

Monetary policy and banking business

Monetary policy and money market developments

Key interest rates still at historical low

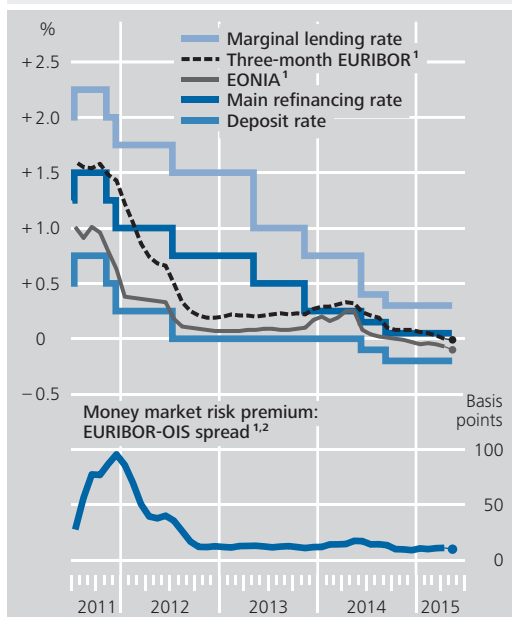
In line with its forward guidance, during the reporting period the Governing Council of the ECB kept key euro-area interest rates at the levels reached following the interest rate cut of 4 September 2014, which it considers the lower bound. Therefore, the main refinancing rate remains at 0.05%, the marginal lending rate at 0.30% and the deposit rate at -0.20%.

EAPP launched in March 2015

On 9 March 2015, the Eurosystem began purchasing additional bonds issued by euro-area central governments, agencies and European institutions under the expanded asset purchase programme (EAPP). These additional purchases constitute the new public sector purchase programme (PSPP). Under the EAPP the Eurosystem concurrently continued its third covered

bond purchase programme (CBPP3) and asset-backed securities purchase programme (ABSPP), which were announced in September 2014, on the same terms. The monthly purchase volume under the EAPP, including the ABSPP and CBPP3, is to total €60 billion, and this monthly volume is to be maintained until the end of September 2016 or, in any case, until the Governing Council sees a sustained adjustment in the path of inflation that is consistent with its aim of achieving inflation rates below, but close to, 2% over the medium term. In its April meeting, the ECB Governing Council also made it clear that, in line with its monetary policy strategy, it would focus on inflation trends and look through unexpected outcomes in measured inflation in either direction if they were transient and did not have an impact on the medium-term outlook for price stability.

Money market interest rates in the euro area



Source: ECB. 1 Monthly averages. 2 Three-month EURIBOR less three-month EONIA swap rate. The three-month EUREPO rate used hitherto was discontinued on 1 January 2015. See also Deutsche Bundesbank, Money market risk premia: indicators for the state of the interbank market, Monthly Report, August 2014, pp 30-31. • Average 1 to 14 May 2015.

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By 8 May, the volume of purchases on the secondary market under the PSPP had reached €108.7 billion. To date, purchases under CBPP3 and ABSPP on the primary and secondary markets have amounted to €78.0 billion and €5.8 billion respectively. Purchases under these two programmes began in the fourth quarter of 2014. For the months of March and April, the volume of securities purchased under the EAPP corresponds to the monthly volume of around €60 billion previously announced.

So far, purchase volume consistent with target

On 19 March 2015, the third of eight targeted longer-term refinancing operations (TLTROs) was carried out. In this operation, 143 institutions borrowed an overall volume of €97.8 billion from the Eurosystem, which exceeded survey expectations and brought the combined volume of the first three refinancing operations of this kind to a total of €310.4 billion. A further five TLTROs will be conducted up until June 2016, which, like the third and most recent operation, will allow counterparties to borrow up to three times the amount of their eligible net lending above a certain benchmark.

143 banks borrow €97.8 billion in third TLTRO

Money market management and liquidity needs

The two reserve maintenance periods from 28 January 2015 to 21 April 2015 saw a marked decrease in euro-area liquidity needs stemming from autonomous factors. This specifically applied to the March-April 2015 maintenance period, in which autonomous factors averaged €465.2 billion and were €40.0 billion lower than in the December 2014-January 2015 reserve maintenance period. This was primarily driven by the aggregate decrease in other autonomous factors (including net foreign assets) totalling €54.2 billion. A major part in this was played by lower net assets denominated in euro. By contrast, banknotes in circulation and government deposits with the Eurosystem rose by €10.4 billion and €3.9 billion net respectively. Calculated liquidity needs were additionally expanded by the increase in the minimum reserve requirements which, at €4.4 billion, was distinctly higher than in the three previous maintenance periods (+€0.8 billion); see table below.

Overall, the outstanding volume of tender operations fluctuated within a broad range between €465 billion and €594 billion (see chart on page 31). The period under review included the maturing of the two three-year LTROs at the end of January and February. The resultant liquidity effect was, however, largely offset by substitution via the main refinancing operations and three-month tenders, which led to a significant rise in such transactions. Furthermore, the main focus was on the allotment of the third targeted longer-term refinancing operation (TLTRO). As at 25 March 2015, €97.8 billion had been credited, although the outstanding tender volume showed a net increase on that day of only €73 billion as funds were shifted from the main refinancing operation and three-month tender. The main refinancing operations tended to attract an increased demand from a higher number of bidders at the end of each month apart from at the end of March,

Factors determining bank liquidity*

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

Item	2015	
	28 Jan to 10 Mar	11 Mar to 21 Apr
I Provision (+) or absorption (–) of central bank balances due to changes in autonomous factors		
1 Banknotes in circulation (increase: –)	+ 0.1	– 10.5
2 Government deposits with the Eurosystem (increase: –)	+ 4.2	– 8.1
3 Net foreign assets ¹	+ 12.8	+ 36.7
4 Other factors ¹	+ 7.1	– 2.4
Total	+ 24.2	+ 15.7
II Monetary policy operations of the Eurosystem		
1 Open market operations		
(a) Main refinancing operations	+ 23.6	– 23.7
(b) Longer-term refinancing operations	– 79.4	+ 11.1
(c) Other operations	+ 12.9	+ 59.8
2 Standing facilities		
(a) Marginal lending facility	– 0.1	– 0.2
(b) Deposit facility (increase: –)	+ 7.8	– 26.2
Total	– 35.2	+ 20.8
III Change in credit institutions' current accounts (I + II)	– 11.0	+ 36.5
IV Change in the minimum reserve requirement (increase: –)	– 1.4	– 3.0

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

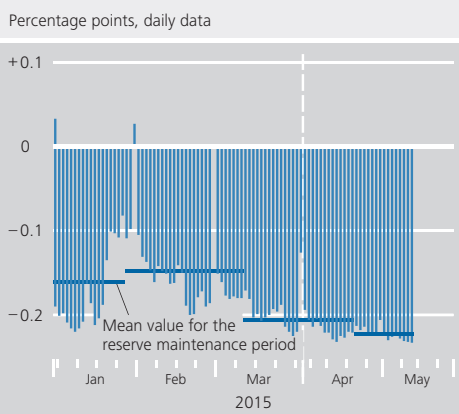
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Central bank interest rates, money market rates and excess liquidity



Sources: ECB, Eurex Repo and Bundesbank calculations. ¹ Current account holdings minus the minimum reserve requirement plus the deposit facility.
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Spread between Stoxx GC Pooling Overnight and the main refinancing rate



