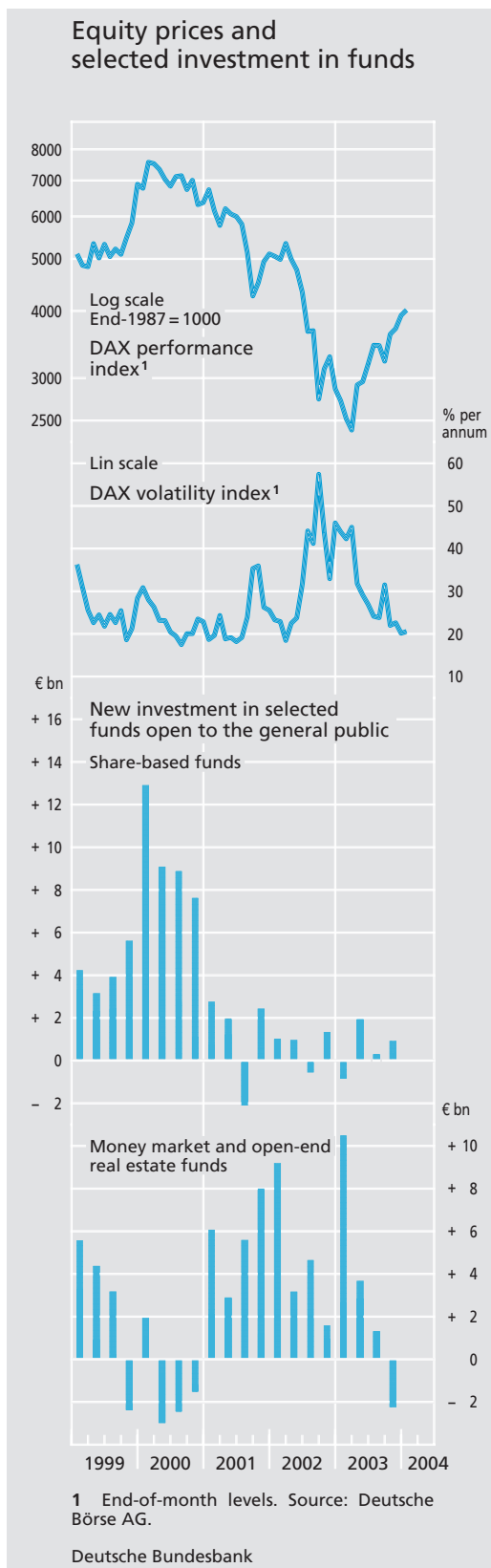
Investment activity in the German securities markets

Item	2003		2002
	July to Sep	Oct to Dec	Oct to Dec
€ billion			
Bonds and notes			
Residents	31.6	20.3	- 4.7
Credit institutions	4.0	8.6	- 19.7
of which			
Foreign bonds and notes	0.2	13.4	- 7.0
Non-banks	27.6	11.7	15.0
of which			
Domestic bonds and notes	23.2	15.9	3.4
Non-residents	- 6.8	13.7	- 4.2
Shares			
Residents	1.3	- 9.9	5.7
Credit institutions	- 1.5	9.2	0.0
of which			
Domestic shares	0.0	7.0	- 1.3
Non-banks	2.7	- 19.1	5.6
of which			
Domestic shares	- 1.4	- 22.9	- 1.0
Non-residents	3.4	22.2	3.7
Mutual fund shares			
Investment in specialised funds	4.0	5.2	10.0
Investment in funds open to the general public	2.6	- 0.4	3.0
of which: Share-based funds	0.3	0.9	1.3
Deutsche Bundesbank			

In the period from October to December 2003 there was a moderate upturn in the volume of funds raised in the German bond market. After resident borrowers had issued debt securities with a market value of €275 billion in each of the two previous quarters, gross sales increased to €289 billion. After deducting redemptions and changes in issuers' holdings of their own bonds, net sales receipts increased by only €5 billion to €25 billion in the period under review. In the fourth quarter, twice as many foreign bonds were sold (€9 billion) as in the previous quarter (€4½ billion).

