

## Monetary policy and banking business

### Monetary policy and money market developments

Key interest rates still at historical low

After the Governing Council of the ECB had once again lowered the interest rates for the marginal lending facility and main refinancing operations in November, key interest rates were not changed at any of the subsequent meetings. Interest rates for the marginal lending facility and main refinancing operations have stood at 0.75% and 0.25% respectively since mid-November, while the interest rate on the deposit facility has been 0.00% since mid-July 2012.

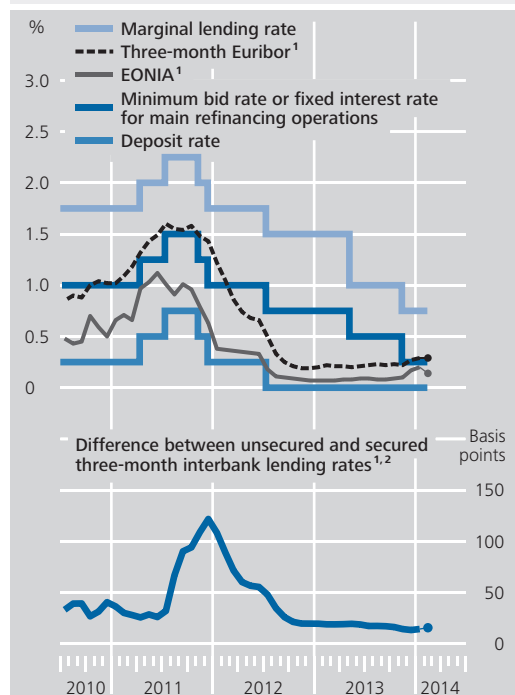
The decisions of the ECB Governing Council were based on the view that the accommodative monetary policy stance will continue to assist the gradual economic recovery in the euro area. Euro-area inflation is expected to

remain low over a prolonged period of time given low price pressure. However, with an economic recovery expected, inflation is likely to increase again gradually as the recovery process continues.

In addition, as in the preceding monetary policy meetings, the ECB Governing Council confirmed in January and February its forward guidance on the future development of the ECB key interest rates, which was first communicated on 4 July. It expressly reaffirmed its intention of leaving key interest rates at present or lower levels for an extended period of time and underscored its determination to maintain an accommodative monetary policy stance for as long as necessary. This statement is based on the assessment that the subdued outlook for inflation extends into the medium term against the backdrop of weak growth and dampened monetary dynamics, and is therefore entirely consistent with the Eurosystem's monetary policy strategy.

*ECB Governing Council reaffirms forward guidance on its future monetary policy stance*

#### Money market interest rates in the euro area



Source: ECB. 1 Monthly averages. 2 Three-month Euribor less three-month Euripo. • Average 1 to 12 February 2014.  
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On 24 January 2014, the Governing Council of the ECB announced that it would reduce its offering of US dollar liquidity-providing operations in view of the lower demand for such operations and the considerable improvement in US dollar funding conditions. US dollar liquidity-providing operations with a maturity of three months will initially cease to be conducted from the end of April 2014; those with a maturity of one week will continue to be conducted at least until 31 July 2014.

*ECB Governing Council's decision on future US dollar liquidity-providing operations*

The Eurosystem did not purchase any additional securities as part of monetary policy-based purchase programmes in the period under review. In particular, it still did not conduct any outright monetary transactions. The Eurosystem's holdings of securities acquired under the Securities Market Programme (SMP), which was discontinued in 2012, and the two covered bond purchase programmes, which

*Still no bond purchases in the form of outright monetary transactions (OMT)*

## Money market management and liquidity needs

The provision of liquidity to credit institutions in the euro area was still clearly above the calculated liquidity needs during the three maintenance periods under review, from 9 October 2013 to 14 January 2014. This stemmed from the structure of the liquidity-providing open market operations which continued to be carried out as fixed-rate tenders with full allotment of the submitted bids (see the table on page 31). Nonetheless, excess liquidity<sup>1</sup> diminished distinctly from €215 billion at the beginning to €154 billion at the end of the period under review amid fairly substantial fluctuations. The decline in excess liquidity was mainly driven by early repayments of liquidity provided in the three-year tenders amounting to €101.1 billion. By contrast, the December 2013-January 2014 period saw demand in the main refinancing operations accelerating by €39 billion on average to €129 billion and demand in the longer-term refinancing operations with maturities of three months and one maintenance period climbing by €17.2 billion to €36.1 billion. Seasonal factors drove average short-term money market rates distinctly higher in the Christmas maintenance period amid fluctuating liquidity conditions with the result that money market rates were again mostly geared more towards the main refinancing rate than the deposit facility.

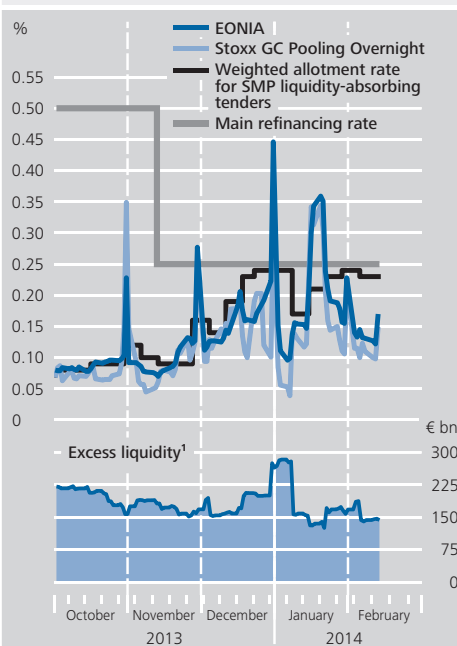
Overall, liquidity needs stemming from autonomous factors remained virtually unchanged in the three maintenance periods, fluctuating in a range of €487 billion and €540 billion. While government deposits shrank by €18.9 billion on balance, seasonal

factors meant that the volume of banknotes in circulation in the Eurosystem climbed by a robust €29.6 billion, thereby increasing liquidity needs. The volume of banknotes in circulation in the euro area reached a new high of roughly €958 billion on 27 December 2013. The aggregate change in net foreign assets and other factors, which are observed jointly to eliminate liquidity-neutral valuation effects, had a liquidity-providing effect, however. This sum increased by €11.7 billion on balance, reducing the liquidity needs arising from autonomous factors by the same measure.

Owing to maturities, the balance sheet holdings of securities purchased under the Securities Markets Programme (SMP), including the quarterly revaluation at the end of the quarter, decreased by €10.8 billion to

### Central bank interest rates, money market rates and excess liquidity

Daily data



<sup>1</sup> Deposit facility plus current account holdings minus the minimum reserve requirement.  
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<sup>1</sup> Deposit facility plus current account holdings minus the minimum reserve requirement.

## Factors determining bank liquidity<sup>1</sup>

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

Item	2013/2014		
	9 Oct to 12 Nov	13 Nov to 10 Dec	11 Dec to 14 Jan
I Provision (+) or absorption (–) of central bank balances due to changes in autonomous factors			
1 Banknotes in circulation (increase: –)	– 2.1	– 5.5	– 22.0
2 Government deposits with the Eurosystem (increase: –)	+ 9.2	– 9.3	+ 19.0
3 Net foreign assets <sup>2</sup>	+ 12.7	– 0.1	– 18.1
4 Other factors <sup>2</sup>	– 21.5	+ 6.2	+ 32.5
Total	– 1.7	– 8.7	+ 11.4
II Monetary policy operations of the Eurosystem			
1 Open market operations			
(a) Main refinancing operations	– 5.4	+ 0.8	+ 37.7
(b) Longer-term refinancing operations	– 22.2	– 27.1	– 33.2
(c) Other operations	– 1.0	+ 6.7	+ 23.4
2 Standing facilities			
(a) Marginal lending facility	– 0.1	+ 0.0	+ 0.2
(b) Deposit facility (increase: –)	+ 6.8	+ 3.8	– 11.8
Total	– 21.9	– 15.8	+ 16.3
III Change in credit institutions' current accounts (I + II)	– 23.5	– 24.7	+ 27.9
IV Change in the minimum reserve requirement (increase: –)	+ 0.0	+ 0.4	+ 0.1

<sup>1</sup> For longer-term trends and the Deutsche Bundesbank's contribution, see pp 14\* and 15\* of the Statistical Section of this Monthly Report. <sup>2</sup> Including end-of-quarter liquidity-neutral valuation adjustments.