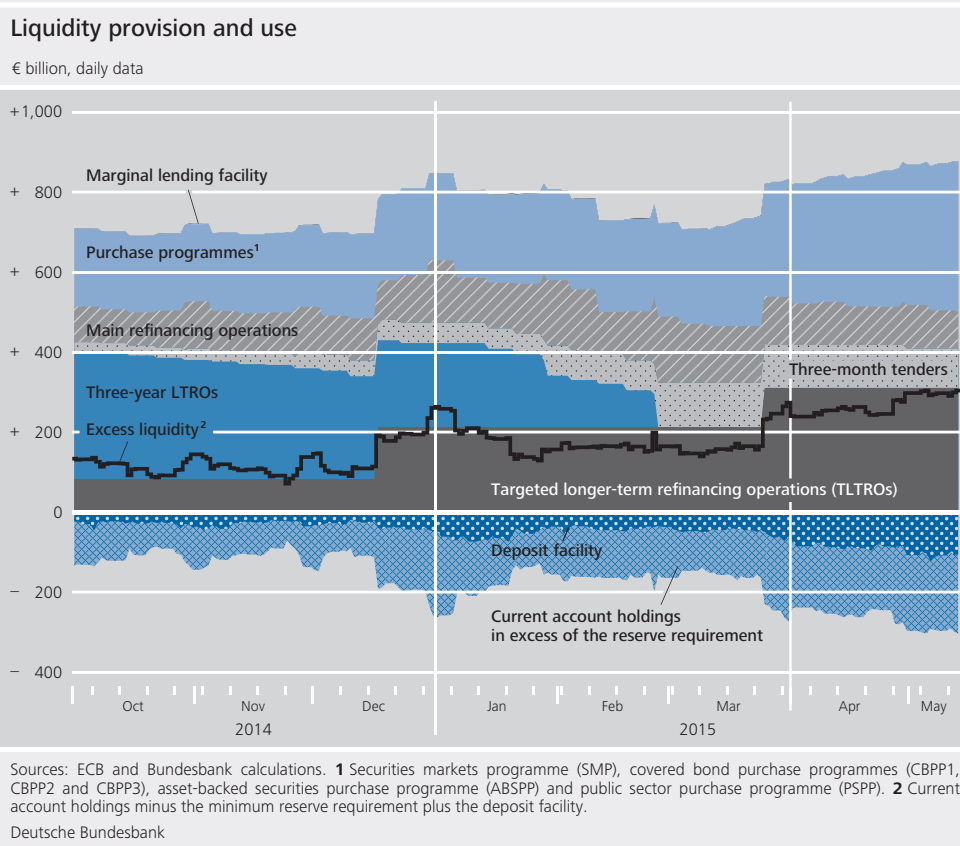
Sources: ECB, Eurex Repo and Bundesbank calculations.
 Deutsche Bundesbank

which coincided with the allotment of the third TLTRO. In the period under review, the volume allotted in the three-month tenders remained comparatively high despite these shifts; thus at the end of the March-April 2015 period, they accounted for around 20% of total tender refinancing in the amount of €514.1 billion. The four-year

TLTROs had a share of 60%, while the main refinancing operations made up 20%.

Additional liquidity was injected into banks from purchases under the public sector purchase programme (PSPP) launched at the beginning of March 2015 as well as from outright operations under the third covered bond purchase programme (CBPP3) and the asset-backed securities purchase programme (ABSPP) launched back in October and November 2014. By 8 May 2015, purchases under these programmes had reached balance sheet totals of €108.7 billion (PSPP), €77.9 billion (CBPP3) and €5.8 billion (ABSPP). The balance sheet holdings of securities acquired through purchase programmes already completed concurrently fell further during the period under review as a result of maturities and taking into account end-of-quarter revaluations (CBPP1 and CBPP2 declined by €1.8 billion to €25.7 billion and by €1.3 billion to €11.4 billion respectively, while the SMP volume was down by €4.8 billion to €139.4 billion).

Excess liquidity proved volatile during the period under consideration owing to fluctuations in autonomous factors between €444 billion and €557 billion and changes in the demand for tenders (see chart above). It touched a trough of €139 billion on 9 March 2015 compared with a peak of €274 billion on 31 March 2015. While average excess liquidity, at €160 billion, was lower in the January-March 2015 reserve maintenance period than in the previous period (€180 billion), it rose considerably to €220 billion in the March-April 2015 reserve maintenance period under the impact of the third TLTRO and the PSPP. One of the reasons for the sharp rise in excess liquidity is that the demand for tenders barely declined despite the considerable provision of liquidity by the purchase programmes. Excess liquidity was boosted in addition by autonomous factors, which declined by €16 billion on average in comparison to the January-March 2015 maintenance period.



With the exception of the month-end levels, the overnight money rates hovered between the main refinancing rate and the deposit facility rate in the two reserve maintenance periods under review. Secured overnight money (GC Pooling Overnight, ECB basket) rates remained consistently below EONIA (by 8 basis points on average; see charts on page 30), although the spread between the rates widened over course of the two periods. After the spread between the main refinancing rate and the STOXX GC Pooling Overnight rate stood at -15 basis points on average in the January-March reserve maintenance period, it fell considerably in the following period to -21 basis points on average in light of the increase in excess liquidity. EONIA stood at -0.06% on average in the March-April 2015 reserve maintenance period (previous period: -0.04%), while secured overnight money reached an average of -0.16% (previous period: -0.10%). The underlying turnover on the overnight money market continued to decline over the period under re-

view. While the corresponding turnover on GC Pooling (ECB basket) sank markedly by €3.7 billion, in comparison to the previous period, to an average of €13.9 billion in the March-April period, EONIA turnover proved somewhat more stable, falling by €1.5 billion to around €26.0 billion, albeit at a very low level. One reason for the weaker Overnight GC Pooling and EONIA turnovers may have been the increase in excess liquidity, which, in conjunction with the ECB's forward guidance, led to an increasingly flatter money market yield curve. The first two weeks of the April-June 2015 reserve maintenance period were marked by a further increase in excess liquidity (€304 billion on 5 May) owing to the continuous liquidity inflows, above all from the PSPP and CBPP3. One result of this was that the typical sharper increase in overnight rates on the last day of the month did not occur, even though this lasted for four days in April owing to the May Day public holiday.

In the first two TLTROs, which took place last year, participating banks were able to take out central bank loans amounting to up to 7% of their outstanding credit volume to the non-financial private sector (not including loans to households for house purchase) as at 30 April 2014.

Excess liquidity still trending upwards

Between the beginning of February and the end of March, excess liquidity showed no significant increase despite the ongoing bond purchase programmes because the liquidity injected was more or less offset by contracting refinancing operations. The jump of around €70 billion at the end of March was mainly attributable to the allotment of the third TLTRO. At the current end, excess liquidity, at some €300 billion, is considerably higher than the average figure for 2014. It is expected to rise further in the next few months as a result of the EAPP outright purchases, although its growth could be somewhat dampened by the slight decrease anticipated in the demand for liquidity in the regular refinancing operations.

Three-month EURIBOR in negative territory for the first time

Overall, short-term money market rates continued to fall during the observation period. Whereas the overnight rates (EONIA, STOXX GC Pooling ON) did not initially decline further in February and March given the predominantly constant supply of liquidity and recorded higher levels than in the first half of January, they reached new lows in the light of the significant rise in excess liquidity from the end of March. The unsecured interbank money market rate EONIA temporarily reached a level of -0.143%, while the secured STOXX GC Pooling ON rate fell to as low as -0.183%. By contrast, given expectations of a further rise in excess liquidity, the three-month EURIBOR rate continued the negative trend seen in the last few months throughout the observation period. At the current end it reached an all-time low of -0.009%, which was also the first time it has entered negative territory.

Monetary developments in the euro area

The recovery in the broad monetary aggregate M3 observed since the first quarter of 2014 gained further momentum during the reporting quarter. At an (annualised) quarter-on-quarter rate of just under 6%, the monetary aggregate showed sharper growth over the winter months than it had for three years. This pick-up was due, above all, to the further increase in the money-holding sector's preference for highly liquid assets as interest rates continued to fall. In terms of its counterparts, the growth in M3 is also increasingly being supported by lending to the private sector. The recovery in lending comprised both loans to households and to non-financial corporations. Demand for credit is benefiting from exceptionally favourable financing conditions and the positive underlying trend in real economic activity.

Monetary growth increasingly supported by lending

The monetary aggregate M3, which had already recorded a significant expansion in the two previous quarters, increased again noticeably in the first three months of this year. This increase was once more primarily driven by overnight deposits, which benefited from a further reduction in interest rates for other deposits and were further stocked up by households and non-financial corporations, in particular. Conversely, these sectors' demand for short-term time deposits fell again significantly in the reporting quarter. As in the previous quarter, financial corporations also substantially increased their overnight deposits and scaled back other deposits included in M3, albeit to a lesser extent than the non-financial private sector.

Significant M3 growth still driven by overnight deposits

Against this backdrop, the upward trend in monetary growth that has been observed since the beginning of 2014 gained further momentum in the reporting quarter, and the annual growth rate of M3 rose markedly to 4.6% at the end of the reporting quarter. The ongoing recovery also led to an increase in the annual

Continued upward trend in monetary and credit growth

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

Changes in € billion, seasonally adjusted

Assets	2015 Q1	2014 Q4	Liabilities	2015 Q1	2014 Q4
Credit to private non-MFIs in the euro area	38.8	2.0	Central government deposits	16.8	8.8
Loans	46.4	19.7	Monetary aggregate M3	148.4	119.4
Loans, adjusted ¹	55.4	30.1	of which Components		
Securities	- 7.7	- 17.7	Currency in circulation and overnight deposits (M1)	213.0	144.2
Credit to general government in the euro area	28.5	46.4	Other shorter-term bank deposits (M2-M1)	- 55.5	- 54.4
Loans	21.5	12.7	Marketable instruments (M3-M2)	- 9.0	29.6
Securities	7.0	33.6	Longer-term financial liabilities to other non-MFIs	- 67.7	- 97.3
Net external assets	- 14.4	36.9	of which		
Other counterparts of M3	35.7	- 64.8	Capital and reserves	22.2	3.1
			Other longer-term financial liabilities	- 89.9	- 100.4

* Adjusted for statistical changes and revaluations. The data shown have been extensively revised, mainly in connection with the new regulation concerning the balance sheet of the monetary financial institutions sector and changes to the statistical reporting framework of a number of national central banks. ¹ Adjusted for loan sales and securitisation.