In the third quarter, German credit institutions and public sector issuers tapped the bond market to a volume of €9½ billion and €9 billion respectively; in the fourth quarter, public

Further increase in public sector bond issues



sector bonds took centre stage with net sales of just under €12½ billion. Both the increased funds (€15 billion) raised by the Federal Government and the increased borrowing by the state governments (€7½ billion) contributed to this. The Federal Government issued ten-year Bunds and five-year Bobls, each to a volume of €8 billion, followed by two-year Federal Treasury notes for €1½ billion. The Federal special funds redeemed a Treuhand agency bond worth €5 billion as well as Federal Railway and Post Office bonds worth €2½ billion each.

German credit institutions raised €6½ billion in the German bond market between October and December 2003 after having raised €9½ billion in the previous month. The sales of other bank debt securities amounting to €15½ billion net were offset by net redemptions of public Pfandbriefe totalling €15 billion. Debt securities worth €6½ billion were issued by specialised credit institutions, compared with €11½ billion in the previous period. By contrast, €1 billion worth of mortgage Pfandbriefe were redeemed; in the previous quarter, €2 billion net of mortgage Pfandbriefe had been issued.

Decline in borrowing by credit institutions

Against the backdrop of favourable debt financing conditions, companies also tapped the German bond market for over €6 billion in the fourth quarter. Most of the sales were of commercial paper amounting to just under €4½ billion; the previous quarter had seen net redemptions of this type of paper. Owing to particularly buoyant issuing activity at the start of the year, the volume outstanding of these financing instruments increased by

Companies again increasingly tapping the bond market

more than 60% over the course of last year. Hence issues of commercial paper gained further in importance last year. Even so, the extent to which these issues were used to finance real investments or also accrued to non-monetary financial institutions remains to be seen. Although at just under €2 billion the level of funds raised through corporate bonds was only slightly up on the previous quarter, over the whole of the year they amounted to just under €18½ billion and their importance was thus similar to that of commercial paper.

Domestic bonds and notes purchased mainly by non-banks

Non-banks were the main purchasers in the German bond market between October and December 2003. In net terms, they added €16 billion worth of German debt securities to their portfolios (previous quarter: €23 billion). As was the case in the previous period, nearly two-thirds of bonds purchased by residents were from the public sector (€10½ billion) while in net terms non-banks sold foreign bonds and notes worth over €4 billion. Foreign investors purchased German bonds and notes for €13½ billion, most of which accrued to private borrowers. By contrast, German credit institutions sold both public sector bonds and private issuers' bonds for a total of just under €5 billion; at the same time, however, they purchased €13½ billion worth of foreign fixed interest securities.

Increased volume of funds raised in the equity market

Against the backdrop of the strengthening economy and the favourable equity market environment, the level of issuing activity in the German equity market increased in the fourth quarter. Between October and December, domestic enterprises placed just under

€6½ billion of new shares at market values, three times as much as in the preceding quarter. The majority of these issues were listed equities. However, it should be borne in mind that in the period under review, two sizeable capital increases – one by an insurance company, and the other, smaller, by a big bank – took place, with a major impact on the result.

In the fourth quarter of 2003 the main purchasers of German equities were foreign investors. They added €22 billion to their equities portfolio, compared with €3½ billion in the July-September period. On balance, credit institutions acquired €7 billion of domestic shares and €2½ billion of foreign shares. Domestic credit institutions, by contrast, reduced their holdings of German shares by €23 billion and purchased foreign shares for €4 billion.

Equities purchased mainly by foreign investors

Sales of domestic and foreign mutual fund shares went down slightly to €5½ billion in the fourth quarter, compared with just under €7 billion in the third quarter. Virtually all the inflows accrued to domestic investment companies and on balance only to specialised funds (€5 billion), which are reserved for institutional investors. By contrast, funds open to the general public redeemed €½ billion in shares. Redemptions by private investors were mainly of shares in money market funds (€2 billion). The volume outstanding of shares in open-end real estate funds, which for a long time had had the greatest appeal for investors, also decreased (€½ billion). Share-based funds, however, attracted additional funds amounting to just under €1 billion. Mixed funds and bond-based funds also re-

Declining investment in mutual fund shares

Lending rates in the euro area and in Germany

The collection of harmonised data in accordance with the new euro-area interest rate statistics provides, for the first time, data which, since methodological differences have been eliminated, permit cross-border comparisons.¹ It thus becomes clear that there are certain differences between the interest rates in the various euro-area member states.² This is to be expected for a single currency area as interest rates are affected not only by monetary policy, but by a host of national particularities as well. For example, the cyclical situation and, more importantly, the structure of financial relationships in a given country are major factors determining lending rates.

