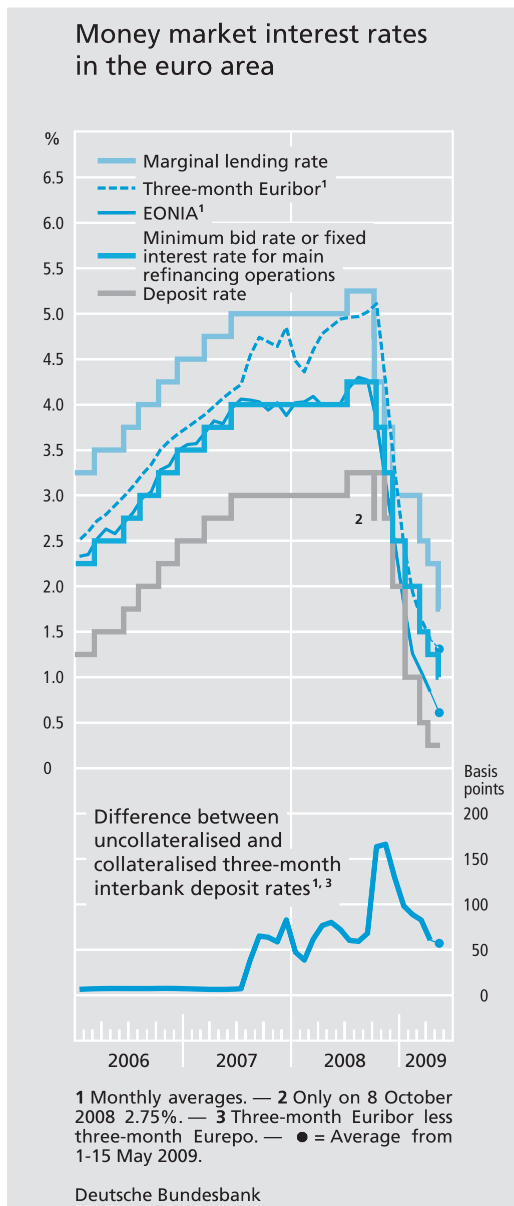
Monetary policy and banking business

Interest rate policy and the money market

Further interest rate cuts by ECB Governing Council

In the light of growing downward cyclical pressure and a brighter outlook for price stability, the Governing Council of the ECB continued easing its interest rate policy in 2009. By May, the interest rate for the weekly main refinancing operations of the Eurosystem had been lowered to 1%. Furthermore, the Governing Council decided to offer both the main and longer-term refinancing operations as fixed-rate tenders with full allotment of all tenders submitted beyond the end of 2009 and to offer additional longer-term refinancing transactions with a maturity of 12 months from June. The Governing Council also agreed, in principle, to purchase covered bonds in future. This measure is intended to help further improve financing conditions in the banking sector and is therefore a logical continuation of the monetary policy measures introduced to date, which take account of the banking system's key role in monetary transmission in the euro area. In order not to place an additional strain on the incipient recovery in the money market, even in a setting of low short-term interest rates, the Governing Council decided to leave the interest rate on the deposit facility of banks' account holdings on hold at ¼%. By contrast, it lowered the interest rate charged by the Eurosystem for use of the marginal lending facility to 1¾% in order to maintain the symmetry of the interest rate corridor around the main refinancing rate.

Money market rates have clearly been tracking the Governing Council's reduction in key



Slight easing in the overnight money market

policy rates since October 2008. The EONIA overnight index, in particular, has been trading below the main refinancing rate virtually without exception since the Eurosystem's refinancing operations were switched to the full allotment regime in October 2008. At the same time, there has been a trend rise in the trading volumes used to determine the EONIA compared with the fourth quarter of 2008, which was supported by the renewed expansion of the interest rate corridor around the main refinancing rate in February. Despite trading volumes not yet having reached the level they were at prior to the financial market crisis, this can be seen as a sign of the situation in the euro money market having relaxed significantly compared with the autumn of last year.

Longer-term money market rates respond to monetary policymakers' guidance

Longer-term money market rates also responded to monetary policymakers' guidance. Given the extensive monetary policy and fiscal measures in recent months and buoyed by the positive news from the US and European banking sectors, the main risk premiums have also continued to narrow. Since the start of February, the yield spread between the interest rate for uncollateralised three-month money (three-month Euribor) and its collateralised three-month counterpart (Eurepo) has fallen by around 0.3 percentage point to almost 0.6 percentage point. This risk premium has therefore returned to a level which was last seen before the marked escalation of the financial market turbulence in the final quarter of 2008.

Monetary developments in the euro area

Significant drop in M3 in the first quarter

The slowdown in the pace of monetary growth in the euro area continued sharply in the first quarter of 2009. The M3 monetary aggregate shrank for the first time since the launch of monetary union. In seasonally adjusted and annualised terms, its growth rate was almost -2½%, compared with an increase of just under 7% in the fourth quarter of 2008. The three-month average of its an-

Open market operations of the Eurosystem *

Value date	Type of transaction 1	Maturity in days	Actual allotment in € billion	Deviation from the benchmark 2 in € billion	Marginal rate/fixed rate %	Allotment ratio %	Weighted rate %	Cover ratio 3	Number of bidders
21.01.09	S-LTRO (MT)	21	113.4	–	2.00	100.00	–	1.00	139
21.01.09	MRO (MT)	7	251.5	119.5	2.00	100.00	–	1.00	668
28.01.09	MRO (MT)	7	214.2	183.7	2.00	100.00	–	1.00	544
29.01.09	LTRO (MT)	91	43.2	–	2.00	100.00	–	1.00	133
04.02.09	MRO (MT)	7	207.1	213.6	2.00	100.00	–	1.00	501
10.02.09	FTO (–)	1	– 129.1	–	1.80	100.00	1.36	1.01	119
11.02.09	S-LTRO (MT)	28	104.7	–	2.00	100.00	–	1.00	93
11.02.09	MRO (MT)	7	197.7	– 26.8	2.00	100.00	–	1.00	511
12.02.09	S-LTRO (MT)	91	18.5	–	2.00	100.00	–	1.00	39
12.02.09	S-LTRO (MT)	182	10.7	–	2.00	100.00	–	1.00	39
18.02.09	MRO (MT)	7	215.3	140.8	2.00	100.00	–	1.00	527
25.02.09	MRO (MT)	7	237.8	126.3	2.00	100.00	–	1.00	504
26.02.09	LTRO (MT)	91	21.6	–	2.00	100.00	–	1.00	57
04.03.09	MRO (MT)	7	244.1	146.6	2.00	100.00	–	1.00	481
10.03.09	FTO (–)	1	– 110.8	–	1.80	100.00	1.52	1.01	119
11.03.09	MRO (MT)	7	227.7	– 67.8	1.50	100.00	–	1.00	503
11.03.09	S-LTRO (MT)	28	120.2	–	1.50	100.00	–	1.00	97
12.03.09	S-LTRO (MT)	91	30.2	–	1.50	100.00	–	1.00	71
12.03.09	S-LTRO (MT)	182	10.8	–	1.50	100.00	–	1.00	60
18.03.09	MRO (MT)	7	226.1	101.6	1.50	100.00	–	1.00	537
25.03.09	MRO (MT)	7	230.0	62.5	1.50	100.00	–	1.00	538
26.03.09	LTRO (MT)	91	28.8	–	1.50	100.00	–	1.00	87
01.04.09	MRO (MT)	7	238.1	89.6	1.50	100.00	–	1.00	522
07.04.09	FTO (–)	1	– 103.9	–	1.30	100.00	1.12	1.02	114

* For more information on the Eurosystem's operations from 8 October 2008 to 20 January 2009, see Deutsche Bundesbank, Monthly Report, February 2009, p 25. — **1** MRO: main refinancing operation, LTRO: longer-term refinancing operation, S-LTRO: supplementary longer-term refinancing operation, FTO: fine-tuning operation (+: liquidity providing operation, –: liquidity absorbing operation). MT: fixed-rate tender. — **2** Excluding (S-)LTROs allotted in the same week and various foreign exchange swap operations. — **3** Ratio of total bids to the allotment amount.