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€177.4 billion in the three maintenance periods under review. Furthermore, weekly liquidity-absorbing fine-tuning operations were conducted to sterilise the liquidity effect of SMP holdings. Counterparties' increased preference for liquidity meant that underbidding occurred in several SMP liquidity-absorbing tenders during the period under review. Balance sheet holdings under the two Covered Bond Purchase Programmes (CBPP1 and CBPP2) declined by €1.2 billion to €41.6 billion and by just under €0.2 billion to €15.4 billion respectively.

The October-November 2013 maintenance period saw demand tapering off slightly in the main refinancing operations and the three-month refinancing operations (down by €3.8 billion and €0.8 billion respectively) as well as repayments of €26.1 billion of the liquidity provided in the three-year tenders. This led to an outstanding tender volume (excluding liquidity-absorbing fine-tuning

operations) of €743 billion on average, 85% of which was accounted for by the two three-year tenders. Compared with the previous period, excess liquidity fell by €30 billion in total to an average of €193 billion. While it is true that this maintenance period, too, exhibited a kind of frontloading initially, with current account holdings higher at the beginning of the period, balances receded briefly before going up again on certain days towards the end of the period. Overnight rates remained low overall, with secured overnight rates in Eurex Repo's GC Pooling (ECB basket) and the weighted allotment rate for SMP liquidity-absorbing tenders increasing somewhat prior to the end of October.

Over the November-December 2013 maintenance period, demand in the main refinancing operations remained unchanged against the previous period at €92 billion on average. The volume of the longer-term refinancing operations receded by an average

### Open market operations of the Eurosystem\*

Value date	Type of transaction <sup>1</sup>	Maturity in days	Actual allotment in € billion	Deviation from the benchmark in € billion <sup>2</sup>	Marginal rate/ fixed rate %	Allotment ratio %	Weighted rate %	Cover ratio <sup>3</sup>	Number of bidders
09.10.2013	MRO (FRT)	7	93.4	49.9	0.50	100.00	–	1.00	68
09.10.2013	S-LTRO (FRT)	35	3.4	–	0.50	100.00	–	1.00	21
09.10.2013	FTO (–)	7	– 188.0	–	0.09	72.99	0.08	1.34	117
16.10.2013	MRO (FRT)	7	91.2	51.2	0.50	100.00	–	1.00	70
16.10.2013	FTO (–)	7	– 188.0	–	0.15	26.01	0.09	1.17	117
23.10.2013	MRO (FRT)	7	90.6	24.6	0.50	100.00	–	1.00	67
23.10.2013	FTO (–)	7	– 188.0	–	0.12	54.07	0.09	1.28	132
30.10.2013	MRO (FRT)	7	89.3	– 27.7	0.50	100.00	–	1.00	66
30.10.2013	FTO (–)	7	– 188.0	–	0.18	78.40	0.12	1.15	119
31.10.2013	LTRO (FRT)	91	1.9	–	<sup>4</sup> 0.29	100.00	–	1.00	43
06.11.2013	MRO (FRT)	7	89.5	– 51.5	0.50	100.00	–	1.00	64
06.11.2013	FTO (–)	7	– 184.0	–	0.13	32.44	0.10	1.40	131
13.11.2013	MRO (FRT)	7	87.7	16.7	0.25	100.00	–	1.00	67
13.11.2013	S-LTRO (FRT)	28	3.2	–	0.25	100.00	–	1.00	21
13.11.2013	FTO (–)	7	– 184.0	–	0.10	96.83	0.09	1.38	126
20.11.2013	MRO (FRT)	7	86.9	14.4	0.25	100.00	–	1.00	66
20.11.2013	FTO (–)	7	– 184.0	–	0.11	57.58	0.09	1.19	122
27.11.2013	MRO (FRT)	7	97.2	– 24.8	0.25	100.00	–	1.00	78
27.11.2013	FTO (–)	7	– 157.8	–	0.25	100.00	0.16	1.00	108
28.11.2013	LTRO (FRT)	91	5.9	–	<sup>4</sup> ...	100.00	–	1.00	47
04.12.2013	MRO (FRT)	7	94.6	– 41.4	0.25	100.00	–	1.00	78
04.12.2013	FTO (–)	7	– 184.0	–	0.25	100.00	0.14	1.00	130
11.12.2013	MRO (FRT)	7	98.5	38.0	0.25	100.00	–	1.00	80
11.12.2013	S-LTRO (FRT)	35	10.1	–	0.25	100.00	–	1.00	31
11.12.2013	FTO (–)	7	– 184.0	–	0.25	86.43	0.19	1.02	126
18.12.2013	MRO (FRT)	5	118.9	59.9	0.25	100.00	–	1.00	102
18.12.2013	FTO (–)	5	– 152.3	–	0.25	100.00	0.23	1.00	109
19.12.2013	LTRO (FRT)	98	20.9	–	<sup>4</sup> ...	100.00	–	1.00	76
23.12.2013	MRO (FRT)	7	133.6	87.6	0.25	100.00	–	1.00	117
23.12.2013	FTO (–)	7	– 139.9	–	0.25	100.00	0.24	1.00	103
30.12.2013	MRO (FRT)	9	168.7	136.2	0.25	100.00	–	1.00	181
30.12.2013	FTO (–)	9	– 104.8	–	0.25	100.00	0.24	1.00	89
08.01.2014	MRO (FRT)	7	112.5	193.0	0.25	100.00	–	1.00	92
08.01.2014	FTO (–)	7	– 179.0	–	0.25	46.39	0.17	1.04	132

\* For more information on the Eurosystem's operations from 10 July 2013 to 8 October 2013, see Deutsche Bundesbank, Monthly Report, November 2013, p 26. <sup>1</sup> 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), FRT: fixed-rate tender. <sup>2</sup> Calculation according to publication after MRO allotment. <sup>3</sup> Ratio of total bids to the allotment amount. <sup>4</sup> The interest rate corresponds to the average minimum bid rate or main refinancing rate of the MROs conducted over the life of this operation (may be rounded to two decimal places in the table).

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of €27 billion to €625.3 billion. Due to underbidding, in which, among other things, the end of the month and the sharp rise in autonomous factors are likely to have played a part, the weighted average rate in the last SMP liquidity-absorbing operation in November grew by a significant 7 basis points to 0.16%. The lower propensity of credit institutions to place liquidity in the liquidity-absorbing operations sent excess liquidity to highs of up to €195 billion on the first two days of the new month, before it fell back to roughly €155 billion due to the full absorption of the SMP volume. Among other things, the volatility of excess liquidity

had driven EONIA and Stoxx GC Pooling Overnight rates to higher average levels for the maintenance period as a whole of 0.12% (previous period: 0.09%) and 0.11% (previous period: 0.09%) respectively.

This somewhat higher level of overnight rates was an early feature of the December 2013-January 2014 maintenance period, which was characterised by further upside pressure and heightened volatility in shorter-term money market rates, notably in the Stoxx GC Pooling one-week maturity term. The expected tensions towards the end of the year already made themselves

felt at the beginning of the period, with demand rising in the main refinancing operations. In addition, from the second week, underbidding occurred on three consecutive occasions in the SMP liquidity-absorbing tenders amounting to up to €74 billion (as at 30 December 2013). This bidding behaviour by credit institutions sent excess liquidity significantly higher. From around €160 billion at the beginning of the period, it peaked in the week around the turn of the year, rising to €284 billion. If it had not been for the early repayments of liquidity provided in the three-year tenders, which totalled €50.5 billion in this period, excess liquidity would have been higher still. Nonetheless, at an average of €205 billion, it far exceeded the prior-period level of €165 billion. Despite the clearly improved supply of liquidity overall, especially before Christmas and the turn of the year, overnight rates remained at an elevated level, rising sharply

again at the end of the year, in particular (EONIA +22 basis points, compared with only +5 basis points in the previous year). Excess liquidity plummeted by around €122 billion to roughly €157 billion per day in the last week of the maintenance period, ie the week commencing on 8 January 2014, primarily on account of demand in the main refinancing operations deteriorating by €56 billion and an SMP liquidity-absorbing tender absorbing all the SMP liquidity again for the first time following three consecutive occurrences of underbidding. These considerably tighter liquidity conditions sent overnight rates back to a somewhat elevated level.

had likewise been discontinued, are diminishing over time owing to maturing paper.