Compared with most of the other euro-area member states, German banks play a far more important role in the financial system.³ As a result, in the area of corporate finance, the generally longer-term credit relations of an enterprise are often concentrated at one or just a few banks. On the one hand, owing to a steady flow of information, relationship lending enables loans to be granted at more favourable conditions with respect to interest rates and volume, especially for loans with a lengthy

Average deviation of German interest rates from the euro-area aggregates in 2003

Existing loans

As a percentage

Loans to non-financial corporations with a maturity of		
up to 1 year	over 1 year up to 5 years	over 5 years
0.26	0.25	0.54

New business

As a percentage

Other loans over €1 million (up to €1 million) to non-financial corporations with an initial rate fixation		
up to 1 year	over 1 year up to 5 years	over 5 years
0.22 (0.37)	0.56 (0.23)	0.31 (0.23)

1 For methodological notes, in particular on the German data, see Deutsche Bundesbank, The new MFI interest rate statistics – method-
Deutsche Bundesbank

maturity (long-termism). On the other hand, it fosters a certain amount of dependence on the borrower's "house bank", thereby lowering competitive pressure. Taken in isolation, this would lead to higher borrowing costs. Relationship lending also results in the fact that the "house bank" does not fully adapt its lending conditions to changes in refinancing conditions. In a period of low interest, such behaviour should be reflected in a higher rate of interest being charged on new lending than on existing loans in Germany when compared with the euro-area average. It is not possible to say a priori which of the aforementioned determinants has the greatest impact.

Moreover, because they are better informed, "house banks" have been able to limit the problem of adverse selection and deal with those customers which present a greater risk by applying risk-differentiated rates of interest rather than by loan rationing. In aggregate interest rate statistics, which of course cannot differentiate between the underlying risks, the higher risk premium charged in these cases leads to a correspondingly higher reported interest rate level. Above and beyond this, owing to the cyclically susceptible default probabilities, the risk premia can also be expected to move procyclically, thereby contributing to a trend towards higher lending rates in periods of economic weakness.

Finally, owing to the specific statistical collection methods used, the observable trend towards long-termism in Germany is likely to have left its mark on the measurable rate of interest. The new euro-area interest rate statistics differentiate between loan maturities. Even so, the German loan maturities, especially in the longer-term maturities ranges (over five years), are likely to be at the long end. Given a "normal" yield curve, ie one that increases in line with the length of maturity, the aggregation itself results in a higher level of interest for Germany in each maturity range.

A comparison of German and European interest rates for loans to enterprises in 2003 shows that German rates are in some cases well above their corresponding euro-area aggregate (see adjacent table). A comparison of the interest rate differential between existing loans and new lending, however, produces no clear-cut indication that interest rate smoothing by German banks,

ology for collecting the German data, *Monthly Report*, January 2004, pp 45-59. — 2 See European Central Bank, New ECB statistics on MFI

compared with their own refinancing costs, was the cause. The gap between the euro-area average and the rate on long-term loans to enterprises in Germany, for example, is greater for existing loans than for new lending. For medium-term loans to enterprises, which play a less significant quantitative role in Germany, the interest rates on existing loans are, as is to be expected, at least for large-volume contracts, closer to the euro-area average.

It should be borne in mind that in such a comparison, the breakdown of loans to enterprises for new lending is based on the original period of interest rate fixation; for existing loans, however, the original maturity is used. This leads, in particular, to a varied classification of variable interest loans, which are captured as short-term loans in new lending business; existing variable interest loans, however, are recorded on the basis of their longer maturity. Since these loans offer more favourable conditions owing to the fact that the borrower bears the risk of interest rate changes, and are likely to play a more significant role in the other euro-area countries than in Germany, the different statistical treatment of such loans could contribute to a certain upward distortion of the German interest rate gap for existing loans relative to that for new business.