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nual rate for the period from January to March fell accordingly to 5½%, thus reaching its lowest level for around five years.

Marketable instruments and other short-term deposits decline on balance

Of the individual components of M3, there was a sharp decline, above all, in marketable instruments. They shrank at a seasonally adjusted annual rate of over 16½% on the back of weak growth in the previous quarter. This decrease was caused mainly by the sharp drop in short-term debt securities (with a maturity of up to two years) owing to the persistent financial market turmoil. The seasonally adjusted and annualised decline amounted to 69½%, which was not offset by the higher uptake of money market fund shares/units. However, it was not only marketable paper that declined; other short-term deposits fell, too, at a seasonally adjusted and annualised rate of 9½% on balance. Although short-

Money market management and liquidity needs

During the three reserve maintenance periods from 21 January to 7 April 2009, euro-area credit institutions' need for central bank money determined by autonomous liquidity factors increased by €19.3 billion in net terms. This was attributable to the sharp rise in general government deposits, which increased by a total of €39.1 billion in the period under review. By contrast, the demand for liquidity from banknotes in circulation declined by €5.8 billion owing to the distinct fall in demand for banknotes in the January-February 2009 maintenance period (by €12.9 billion). This is usual for the time of year following the sharp rise over the Christmas period. Moreover, if the net foreign reserves and the other factors are taken together, a move which eliminates valuation effects with no impact on liquidity, there was also a decline in liquidity demand over the three periods (€14.0 billion in total). Factors such as the disbursements of central bank profits, which have an effect on liquidity, including the Bundesbank profit of €6.3 billion paid on 10 March, contributed to this development. The demand for central bank liquidity resulting from the minimum reserve requirement increased only slightly in net terms by €0.6 billion.

In the period under review, the Eurosystem continued to pursue its policy of generous liquidity provision in order to support the functioning of the money market. All main refinancing operations and longer-term refinancing operations were still conducted as fixed-rate tenders with full allotment. Thus, in the three maintenance periods under review, liquidity provision was based solely on demand from credit institutions. However, credit institutions' demand for liquidity dropped steadily during the period under review meaning that, in net terms, the volume of Eurosystem open market operations decreased by almost €160 billion and recourse to the deposit facility fell by €180 billion. The longer-term refinancing operations continued to be carried out with the same maturity structure and frequency used since November 2008 following the intensification of the money market turmoil. These included special tenders with a maturity of one reserve maintenance period as well as monthly parallel allotments of three-month and six-month tenders (see the table on page 27). However, the share of the main refinancing operations in total refinancing increased from 30% to 36% overall during the period under review. On the last day of the respective maintenance periods, the ECB carried out fine-tuning operations to absorb excess liquidity as usual.

In the January-February 2009 reserve maintenance period, which lasted only 21 days, the new fixed rate of 2.00% was used for the first time in the main refinancing operations after the ECB Governing Council had agreed a further cut in the interest rate of 50 basis points at its meeting on 15 January. This period was also marked by the reinstatement of the 200-basis-points corridor for the standing facilities as of 21 January; it had been symmetrically narrowed to 100 basis points in October 2008. Although credit institutions' demand for central bank liquidity remained strong, it declined noticeably in comparison with the previous weeks measured against the above-benchmark surplus in liquidity. On a daily average, this excess liquidity decreased to just over €220 billion, whereas it had stood at over €300 billion per day throughout most of the December-January maintenance period. As a result of this reduction in liquidity, recourse to the Eurosystem's deposit facility fell to an average of €175 billion compared with almost €240 billion in the previous period. Against the background of the full allotment regime, the widening of the standing facilities corridor was evidenced particularly clearly in the development of EONIA fixings, which were significantly lower (by 76 basis points on average over the period) than the fixed rate for the main refinancing operations.

The developments observed in the previous period continued in the February-March reserve maintenance period. Thus, credit institutions' demand for central bank liquidity declined further, which – owing to market participants' expectations of interest rate cuts – was especially apparent in the rather modest bidding volumes in the longer-term refinancing operations. The excess liquidity, which had decreased to just over

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€130 billion on average, was reflected in the lower levels of recourse to the deposit facility (€95 billion on average). The noticeable decline in liquidity had only a minor impact on the spread between the EONIA and the main refinancing rate: in this maintenance period too, the overnight reference rate was, on average, 72 basis points lower than the key interest rate of 2.00% and was thus clearly guided by the deposit facility rate.

In the March-April reserve maintenance period, the main refinancing operations were carried out with the new fixed rate of 1.50%. At its meeting on 5 March, the ECB Governing Council, besides approving a cut of 50 basis points in the key interest rate, agreed to continue conducting the main refinancing operations and longer-term refinancing operations as fixed-rate tenders with full allotment until at least the end of 2009, a measure which had initially been limited to the end of March 2009. The regime of carrying out additional longer-term tenders, which had been in place in the previous months, was also extended beyond the end of 2009. In view of this greater planning certainty for the coming months, credit institutions' demand for central bank money decreased further in the March-April maintenance period. Although the respective allotment volumes for the main refinancing operations remained fairly steady – as in the previous period – at €230 billion, daily excess liquidity fell noticeably to just over €90 billion on average. Besides the persistently lower level of interest in longer-term refinancing operations, the degree of liquidity absorption through autonomous factors – which was higher than in the previous period – contributed to the reduced liquidity surplus. This consequently led to a renewed decline in recourse to the deposit facility (€58 billion on a daily average). During the March-April maintenance period, the EONIA was once again almost always well below the main refinancing rate, albeit to a lesser extent than in the previous period. It did not completely mirror the 50-basis-point cut in the main refinancing rate, meaning that the average spread between the two rates decreased to 56 basis points. The higher EONIA of 1.64% at the end of the quarter also had an impact here as it was above the respective key interest rate again for the first time since 8 October 2008. Broad trading margins continued to be a significant feature of the overnight interest rate.

