



# Monthly Report January 2017

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### Abbreviations and symbols

- e Estimated
- p Provisional
- pe Partly estimated
- r Revised
- ... Data available at a later date
- . Data unknown, not to be published or not meaningful
- 0 Less than 0.5 but more than nil
- Nil

Discrepancies in the totals are due to rounding.

## ■ Commentaries

### ■ Economic conditions

#### Underlying trends

*German economy gathers pace significantly towards end of year*

Germany's economic growth is likely to have gathered pace significantly in the final quarter of 2016. Both domestic and external factors played a part, with German enterprises' goods exports recently recording a steep rise. In tandem with very strong industrial orders, this led to a clear increase in industrial production. The construction sector, too, shrugged off its third-quarter lethargy and saw a resurgence of growth. Here, sentiment indicators are breaking one record after the next, and also in other sectors, enterprises rate their business situation as very favourable. To round out the list, private consumption appears to have continued to provide positive stimuli.

*Economic growth in 2016 sustained by domestic activity*

According to provisional calculations by the Federal Statistical Office, real gross domestic product (GDP) expanded by 1.9% (1.8% after calendar adjustment) in 2016. This means that the increase in aggregate output was somewhat stronger than in 2015 (+1.7%). GDP growth was sustained mainly by healthy domestic demand. Private consumption benefited from the favourable situation in the labour market and the strong growth in real disposable incomes spurred by depressed inflation. Construction investment received additional support from favourable financing conditions and there was strong growth in refugee-related government consumption at the beginning of the year in particular. By contrast, export growth was dampened by weak global trade. German enterprises' exports to non-euro-area countries, in particular, were muted.

#### Industry

In November 2016, industrial production in Germany increased slightly by ¼% on the

month in seasonally adjusted terms. On an average of October and November, it was up significantly from the third quarter (+¾%). Substantial output growth was recorded mainly by German manufacturers of machinery and equipment, while motor vehicle manufacturers suffered clear losses. The output of capital goods showed a steep 1% expansion overall, however. Producers of intermediate goods increased their output to a similar extent. By contrast, there was only a slight uptick in the production of consumer goods (+¼%).

*Industrial production clearly on growth path*

Following the exceptionally strong growth in October, new industrial orders in November recorded a steep seasonally adjusted decline of 2½% on the month. However, on an average of October and November, the volume of new orders was still showing a strong upward trend (+3¾%) compared with the third quarter. Disregarding large-scale orders, growth was even more dynamic at 5%. Against this backdrop, the outlook for German industry is favourable. The buoyant inflow of orders was mainly attributable to domestic orders (+4¼%) and orders from countries outside the euro area (+5¾%). By contrast, there were fewer orders from euro-area countries (-½%). However, this was mainly due to the extremely weak placement of orders for other transport equipment, where the proportion of large contracts is very high. If this area is excluded, euro-area countries also placed significantly more orders compared with the average for the third quarter.

*Strong momentum in new orders*

After seasonal adjustment, industrial sales in November increased clearly by 1% on the month. On an average of October and November, they were up by a steep 1½% from the third quarter. Producers of intermediate and capital goods recorded a similarly strong increase in sales (+1½%). Sales of consumer goods also showed a distinct ¾% rise in growth, however. With regard to the regional development of sales, German industrial enter-

*Clear rise in industrial sales, strong growth of exports*

Economic conditions in Germany*				
Seasonally adjusted				
Period	Orders received (volume); 2010 = 100			
	Industry			Main construction
	Total	of which		
	Domestic	Foreign		
2016 Q1	110.9	104.9	115.8	129.1
Q2	110.5	106.0	114.2	129.0
Q3	111.2	103.9	117.1	121.9
Sep	111.2	104.0	117.0	122.3
Oct	116.8	109.9	122.4	134.6
Nov	113.9	106.8	119.6	...
2016	Output; 2010 = 100			
	Industry			Construction
	Total	of which		
	Intermediate goods	Capital goods		
Q1	112.2	107.6	120.2	109.5
Q2	111.5	106.9	119.2	105.4
Q3	111.6	106.9	119.5	105.8
Sep	111.8	107.5	119.5	105.5
Oct	112.3	107.4	120.7	106.7
Nov	112.7	108.4	120.6	108.3
2016	Foreign trade; € billion			Memo item Current account balance in € billion
	Exports	Imports	Balance	
Q1	297.89	236.37	61.52	75.15
Q2	299.17	233.56	65.61	70.99
Q3	298.83	236.83	62.00	64.72
Sep	100.14	79.03	21.11	20.47
Oct	100.64	79.98	20.66	21.36
Nov	104.52	82.80	21.72	21.25
2016	Labour market			
	Employment	Vacancies <sup>1</sup>	Unemployment	Unemployment rate in %
	Number in thousands			
Q2	43,484	647	2,700	6.1
Q3	43,496	664	2,678	6.1
Q4	...	681	2,651	6.0
Oct	43,526	676	2,661	6.0
Nov	43,560	679	2,655	6.0
Dec	...	687	2,638	6.0
2016	Prices; 2010 = 100			
	Import prices	Producer prices of industrial products	Construction prices <sup>2</sup>	Consumer prices
Q2	97.0	101.6	113.1	107.3
Q3	97.8	102.1	113.7	107.6
Q4	...	103.1	114.1	108.2
Oct	99.0	102.7	.	108.0
Nov	99.7	103.1	.	108.0
Dec	...	103.5	.	108.5