Furthermore, for loans to enterprises with a maturity of over five years, the longer maturity in Germany has apparently resulted in a slower adaptation of interest rates on existing loans to the lower interest rate level than the euro-area aggregate. Consequently, over the course of the year, the gap between these rates in Germany and the euro-area average widened from 35 basis points to 67 basis points (see adjacent chart).

The interest differentials for mortgage Pfandbriefe with varying maturities may be used to quantify the possible influence that the longer maturity in Germany for long-term loans to enterprises may have. This reveals that the gap between German lending rates and the euro-area average occurs in the area of interest rate premia, which on mortgage Pfandbriefe in this maturity range were in line with the market average in 2003 for a residual maturity of two to four years longer (25 to 62 basis points). The average interest rate premia which emerge in line



with a longer residual maturity based on the yield curve estimate for the entire German bond market were 47 to 91 basis points in 2003, ie slightly higher.

Apart from the tendency towards longer maturities of German bank loans, there are other characteristics of the German financial system which may play a role in explaining the deviation of German bank interest rates; these include relationship lending, banks' refinancing costs, borrowers' collateral structure and, ultimately, the particularities of the statistical methods used. However, given the short duration of the period under observation, these individual factors are difficult to assess. The same applies to the potential influence of cyclical factors. In summary, based on the existing data it cannot be said that a German enterprise, with otherwise equal features, has structurally higher interest rate expenses to bear than the average expenses borne by enterprises in other euro-area member states.

interest rates, *Monthly Bulletin*, December 2003, pp 23-25. — 3 See also European Central Bank, *Report on financial structures*, 2002.

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

€ billion

Item	2003	2002
	Oct to Dec	Oct to Dec
Deposits of domestic non-MFIs 1		
Overnight	+ 15.5	+ 35.0
With agreed maturities		
up to 2 years	+ 0.0	+ 6.8
over 2 years	+ 2.8	+ 9.4
At agreed notice		
up to 3 months	+ 10.6	+ 18.1
over 3 months	+ 1.4	- 1.2
Lending		
to domestic enterprises and households		
Unsecuritised	- 0.2	+ 4.6
Securitised	- 3.4	+ 17.7
to domestic government		
Unsecuritised	+ 4.5	+ 3.2
Securitised	- 2.6	- 1.0

* 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.

Deutsche Bundesbank

recorded additional inflows of around €½ billion each, nearly the same level as in the previous period. The reason for this development was that private investors shifted their strategy towards riskier and less liquid forms of investment such as share-based funds and, to a lesser extent, bond-based funds and away from money market funds in particular. This development surely also reflects a waning propensity for liquidity.

Deposit and lending business of German banks with domestic customers

Overnight deposits decline

In the last three months of 2003 developments in the German banking sector differed somewhat from those observed in the euro area. As regards deposit business, short-term

bank deposits were especially affected. Contrary to the substantial increase at the euro-area level, overnight deposits of German investors at German banks declined in seasonally adjusted terms in the fourth quarter, after a previous increase of 10½%. Whereas in the period under review non-financial enterprises increased their overnight deposits in volumes similar to those of previous years, the other financial institutions withdrew far more deposits in the October-December period than is usually the case. Compared with the two previous years, the increase in households' sight deposits was rather moderate. Alongside the initial marked rise in capital market yields over the course of the quarter, the ongoing recovery in the equity markets probably also contributed to this development. Investors' overall waning appetite for liquidity is perhaps also reflected in the increased sales of shares in funds open to the general public, which invest in equities and bonds and notes.