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growth rate for loans to the euro-area private sector (adjusted for loan sales and securitisation), which, at 0.8%, reached its highest level since March 2012. Despite these evident signs of recovery, growth in lending business and thus the underlying monetary dynamics in the euro area remain very moderate.

financial corporations sector. The surveyed euro-area institutions reported a further moderate increase in demand for bank loans among non-financial corporations following a marked rise in the previous quarter. Banks reported that the demand for credit was supported mainly by the low general interest rate level. The banks responding to the BLS also stated they had once more moderately relaxed their credit standards for loans to enterprises and expected these standards to ease further in the wake of the Eurosystem's expanded asset purchase programme. The trend towards more expansionary credit standards observed since the second quarter of 2014 therefore continued. Alongside their robust liquidity position, banks said that the easing of standards was due, in particular, to the high level of competition in the area of corporate banking.

BLS, too, points to gradual stabilisation in lending to non-financial corporations

Ongoing recovery in loans to non-financial corporations

The broad-based recovery in lending included loans to non-financial corporations, which increased noticeably in the quarter under review after recording a net increase in the previous quarter for the first time since the third quarter of 2011 (see the chart on page 34). This increase pertained to loans with medium-term maturities, in particular, while long-term lending went up only slightly during the reporting quarter. Short-term lending also continued its upward trend, though loans with short maturities again recorded slight outflows on balance. Given the strong cyclical nature of this maturity segment, a further upturn is expected in the wake of the economic recovery. The annualised rate of change for loans to non-financial corporations in the euro area as a whole subsequently continued its recovery and amounted to -0.3% at the end of the reporting quarter.

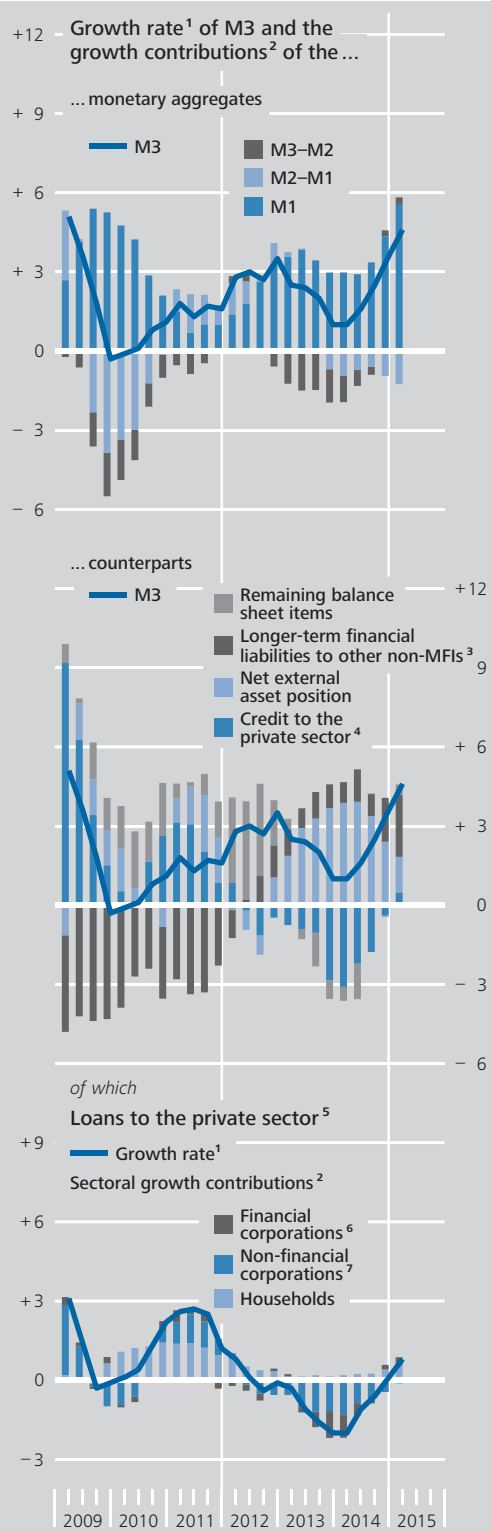
In contrast to the recovery in lending in the fourth quarter of 2014, which was supported by a broad base of countries, the pattern among the four large euro-area countries in the reporting quarter was more mixed (see chart on page 35). While quarter-on-quarter corporate lending in France surged and the level of net redemptions in Spain declined noticeably, German banks' loans to non-financial corporations in the euro area decreased and Italy recorded a renewed rise in net redemp-

Mixed developments in corporate lending in the four large euro-area countries

The Bank Lending Survey (BLS) carried out in the first quarter also pointed to a continued upward movement in lending to the non-

Monetary aggregates and counterparts in the euro area

Seasonally adjusted, end-of-quarter data



Source: ECB. **1** Year-on-year percentage change. **2** In percentage points. **3** Denoted with a negative sign because, per se, an increase curbs M3 growth. **4** Adjusted for loan sales and securitisation. **5** Adjusted for loan sales and securitisation from 2010 Q1. **6** Non-monetary financial corporations. **7** Non-financial corporations.

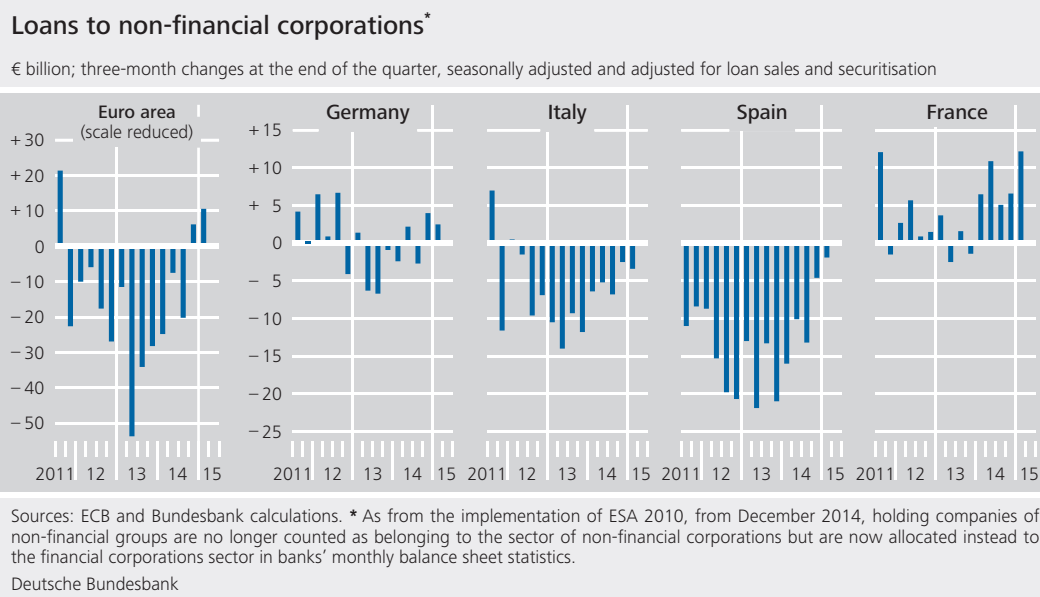
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tions. As in the preceding quarters, German and Italian firms' demand for bank finance was probably curbed in part by their greater recourse to alternative sources of funding. Thus the BLS data for Italy indicate that the subdued borrowing demand from non-financial corporations was due, among other things, to the increased issuance of debt securities by large enterprises, while firms in Germany, in particular, relied primarily on own funds.

The recovery in loans to households observed since the third quarter of 2013 likewise persisted. However, with a year-on-year expansion of 1.1% at the end of the reporting quarter, the growth rate of this aggregate is still moderate. In an environment characterised by historically low interest rates, growth was again driven by loans for house purchase, although consumer credit also made a distinctly positive contribution. Like the pattern of lending to non-financial corporations, the growth in household borrowing reported for the euro-area aggregate masked relatively heterogeneous national developments. Whereas mortgage lending continued to increase markedly in Germany, in particular, housing loans showed a decrease in the euro-area periphery countries, not least owing to households' continued need to deleverage, although there was a noticeable slowdown in net redemptions. For the euro area as a whole, the banks surveyed in the BLS likewise reported that demand in this credit segment had again risen considerably, while standards for loans to households for house purchase had remained virtually unchanged.