*Substantial rise in refinancing volume and excess liquidity at the turn of the year*

Following the decline in the outstanding refinancing volume in October and November as a result, above all, of continued repayments of funds provided in the three-year tenders, recourse to the Eurosystem's monetary-policy refinancing operations temporarily increased among euro-area banks until the end of the year. In particular the volume of liquidity provided in the one-week main refinancing operations rose substantially in the course of December. Coupled with greater underbidding in the weekly liquidity-absorbing tenders,<sup>1</sup> this caused a strong rise in excess liquidity.

*Factors potentially affecting the increased demand for liquidity at year-end*

The regularly recurring greater tendency of the banking sector to hold liquidity buffers at year-end and the lower level of excess liquidity compared with previous years are likely to have contributed to the increase in the demand for liquidity. In addition, it can be assumed that the

institutions are increasingly taking active charge of their balance sheet reporting towards the end of the reporting period (31 December), for example regarding internal and regulatory aspects. It is likely that the planned balance sheet assessment of banks to be carried out by the ECB in 2014 played a significant role here, too.

Demand for liquidity rapidly returned to normal at the beginning of January. Main refinancing operations saw a significant decline in demand and overnight excess liquidity ranged between €125 billion and €187 billion amidst heightened fluctuations. Short-term money market rates reacted with increased fluctuations. Evidently, banks have been increasingly aligning their individual bidding behaviour in the Eurosystem's refinancing and liquidity-absorbing

*Money market conditions marked by fluctuations amidst declining excess liquidity*

<sup>1</sup> Each week, the Eurosystem offers banks a liquidity-absorbing operation in the amount of the outstanding SMP portfolio volume. This operation was introduced alongside the SMP in May 2010 to stress that it was not the intention of this programme to loosen monetary policy.

operations with the respective level of money market rates. This is basically a positive development as it indicates that banks are increasingly reverting to a more normal liquidity management instead of holding large amounts of excess central bank reserves for precautionary reasons. However, under these specific circumstances, the Eurosystem's liquidity-absorbing operations tend to make money market conditions more volatile.

On the whole, the Bundesbank is therefore open to possibly adjusting the current supply of liquidity-absorbing operations, if such an adjustment is suitable to stabilise money market and liquidity conditions, signalling even more clearly than before the Eurosystem's accommodative monetary policy stance.

Since around mid-November, the short-term money market rates in the euro area have been increasing markedly in reaction to the trend decline in excess liquidity. Greater fluctuations in the unsecured interbank overnight rate EONIA and other short-term money market rates could be observed both at month-ends and at the turn of the year in each case. However, short-term money market rates were also exposed to greater fluctuations in reaction to liquidity developments in the course of January. Against this backdrop, EONIA temporarily reached values above the Eurosystem's main refinancing rate. This increase in short-term money market rates should not be interpreted as an expression of tensions in the money market, but merely reflects banks' voluntary repayment of surplus liquidity to the Eurosystem. The very short-term money market rates ought to be somewhat below the main financing rate on average in view of the continued full allotment for monetary policy refinancing operations. Nevertheless, it is possible for them to exceed the main refinancing rate for several successive days because the monetary policy counterparties are only able to influence the banking system's aggregate liquidity position vis-à-vis the Eurosystem once a week through their bidding behaviour in the regular monetary policy oper-

ations. It is likely that the short-term money market rates will continue to exhibit stronger fluctuations in the future while the liquidity situation remains unchanged.

After the end of November, money market forward rates<sup>2</sup> in the euro area started going up again slightly after reaching a local trough following the interest rate cut of 7 November. This increase accelerated somewhat after the meeting of the ECB Governing Council on 5 December. One reason for this is probably that the previous expectations of some market participants about possible further monetary policy measures by the Eurosystem were not confirmed. On the whole, however, the increase in forward rates was significantly lower than the temporary rise in EONIA in the presence of heightened fluctuations. At the end of January, forward rates fell again to the low level of November. This may indicate that market participants currently do not expect recently observed fluctuations in short-term money market rates to be reflected in a distinct rise in interest rates any time soon.

*Money market forward rates up, but forward price curve remains flat*

*Short-term money market rates rise amidst substantial fluctuations as banks voluntarily repay excess liquidity*

## Monetary developments in the euro area

In the final quarter, balance sheet cleansing processes in the banking sector were a major determinant of monetary trends. Besides year-end effects, it is likely that the stronger reduction in balance sheet assets in the autumn months was also motivated by the impending balance sheet assessment prior to the launch of the Single Supervisory Mechanism (SSM), with 31 December 2013 as the reporting date (see box on pages 37 to 39 and the chart on page 36). Of the M3 counterparts, the balance sheet repairs were reflected above all in an accelerated reduction in securitised lending. The decline in lending to the private sector also

*Macroeconomic setting*

<sup>2</sup> Implicit forward rates, derived from swap rates, for the unsecured interbank overnight rate EONIA and interest rates of exchange-traded futures on the three-month Euribor.



## Interest rates in the repo market: approximation of short-term risk-free interest rates

Since the beginning of the financial crisis, unsecured short-term money market rates for interbank trading (such as EONIA and EURIBOR rates) have no longer provided an appropriate approximation of risk-free interest rates. An alternative is provided by interest rates on secured money market transactions.<sup>1</sup> Where high-quality securities are used as collateral, the credit risk involved in such transactions is low and the repo rate can be used as an approximation of the risk-free interest rate for the relevant maturity. However, repo rates have yet to assume the importance of EONIA and EURIBOR.

### Repo rate determinants

Repos differ, among other things, with regard to maturity, motivation of the counterparties and the securities used as collateral. In terms of maturity, most repos are overnight transactions, but they can also have (standard) maturities of up to two years. In terms of motivation, repo transactions can be “money-driven”, which means that the seller needs liquidity and, in return, provides securities collateral (in the case of general collateral (GC) repos). If, by contrast, the repos are “securities-driven”, the buyer wishes to borrow a specific security and, in return, offers liquidity as collateral. In such cases, the repo rate is normally lower than for money-driven transactions with qualitatively comparable collateral and therefore provides a less appropriate approximation of the short-term risk-free interest rate.<sup>2</sup> The higher the quality of collateral, the lower the repo rate tends to be – and the more likely it is to provide an accurate indication of the risk-free interest rate. Another determinant of the repo rate can be the borrower’s creditworthiness, whereby the lower his credit rating, the higher the repo rate.

### Calculating representative rates

Outside exchanges or electronic trading venues, the conditions for individual trans-

actions are generally only known to the contracting parties. On electronic trading platforms or in market information systems, by contrast, the conditions offered, and sometimes also the transactions themselves, can be observed by third parties. There are two basic techniques for calculating representative market interest rates.

In the case of the transaction-based approach, the repo rates for actual transactions concluded are used as the basis for calculations. Examples of this include Eurex Repo’s STOXX GC Pooling Overnight rates, which are regularly commented on in the Bundesbank’s *Monthly Report* (see the box on pages 29 to 32). These are based on a range of eligible collateral, which is pooled and can therefore be used for various transactions. Another option is the RepoFunds Rate, which is calculated jointly by the trading platforms BrokerTec and MTS and published in three variations for transactions with a maturity of one day which are backed by German, French and Italian government bonds. These include transactions backed by GC as well as specific collateral, whereby the percentages are not disclosed.<sup>3</sup> The transaction-based approach becomes untenable, however, if an adequate number of transactions is not carried out regularly, which is particularly relevant in the case of longer-term maturities.

In the case of the survey-based approach, a panel of market participants is asked to provide the rates for hypothetical transactions. Examples of this include the EUREPO rates

<sup>1</sup> See also Deutsche Bundesbank, *The financial system in transition: the new importance of repo markets*, Monthly Report, December 2013, pages 57-71.

<sup>2</sup> This is because the collateral provider is required to pay the repo rate although he does not need liquidity and the initiative for the transaction usually lies with the party receiving the collateral. In turn, the seller can relend the liquidity received from such a repo transaction at a higher repo by means of a GC repo, thereby generating a profit.

<sup>3</sup> These repo rates are freely available online at <http://www.repofundsrate.com>.

calculated by the European Banking Federation.<sup>4</sup> The panel banks provide their estimation of the interest rate on an interbank loan backed by the best collateral. The expectation in doing so is that the panel banks will normally be willing to enter into transactions at these rates.

The survey-based approach facilitates the continuous provision of repo rates for a whole range of different maturities of up to twelve months – irrespective of whether or not any transactions have actually taken place. Compared with the transaction-based approach, this procedure has the disadvantage that the quality of the reported bids is indeterminate. One variation on transaction-based rates is provided by the repo rates recently made available by Eurex Repo GC Pooling for transactions of various standard maturities, ranging from one week to twelve months, which are based on both transactions and binding quotes. These ensure that rates are calculated continuously, even if an insufficient number of transactions are carried out on one particular day of trading. The interest rate spreads between the GC Pooling and EUREPO interest rates are likely to be caused primarily by differences in the quality of underlying collateral.