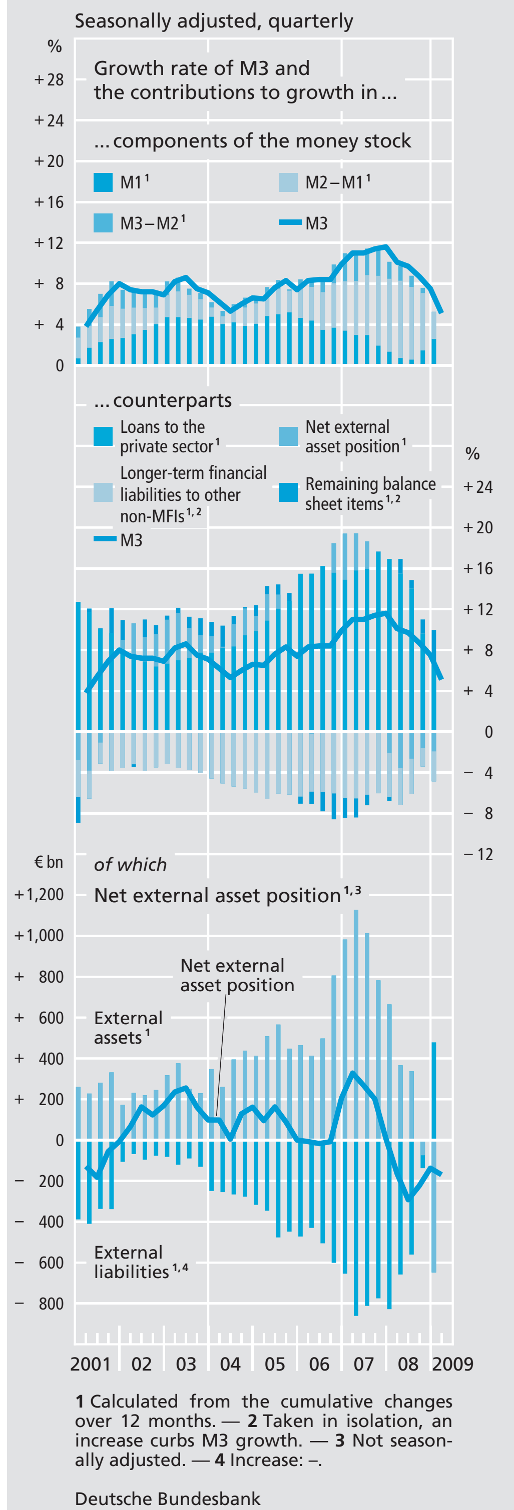
Following a further cut of 25 basis points in the key interest rate agreed by the ECB Governing Council at its meeting on 2 April, the main refinancing operations in the subsequent April-May reserve maintenance period were carried out with an interest rate of 1.25%.

Factors determining bank liquidity [1]

€ billion; changes in the daily averages of the reserve maintenance periods vis-à-vis the previous period

Item	2009		
	21 Jan to 10 Feb	11 Feb to 10 Mar	11 Mar to 7 Apr
I Provision (+) or absorption (–) of central bank balances due to changes in autonomous factors			
1 Banknotes in circulation (increase: –)	+ 12.9	– 1.3	– 5.8
2 General government deposits with the Eurosystem (increase: –)	– 2.8	– 7.4	– 28.9
3 Net foreign reserves [2]	– 33.9	– 34.7	– 4.7
4 Other factors [2]	+ 21.3	+ 37.9	+ 28.1
Total	– 2.5	– 5.5	– 11.3
II Monetary policy operations of the Eurosystem			
1 Open market operations			
(a) Main refinancing operations	+ 5.7	– 0.6	+ 6.2
(b) Longer-term refinancing operations	– 62.2	– 79.0	– 29.3
(c) Other operations	– 2.8	+ 2.1	+ 0.3
2 Standing facilities			
(a) Marginal lending facility	– 0.8	– 0.5	– 0.5
(b) Deposit facility (increase: –)	+ 63.1	+ 79.9	+ 37.7
Total	+ 3.0	+ 1.9	+ 14.4
III Change in credit institutions' current accounts (I + II)	+ 0.6	– 3.5	+ 3.0
IV Change in the minimum reserve requirement (increase: –)	– 0.8	+ 3.5	– 3.3

1 For longer-term trends and the Deutsche Bundesbank's contribution, 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.



1 Calculated from the cumulative changes over 12 months. — 2 Taken in isolation, an increase curbs M3 growth. — 3 Not seasonally adjusted. — 4 Increase: –.

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term savings deposits (with an agreed period of notice of up to three months) were extremely popular, there were outflows from short-term fixed-term deposits (with an agreed maturity of up to two years) owing to the flat yield curve. This more than offset the increase.

Sharp growth in M1

This decline in short-term fixed-term deposits did not contribute to the reduction in M3 to the same extent, however, as overnight deposits benefited from it, growing at an extremely strong seasonally adjusted and annualised rate of 11½% between January and March. By contrast, currency in circulation rose no more than just under 9½% in the same period, after an increase of 31½% in the last three months of 2008, primarily owing to uncertainty. Overall, the narrow money aggregate M1 grew at a seasonally adjusted and annualised rate of over 11%, which was even more than in the fourth quarter of 2008.

Lending to private sector markedly subdued

The weak underlying monetary momentum during the reporting period has to be seen, in particular, in connection with a continuing muted growth in lending. As in the previous quarter, the volume of new lending to the domestic private sector in the euro area was lower than that of redemptions. The seasonally adjusted and annualised growth rate of loans was again -½% between January and March. It should be noted in this regard, however, that lending was influenced by securitisation and loan sales transactions, as a result of which the loans in question, under certain circumstances, no longer appear as unsecuritised lending in the credit institutions' balance

sheets. The statistical data on loans therefore tend to understate funding by banks. Adjusted for this effect, loans increased by a seasonally adjusted and annualised ½% in the first quarter, compared with 3% in the final quarter of last year. Most loans securitised by banks are, statistically speaking, included in securitised loans to private issuers, which grew at a correspondingly vigorous rate in the reporting period. In total, funds provided to the private sector nonetheless rose by no more than 1% in seasonally adjusted and annualised terms in the first quarter and were therefore again down on the previous quarter.

Weak lending, especially to non-financial corporations ...

Lending was weak in all sectors. Loans to non-financial corporations rose only by a seasonally adjusted and annualised rate of 1% in the first quarter.[1] the pace of growth slowed over the quarter, in fact. The increase was primarily driven by strong growth in January, whereas loans were cut back in February and March. Weak lending growth also reflected the fall in corporate demand for loans. Faced with declining capacity utilisation, demand for short-term debt capital, among other things, was also tending to fall as running costs were covered by the existing liquidity buffer from enterprises' bank deposits.

... and financial corporations

Loans to financial corporations declined in the first quarter of 2009, in some cases significantly. In seasonally adjusted and annualised terms, outstanding unsecuritised credit to insurers and pension funds fell by almost 17%, while loans to other financial intermediaries decreased at a rate of just over 4%. The development of loans to households was also weak in the first quarter even though the downward movement from the previous quarter was less intense in some sub-segments. The seasonally adjusted and annualised growth rate of consumer credit thus rose from -4% to 1½%, and the downward movement in loans for house purchase also slowed during the reporting quarter. By contrast, other credit to households fell at a rate of 1%.

Strong provision of securitised funds

While loans to public sector entities rose only slightly in the reporting period, banks added larger amounts of public sector securities to their portfolios. Overall, this primarily reflects the increased demand for funding from the public sector. Taking into account securitised lending to both public and private sector debtors, securitised lending was, in terms of its overall quantity, the most significant instrument for the provision of funds by banks in the euro area. For banks, securitisation is an attractive option because, among other things, it improves their capacity to raise funds through collateralised transactions.

Other counterparts

Net external assets in the MFI sector, which shows non-banks' transactions with non-residents, fell by almost €91 billion in seasonally adjusted terms in the first quarter of 2009, thus playing a part in the slowdown in monetary growth in the euro area. Taken in isolation, the increase in central governments' deposits at credit institutions, which are not part of the monetary aggregate M3, also had a dampening effect on M3 growth in the first quarter.

1 Credit data by sector are not adjusted for securitisation and loan sales transactions.

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

€ billion

Item	2009 Jan to Mar	2008 Jan to Mar
Deposits of domestic non-MFIs 1		
Overnight	+ 68.6	+ 1.0
With agreed maturities		
of up to 2 years	− 83.5	+ 14.8
of over 2 years	+ 12.1	+ 3.2
Redeemable at notice		
of up to 3 months	+ 11.8	− 8.5
of over 3 months	+ 0.8	− 3.1
Lending		
to domestic enterprises and households		
Loans	+ 25.2	+ 32.2
Securities	+ 7.4	+ 11.3
to domestic government		
Loans	− 4.8	− 9.7
Securities	+ 5.4	+ 6.8

* 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.