\* For explanatory notes, see Statistical Section, XI, and Statistical Supplement, Seasonally adjusted business statistics. <sup>1</sup> Excluding government-assisted forms of employment and seasonal jobs. <sup>2</sup> Not seasonally adjusted.

prises profited in particular from the brisk demand in non-euro-area countries. In line with this, nominal exports of goods in November showed a steep rise on the month (+3¾%). Average exports for the October-November period were also up significantly from their third-quarter level (+3%). In spite of rising export prices, a substantial increase of 2¼% was also posted in real terms. In November, nominal goods imports were likewise up considerably on the month (+3½%). The average of October and November, at 3%, also represented a steep increase from their third-quarter level. Owing to the quite dynamic development of import prices, however, the growth of goods imports was only nearly half as high in real terms (+1½%).

## Construction

Construction output continued its ascent in November 2016, posting a steep month-on-month increase of 1½% in seasonally adjusted terms. The average of October and November showed a significant increase of just over 1½% from the third quarter. This was due chiefly to the substantial expansion in the main construction sector (+3½%), in particular in building construction. The finishing trades posted a slight decline (-½%), however. The outlook for the construction sector overall remains very favourable. Both new orders and building permits in October – the most recent period for which statistics are available – are up considerably on their third-quarter level. Furthermore, according to the Ifo Institute, the business expectations of German construction firms are approaching the record level attained shortly after reunification.

*Construction sector still on expansionary course*

## Labour market

Following a few weaker months, employment recorded a somewhat stronger rise again in November 2016. The seasonally adjusted number of persons in work in Germany increased

*Somewhat stronger rise in employment again in November*

by 34,000 on the month, compared with +15,000 in October. However, growth was lower than one year earlier; the year-on-year increase declined further to 297,000 persons or +0.7%. According to the provisional disaggregated estimate provided by the Federal Employment Agency up until October, the primary reason why employment growth was relatively subdued in the third quarter and stretching into October is that the number of jobs subject to social security contributions went up only moderately; in addition, there continued to be a slightly negative trend in exclusively low-paid part-time employment. However, the leading labour market indicators, in particular the Ifo employment barometer and the Federal Employment Agency's BA-X job index, are still exceptionally favourable, implying that the recent stronger job growth might continue.

*Further fall in registered unemployment*

Seasonally adjusted unemployment in December fell significantly on the month. 2.64 million persons were registered as unemployed with the Federal Employment Agency, 17,000 fewer than in November. The unemployment rate remained at 6.0%. Compared with the same month one year earlier, 113,000 fewer persons were out of work, and the unemployment rate was 0.3 percentage point lower. Total underemployment (excluding short-time work), which also includes persons taking part in labour market policy measures, rose only marginally in December. This was preceded by a clear rise in underemployment using the Federal Employment Agency's definition in connection with measures to integrate refugees into the German labour market. According to the IAB labour market barometer, official unemployment could continue to fall slightly over the next few months.

## Prices

*Clear increase in crude oil prices*

After OPEC and other countries had agreed to cut oil production, crude oil prices rose considerably at the beginning of December 2016 and reached a level of just over US\$55 per barrel of

Brent crude on a monthly average. This represents a month-on-month increase of more than 15%. Owing to the distinct decline in prices in December 2015, the annual percentage growth even shot up from 4% to more than 40%. As this report went to press, the price of a barrel of Brent crude oil stood at US\$55. The premium on crude oil futures was US\$2 for deliveries six months ahead and only slightly higher for deliveries 12 months ahead.

Import and producer prices continued their ascent at the end of the year. Although energy prices were up only marginally up until November,<sup>1</sup> the prices of other goods rose sharply, notably at the import level. Overall, prices were up on the year. Import prices were up by +0.3% on the year in November and industrial producer prices by 1.0% in December (November +0.1%).