Marked rise in household borrowing

The upturn in consumer credit observed over the last few quarters probably reflects the ongoing pick-up in private consumption in the euro area. This tallies with the replies of the respondent institutions to the BLS. They reported that a perceptible increase in demand in the consumer credit segment was accompanied by a slight easing of credit standards. They added that the demand for consumer credit was being boosted by improved consumer confidence and the low general interest rate level.



Marked fall in monetary capital as long-term bank debt securities shrink

As well as lending to non-banks, monetary growth in the reporting period was mainly supported by a decline in longer-term financial liabilities, which decreased considerably in the first quarter following outflows in the previous quarters. This was chiefly attributable to ongoing sizeable net redemptions of bank debt securities with a maturity of over two years and to marked withdrawals of funds from long-term time deposits; this was partly counterbalanced by an appreciable increase in capital and reserves.

The reduction of long-term bank debt securities in the hands of the euro-area money-holding sector has been observed since the fourth quarter of 2011. While the net redemptions were initially attributable, above all, to weak demand, banks' refinancing situation in the market has clearly improved again in the meantime. This is corroborated by the comment of the banks surveyed in the BLS, which reported improvements in the issuance of longer-term bank debt securities in the first quarter, as in the preceding quarters. The ongoing reduction of long-term bank debt securities despite improved market access suggests that this type of refinancing has become less attractive to banks compared with alternative sources of funding. These notably include mounting deposits and cheap liquidity provided

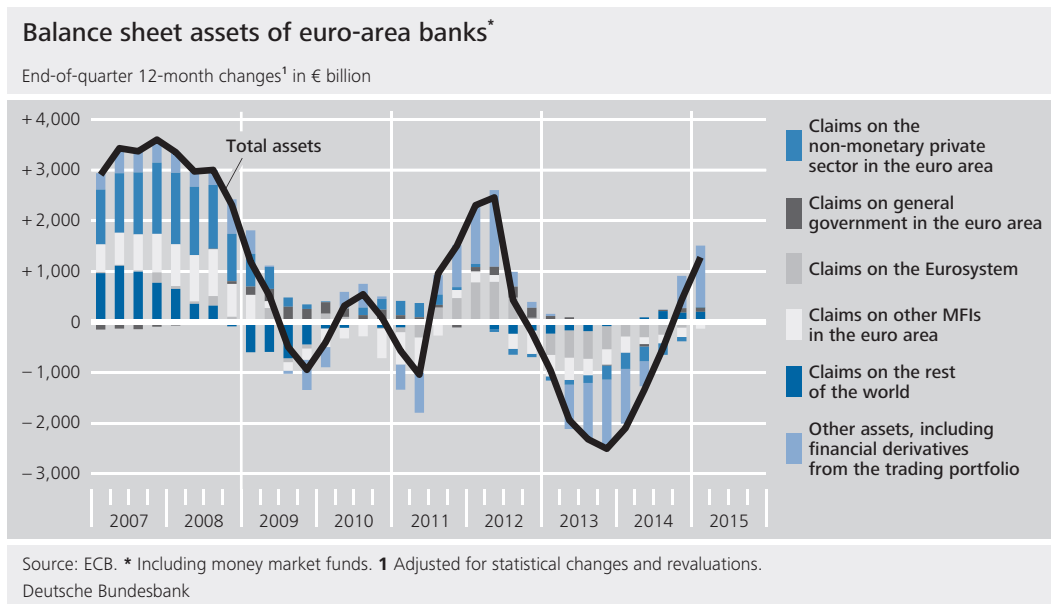
by the Eurosystem. This is consistent with the answer of the BLS respondent banks that, besides lending to enterprises, they were using the funds obtained under the Eurosystem's expanded asset purchase programme as a substitute for alternative sources of funding.

In the three months up to March the MFI sector's net external asset position, which has been the main counterpart supporting M3 for the last two years, recorded net outflows for the first time since mid-2012 despite higher current account surpluses. This is presumably attributable to net capital exports in portfolio business fuelled by strong demand from domestic investors for securities issued outside the euro area. At the same time, foreign investors continued to reduce their holdings of debt securities issued by non-MFIs resident in the euro area, a development which began in mid-2014. This is probably connected to the Eurosystem's expanded securities purchases. By contrast, non-resident investors again noticeably expanded their activities in the euro-area stock market.

However, the decline in the MFI sector's net external asset position was not accompanied by a fall in aggregate total assets; both claims on and liabilities to the rest of the world increased quite significantly. The balance sheet

First outflows in net external asset position since 2012

Banks' total assets up again



shrinkage in the banking sector, which commenced in mid-2012, came to a halt in 2014 and has since given way to a discernible balance sheet expansion. The total assets of banks in the euro area increased perceptibly in the first quarter of 2015, with growth being broadly based across the individual balance sheet items. On an annual basis, this was driven by an increase in financial derivatives in the trading portfolio (see the above chart). Claims on the rest of the world and on general government, too, featured prominently. Looking only at the first quarter, the balance sheet expansion encompassed all asset items. The four large euro-area countries continued to exhibit two divergent developments. While banks in Germany and France clearly contributed to the balance sheet expansion observed in the euro area aggregate, the balance sheet reduction of banks in Spain and Italy continued on a 12-month view, although it slowed considerably and almost halted. In both countries it was mainly financial derivatives and in Italy bonds issued by other euro-area countries, too, that were bought; in addition, the decline in claims on the private sector slowed down perceptibly.

German banks' deposit and lending business with domestic customers

German banks' deposit business with domestic customers in the first quarter of 2015 was again dominated by growing overnight deposits. While domestic investors increased their overnight deposits with German banks even more considerably than in the final quarter of 2014, they again distinctly reduced all longer-term bank deposits on balance. This development reflects the money-holding sector's continued preference for highly liquid forms of investment, which is being spurred by the historically low interest rate level and the flat yield curve. As the chart on page 37 shows, the interest rate spread of deposits with longer maturities over overnight deposits has steadily narrowed over the past three years. In the case of long-term time deposits the declining interest rate trend is mirrored in new business as the overall interest rate level responds very slowly due to the high share of older business.

Unlike in the previous quarter, growth in overnight deposits in the three months under review was supported by all money-holding sectors, with the greatest inflows still being recorded by households. As households simultaneously ran down – in some cases mark-

Deposit business still marked by portfolio shifts

Current increase in overnight deposits supported by all sectors

edly – all other types of deposit (ie short and long-term time deposits and savings deposits), their overnight deposits increased dynamically during the period under review (see the chart on page 40).

Non-financial corporations, too, exhibited a marked interest in overnight bank deposits in the reporting quarter. Besides the low interest rates on longer-term bank deposits, the reason for the perceptible increase in overnight deposits in this sector is likely to be non-financial corporations' high level of cash holdings at present, which is due to their stable profit situation amidst still weak, albeit slightly rising, investment. A further reason for the corporate stocking-up of overnight deposits could be that enterprises on the whole are intending to finance more of their forthcoming acquisitions of fixed assets through internal resources.

Deposit business with financial corporations mixed

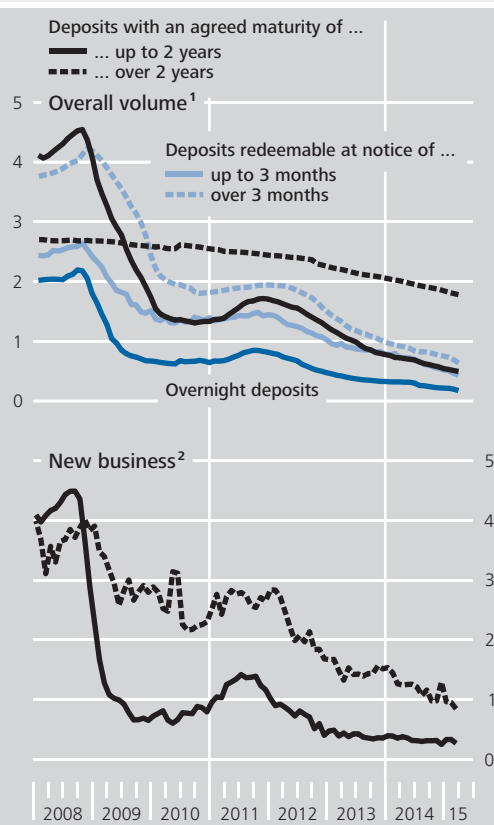
In the quarter under review domestic banks also recorded net positive deposit inflows from financial corporations for the first time in four quarters. This, however, masked disparate developments in the case of insurance corporations and pension funds, on the one hand, and other financial intermediaries, on the other. While other financial intermediaries considerably built up their stocks of overnight deposits in the reporting quarter, insurance corporations and pension funds continued to scale back their bank deposits across all maturities (but especially long-term time deposits), a trend which has been observed for several quarters now. At least a part of these funds is likely to have been invested in riskier forms of financial asset acquisition in the search for higher yields (see the box on pages 39 to 41).