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Rise in longer-term investment at banks

Monetary growth in the reporting period also tended to be dented by the sharp increase in monetary capital. After a slight decrease in longer-term investment in the euro area by a seasonally adjusted and annualised ½% in the fourth quarter of 2008, there was perceptible growth of 9% in the first quarter of 2009. All components of monetary capital contributed to this expansion. Growth in longer-term fixed-term deposits (with an agreed maturity of more than two years) was particularly dynamic at 16½%. Furthermore, banks continued to top up their "capital and reserves" substantially, mainly on account of the central government rescue measures to stabilise the financial sector. By contrast, long-term savings deposits (with an agreed maturity of more than three months) and long-term debt securities (with a maturity of more than two years) were considerably less popular. Although the latter increased very sharply in January and February, the months with the largest issues of government-guaranteed bank debt securities to date, this growth only partially offset the sharp decrease in the previous quarter. Moreover, non-banks offloaded much of these securities again in March. As a result, growth in the reporting period was just 3% in seasonally adjusted and annualised terms.

Medium-term price risks down considerably from monetary perspective

After recording what were still comparatively high M3 growth rates between October and December 2008, the underlying monetary dynamics – in other words, the monetary growth relevant to inflation – slowed considerably in the reporting quarter. The longer-term inflation risks associated with monetary expansion therefore fell sharply in the course of the first quarter. This is also reflected in the results of the monetary-based inflation projections, which now place the most probable medium-term inflation growth at below the 2% mark. However, the high degree of uncertainty associated with such inflation forecasts at present should not be overlooked.

Deposit and lending business of German banks with domestic customers

Sharp increase in overnight deposits with massive cutback in short-term fixed-term deposits

Domestic investors' deposits at German banks rose at an annualised rate of 5½% in the first quarter. Growth was thus significantly down on the quarter. As in the euro area as a whole, however, there were distinct shifts in the various types of short-term deposit. While short-term fixed-term deposits plummeted by

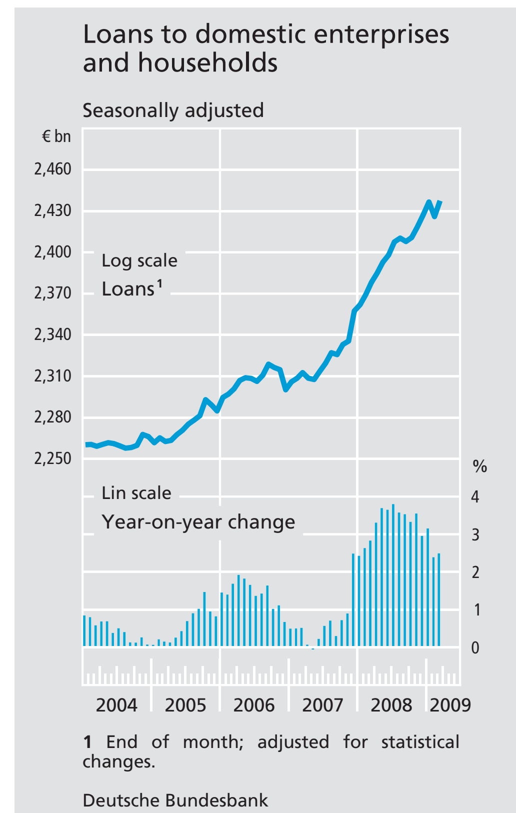
almost 31½% in seasonally adjusted and annualised terms, domestic investors topped up their overnight deposits extremely sharply at a rate of 35½%. This is undoubtedly also to be seen in connection with the fact that, given declining interest rates, the yield advantage of short-term overnight money remunerated at market rates has narrowed. As in the fourth quarter of 2008, it was mainly households and – albeit to a lesser extent – non-financial corporations which made these portfolio adjustments in the first three months of 2009.

Marked increase in longer-term fixed-term deposits ...

Longer-term bank deposits of domestic investors grew noticeably in the period from January to March. Long-term fixed-term deposits (with an agreed maturity of more than two years) were in particular demand. At just over 6%, however, the seasonally adjusted annual rate was well below that of the previous quarter. These deposits were made, above all, by insurers and other financial intermediaries, which are traditionally the most important investor group in this segment. As in the previous quarter, the increase in long-term fixed-term deposits also includes some securitisation transactions by German banks, in which the securitised paper of their special purpose vehicles is taken on to their own balance sheet against long-term fixed-term deposits.

... and extremely subdued growth in longer-term savings deposit

At the same time, the seasonally adjusted and annualised growth rate of longer-term savings deposits (with an agreed period of notice of more than three months) fell to just 2% after totalling 36% in the fourth quarter of 2008 as a result of the extremely high demand for these products, especially from households.

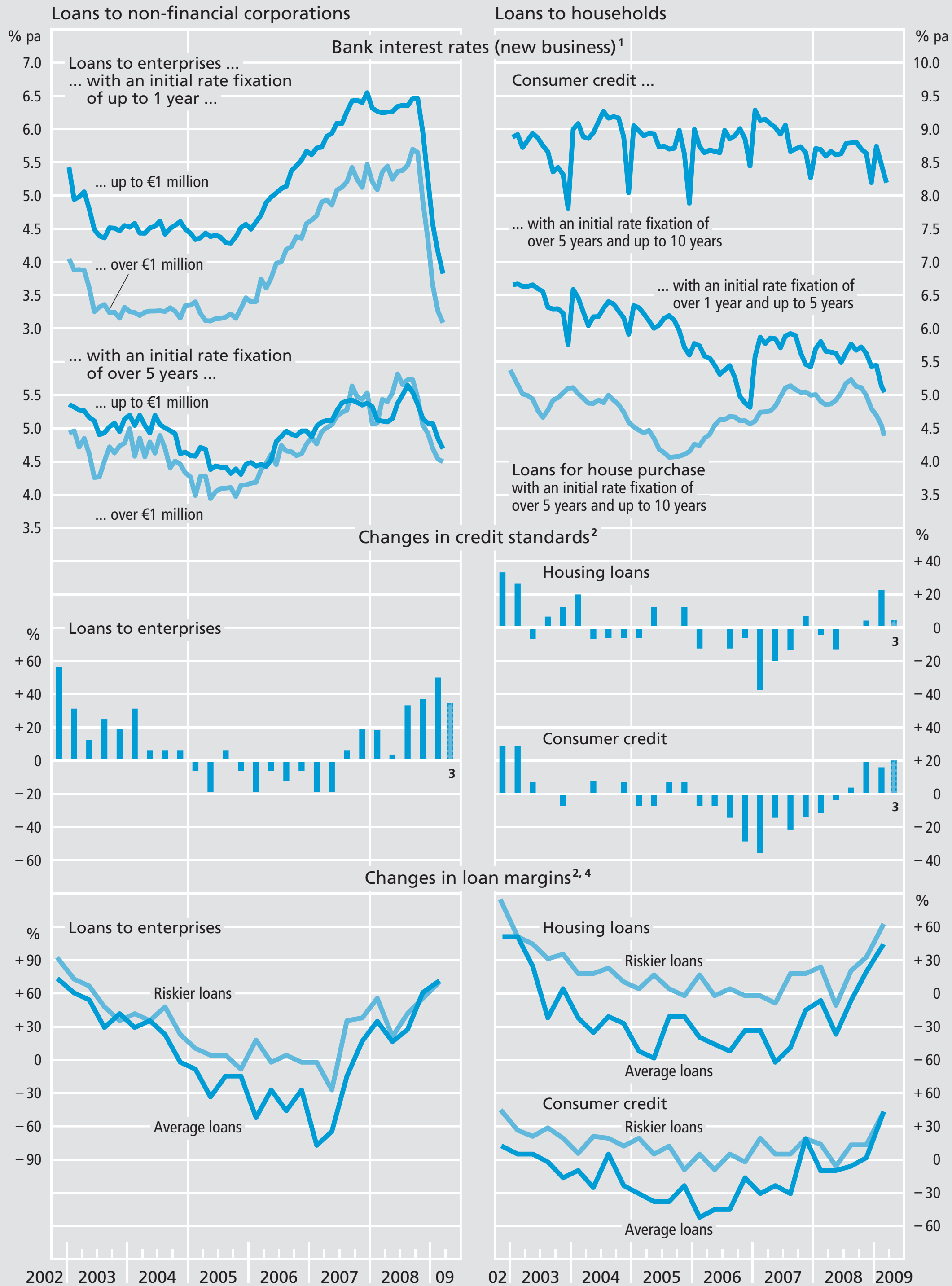


1 End of month; adjusted for statistical changes.

Rise in loans to financial corporations ...