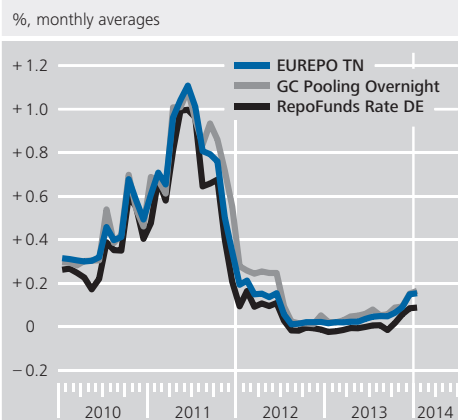
### EONIA swap rates as an alternative

EONIA swaps are hedging transactions in which a fixed interest rate (the swap rate) is “exchanged” for the EONIA rate for the term of the contract. Because no loan principal changes hands (instead, the difference between the variable EONIA rate and the fixed rate on a notional amount is paid), there is virtually no credit risk. However, the – unsecured – EONIA, which is used as the reference rate, can include a (relatively small amount of) compensation for credit risk. Much like the EUREPO yield curve, the EONIA swap curve can therefore be seen as a virtually risk-free yield curve.

### Conclusion

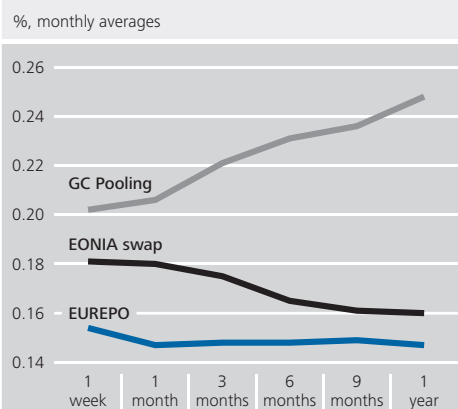
There is no generally accepted measure of short-term risk-free interest rates. The exist-

### Secured overnight rates



Sources: Euribor-EBF, Eurex Repo and ICAP Information Services.  
 Deutsche Bundesbank

### Interest rate structure in the secured money market in January 2014

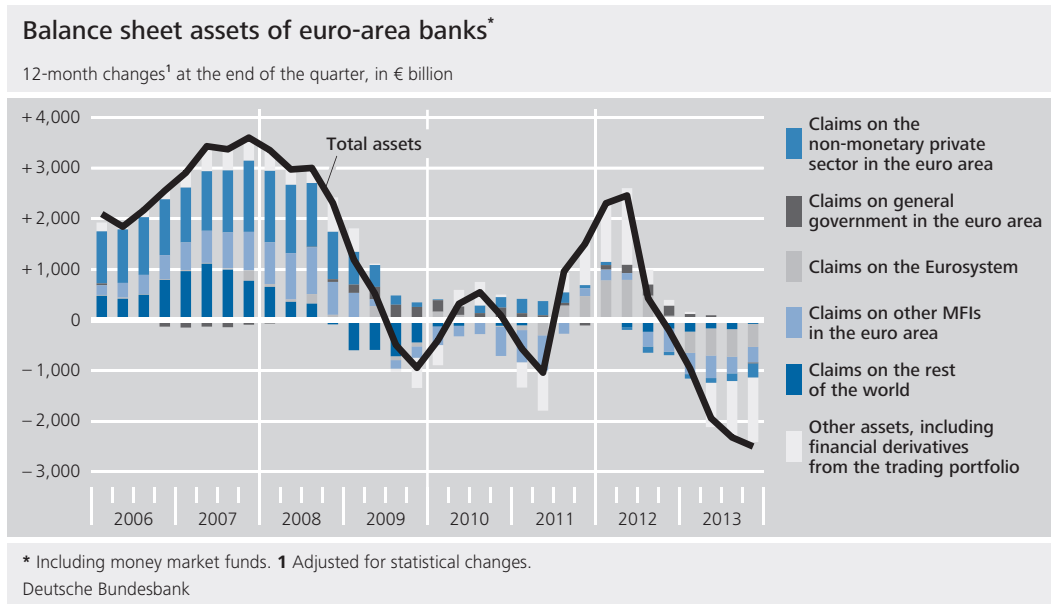


Sources: Euribor-EBF and Eurex Repo.  
 Deutsche Bundesbank

ing approaches each have their own specific characteristics, which must be taken into account in their evaluation and interpretation. The underlying reason for the, in some cases, pronounced interest rate spreads is that the different risks associated with the relevant transactions have increasingly been priced differently since the crisis. This, in itself, does not constitute a malfunction or overreaction on the part of the markets. The fact that financial market participants are now better able to make distinctions is to be welcomed.

<sup>4</sup> See <http://www.euribor-ebf.eu/eurepo-org/eurepo-rates.html>.





continued, although it slowed perceptibly given economic improvement. Money growth was again supported by inflows of funds from abroad, which were again significantly larger than in the preceding quarters as a result of ongoing current account surpluses and higher demand for euro-area securities.

*Low interest rates put brake on growth of M3 components*

Given that there were no noteworthy contributions to growth from other counterparts, the monetary aggregate M3 recorded a slight decline on balance in the fourth quarter. With the opportunity cost of holding liquid funds declining further, sight deposits again increased considerably in the fourth quarter of 2013. However, at the same time, low interest rates and the decline in risk aversion contributed to investors further reducing the remaining deposits included in M3, in particular short-term time deposits and money market fund shares, in the search for yield.

*Downward trend in money and credit growth continues*

Against this backdrop, the downward trend in money growth seen since the beginning of 2013 continued in the reporting quarter. The annual rate of M3, which had stood at 3.5% at the end of 2012, fell to 1% at the end of 2013. Simultaneously, the annual rate for lending to the private sector (adjusted for loan sales and securitisation) continued its downward trend, which has persisted since mid-2011. Underlying

monetary dynamics therefore remained very subdued.

The decline in loans to the private sector in the final quarter again focussed on lending to financial and non-financial corporations. A considerable portion was attributable to a dampening special effect in the context of securitisation transactions involving loans to other financial corporations.

Loans to non-financial corporations also declined further. However, the reduction in lending to this sector slowed down perceptibly towards the end of the year, which meant that no direct negative impact could be observed from balance sheet cleansing. Improvement trends were most evident in the long-term maturity segment. For the first time since April 2012, loans with a maturity of over five years recorded inflows in the fourth quarter of 2013. An increase in long-term loans is usually indicative of greater economic optimism among enterprises.

At country level, the heterogeneity in the development of lending remained high. The weak economic environment and the persistently great need for deleveraging resulted in a further decline in loans to non-financial corporations, especially in Spain and Italy. According

*Decline in loans to non-financial corporations slower*

*Improvement trend in loans with long-term maturities, ...*

*... but heterogeneity in the euro area remains high*

## On the decline in assets in the bank balance sheets of the four large euro-area countries

Banks' restructuring endeavours were reflected in a sharp decline in total assets that began in mid-2012 and affected, throughout the euro area, mainly claims on other commercial banks and the Eurosystem as well as derivative financial instruments. Claims on the domestic private sector were also scaled back, however. Of the four large euro-area countries (see the chart on page 38), whose credit institutions account for almost three-quarters of the total assets of the entire euro area's banking sector, Germany was most strongly affected, followed by Spain and France.

To a large extent, the decline in balance sheets was fuelled by claims on monetary financial institutions, growth in which stemmed, until mid-2013, from claims on the Eurosystem.<sup>1</sup> The main factor behind the shortening of the balance sheets were substantial flows of deposits from Germany in particular – though also from France – back to foreign banks as confidence in the single currency area rose again. In keeping with market conditions, which have improved only slightly since then, the reduction in claims on the Eurosystem stabilised during the course of 2013. The decline in claims on other commercial banks gained in importance in the second half of 2013. German and French banks in particular may have used this item to enable them to report lower total assets at the end of the year.