Such factors probably also led to the strong reduction in other short-term deposits of private domestic non-banks in the German banking system. At the euro-area level, there was still a slight increase in net terms, driven by short-term savings deposits. In Germany, deposits redeemable at notice of three months, by contrast, declined discernibly again for the first time since the second quarter of 2002. In this context, the demand for higher-interest-bearing special savings instruments, in particular, was far lower (in non-seasonally adjusted terms) in the quarter under review than is usually the case at the end of the year. Moreover, in seasonally adjusted terms, short-term time deposits de-

Strong reduction in short-term savings deposits and time deposits

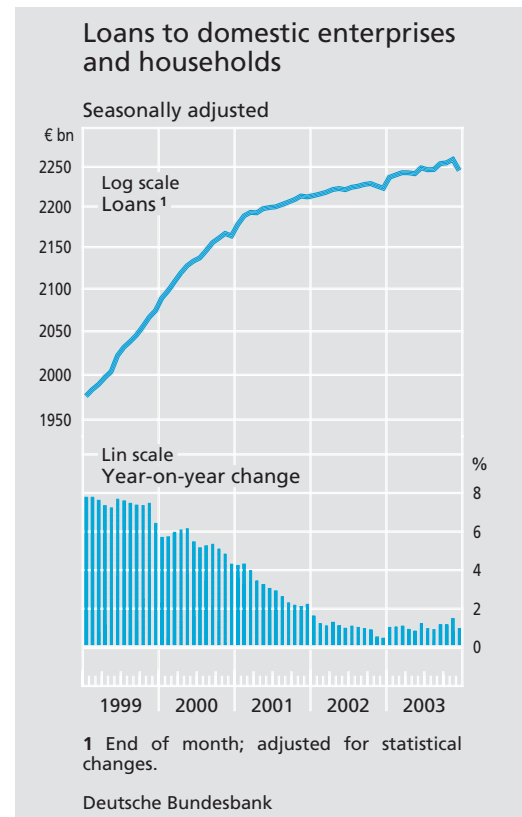
clined strongly again in the period under review. Households, in particular, continued to reduce their short-term time deposits, thereby continuing the trend started at the end of 2001. However, contrary to the usual pattern in the fourth quarter, non-financial enterprises decreased their time deposits.

Contrasting increase in longer-term bank deposits

By contrast, in seasonally adjusted terms, longer-term bank deposits increased further in the period under review, after having already risen sharply in the previous quarter. Virtually the entire increase, however, was of longer-term time deposits with a maturity of over two years, which, probably owing to the discernible rise in the rate of interest in this market segment in the fourth quarter, were mainly accumulated on a fairly large scale by employed persons. By contrast, deposits with an agreed period of notice of more than three months were reduced further, continuing the trend which began in spring 2001.

Reduced lending to public sector and private borrowers

Fairly large deviations from the trends in the euro area as a whole were also observed in the lending business of German banks. First, lending to the public sector was down on the level usually seen towards the end of the year. Second, in seasonally adjusted terms, there was a decrease in lending by German MFIs to the domestic private sector between October and December. The annual rate of change fell from 1.7% at the end of September to 0.7% at the end of December. The decline in lending mainly affected securitised lending since German credit institutions perceptibly reduced their holdings of securities issued by the domestic private sector, rather than topping up these holdings as they usual-