In the first quarter of 2009, the total provision of funds by domestic institutions was considerably down on the quarter. The seasonally adjusted and annualised growth rate was just 1%, compared with 6% in the final quarter of 2008. The corresponding growth rate of loans to the domestic private sector was also well below that of the previous quarter. It should be noted that this growth was almost exclusively attributable to strong lending to financial corporations, with reverse repo transactions playing a major role. These transactions arose mostly in connection with interbank lending, however, which is recorded statistically under loans to financial corporations as it is settled via a domestic non-bank.

Banking conditions in Germany



1 According to harmonised MFI interest rate statistics. — 2 According to the Bank Lending Survey, difference between the numbers of respondents reporting “tightened considerably” and “tightened somewhat” and the numbers of respondents reporting “eased somewhat” and “eased considerably” as a percentage of the responses given. — 3 Expectations for 2009 Q2. — 4 Reduced scale.

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They are not, however, directly associated with the provision of funds by banks to the domestic non-banking sector.

... decline in loans to non-financial corporations and ...

The decrease in unsecuritised lending from German banks to foreign non-financial corporations was the principle contributory factor in the weak loan development in the reporting quarter. This was mainly due to a decline in demand for funds owing to weaker macroeconomic activity and muted fixed investment. Furthermore, the volume of outstanding loans for house purchase accounted for by households continued to decline, as did other loans to households. In seasonally adjusted terms, German credit institutions also disposed of some of their securities from private issuers, albeit to a small extent. By contrast, holdings of securities of government issuers were increased very slightly, whereas unsecuritised credit to general government fell noticeably.

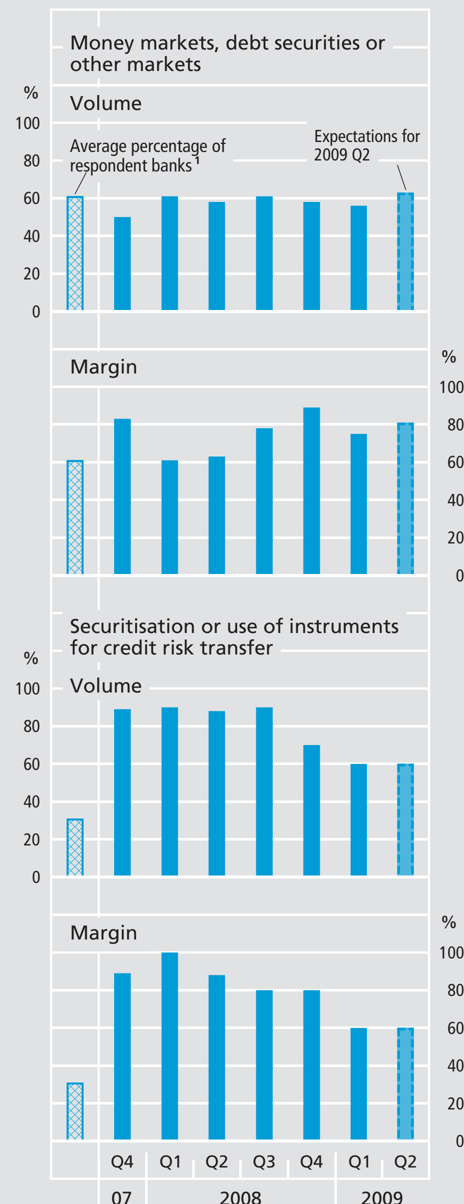
... further decline in loans to households

Lending conditions tightened across the board

Banks' more restrictive lending policy also had a dampening effect on the development of domestic loans to the private sector. The German banks taking part in the Bank Lending Survey (BLS) stated that they had tightened their lending conditions in all business areas in the first quarter of 2009. This time, the adjustments of credit standards and margins in Germany – in contrast to the previous quarters – were no longer less pronounced than those in the euro area as a whole; for the first time, changes were made to a similarly marked extent.

Specifically, the tightened lending conditions were reflected, above all, in a sharp expan-

Funding options and lending of German BLS banks during the financial market crisis*



* Banks which reported significant or insignificant effects of the financial crisis on their credit standards as a percentage of all banks claiming to be active in the relevant market and to have been adversely attected in their wholesale funding. — **1** Banks claiming to be active in the relevant market and to have been adversely attected in their wholesale funding as a percentage of all German BLS banks; average from 2007 Q4 to 2009 Q1.

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Short-term bank lending rates since the autumn of 2008

Banks passing through interest rates in their lending business with the private sector plays a key role for the impact of monetary interest rate measures on the real economy. This is especially true of economies with a bank-oriented financial system, as is the case in Germany. In the current situation of a severe financial crisis and a worsening underlying recessionary trend, the extent to which banks pass through their lower refinancing costs to their borrowers is of particular interest. Below, more light will be shed on German banks' interest rate pass-through in their short-term enterprise and housing loan business. The analysis excludes long-term loans, as there is likely to have been a marked change in German financial institutions' long-term wholesale funding behaviour during the financial market crisis. For example, there has probably been a decline in the importance of the capital market for banks' refinancing and, therefore, in the relevance of the yield on bank bonds, which typically represent the starting point for studies on the pass-though of interest rates.

Between the end of September 2008 and the beginning of May 2009, the Eurosystem lowered the interest rate on its main refinancing operations from 4.25% to 1.00% – a total of 325 basis points. Comparing three-month money market rates (Euribor) for the period from the end of September 2008 to the end of March 2009 (latest data available from EMU interest rate statistics) with the changes in the short-term bank lending rates shown in the interest rate statistics (with a floating rate or an initial rate fixation of up to one year), it becomes apparent that, in their lending to enterprises, German banks passed on just under 80% of the wholesale funding advantage to borrowers, while the corresponding figure for housing loans was around 60%.