The second important item that led to the trimming of balance sheet assets were financial derivatives purchased for trading purposes, which had a significant effect on the item "Other assets" in the chart on page 38. In various euro-area countries (and in Germany since 2010) these derivatives are subject to reporting in the balance sheet, and at institutions that engage in

trading on a large scale they account for a relatively considerable share on both the assets side and the liabilities side of the balance sheet. Two developments in particular are probably responsible for the pronounced reduction of these items in Germany and France, and to a lesser extent in Italy and Spain. First, due to the considerably heightened uncertainty, particularly in the third quarter of 2011, banks had increasingly concluded derivative contracts to hedge against interest rate and currency risks; these hedges were terminated again as uncertainty diminished from mid-2012. Second, current regulatory endeavours – notably the Basel III framework with its more stringent capital requirements and the leverage ratio as well as restrictions on trading business over and above those requirements are probably already exerting pressure on banks which are active in trading to scale back their, in some cases, significant derivatives holdings.

Nor was balance sheet shrinkage in the euro area restricted to just these two items. In Spain and Italy, the reduction of claims on the euro-area private sector played a major part in this respect.<sup>2</sup> In Spain, moreover, the orderly restructuring of the banking sector at the end of 2012/beginning of 2013 led to a large-scale spin-off of credit to a resolution agency (which, for statistical purposes, is classified as belonging to the non-banking sector).

With regard to loans to the private sector, many indications in those countries suggest

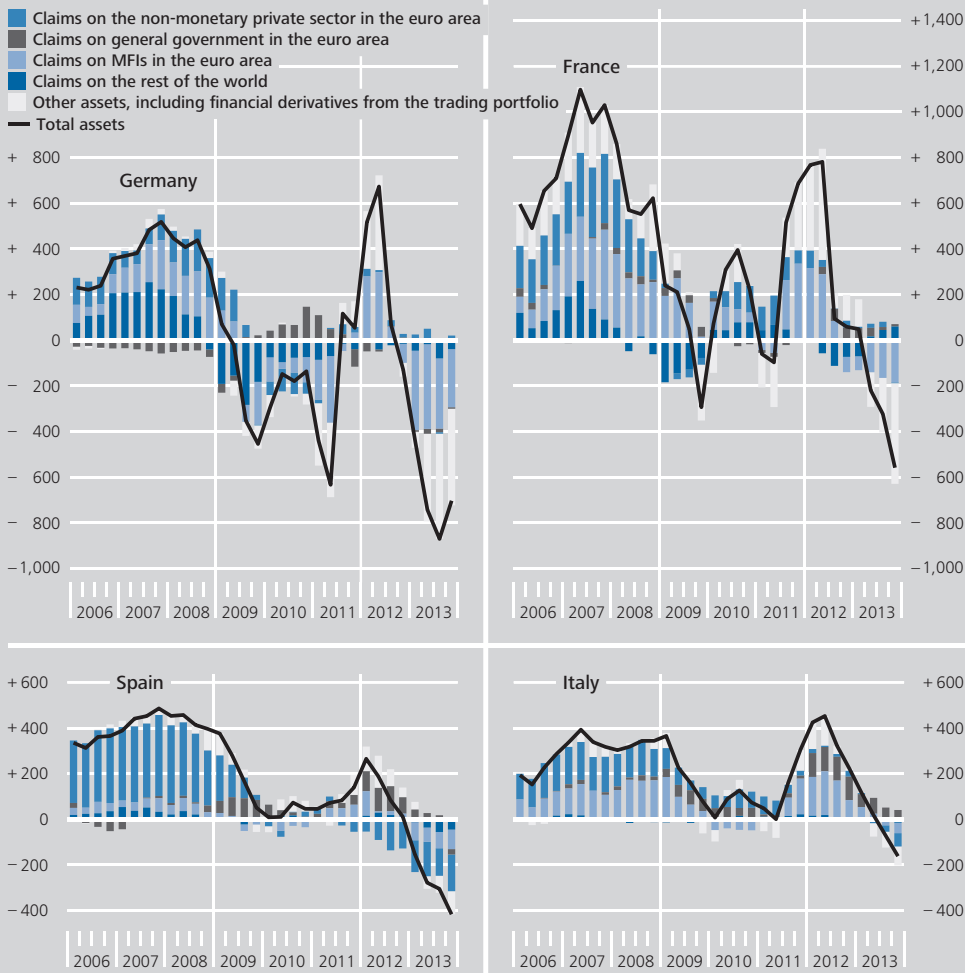
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<sup>1</sup> These result from Eurosystem liquidity-absorbing operations, the deposit facility as well as the excess reserves, which are held on current accounts with the national central banks.

<sup>2</sup> The chart on p 38 is based on transaction-related flows; unlike absolute changes in outstanding amounts, valuation adjustments for claims and securities holdings are therefore eliminated.

### Balance sheet assets of selected euro-area banks\*

12-month changes<sup>1</sup> at the end of the quarter, in € billion



\* Including money market funds. <sup>1</sup> Adjusted for statistical changes.  
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that their decline, as has already been explained elsewhere,<sup>3</sup> was mainly demand-driven. Available indicators for supply-side constraints suggest that, when viewed in isolation, bank-related factors – which in 2011 in particular and to some extent also in 2012 clearly contributed to a tightening of credit conditions – are not exercising a restrictive influence at the current end. This is corroborated by the fact that the cut-backs in loans to the non-financial private sector in Italy and Spain have not as yet accelerated despite the impending balance sheet assessment as part of the banking union. Nonetheless, it is too early to sound the all-clear. A glance at the high level of

non-performing loans on Spanish and Italian banks' books illustrates that the process of cleaning up bank balance sheets has not yet been concluded.

The balance sheet assessment to be carried out as at the balance sheet date of 31 December 2013 has probably had a greater impact on other asset items. In the

<sup>3</sup> For an in-depth discussion of this issue, see Deutsche Bundesbank, Differences in money and credit growth in the euro area and in individual euro-area countries, Monthly Report, July 2013, pp 47-64, and Deutsche Bundesbank, Private debt – status quo, need for adjustment and policy implications, Monthly Report, January 2014, pp 53-65.

fourth quarter of 2013, French and Spanish banks strongly reduced their holdings of bonds from the non-monetary private sector. French, Spanish and Italian banks also sharply scaled back their holdings of domestic sovereign bonds, which had risen continuously in the previous quarters,<sup>4</sup> in the second half of 2013. It would be welcome if these were not just short-term accounting-policy measures, so that the level of interdependency between banks and governments in the euro area may be reduced on a lasting basis.

To conclude, the experience of recent years has shown three things. First, for the banking sector of a country considered to be a safe haven, a rise in general uncertainty can result in a considerable build-up and subsequent reduction of balance sheet assets. Second, the weakness of economic activity was reflected in the Spanish and Italian banking sectors, as was, in the case of

Spain, the ongoing reduction of debt overhangs in the private sector. Third, the financial crisis gave rise to a tightening of regulatory requirements throughout the euro area; the balance sheet assessment at the launch of the banking union probably amplified this effect briefly. Thus, the broad-based process underway in the euro area of reducing the balance sheet is based on as yet unfinished corrections of previous undesirable developments – corrections which are necessary in order to strengthen the resilience of the financial systems and restore confidence in the single currency area on a long-term basis.

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<sup>4</sup> See also Deutsche Bundesbank, Changes in bank holdings of domestic government bonds in the euro area, Monthly Report, November 2013, pp 31-32.

to the banks participating in the Bank Lending Survey (BLS), this was not attributable to tighter credit supply factors in the euro area as a whole. The survey states that the participating institutions largely kept standards for loans to enterprises at the level of the previous quarter on balance. By contrast, the surveyed banks again reported a moderate decline in the demand for bank loans by non-financial corporations in the euro area.

Lending to households, too, continued to exhibit heterogeneity at country level. On aggregate, unsecured loans to households showed no increase at year-end. Consumer credit and other lending recorded net outflows, which were just about offset by the comparatively moderate inflows to loans for house purchase. On balance, lending to households stagnated in the fourth quarter, leaving the annual growth rate to fall marginally to 0.3%. This development is consistent with what the institutions surveyed as part of the BLS reported. They

stated that they had also left standards for loans to households almost unchanged, while at the same time reporting largely stagnant borrowing requirements among households.

Unlike loans to the non-financial private sector, the reduction of which slowed down on balance, the decline in securitised lending was particularly pronounced in the last quarter of the year. Both securities of general government and the private sector recorded substantial outflows, which were probably linked to the impending balance sheet assessment of systemically important euro-area banks. This is consistent with the institutions questioned as part of the BLS reporting that given the new regulatory and supervisory activities they reduced their risk-weighted assets and strengthened their capital position in the second half of 2013.