Buoyant credit business with non-banks

Banks' credit business with the domestic non-bank sector in the period under review was likewise characterised by the historically low interest rate environment as well as by the positive income situation of German households and enterprises. Unlike in the final quarter of 2014, when the decline in credit to general government had had a noticeable offsetting in-

Interest rates on bank deposits in Germany*

% pa, monthly



* Deposits of households and non-financial corporations. **1** According to the harmonised MFI interest rate statistics. Volume-weighted interest rates across sectors. Interest rate levels for overnight and savings deposits may also be interpreted as new business due to potential daily changes in interest rates. **2** According to the harmonised MFI interest rate statistics. Volume-weighted interest rates across sectors and maturities. Unlike the overall volume of contracts (ie deposit contracts on the balance sheet at the end of the month), the volume of new business (ie all contracts concluded in the course of a month) is explicitly recorded for time deposits only.

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fluence on the overall positive development in lending to private non-banks, lending to both private-sector and public-sector non-banks increased in the reporting quarter. In this context, MFIs in Germany markedly increased their holdings of securities issued by the domestic private and public sectors and granted considerably more loans to both sectors. With regard to the changes in lending shown in the table on page 38 it should be noted that the data situation for the period from December to February, which is still provisional, has been changed considerably retrospectively by the revision of banks' monthly balance sheet statistics, in particular due to the implementation of

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

Changes in € billion, seasonally adjusted

Item	2014	2015
	Q4	Q1
Deposits of domestic non-MFIs ¹		
Overnight	25.5	47.9
With agreed maturities		
of up to 2 years	- 2.5	2.1
of over 2 years	- 14.9	- 9.7
Redeemable at notice		
of up to 3 months	- 2.8	- 2.1
of over 3 months	- 1.1	- 2.7
Lending		
to domestic general government		
Loans	- 3.6	11.4
Securitised lending	- 5.3	2.3
to domestic enterprises and households		
Loans ²	9.4	14.1
of which to households ³	6.3	9.0
to non-financial corporations ⁴	4.1	3.2
Securitised lending	2.7	6.7

* 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 and revaluations. **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. As from the implementation of ESA 2010 in December 2014, holding companies of non-financial groups are no longer counted as belonging to the sector of non-financial corporations but are now allocated instead to the financial corporations sector.
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the European System of Accounts 2010 (ESA 2010) as at the December 2014 reporting date.¹

Positive credit business with households driven by vibrant demand for private housing loans and ...

As in the preceding quarters, the bulk of loans were granted to households. A decisive factor in this was the persistently vibrant demand for private housing loans, which is likely to have been driven by another slight decline in borrowing costs as well as the positive household income situation and the low appeal of alternative investment options. The BLS results, too, indicate that household demand for housing loans rose substantially in the first quarter of 2015, exceeding bank managers' expectations in the previous quarter. According to the re-

spondents, this was due primarily to the low general interest rate level. The MFI interest rate statistics recorded a distinct decline in interest rates on long-term mortgage loans in the first quarter to 1.9%, marking a new historical low since the harmonised MFI interest rate statistics were introduced in 2003. The BLS data suggest that demand for credit in this segment was additionally supported by households' continuing positive outlook regarding the housing market and house price developments. Households' borrowing requirements for debt refinancing, restructuring and renegotiating purposes had an additional positive effect on new business with housing loans. At the same time, banks' lending policy was conducive to the rising demand for loans for house purchase in the quarter under review. Thus, although the banks participating in the BLS did not adjust their credit standards for housing loans in the final quarter, they did slightly narrow their margins on loans subject to average risk.

In addition, the persistently positive income and wealth outlook in Germany was reflected in a significant increase in consumer credit. The banks participating in the BLS accordingly reported a perceptible rise in demand in the first quarter of 2015. The bank managers responding to the BLS attributed this to consumers' increased propensity to purchase, buoyant consumer confidence and the low general interest rate level. Consumer credit lending policy remained unchanged on balance in the final quarter according to the BLS. The BLS banks did, however, narrow their margins for both average and riskier loans in light of the current

... consumers' increased propensity to purchase

¹ As from the implementation of ESA 2010 in banks' balance sheet statistics, holding companies of non-financial groups (eg management holding companies with predominantly financial shareholdings) are no longer counted as belonging to the sector of non-financial corporations but are now allocated instead to the financial corporations sector as other financial intermediaries. Moreover, some entities and enterprises which are non-market producers (eg public utilities) and have been counted as non-financial corporations thus far are now allocated to the general government sector (under off-budget entities). See also Deutsche Bundesbank, Methodological changes in the financial accounts – background, approach and selected results, Monthly Report, October 2014, pp 13-26.

Portfolio reallocations into higher-yielding assets in Germany

During the course of the crisis, the ECB Governing Council has incrementally reduced the main refinancing rate to an all-time low of 0.05%. Amongst other things, this caused interest rates for bank deposits to diminish and, as rates approached the zero lower bound, also narrowed spreads between deposit rates for different maturities (see the chart on page 37). Viewed in isolation, this is an incentive for investors to shift assets out of bank deposits into higher-yielding forms of investment. And the chart below does indeed demonstrate that deposits as a percentage of total assets in the money-holding sectors¹ have shrunk in recent years; at the same time, however, it shows that this decline was not evident across every single sector.

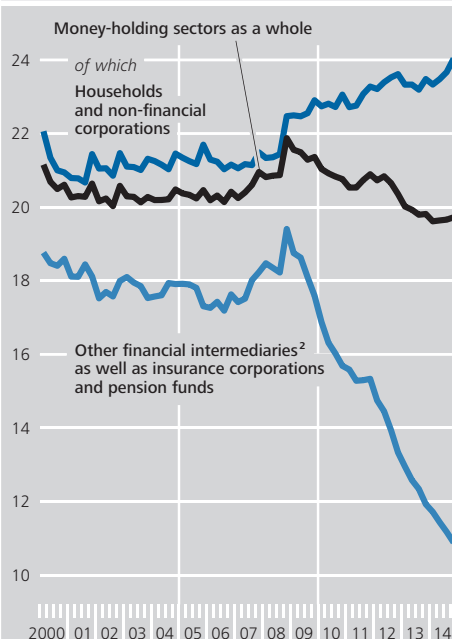
The banking statistics and financial accounts² data reveal that it is primarily the non-financial private sector – that is, households and non-financial corporations – whose financial investment behaviour deviates from the aggregate. Since Lehman Brothers collapsed, their deposits have seen a sustained and unusually robust build-up in overnight deposits (see the chart on page 40), coinciding with a sometimes perceptible reduction in other forms of deposit

(short-term time deposits and longer-term savings deposits, mainly). Two factors explain the non-financial private sector's preference for liquid assets: first, a general sense of uncertainty sparked by the financial crisis in what is already a rather risk-averse sector; second, and now more importantly, the declining opportunity costs of holding overnight deposits, both in relation to other forms of deposit and as compared with lower-risk securities such as Federal bonds. In addition, non-financial corporations might have lifted the percentage of liquid assets in their portfolios in a move to finance more of their potential forthcoming acquisitions of fixed assets using internal funds.³

A glance at the remaining acquisition of financial assets in the non-financial private

Deposits as a percentage of total sectoral financial assets in Germany

Notional stocks with base year 2000,¹ %



¹ The “money-holding sectors” comprise households, non-financial and financial corporations (apart from monetary financial institutions (MFIs)) as well as general government. The general government sector is omitted for the purposes of this box since its acquisition of financial assets is highly volatile and of a relatively low volume compared with other sectors.