Econometric estimates on German banks' interest rate pass-through prior to the financial crisis show that changes in refinancing costs in the money market are passed through to a varying extent depending on the credit aggregate observed. This happened most quickly in short-term lending to enterprises, while interest rates for short-term housing loans to households, for instance, were changed somewhat more slowly.[1] Accordingly, certain margin increases along with falling refinancing costs were quite usual, at least temporarily, even before the financial crisis. This can also be observed in the period considered here. According to the Bank Lending Survey (BLS), the (net) balance of the institutions reporting increased margins in their lending to enterprises and for housing loans in the period under observation here noticeably exceeded that of the preceding quarters.[2]

A comparison of (the change in) bank lending rates with the projected values of an econometric model for interest rate pass-through can provide possible indications as to whether the observed increase in German banks' margins since the autumn of 2008 were sharper than before the financial crisis in terms of their response pattern. To do this, using a model estimated up to the autumn of 2007, ie shortly after the onset of the financial market turbulence, the path of the short-term bank lending rates under consideration here is forecast based on the development of the three-month rate and then compared with the lending rates actually observed (see charts). This shows that the actual decreases in short-term bank lending rates in corporate business were greater than those projected using the model. The interest rates for short-term loans for house purchases are not noticeably higher than their forecast values either. Compared with the interest rate pass-through behaviour from the period before the crisis, as expressed by the estimated equation, this indicates that German banks' interest rate pass-through in their short-term lending since the beginning of monetary policy easing has not been exceptionally slow.[3]

1 See J von Borstel (2008), Interest rate pass-through in Germany and the euro area, ROME discussion paper No 08-05. In the interest rate pass-through model, the banks' refinancing costs for short-term lending, as considered here, are approximated using the EURIBOR (three-month rate) and, for longer-term loans, by bank bonds with a matching maturity. — **2** The aggregate survey results for Germany can be found at http://www.bundesbank.de/volkswirtschaft/vo_veroeffentlichungen.php. — **3** Model-based forecasts on interest rate pass-through are to be interpreted with particular caution in the current setting, however. The dislocations in the money and capital markets are likely to have had an impact on banks' refinancing behaviour. Insofar as this affects not only the longer maturities, but also short-term refinancing behaviour, a model analysis that does not take account of these near-time changes loses some explanatory

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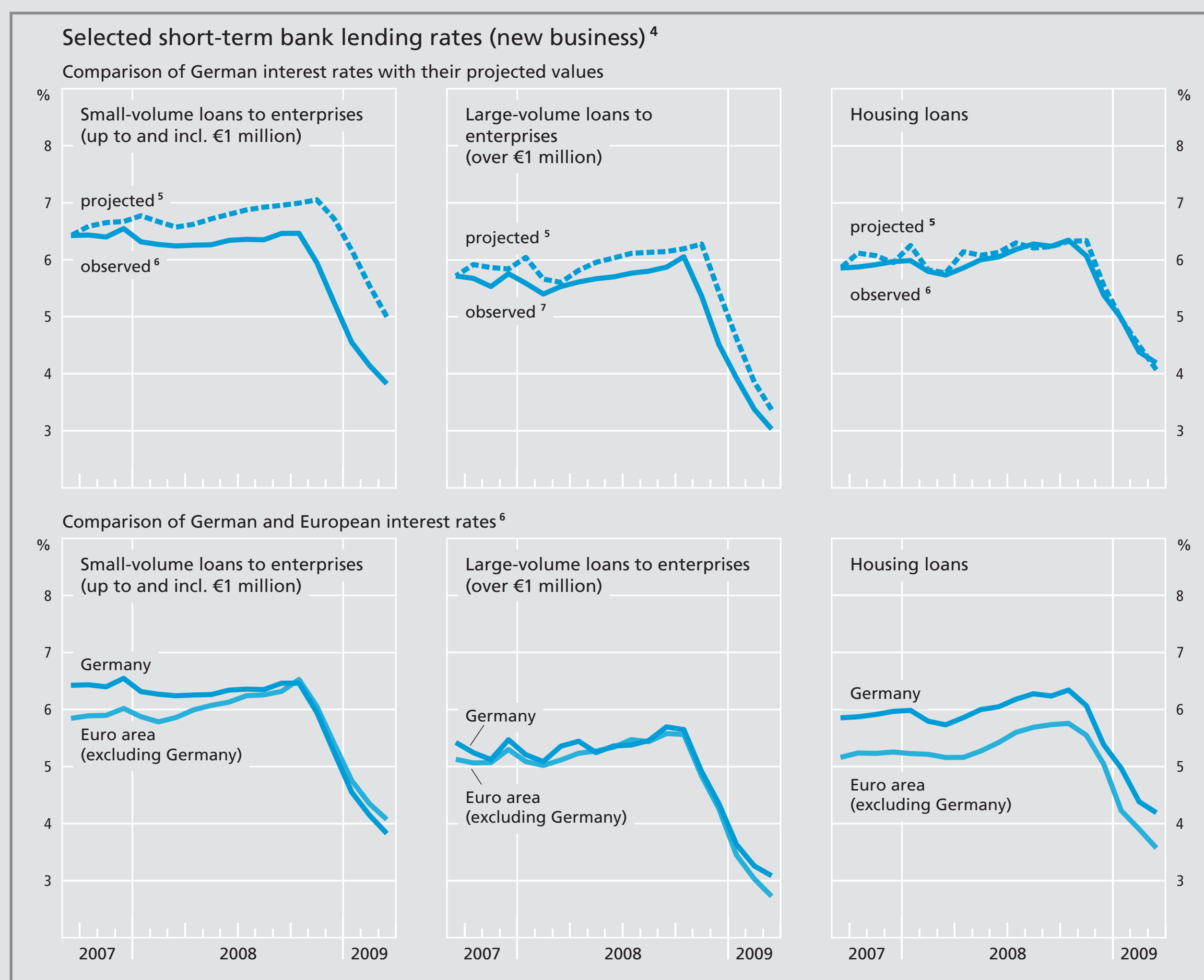
Another possibility to investigate the question as to whether the German banks' were extremely slow in lowering lending rates is to compare German interest rates for short-term loans to enterprises and for housing loans with the corresponding interest rates in the euro area (excluding Germany). Here, too, it is evident that the decline in bank interest rates in the categories considered here was more or less as strongly marked in both reference areas (see charts). Therefore, neither the model-based analysis nor a comparison with euro-area interest rates provides any indication of German banks being too slow in passing through lower refinancing costs.



power. Finally, it cannot be ruled out either that the bank interest rates shown in the statistics overstate the actual interest rate pass-through, as the interest rate statistics show volume-weighted averages for each current bank interest rate. If, say, a stronger-than-usual shift in demand towards banks with comparatively favourable conditions is taking place at present, the quantity-weighted statistical data would overstate the pure price effect and, therefore, the banks' interest rate pass-through. — **4** With initial interest rate fixation variable or up to one year. — **5** Projected values according to the interest rate pass-through model. See J von Borstel (2008), op cit. — **6** According to the harmonised euro-area interest rate statistics. — **7** Unweighted average.

sion of margins for all types of credit. On balance, the surveyed German institutions also applied significantly stricter credit standards to corporate lending business, in particular. According to the surveyed banks, the adverse impact of the general outlook for the economy as well as industry and firm-specific factors played a crucial role, in addition to increased wholesale funding and balance sheet constraints. Credit standards for loans to households for house purchase or for consumption purposes were tightened less than those for loans to enterprises, but were still tightened significantly. Conversely, German BLS banks observed increased demand from households for loans for house purchase and consumer credit. The latter should be seen in connection with the "environmental bonus" for buying cars. Surveyed institutions also reported a slight increase in non-financial corporations' demand for loans in the reporting period; this was mainly for short-term funding, however. There was, by contrast, a noticeable decline in demand for long-term financing, especially for investment purposes. Given the obviously increasing number of multiple loan requests from enterprises, it is currently difficult to gauge how far the additional short-term demand for funds reported by BLS banks actually reflects stronger demand in the economy as a whole.

As has been the case for some time, the survey round in the first quarter of 2009 also contained a set of *ad hoc* questions on the impact of the financial market crisis on the surveyed institutions' lending policy. According to the surveyed banks, refinancing problems are no longer quite as severe in some markets and affected lending conditions less strongly than in the previous quarter.