The outflows from securitised lending to general government – which stemmed mainly from the periphery countries but also partially from

*Clearly pronounced decline in securitised lending*

*Stagnation in lending to households*

### Consolidated balance sheet of the MFI sector in the euro area\*

Changes in € billion, seasonally adjusted

Assets	2013 Q4	2013 Q3	Liabilities	2013 Q4	2013 Q3
Credit to private non-MFIs in the euro area	- 155.8	- 70.1	Central government deposits	- 25.1	- 18.5
Loans <sup>1</sup>	- 60.8	- 62.6	Monetary aggregate M3	- 7.9	38.2
Securities	- 90.5	- 0.6	of which: Components		
Credit to general government in the euro area	- 49.5	- 21.1	Currency in circulation and overnight deposits (M1)	54.6	87.1
Loans	- 14.9	- 9.4	Other shorter-term bank deposits (M2-M1)	- 40.9	- 20.4
Securities	- 34.5	- 11.7	Marketable instruments (M3-M2)	- 21.6	- 28.5
Net external assets	154.5	61.1	Monetary capital	- 16.9	- 36.3
Other counterpart assets of M3	- 3.8	6.6	of which		
			Capital and reserves	- 16.7	19.1
			Other longer-term financial liabilities	- 0.2	- 55.3

\* Adjusted for statistical changes. <sup>1</sup> Adjusted for loan sales and securitisation.

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France – were higher than in the previous quarter, but were far exceeded by the outflows from securitised lending to the private sector. Here again, Italian, Spanish, and French institutions contributed a great deal to net outflows; however, the largest contribution was made by institutions in the Netherlands. The decline in private sector assets was negligible by comparison.

*Strong expansion in net external asset position*

The contractionary effects of lending were counterbalanced by a strong expansion in the MFI sector's net external asset position. As in the preceding quarters, the inflows of funds reflected continued current account surpluses in the euro area, for one. In addition, securities transactions with non-residents in the final quarter again contributed to the expansion of the monetary aggregate on account of the demand from non-resident investors for domestically issued shares persisting and demand for debt securities issued by domestic non-MFIs increasing again towards the end of the year.

*Monetary capital without major impact on monetary aggregate*

On balance, monetary capital had no significant impact on the monetary aggregate. However, at the same time, holdings of bank bonds with a maturity of over two years were built up again in the fourth quarter for the first time since mid-2011. This is consistent with the institutions questioned as part of the BLS reporting

that there had been noteworthy improvements regarding the issuance of longer-term bank bonds for the euro area as a whole. According to the surveyed institutions, the sovereign debt crisis had virtually no impact on banks' funding conditions or their lending policies in the final quarter.

For the first time since the onset of the crisis, developments in France, Spain and the Netherlands caused a decline in capital and reserves, which is likely to be associated with revaluations and balance sheet adjustments. On balance, this resulted in a slight decline in monetary capital which was negligible compared with the developments in lending and external claims.

### German banks' deposit and lending business with domestic customers

Banks in Germany also recorded positive deposit business in the fourth quarter of 2013, although the momentum in this segment weakened distinctly on the whole towards year-end. As in the preceding quarters, the growth was supported by inflows to sight deposits, which reflected the money-holding sector's continued preference for liquidity. By contrast, the decline

*Further increase in deposit business ...*

in risk aversion caused the money-holding market participants to shift their funds from longer-term types of deposit to assets outside M3 in search of a higher yield.

*... driven by sight deposits and short-term time deposits*

A substantial part of the inflow to short-term deposits continued to stem from households, which accumulated sight deposits again perceptibly, albeit to a somewhat more moderate extent compared with previous quarters. By contrast, non-financial corporations slightly reduced their sight deposits on balance in the reporting quarter, while at the same time markedly increasing their stocks of short-term time deposits again for the first time since summer 2011. This development is likely to be attributable, among other things, to the slight rise in the return on shorter-term time deposits seen at the end of the year, by means of which these deposits became more attractive, increasing again slightly on aggregate for the first time in five quarters.

*Long-term deposits reduced once again in favour of assets outside M3*

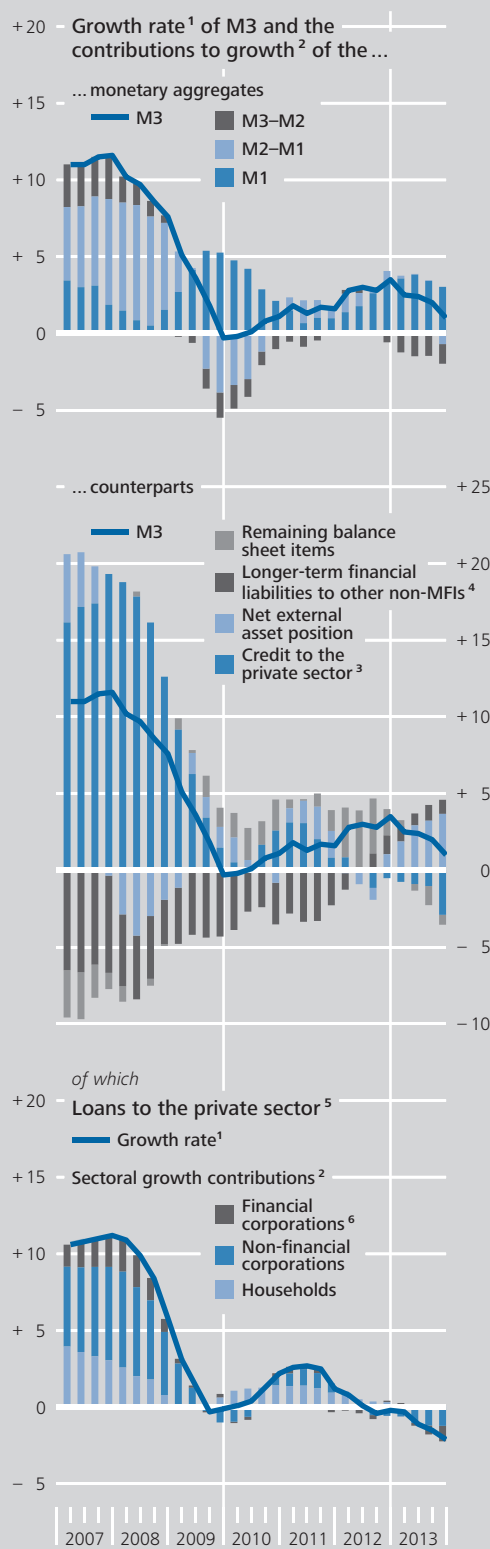
Moreover, domestic banks' deposit business was characterised in the reporting quarter by a renewed distinct reduction in long-term time deposits from financial corporations, in particular insurance companies and pension funds. As in the previous quarters, financial corporations are likely to have shifted the freed-up funds towards less liquid and riskier assets outside M3 in search of higher yield.

*Distinct rise in banks' lending to domestic non-banks; loans for house purchase remain driving force*

In contrast to the reduction in lending in the euro area as a whole, credit business in Germany remained on the positive path begun in the previous quarter. This was mainly due to marked growth in securitised lending to general government and a noticeable increase in loans to the private sector. The latter still consisted primarily of loans to households, which, for several quarters, have largely been fuelled by housing loans due, *inter alia*, to the fact that financing conditions remain favourable. However, the expansion in loans for house purchase was somewhat weaker in the final quarter of the year compared with the previous quarters, which is probably related, above all,

## Monetary aggregates and counterparts in the euro area

Seasonally adjusted, end-of-quarter data



Source: ECB. **1** Year-on-year change in per cent. **2** In percentage points. **3** Adjusted for loan sales and securitisation. **4** Denoted with a negative sign because, taken in isolation, an increase curbs M3 growth. **5** Adjusted for loan sales and securitisation from 2010 Q1. **6** Non-monetary financial corporations.

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

Changes in € billion, seasonally adjusted

Item	2013	
	Q3	Q4
Deposits of domestic non-MFIs <sup>1</sup>		
Overnight	36.2	12.5
With agreed maturities		
of up to 2 years	-11.6	1.2
of over 2 years	-9.9	-7.3
Redeemable at notice		
of up to 3 months	1.7	-0.5
of over 3 months	-2.3	-1.3
Lending		
to domestic general government		
Loans	-3.1	-0.8
Securitised lending	6.0	5.0
to domestic enterprises and households		
Loans <sup>2</sup>	-0.8	1.9
of which to households <sup>3</sup>	5.7	3.1
to non-financial corporations <sup>4</sup>	-5.3	-0.3
Securitised lending	0.7	-2.6

\* As well as banks (including building and loan associations, but excluding the Bundesbank), monetary financial institutions (MFIs) here also include money market funds. End-of-quarter data, adjusted for statistical changes. **1** Enterprises, households and general government excluding central government. **2** Adjusted for loan sales and securitisation. **3** Including non-profit institutions serving households. **4** Corporations and quasi-corporations.