*Sharp increase in import and producer prices excluding energy*

Consumer prices recorded a steep rise of 0.5% in December in seasonally adjusted terms according to the national consumer price index (CPI). Prices for mineral oil products went up very significantly on the back of rising crude oil prices. Prices of services showed a clear increase on the month owing to a notable hike in prices for package holidays. Rents, by contrast, increased only moderately, and prices for food and other goods remained virtually unchanged. Overall, year-on-year inflation increased from +0.8% as measured by the national CPI and from +0.7% as defined by the Harmonised Index of Consumer Prices (HICP) to +1.7% in each case. This was also due to the marked decline in prices in December 2015. Inflation was still muted (CPI +0.5% and HICP +0.4%) on average for 2016. Given the recent clear rise in daily average prices for mineral oil products, inflation could climb to just over +2% in January.

*Steep rise in consumer prices*

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<sup>1</sup> At the import level, data are currently only available for November, a month in which crude oil prices had not yet increased. Data are already available for December at the industrial producer level, but the recent price surge only had a limited impact on account of the low weighting of oil.

## ■ Public finances<sup>2</sup>

### Local government finances

*Further budget deterioration in Q3 amidst clear revenue growth ...*

Local government core budgets and off-budget entities ran a small cash surplus in the third quarter of 2016, having posted a surplus of just over €1 billion a year earlier. Revenue continued to rise considerably (by 5½%, or just over €3 billion). Tax receipts increased by 3% (€½ billion), driven primarily by growth of just over 5% in revenue from local business tax (after deducting the shares accruing to other government levels). However, as in the previous quarter, the rise in transfers from state government – not least in connection with support for refugees – was still far stronger and more influential (9½%, or €2 billion). Also noteworthy was the rise of 9% (€½ billion) in receipts from fees, which was largely due to a special effect in North Rhine-Westphalia.<sup>3</sup>

*... due to even stronger rise in expenditure*

At just over 7½%, or €4½ billion, growth in expenditure was much stronger than that in revenue. Once again, the large increase in spending on social benefits made a particularly strong impact (11%, or €1½ billion). Given the substantial drop in refugee migration in 2016 and progress made in processing asylum applications,<sup>4</sup> outlays on benefits for asylum seekers fell somewhat on the quarter but were still up by a sizeable 75% (€½ billion) on the year. Spending on assistance for young people housed in welfare facilities, which notably includes benefits for unaccompanied refugee minors, grew by one-quarter (just under €½ billion). In addition, outlays on social assistance rose considerably (by 5½%, or just under €½ billion), whilst expenditure on accommodation for recipients of unemployment benefit II remained more or less stagnant. Other operating expenditure increased by 6½% (almost €1 billion). The impetus from refugee migration appeared to abate here too. At just below 6½% (€1 billion), year-on-year growth in personnel expenses was much stronger than in the previous quarters. The effects of the agreed 2½% increase in negotiated rates of pay were prob-

ably markedly augmented by back payments for the preceding months. At 5½% (just under €½ billion), the rise in fixed asset formation had slowed down but remained significant.

In the first three quarters combined, local government's budget balance thus deteriorated by €3 billion compared with the same period a year earlier. However, this downward trend may have come to an end in the final quarter for two reasons: first, the budgetary burdens associated with refugee migration were already relatively large a year earlier and, second, central and state government's cost assumption measures were probably making a greater impact by then. However, tax refunds due to previous court rulings were expected to curtail tax revenue in the final quarter. Nonetheless, local government may still have achieved a broadly balanced budget for 2016 as a whole.

*After deterioration in 2016, ...*

As things stand, budgetary burdens resulting from refugee migration are likely to decline in 2017. Irrespective of this, financial assistance from central government will be increased by a further €1½ billion. From 2018 onwards, the funds granted since 2015 will be replaced by the permanent financial relief package for local government (€5 billion), which has now been adopted and will result in an additional €2½ billion net for local government compared with 2017. Consequently, a marked improvement in local government finances is expected from this year onwards, with a return to perceptible surpluses. In addition, the relief measures

*... outlook much brighter*

<sup>2</sup> In the short commentaries on public finances, the emphasis is on recent outturns. The quarterly editions of the Monthly Report (published in February, May, August and November), by contrast, contain a detailed description of public finance developments during the preceding quarter. For detailed data on budgetary developments and public debt, see the statistical section of this report. A more detailed analysis of the longer-term development of local government finances can be found in Deutsche Bundesbank, Local government finances: Development and selected aspects, Monthly Report, October 2016, pp 13-36.

<sup>3</sup> New entities were evidently added to the reporting group in this state. For the same reason, there is likely to have been a marked acceleration in expenditure growth too.