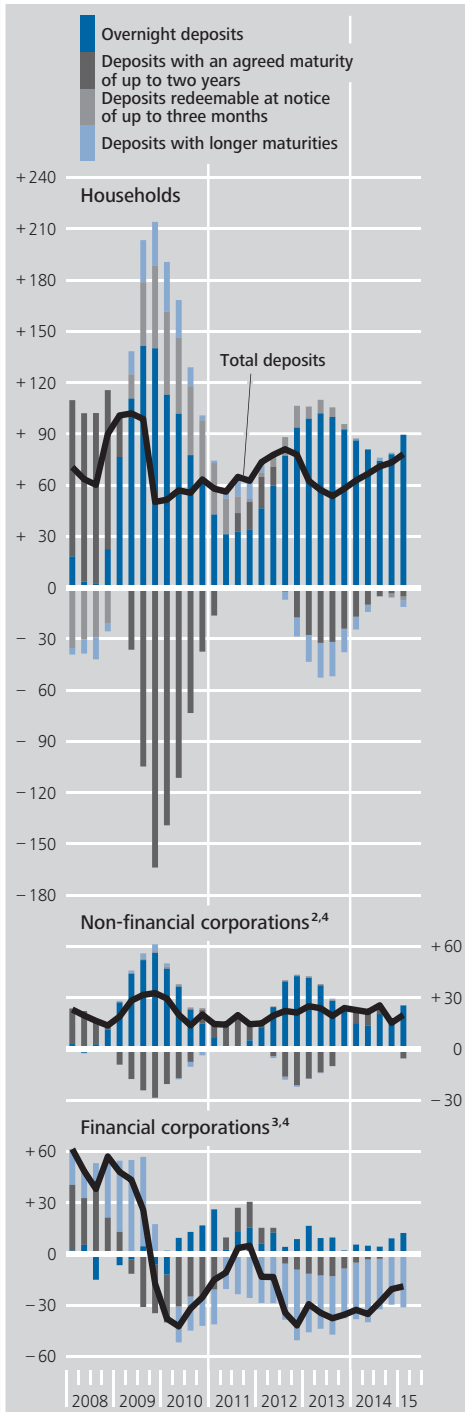
² The analysis is based on quarterly transactions. Financial accounts data are only available up to 2014 Q4 at the current juncture, so the observation period ends on 31 December 2014.

³ The longer-term significance and development of internal financing in Germany's non-financial corporate sector is discussed in Deutsche Bundesbank, Long-term developments in corporate financing in Germany – evidence based on the financial accounts, Monthly Report, January 2012, pp 13-27.

¹ Statistical changes and revaluations are hereby eliminated.
² Including mutual funds.
 Deutsche Bundesbank

Breakdown of deposits by German banks* by selected sectors

Seasonally adjusted end-of-quarter 12-month changes¹
 in € billion



* Including money market funds. **1** Adjusted for statistical changes and revaluations. **2** Corporations and quasi-corporations. **3** Non-monetary financial corporations. **4** As from the implementation of the ESA 2010 as at the December 2014 reporting date, holding companies of non-financial groups are no longer counted as belonging to the sector of non-financial corporations but are now allocated instead to the financial corporations sector.

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sector confirms the view that this sector has largely refrained from shifting assets out of deposit vehicles into higher-yielding forms of investment such as securities in recent years on account of its inherent risk aversion and preference for liquidity. Households chiefly added to their claims on (life) insurers; holdings of shares in mutual funds, which offer a higher degree of risk diversification for smaller investment sums than do direct securities holdings, were ramped up significantly while direct securities exposures were scaled back on the whole. Non-financial corporations increasingly took to funding other non-financial corporations, making use of instruments such as equity and (trade) credits; all things considered, however, securities investments have played a negligible role for these enterprises in recent years.

Unlike the non-financial private sector, financial corporations – that is, insurance corporations and pension funds as well as other financial intermediaries (OFIs)⁴ – have seen their deposits contract noticeably since the end of 2009 (see the adjacent chart). This was driven predominantly by a growing tendency since 2010 for insurance corporations to run down their longer-term time deposits, a trend which was not matched by a build-up of other types of deposit. OFIs, too, have reduced their stocks of deposits on balance since mid-2012; unlike insurance corporations, however, there were spells in which they increased their holdings of overnight deposits at the expense of longer-dated types of deposit.

Financial corporations, with their professional portfolio managers, instead focused their investments on debt securities and mutual fund shares, taking in sometimes

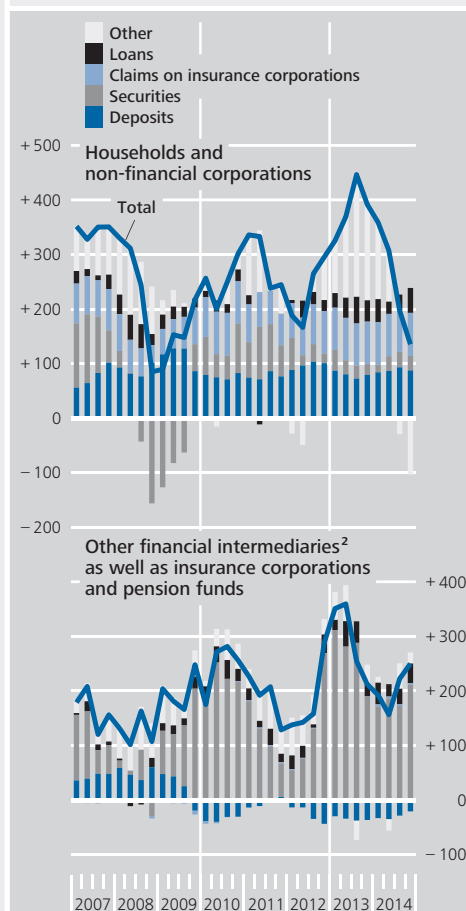
⁴ Including mutual funds but excluding MFIs (and thus excluding money market funds).

higher-yielding foreign paper. Furthermore, the era since the onset of the financial crisis has seen OFIs in particular stepping up their lending activity, especially to non-financial corporations. The pick-up in loans and securities lending by financial corporations to the non-financial private sector points to the increasing importance of players outside the regular banking system – that is, the shadow banking industry⁵ – in financial intermediation. All things told, the search for yield probably exerts a stronger influence over investment behaviour in the financial sector than it does in other sectors. Data available since early 2013 on debtor sector classifications and countries of domicile suggest that the risk appetite associated with this search for yield has been slightly less pronounced among insurance corporations in recent years than it has for OFIs. This is probably due, amongst other reasons, to regulatory factors.

The differences in the investment behaviour of the financial and non-financial sectors provide important insights in a number of areas. One is that it allows deposit patterns to be interpreted from the angle of monetary analysis. As a case in point, the fact that household and non-financial corporation inflows are the main engine driving monetary growth at the present time would, at first glance, point to a corresponding upturn in underlying monetary dynamics. After all, money holdings in the non-financial sector are generally more closely linked to consumption and capital expenditure – and thus also to changes in the consumer price index – than are money holdings in the financial sector, with its stronger focus on the financial markets. On closer inspection, however, it becomes clear that a significant portion of the deposit growth observed was caused by the non-financial sector's strong preference for liquidity and its aversion to risk in the face

Acquisition of financial assets and its components

Sum of figures for the current and the three preceding quarters in each case,¹ in € billion



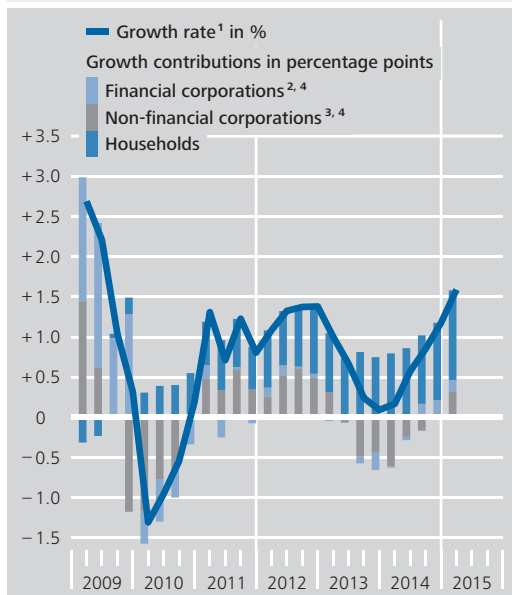
¹ Adjusted for statistical changes and revaluations. ² Including mutual funds.
 Deutsche Bundesbank

of the low-interest-rate environment. As far as monetary growth can be explained by these motives, it overstates the underlying monetary dynamics affecting inflation.

⁵ A definition of the shadow banking system and a description of its activities can be found in Deutsche Bundesbank, The shadow banking system in the euro area: overview and monetary policy implications, Monthly Report, March 2014, pp 15-34.

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. 4 As from the implementation of ESA 2010 in December 2014, holding companies of non-financial groups are no longer counted as belonging to the sector of non-financial corporations but are now allocated instead to the financial corporations sector.

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heightened competition between banks. All in all, however, lending to households in Germany continues to exhibit very moderate dynamics. Thus the 12-month growth rate for loans to households edged up only slightly from 1.6% in the previous quarter to 1.8% at the end of March.

Renewed rise in loans to non-financial corporations ...