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### Loans of German banks to selected sectors

Seasonally adjusted and adjusted for loan sales and securitisation, end-of-quarter data



**1** Year-on-year rate of change. **2** Non-monetary financial corporations. **3** Corporations and quasi-corporations.

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to weaker demand. This is corroborated by the current BLS results, which indicate that, according to the banks participating in the BLS, the trend of rising demand for private housing loans observed since spring 2010 came to a halt in the fourth quarter of 2013. According to the surveyed bank managers, the outlook on the housing market remains positive and consumer confidence continues to be high; however, compared with the previous years, the positive climate has weakened somewhat.

With regard to consumer credit, the banks surveyed as part of the BLS also experienced largely stagnant demand in the final quarter. However, the still favourable conditions for private consumption – in the form of improved income prospects and a better economic outlook – and the associated increase in the propensity to purchase contributed to a further rise in lending for consumption purposes in the reporting quarter as well. On the whole, the momentum of loans to domestic households in Germany continues to be very moderate, however: the 12-month rate for loans to households fell slightly to 1.2% from 1.3% in the previous quarter.

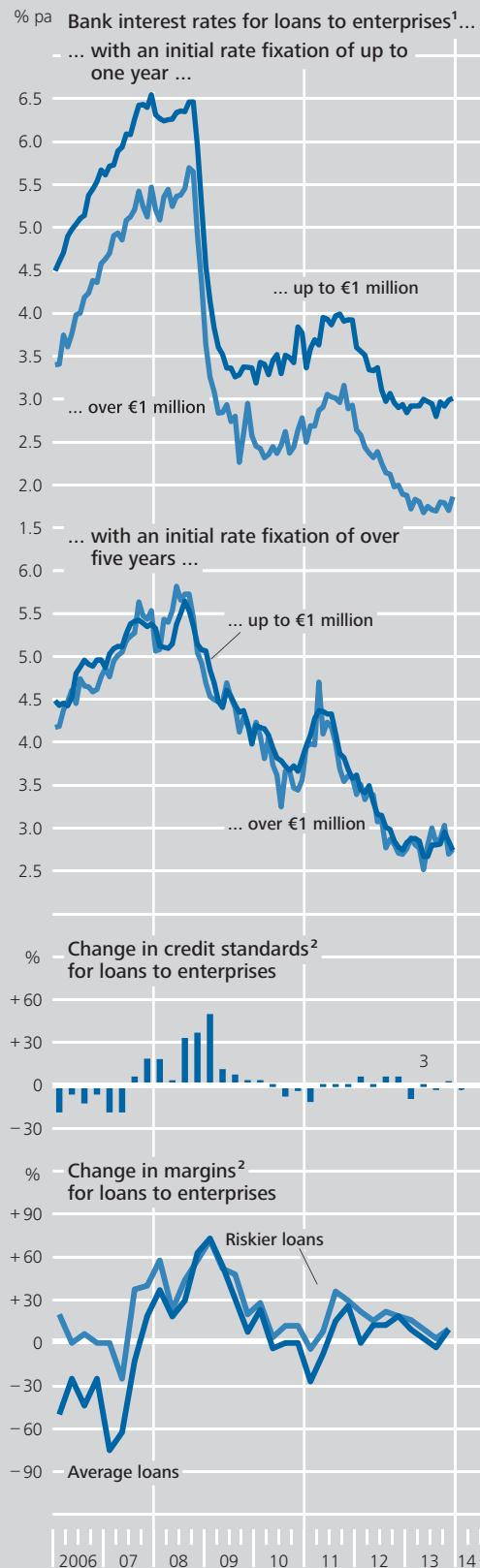
*Growth in loans for consumption purposes still positive*

Loans to domestic non-financial corporations developed increasingly positively in the reporting quarter after contracting during the previous quarters, in some cases significantly. The distinct increase in lending in December marked the end of the downward tendency evident in this credit segment since autumn 2012. Given that the development of loans to non-financial corporations typically reacts to macroeconomic developments and investment with a lag of around three quarters, the increasingly positive development in loans to the corporate sector in the reporting quarter is probably attributable, above all, to the fact that German enterprises have slowly stepped up their investment activities since summer 2013. It can therefore be expected for the forthcoming quarters that lending will experience something of a revival owing to the basically positive economic and investment outlook. However, it should be

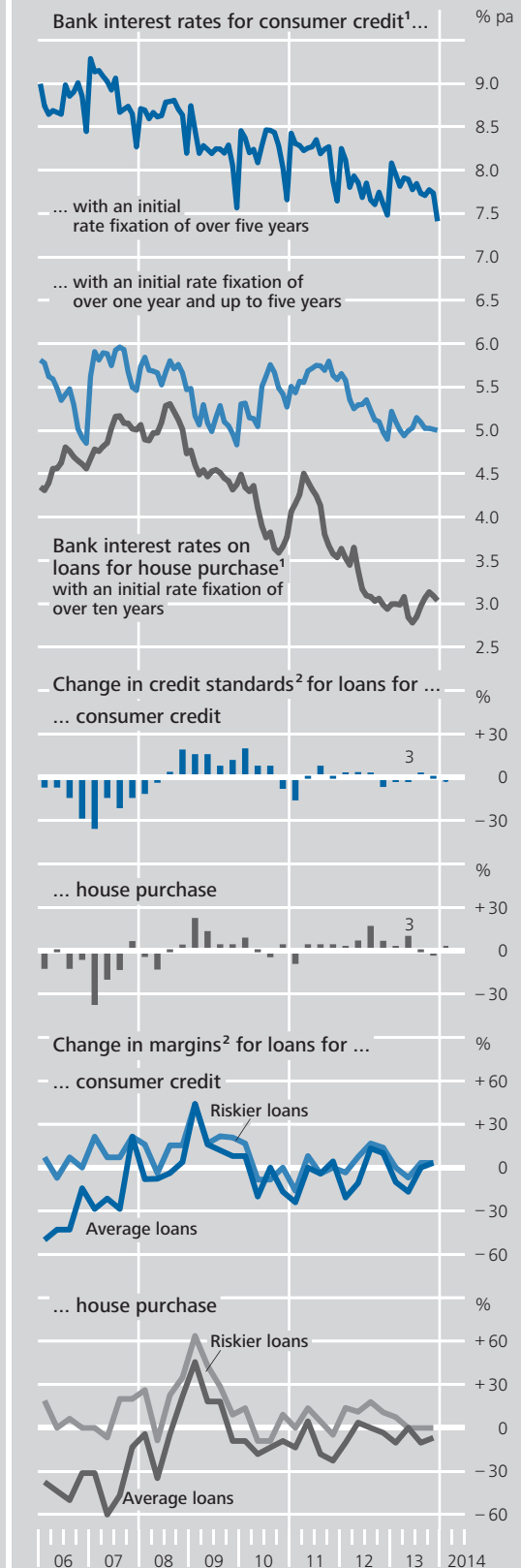
*Only marginal decline in loans to non-financial corporations*

## Banking conditions in Germany

### Credit to non-financial corporations



### Credit to households



**1** New business. According to harmonised MFI interest rate statistics. **2** According to the Bank Lending Survey, difference between the number of respondents reporting "tightened considerably" and "tightened slightly" and the number of respondents reporting "eased somewhat" and "eased considerably" as a percentage of the responses given. **3** Expectations for 2014 Q1.

borne in mind that the importance of MFI loans as a source of finance for non-financial corporations has been experiencing a trend decline for years. It must therefore be assumed that a considerable part of corporate investment will continue to be financed from internal funds and other external forms of financing as well as through alternative lenders (especially intra-group loans, capital-market-based inflows of funds and trade credit) in the coming quarters.<sup>3</sup> The BLS results underpin this assessment. For example, the participating German banks have been indicating for some quarters now that primarily recourse to other sources of funding, internal funds in particular, had the effect of dampening enterprises' demand for bank loans.