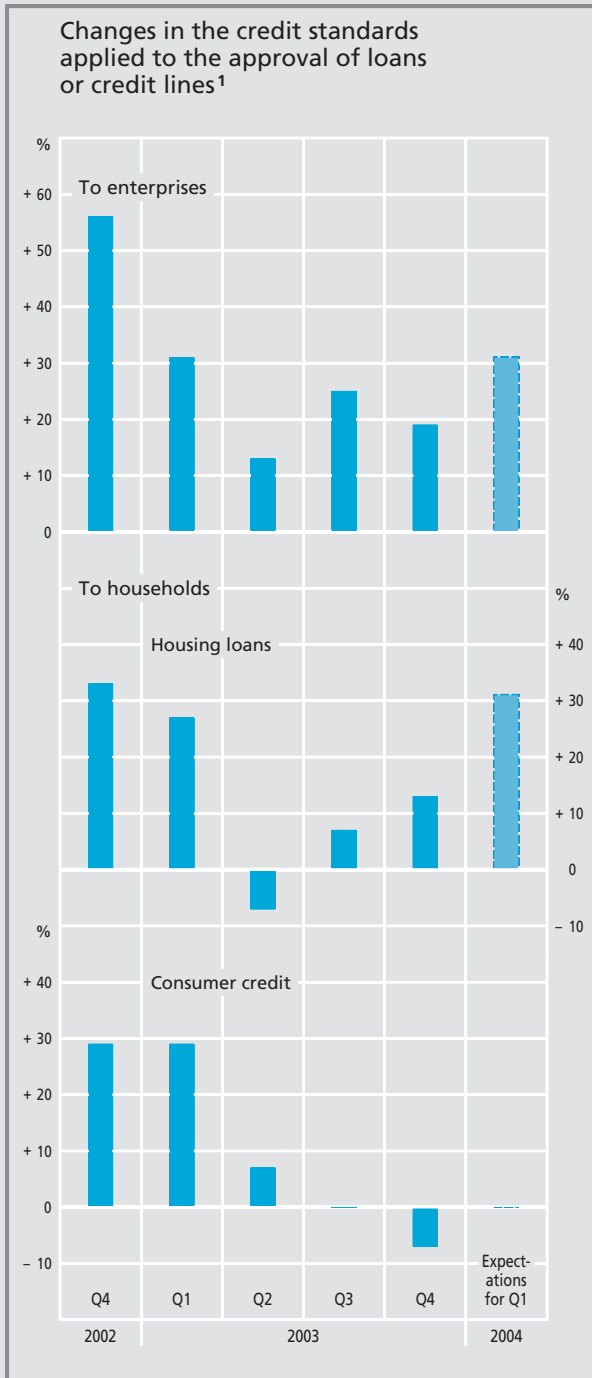


ly do towards the end of the year. In addition, however, loans to German enterprises and households declined, while the demand for loans by households continued to increase across the entire euro area.

In many cases financing projects in the real estate sector, which has been developing very dynamically in several member states, seemed to be the reason for the developments in the euro area. There is no comparable momentum in the German market, although demand in the area of housing construction did pick up at times in connection with the debate about reducing the grant to home buyers. Housing loans have so far remained largely unaffected. In the fourth quarter, for example, these loans increased by a seasonally adjusted annualised rate of only

Real estate financing

Bank lending survey
Widening margin spread in retail business



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". — ² See Deutsche Bundesbank, German results of euro-area bank lending survey,

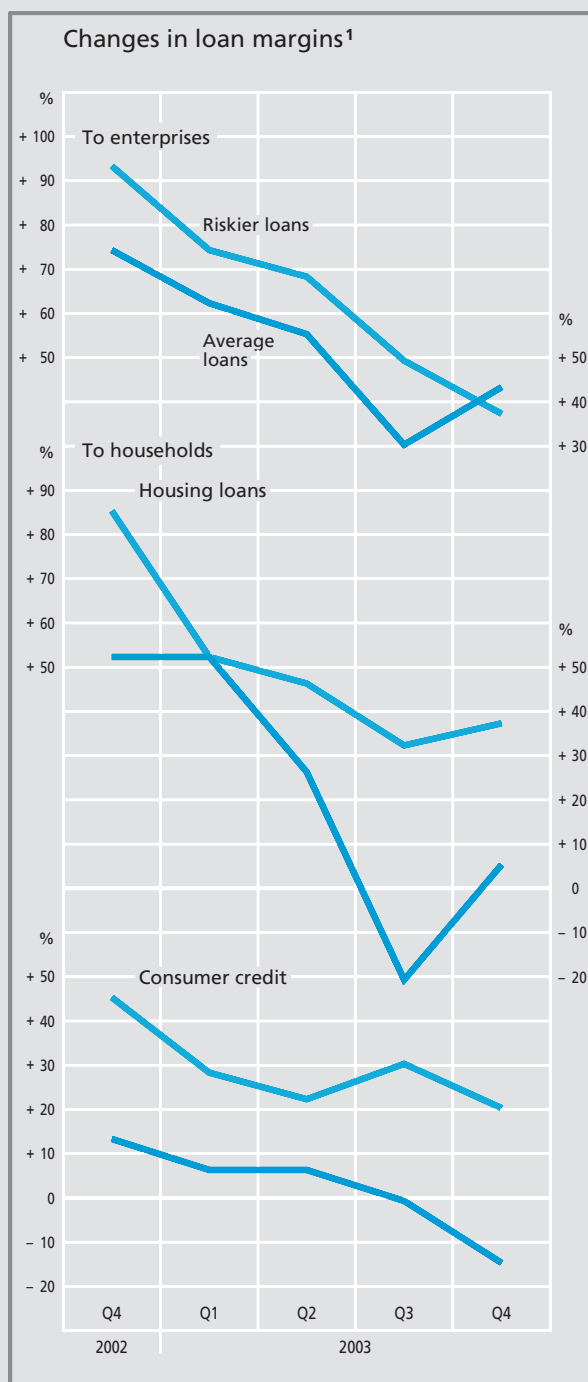
According to the January results of the Eurosystem's bank lending survey,² in the fourth quarter of 2003 some respondent institutions in Germany continued to tighten slightly their credit standards as applied to loans and credit lines to enterprises. This was largely unrelated to the size of the enterprises or the loan maturity. According to the respondent institutions, this reflected increases in some institutions' cost of capital. In contrast to the previous quarter, however, risk assessment remained largely unchanged; some institutions cited the brighter economic outlook as the reason. There was a slight tightening for housing loans following essentially stable quarters. A further tightening for both loans to enterprises and housing loans is expected in the first quarter of 2004; as in the previous quarter, respondent institutions do not expect changes in their credit standards for consumer credit (see adjacent chart).