Aside from loans to domestic households, German banks also increased their loans to non-financial corporations discernibly in the reporting quarter. As in the previous quarter, lending by German banks therefore made a positive contribution to the expansion of credit business with the non-financial corporations sector observed throughout the euro area. In contrast to their corporate counterparts in other euro-area countries, which seem to prefer medium-term loans, German firms recently chiefly increased their demand for long-term loans. This was apparently prompted not only by the perceptible decline in interest rates on long-term loans compared with short and medium-term

borrowing but also by the generally positive economic and business expectations, which stimulated entrepreneurs' interest in long-term investment projects. By contrast, German firms probably financed their short and medium-term investments – as in the previous quarters – to a greater extent via internal funds and/or alternative sources of funding, such as intra-group loans, trade credits and loans from shadow banks, which are gaining increasing importance.

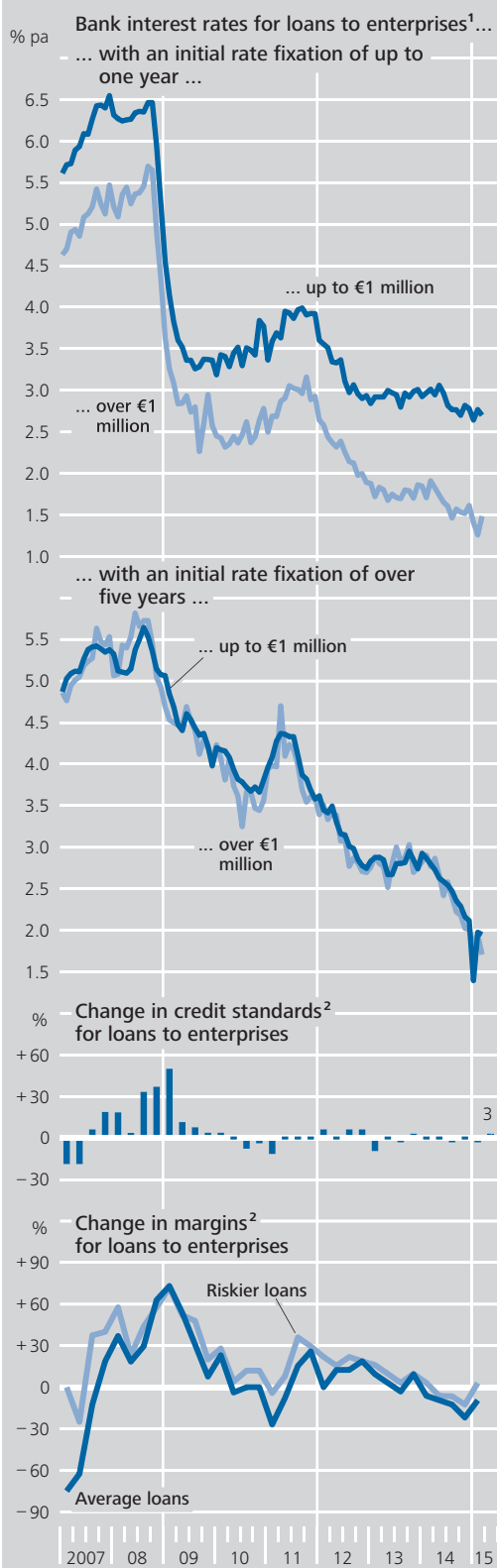
The BLS results from the first quarter of 2015 largely support these inferences. They show that enterprises' demand for credit in the first quarter of 2015 remained unchanged on balance compared with the previous three months, when corporate borrowing requirements had risen considerably on the whole according to the respondents' replies. The bank managers participating in the BLS ascribed this chiefly to firms' ample scope for internal financing, but added that lower borrowing requirements for financing fixed investment, inventories and working capital *per se* were denting the demand for corporate credit. Conversely, enterprises' demand for bank loans was boosted in the reporting quarter, according to the BLS, by greater financing needs for mergers, acquisitions and corporate restructuring. Demand was additionally supported by banks' lending policy. Although the surveyed institutions hardly changed their credit standards for business loans, they narrowed their margins for average-risk loans slightly on balance and also eased their non-interest rate charges and collateral requirements somewhat in favour of their customers.

... due to favourable financing terms

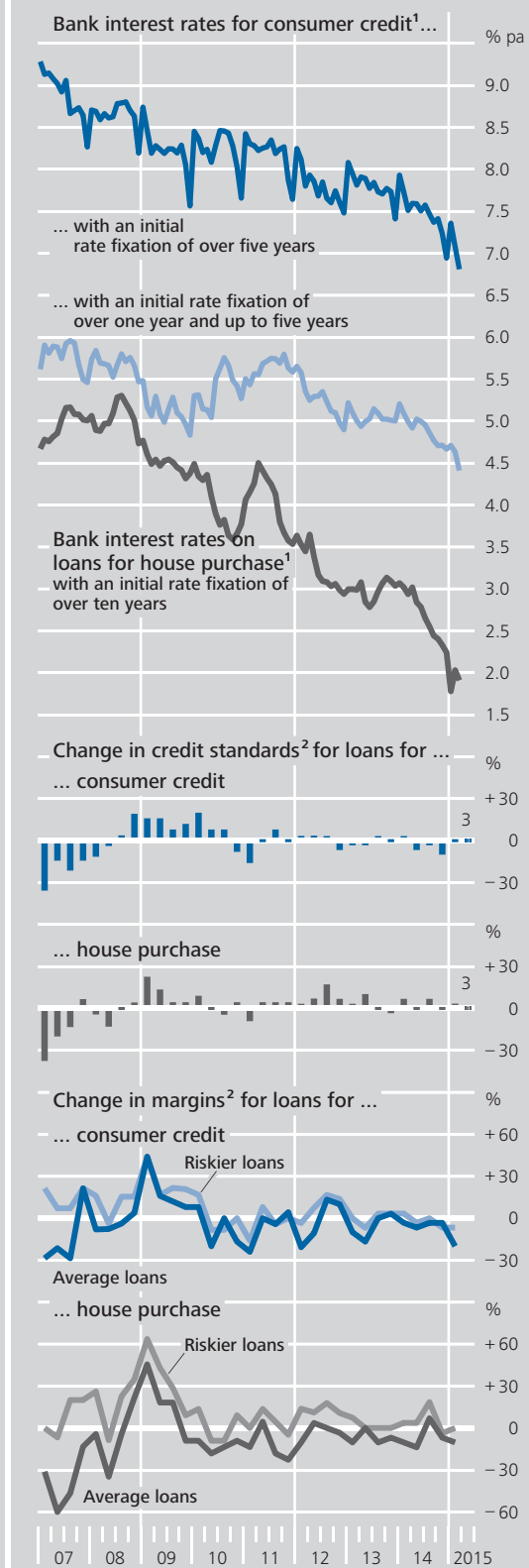
It may be assumed that domestic lending to enterprises was also underpinned by the very low level of bank interest rates: interest rates for short-term bank loans fell slightly and those for long-term bank loans fell perceptibly. At the end of March, the reporting institutions were charging average interest of 2.7% on short-term small-scale loans to domestic non-financial corporations and 1.5% for large-scale

Banking conditions in Germany

Credit to non-financial corporations



Credit to households



1 New business. According to the harmonised euro-area MFI interest rate statistics. **2** According to the Bank Lending Survey; for credit standards: 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; for margins: difference between the number of respondents reporting "widened considerably" and "widened slightly" and the number of respondents reporting "narrowed somewhat" and "narrowed considerably" as a percentage of the responses given. **3** Expectations for 2015 Q2.

Why are interest rates for small loans to enterprises in Germany higher than for large loans?

Bank loans are one of the most important sources of debt financing for small and medium-sized enterprises (SMEs).¹ For this reason, the credit conditions which are set by banks and at which SMEs borrow these funds play an important role from a macro-economic and monetary policy perspective. Against this background, this box compares the lending rates that SMEs pay with those paid by large enterprises. Moreover, consideration is given to the extent to which the bank's cost factors, which are closely related to the (risk) characteristics of the borrower, can explain the interest rate spread that is seen to exist.²

The harmonised MFI interest rate statistics for the euro area provide information on bank loan pricing. However, in new lending to enterprises they do not differentiate according to the size of the borrowing enterprise. For this reason, in the following, small

business loans (up to €1 million)³ serve as an approximation for loans to SMEs, while it is assumed that large business loans (over €1 million) are more likely to be in demand by large enterprises.⁴

Approximated in this way, the lending rates for SMEs are, on aggregate, systematically higher than those for large enterprises (see the chart below). This interest rate premium is driven mainly by the credit conditions for very small loans and decreases for all the considered size classes the longer the interest rate fixation period.

The determinants of this difference can generally be broken down into quantitative (eg credit risk) and qualitative (eg the borrower's bargaining power) factors. By their

1 See Deutsche Bundesbank, An international comparison of the importance of bank credit as a debt financing instrument for non-financial corporations, Monthly Report, November 2014, pp 42-43.