*German banks' credit standards vis-à-vis enterprises marginally tighter*

On the supply side, the, on the whole, slight recovery in domestic lending to the private sector was matched by largely unchanged lending policies. The German results of the BLS indicate that the surveyed institutions only marginally tightened their standards for loans to enterprises on balance in the fourth quarter of 2013. This applies in a similar way to loans to all firm sizes and of all maturities. Thus, the period of little overall change in lending policies, which commenced in mid-2009, continued. None of the factors surveyed in the BLS that are relevant for credit standards on loans to enterprises displayed any noteworthy expansionary or restrictive trends. At the same time, the surveyed institutions on balance widened their margins for loans to enterprises. This applied, first and foremost, to lending to small and medium-sized enterprises.

*Almost no changes to credit standards vis-à-vis households*

Credit standards vis-à-vis households, too, remained virtually unchanged. None of the surveyed factors on the standards for housing loans and consumer credit had a noteworthy impact on lending policies in the fourth quarter. With the exception of a moderate narrowing of margins in the case of average-risk loans for house purchase, there were likewise only minimal adjustments to margins.

In the fourth quarter, the survey contained a number of *ad hoc* questions on banks' funding conditions, the impact of the sovereign debt crisis and on how the institutions' credit standards were affected by the new regulatory and supervisory activities, which include the forthcoming balance sheet assessment by the ECB. In general, the institutions reported a slight overall improvement in their funding environment in the final quarter of 2013. Furthermore, they stated – as in the previous quarters – that the sovereign debt crisis had provoked changes neither in funding conditions nor in credit standards. In the light of the new regulatory and prudential activities, banks reduced their risk-weighted assets in the second half of 2013 and strengthened their capital position by retaining profits and issuing capital instruments. In lending business, the changed regulatory and supervisory setting made itself felt in the form of slightly tighter credit standards for enterprises as well as somewhat narrower margins for consumer credit. It is likely that these relatively slight adjustments were attributable in part to the fact that the new regulations, taken in isolation, had a positive impact on the surveyed institutions' funding conditions.

*Risk-weighted assets reduced and capital position strengthened*

Owing to their still very low level, the development of bank lending rates in new business probably tended to support domestic lending to the private sector. In the fourth quarter, bank lending rates across all business areas, maturities and volumes largely followed the moderate decline in interest rates in the capital market. The only exception was the slight increase in interest rates for short-term loans to enterprises. By contrast, medium and long-term loans to enterprises in the final quarter were consistent with the general trend, ie somewhat more favourable than before. On average, the reporting institutions were charging interest for short-term funds of 3.0% for small-scale and 1.9% for large-scale loans at

*Bank lending rates follow interest rate decline in the capital market*

<sup>3</sup> See Deutsche Bundesbank, The structure of corporate financing amid weak loan growth in Germany and the euro area, Monthly Report, August 2013, pp 42-43.

## Change in households' assets and portfolio behaviour in Germany

According to the financial accounts statistics, German households' financial assets have increased significantly since the launch of monetary union. Starting from €3,257 billion at the beginning of 1999, they reached around €5,070 billion in the third quarter of 2013. In the years 2001-02 and 2008-09 – at the end of the New Economy boom and at the height of the financial and economic crisis – the largely constant increase was interrupted by periods in which financial assets contracted in net terms. These declines were mainly attributable to valuation losses through a fall in equity prices. After the annual growth in financial assets dropped to -3.9% at the end of 2008, it recovered within a year and has since recorded positive momentum similar to that before the crisis.

The breakdown in households' financial assets in Germany has changed only marginally since the turn of the millennium. Monetary assets have always been dominant, accounting for a share of just under 30% of financial assets until the escalation of the financial crisis and subsequently remaining steady at around 34%. Of these, sight deposits (including cash holdings) gained the most ground, whilst, in particular in periods of falling interest rates, the share of other, longer-term deposits in financial assets decreased. Amongst the longer-term investment forms, insurance and pension claims followed very similar patterns to monetary investments in terms of their importance and development. At the same time, the share of other securities (ie long-term bonds and equity) in financial assets declined from 35% in 1999 to only 22.3% in the third quarter of 2013. Equity, in particular, assumed major significance in

the periods of upturn related to the New Economy and before the intensification of the financial crisis, but it swiftly declined again thereafter. Its share has consequently since moved at a constant but low level.

As with financial assets, non-financial assets recorded a marked rise in Germany from 1999 up to the current end. Besides real investment, this also reflected valuation gains which followed a slight upward trend from 2006. These effects are likely to be attributable mainly to residential property, which comprises the lion's share of households' non-financial assets in Germany and which has increased in value in past years.

The change in German households' portfolio structure suggests that, in particular during the financial crisis and recently in connection with the sovereign debt crisis, financial assets have been transferred from more profitable investment forms, such as long-term securities, into more liquid and less risky investments. Thus long-term bonds saw the main outflows of funds at the current end. Although in past years significant price gains were often posted in households' portfolios as a result of a rise in equity prices, direct investment in equities also declined, so that the positive valuation effects lost significance in the portfolio as a whole.<sup>1</sup>

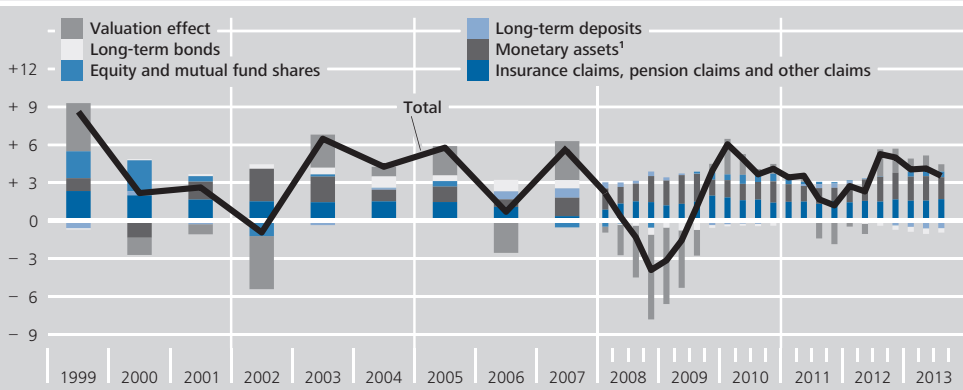
In the period under review, the withdrawal of funds from securities coincided with the growing significance of monetary assets, particularly sight deposits, in the acquisition

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<sup>1</sup> However, the net outflows from equities have recently been largely compensated by inflows into mutual fund shares, which is partly due to the continued popularity of mixed securities-based funds.

### Financial assets and portfolio behaviour of households in Germany

Contributions to annual growth rate of financial assets in percentage points



1 Monetary assets are defined as cash and sight deposits, short-term time and savings deposits, money market paper and money market certificates.

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of financial assets. These mainly entail low or even negative real returns and thus partly a loss of real purchasing power. However, in the current low-interest-rate environment the return disadvantage of these investment forms is small compared with longer-term deposits. Whilst the latter have sometimes played a significant role in the acquisition of new financial assets in times of high interest rates, they again lost importance at the current end and were ultimately reduced. Although insurance and pension claims are also not very liquid instruments, they have received large inflows of funds in Germany not least at the current end, as they are perceived to be largely risk-free and sometimes promise a higher return than other investment forms.

With regard to non-financial assets, since 2010 housing loans and housing investment in particular have grown in Germany with appreciably more momentum than in previous years. Possible reasons for this are the low lending rates on the one hand and on the other the low returns on financial assets, which enhances the attractiveness of investments in non-financial assets in the current low-interest-rate environment.

All in all, the portfolio investment behaviour of households in Germany has been influenced in the period under review by factors on the financial and capital markets, including the low-interest-rate environment. First, it is evident that the attractiveness of non-financial assets (real estate) has increased to some extent with the fall in interest rates. Second, investment behaviour has clearly not been focused on more risky and thus usually higher-return assets, but rather there was an expansion in liquid assets. In combination with the importance of insurance and pension claims, this behaviour indicates both a significant risk aversion and a certain preference for liquidity amongst households, which in turn is likely to be attributable to a general uncertainty in connection with the debt crisis. In an environment of low nominal interest rates, in particular for relatively secure and shorter-term investments, this kind of voluntary portfolio selection often implies negative real returns.

the end of December. Interest rates on long-term loans to domestic non-financial corporations stood at 2.7% and 2.8% respectively at the end of the reporting period.

Interest rates on loans for house purchase remained essentially unchanged in the fourth quarter of 2013. At the end of December, inter-

est rates on long-term loans stood at 3.0%. Whereas deposits from households again earned, almost consistently, somewhat less interest compared with the previous quarter, interest rates on time deposits from non-financial corporations continued to rise significantly.