The respondent institutions reported increased margins for riskier loans, with margins on average retail loans practically unchanged or narrowing. This indicates a sustained risk-differentiated margin spread in retail business (see chart on page 37). By contrast, the data supplied by the banks indicated a broadening of margins for loans to enterprises which was not restricted to riskier loans, but rather also applied increasingly to average loans again. Nonetheless, the broadening of margins in all areas of credit business seems to have slowed in the past few quarters. With regard to other lending conditions, the respondent banks also indicated that they were occasionally applying somewhat stricter criteria to loans to enterprises in respect of collateral.

The survey showed that there was a slight increase in loan demand for private housing construction and, for the first time, from enterprises as well. By contrast, banks indicated that for the first time in a year, there was again a slight decline in demand for consumer loans. Whereas the dampening effect of lower financing needs for fixed investment abated perceptibly in the area of loans to enterprises, the debate about abolishing the grant to home buyers increased demand for housing loans. According to the data supplied by the respondents, the slight drop in demand for consumer loans was partially due to households using more of their savings for consumption purposes.

Compared with the aggregate results for the euro area, the replies from the German institutions taking part in the survey more frequently express expectations of an increase in loan demand from both enterprises and households in the first quarter of 2004. By comparison, respondents expect a far sharper decline in loan demand for private housing construction in Germany; this is probably mainly due to the elimination of the German special effect associated with the grant to home buyers. Overall, the German survey results were more or less in line with the aggregate results for the euro area.³

Altogether, the combination of changes in loan supply and demand in the fourth quarter of 2003 led to a slight tension in the credit market. The estimates for the first quarter of 2004 suggest that this slight tension is likely to continue in the area of loans to enterprises.



Monthly Report, June 2003 pp 67-76. For data and further information see www.bundesbank.de/vo/vo_veroeffentlichungen.php (avail-

able in German only). — ³ See European Central Bank, *Monthly Bulletin*, February 2004, pp 12-15.

½%, although the anticipated increase in interest rates on longer-term mortgage loans with a fixed rate of interest might have led to the assumption that there would be a temporary stronger increase in demand.

*Corporate
lending*

Moreover, loans to enterprises were reduced sharply in the final quarter of 2003. Short-term loans to non-financial enterprises were

especially affected. However, the latest results of the Eurosystem's bank lending survey indicate that banks hardly tightened their conditions for granting loans to enterprises in the fourth quarter; it is therefore unlikely that any serious additional retarding effects came from banks' lending behaviour (see box on pp 36-37).