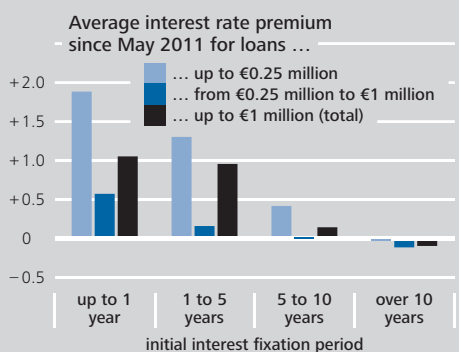
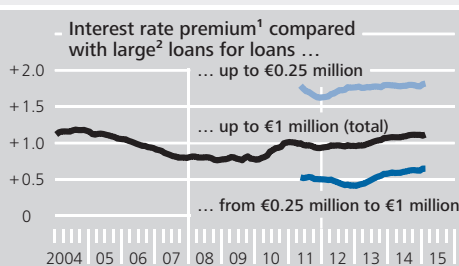
2 Specifically, the extent to which the interest rate spread is attributable to differences in the credit risk and to the capital charge is examined. The remaining part of the interest rate spread represents the influence of the other factors and is referred to as the residual. Ultimately, therefore, the analysis is based on a decomposition of interest rates for loans to SMEs and to large enterprises. For information on the methodology used in decomposing interest rates, see Bank of England, Understanding the price of new lending to households, Quarterly Bulletin Q3 2010.

3 Since 2010, the small loans category has been broken down into new lending volumes up to €0.25 million (very small) and €0.25 million to €1 million (smaller).

4 Bundesbank evaluations made on the basis of the Bach database show this classification to be plausible. However, they also show that a major difference exists between small and medium-sized enterprises in terms of the average size of the loans they take up. Thus, the loan size category up to €0.25 million is probably more relevant for small enterprises. See also ECB, SME access to finance in the euro area: Barriers and potential policy remedies, Monthly Bulletin, July 2014.

Interest rate spreads between small and large loans to enterprises*

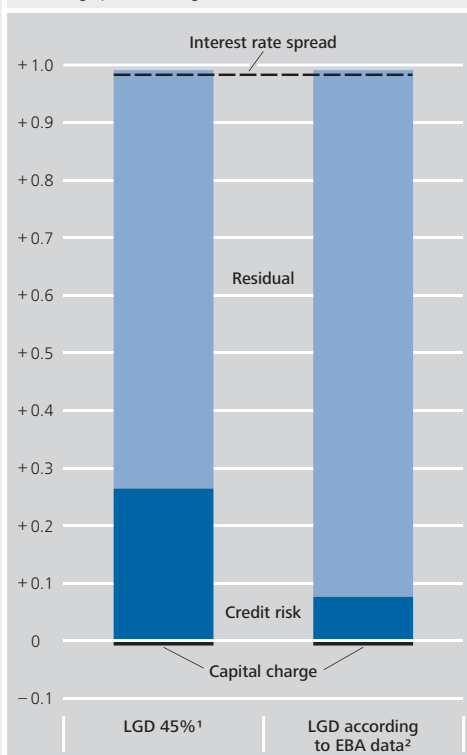
Percentage points, based on 12-month moving averages



* New lending. According to the harmonised MFI interest rate statistics for the euro area. 1 Aggregated across all initial rate fixation periods. 2 Over €1 million.

Contributions of credit risk (two contribution methods) and capital charge to the interest rate spread between small and large loans to enterprises*

Percentage points, average values since 2009



* Sources: harmonised MFI interest rate statistics for the euro area, EBA Risk Dashboard and Bundesbank calculations. Calculations based on the assumption that small loans are granted to small and medium-sized enterprises and large loans to large enterprises. **1** 45% is the standard value of the Capital Requirements Regulation for the loss given default (LGD). **2** Based on the values reported by banks to EBA.

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very nature, the former lend themselves more readily to empirical analysis. They comprise the differences in a bank's expenditure according to the size of the borrower: the risk premium to cover the expected credit loss, the capital charge which represents the costs for the regulatory capital to be held, and the fixed costs incurred by the bank for, say, assessing the borrower's creditworthiness. The fixed costs also contribute to the interest rate spread even if they are, in absolute terms, identical for loans to SMEs and to large enterprises. This is because, in the case of loans to large enterprises, the fixed costs are accrued in re-

spect of a larger loan amount, making them lower per euro of the loan amount granted.

The firm-size-related risk premium can be approximated as the product of the probability of default (PD) and the loss given default (LGD).⁵ The capital charge, which can also be calculated separately for SMEs and large enterprises, is roughly the product of the following three factors: the risk weight of the loan, the minimum capital ratio and the imputed cost of the regulatory capital to be held by banks.⁶ Owing to inadequate data availability the fixed costs are part of the residual, as are the qualitative factors.

Under the assumptions made here, the capital charge for both loan types is almost identical on aggregate. This is because there is only a slight difference between the risk weights of the two borrower categories. On the other hand, credit risk can explain, in part, the interest rate spread (see the adjacent chart).⁷ The contribution of

5 PD and LGD-related data, broken down by SMEs and large enterprises, are provided by the European Banking Authority (EBA). See EBA Risk Dashboard, Aggregate Disclosure of EU Banks' Risk Parameters and Instructions, Annex Q3 2014, and Risk Parameters Disclosure of EU Banks, Annex Q1 2014. It should be pointed out that these data are based on reports from a relatively small number of banks; moreover, they refer not only to new lending business but also to the overall credit portfolio.

6 The regulatory standard of 75% is assumed for the risk weight of SME loans. For loans to large enterprises, use is made of the standardised approach according to the average Standard & Poor's rating for non-financial corporations listed in the German share index (DAX). The 8% minimum capital ratio is equivalent to the value produced in accordance with Basel II and Basel III, disregarding any capital buffers. A general figure of 10% is assumed for the cost of equity (for details on the amount of the cost of equity, see EBA, Risk Assessment of the European Banking System, June 2014).

7 The fact that credit risk accounts for a smaller share of the interest rate spread when using the EBA's LGD-related data, which are based on banks' reports, probably indicates that the collateralisation of loans is more relevant in business with SMEs than in business with large enterprises. Collateralisation generally plays a major role in corporate lending in Germany. For instance, around 20% of the credit volume in this segment is secured by real estate collateral.

the credit risk to the spread points, despite the slight regulatory disparity, to a greater credit risk when lending to SMEs.

The factors which are combined in the residual play the most important part, however – a fact which is consistent with the findings of other studies, which ascribe an essential role to large enterprises' greater bargaining power when banks set their credit conditions.⁸ Amongst other things, this bargaining power results from the fact that large enterprises have more diversified sources of funding and are, therefore, implicitly less dependent on bank financing. Moreover, the literature provides evidence to the effect that larger banks, in particular, seek to win new clients by offering them attractive credit conditions with a view to selling them other bank services in addition to the original loan.⁹ These services include assistance in issuing capital market instru-

ments, for example, or hedging transactions, ie services that large enterprises may tend to require. Besides the additional income that banks might potentially generate as a result, revenues from transactions of this kind allow banks to diversify their sources of income because they boost their commission income, in particular.

⁸ See R Elsas and J P Krahen (1998), Is relationship lending special? Evidence from credit file data in Germany, *Journal of Banking and Finance* 22, pp 1283-1316, and F Hanser (2001), *Die Struktur von Kreditbeziehungen*, p 132.

⁹ See L Lepetit, E Nys, P Rous and A Tarazi (2008), The expansion of services in European banking: Implications for loan pricing and interest margins, *Journal of Banking and Finance*, 32, pp 2325-2335.

loans. The average interest charged on small and large-scale long-term loans to non-financial corporations latterly stood at 1.9% and 1.7% respectively (on the reasons for the different interest rate charges for small and large-scale loans, see the box on pages 44 to 46). Loans to enterprises were thus at their lowest levels since the harmonised MFI interest rate statistics were introduced in 2003.

The BLS in the first quarter of 2015 contained *ad hoc* questions on banks' funding conditions, on the level of credit standards, and on the impact of the EAPP. Against the backdrop of the situation in the financial markets, the German banks again reported a slight improvement in their funding situation compared with the previous quarter. The surveyed banks per-

ceived their current credit standards for loans to both enterprises and households to be comparatively tight relative to the midpoint of the range covering their credit standards from the second quarter of 2010 until the present. However, the level was perceived as being even tighter one year previously on the whole. According to the participating banks, the EAPP improves their financing conditions but also significantly impairs their profitability. Hardly any of the German banks that take part in the survey intend to sell marketable assets under the EAPP. However, they anticipate higher liquidity owing to a rise in customer deposits, which they intend to use for lending purposes amongst other things. The respondent banks are not expecting the EAPP to have any impact on their credit standards.

German banks barely interested in buying marketable assets under the EAPP