Bank lending rates continue to decline

As well as the considerable expansion of margins reported in the BLS, German credit institutions also passed on part of their sharply reduced refinancing costs in the short-term segment to domestic private customers in the reporting quarter:[2] According to the interest rate statistics, there was a marked fall in the cost of short-term loans to non-financial corporations, in particular, in the wake of the Eurosystem's interest rate moves. At the end of the period under review, the figures were 3.8% for small-scale loans and 3.1% for larger-scale loans. Long-term bank loans to domestic non-financial corporations were, however, also cheaper at the end of March compared with three months earlier; depending on volume, the conditions were either 4.5% or 4.7%. Finally, at 4.2% with short-term interest fixation, German banks were asking much less for loans for house purchase quarter-on-quarter, and the cost of loans with an interest fixation of more than five up to ten years also fell somewhat to 4.4%.

The impact of the financial crisis on the financial accounts

Financial flows in 2008

The global financial crisis caused serious disruptions in the money and capital markets last year and had a severe impact on banks' balance sheets. The real economy was also increasingly affected during 2008. Using the 2008 financial accounts figures, which are

2 See explanatory notes on page 36.

now available in full, the extent to which these developments have been reflected in the financing flows and the assets and liabilities positions of individual domestic sectors are investigated below, as are the conclusions to be drawn from this.[3]

Increase in financial flows due to general government transactions

Marked increase in financial flows

According to the financial accounts figures, the financial flows of the domestic non-financial sectors as a whole, ie of households, enterprises and general government, increased sharply in 2008. In a longer-term comparison, this is rather unusual as financing flows tend to decrease during periods of financial market turmoil. In 2008, non-financial sectors' acquisition of financial assets rose by €25 billion to almost €310 billion and demand for funds, in fact, increased by around €50 billion to €145 billion.

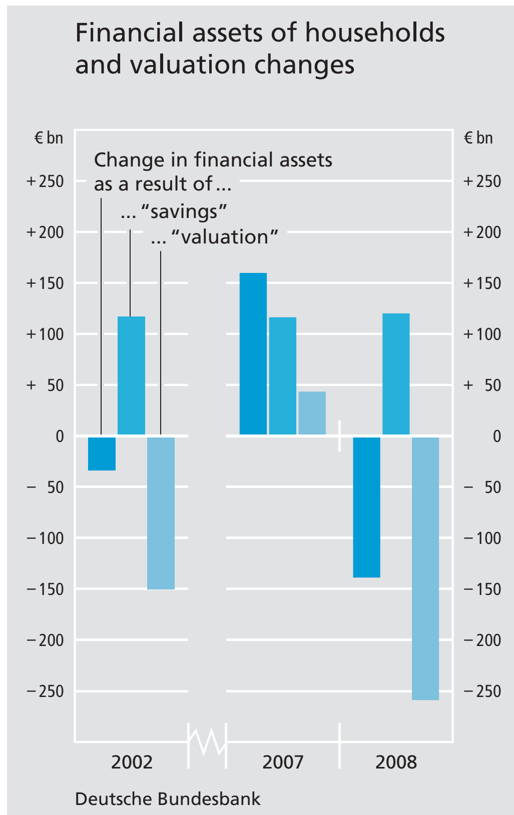
Sharp rise in government external funds and financial assets

The breakdown by sector shows that this development was primarily attributable to general government operations, which is, in turn, largely a reflection of the financial crisis. Net external financing of the government sector amounted to €66 billion in 2008, which was over €50 billion more than in 2007. There was, however, a direct correlation between this considerable increase and the topping-up of financial assets by the government, which, at €63 billion, was extremely high. Government financial investment was shaped, above all, by the substantial acquisition of securities and equity in connection with government measures to stabilise the financial system. The increase of almost €40 billion in bonds, which primarily occurred in the first half of 2008, was due to support measures for Landesbanken. This involved the transfer of banks' debt securities to special purpose vehicles which are counted as part of the public sector. Furthermore, the increase in equity (€13½ billion) was due mainly to the recapitalisation of credit institutions, especially towards the end of the year. Even though the government fiscal deficit, at €3 billion, was relatively low in 2008 – compared with previous years – the rescue measures for the banking sector have had a significant impact on public finances over the course of the financial crisis. As a result, the government debt ratio (pursuant to the Maastricht criteria) had risen to almost 66% of GDP by the end of 2008, which contrasted with the trend in recent years, and is likely to increase further in the near future.

Major valuation losses for households

Households also increased their financial investment in 2008 – in conjunction with a rise in the saving ratio – albeit only slightly to around €120 billion. These transactions were partially offset by major negative valuation effects, especially in the case of direct and indirect investments in shares. Although these effects were spread across the entire year, they were particularly strong in the final quarter when there was a significant escalation of the financial crisis. The valuation losses amounted to a total of some €260 billion. At roughly €4.4 trillion at the end of 2008, financial assets were thus around €140 billion, or just

3 For the most recent financial accounts figures, see Table VIII in the statistical section at the back of this Monthly Report.



over 3%, lower than in 2007. The scale of this "calculated" value adjustment becomes clear by comparing it with 2002, the only year since 1950 in Germany when households' nominal monetary assets decreased on the back of valuation adjustments. At that time, the decline in financial assets amounted to around €35 billion, with concurrent financial investment of just under €120 billion.

Extensive portfolio shifts

There were also major shifts in households' financial investment in the reporting year. Inflows to the "currency and bank deposits" item, which were especially pronounced in the final quarter of 2008, attained their highest value (just over €120 billion) since the beginning of the time series in 1950. Across all quarters, this mainly benefited short-term time deposits, the remuneration of which was still relatively attractive up to the end of last year. An additional factor was that households increasingly opted for overnight money in the final quarter of 2008 in view of the escalating financial crisis.

These inflows to bank deposits were partially offset by a broad reduction in securities, particularly towards the end of 2008. Equity ownership was affected most of all, falling by a transaction-related €45 billion (ie adjusted for valuation losses). Households also sold large quantities of bonds in the fourth quarter, after buying such paper on balance in the first nine months of the year. This development also affected the certificates issued by banks, which, for statistical purposes, are recorded under debt securities. Depending on their characteristics, their value has taken a nosedive as a result of the turbulence in the financial markets. Investment fund shares were purchased on a sizeable scale in the first three quarters of 2008, at a net figure of more than €20 billion. By the end of 2008, by contrast, households had sold almost €17 billion-worth of such shares on balance. In October, in particular, domestic mutual funds were forced to take back shares. Money market and real estate funds were especially affected.

Continued decline in debt

In terms of loans, households continued the trend of debt reduction which has been evident for some years. At just over €15 billion, however, net repayments were down somewhat on 2007 and were made mainly at the beginning of the year and in the final quarter. As in the previous year, this affected loans for commercial purposes and for house pur-

chase. By contrast, loans for consumption purposes, which make up around 15% of all debt, increased slightly. Overall, households' debt ratio was 97% of disposable income at the end of 2008, ie 16 percentage points lower than at the beginning of this decade when debt was at its all-time high. This development essentially mirrors households' construction activity, which has been subdued for some time and is therefore not a result of the financial crisis. The reduction in liabilities slowed the decline in net financial assets somewhat, which fell by €125 billion to almost €2.9 trillion in 2008. Disposable income, at just over 180%, was 13 percentage points lower than at the end of 2007. All in all, the asset position of households worsened considerably as a result of the financial crisis notwithstanding the reduction in debt.

Stable financing situation for enterprises

Investment unchanged at a high level

While the financial investment of non-financial corporations was, at €125 billion in 2008, lower than one year earlier, their spending on real investment increased. At €400 billion in total, investment was relatively high and therefore showed no signs of having been affected directly by the financial crisis.

Share acquisition extremely high

Financial transactions were mainly shaped by an extremely high level of equity acquisition (€150 billion). These chiefly took the form of share purchases resulting from a number of major corporate takeovers across all quarters of last year. Bank deposits were also topped up; at just over €20 billion, inflows were not exceptionally high, however. Conversely, enterprises again offloaded a large volume of money market paper. One likely reason for this was uncertainty following events in the financial markets. Lending, especially to non-residents, was fairly substantial at just over €30 billion, and took place mostly in the first three quarters of 2008.

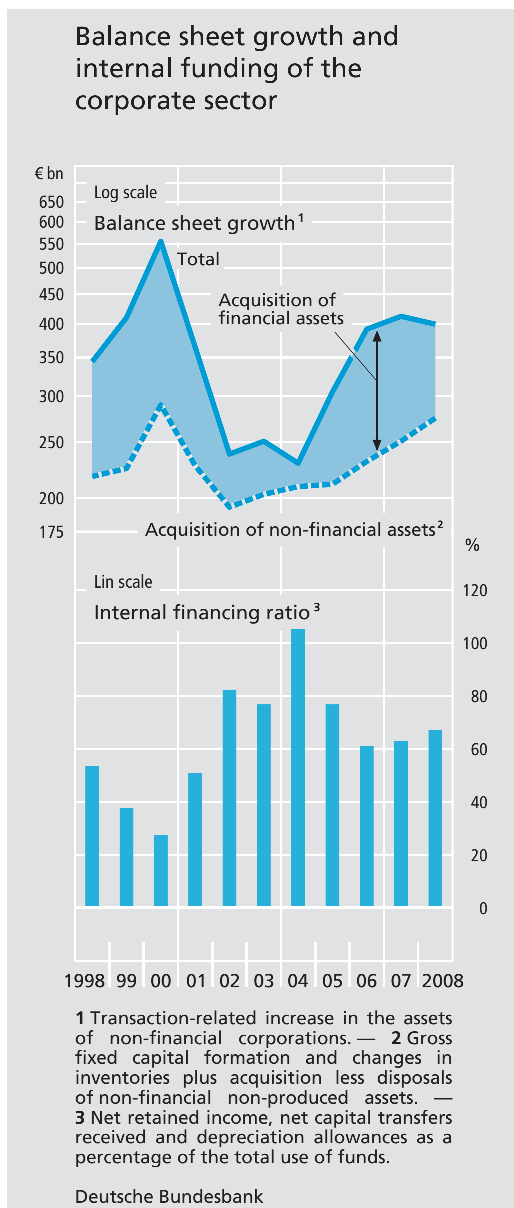
Internal financing again accounts for a large share ...

External financing of producing enterprises fell to €94 billion in 2008 compared with just over €100 billion in the 2007. This was due partly to the fact that own funds, ie retained earnings and "earned" depreciation, were somewhat higher than in 2007. Overall, two-thirds of investment was covered internally as a result. In a long-term comparison, this is a relatively high internal financing ratio. Within external funds, financial credit continued to be by far the most important source. Demand for bank loans, in particular, was extremely buoyant. On balance, enterprises raised loans worth €44 billion – almost exactly as much as in 2007 – at domestic and foreign banks, mainly in the second half of 2008. These were mostly longer-term loans.

... with buoyant demand for bank loans

Capital market funding relatively low

Unlike in previous years, other financial credits from non-residents, which are mainly issued to group affiliates, played a more minor role in the reporting year. This was probably also due to the fact that the financial crisis has increased the difficulty of bond issues by foreign financing subsidiaries, which often underlie such intra-group and tax-motivated transactions. Borrowing was relatively low overall in the domestic capital market, too. At €3½ billion, sales of shares, in particular, were not very productive. By issuing debt securities, the producing enterprises still procured funds amounting to almost €10



1 Transaction-related increase in the assets of non-financial corporations. — 2 Gross fixed capital formation and changes in inventories plus acquisition less disposals of non-financial non-produced assets. — 3 Net retained income, net capital transfers received and depreciation allowances as a percentage of the total use of funds.

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billion in 2008, which was slightly more than in 2007. Even in the fourth quarter, when enterprises had to offer investors relatively attractive conditions, inflows were fairly high, at €5½ billion net.

Slight increase in debt ratio

As a result of the great demand for borrowed funds in the form of bank loans and debt securities, the financial debt of producing enterprises had risen to just over €1.6 trillion by the end of 2008 and was thus 6½% up on the year. This caused the debt ratio to increase from 110% to 114% of gross value added. Furthermore, negative valuation effects on equity capital led to a serious deterioration in the balance sheet ratios based on market prices.[4] The debt/capital ratio (leverage ratio), which is often used internationally, had thus fallen to 100% by the end of 2008, compared with 70% in 2007. It should be noted, however, that German enterprises were able to significantly improve this ratio in recent years owing to restrained borrowing and a high level of internal financing – with simultaneous valuation gains in equity capital – and had therefore established a certain buffer on their balances sheets.

Portfolio shifts of institutional financial investors

Inflows to bank deposits exceptionally high

In addition to households and producing enterprises, domestic institutional financial investors also increased their bank deposits by a relatively large amount in 2008. Other financial institutions, which essentially include investment funds, also topped up their liquidity buffer in the form of bank deposits by just over €90 billion, which was considerably more than usual. This was done mostly at the beginning and towards the end of the year. By contrast, financial institutions, as in previous years, sold stock certificates to the tune of €10 billion. At the end of the year, debt securities were also returned on balance (€38

4 According to international standards, the individual items of the financial accounts data, ie in the sectoral balance sheets, are shown at market prices, where possible.

billion), not least because of the altered risk assessment of such paper.

Insurance sector's investment behaviour stable

Insurance companies and pension funds continued to pursue the same investment policy as in the previous year. Bank deposits were topped up again by almost €17 billion. As usual, a preference was shown for longer-term time deposits. These are often registered debt securities or Pfandbriefe underwritten by banks, which, for statistical purposes, are reported under bank deposits owing to their limited tradability. Mutual fund shares, which – after bank deposits – are the largest item in the portfolio of the insurance sector, were acquired slightly more compared with 2007 (€22 billion). Insurers also increased their bond holdings again. By contrast, €12 billion in share investments were sold by insurers on balance, twice as much as in 2007. Almost half of this amount was sold in the fourth quarter when market prices fell very sharply.

Summary

Financing barely affected by financial crisis, ...

Overall, the financial accounts figures for 2008 reflect the considerable adjustments made by various domestic sectors in the course of the financial crisis, which primarily affected the investment structure, but also affected investment itself. Borrowing does not seem to be have been impaired, however. This is revealed, in particular, by producing enterprises' high take-up of bank credit, and also in the high level of government borrowing. Thus, the financial crisis had hardly any identifiable dampening impact on the acquisition of new machinery and equipment. Despite the worsening of the economic situation overall in the final quarter of 2008, this may ultimately be seen as reflecting the good shape of German enterprises overall, which have improved their balance sheet structures significantly in recent years and consequently had a large volume of own funds available to them.

... but decline in balance sheet positions

Nevertheless, there has been an unmistakable deterioration in the investment position of households and enterprises as a result of the sharp decline in share prices over the course of 2008. This development can only be prevented from continuing by a resolution of the turmoil in the money and capital markets and an improvement in the economic outlook. There are some faint initial signs of hope at the current end. The global efforts of central banks and governments are making a major contribution in this respect. In the longer term, however, it will essentially come down to whether confidence among financial market players can be restored and financial flows return to normal as a result.