<sup>4</sup> Once asylum has been granted, expenditure on refugees is largely covered by central government (basic allowance).



should also result in greater fixed asset formation by local government. The fund to promote municipal investment, which is set to increase by a further €3½ billion, should also contribute to this.

*Debt rose slightly in Q3*

In the reformed debt statistics,<sup>5</sup> local government (including its off-budget entities) recorded a debt level of €150 billion<sup>6</sup> at the end of the third quarter of 2016. While the amount of cash advances outstanding (€51½ billion)<sup>7</sup> fell slightly, other liabilities grew by just under €1 billion. However, there might have been mere shifts between the debt categories, as was evidently the case with past local government bond issuances in North Rhine-Westphalia. For some years now, Saarland, Rhineland-Palatinate, North Rhine-Westphalia and Hesse have recorded particularly large local government cash advances for their municipalities on aggregate. A marked easing of the situation, although desirable, was not yet in sight in the third quarter – indeed, Saarland actually reported another perceptible increase in this type of debt.

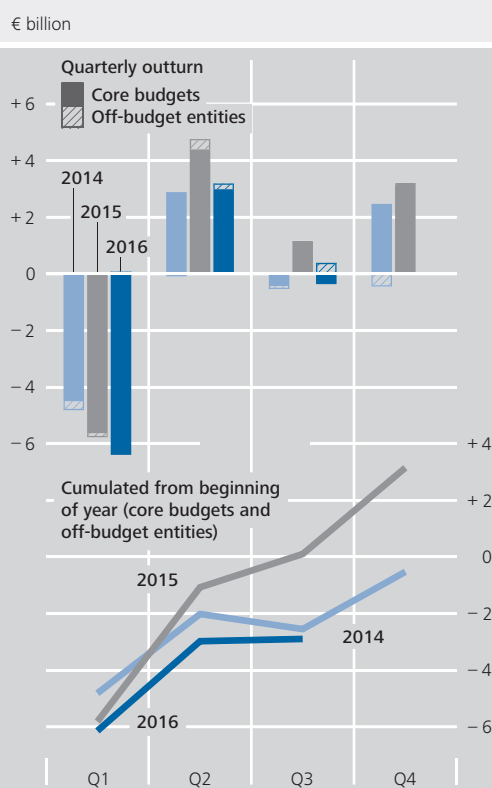
## ■ Securities markets

### Bond market

*Low net sales in the German bond market*

In November 2016, gross issuance in the German bond market stood at €75.5 billion, lagging behind the previous month's figure of €97.5 billion. Nonetheless, after taking account of redemptions, which were also down (€71.5 billion), and changes in issuers' holdings of their own debt securities, the outstanding volume of domestic bonds rose slightly by a net €2.4 billion, after having contracted by €6.4 billion in October. By contrast, the outstanding volume of foreign debt securities in the German market fell by €2.3 billion, which meant that the outstanding volume of domestic and foreign debt securities in Germany increased by just €0.1 billion on balance.

### Local government fiscal deficit/surplus



Source: Federal Statistical Office.  
 Deutsche Bundesbank

The public sector issued own bonds totalling €8.0 billion net in the reporting month, with central government increasing its capital market debt by €6.7 billion on balance. It issued mainly ten-year Federal bonds (Bunds) and two-year Federal Treasury notes (Schätze) in the amount of €4.7 billion and €4.6 billion respectively. It also sold five-year Federal notes (Bobls) to the tune of €0.6 billion, while redeeming 30-year bonds worth €0.3 billion net. State governments issued bonds with a net value of €1.3 billion.

*Increase in the public sector's capital market debt*

German credit institutions reduced their capital market debt by €5.2 billion in November. Most

<sup>5</sup> The Federal Statistical Office's press release of 28 September 2016 states that the reporting group in the quarterly statistics was aligned to that in the annual statistics from 2016 onwards. The new quarterly results are also marked as provisional.

<sup>6</sup> Debts owed to third parties, ie all public and non-public sector lenders apart from other municipalities and municipal special-purpose associations.

<sup>7</sup> According to the new statistics, this includes just under €2 billion from the public sector.

Sales and purchases of debt securities			
€ billion			
Item	2015	2016	
	November	October	November
<b>Sales</b>			
Domestic debt securities <sup>1</sup>	- 2.2	- 6.4	2.4
<i>of which</i>			
Bank debt securities	- 14.3	0.6	- 5.2
Public debt securities	13.9	- 10.3	8.0
Foreign debt securities <sup>2</sup>	1.3	- 2.7	- 2.3
<b>Purchases</b>			
Residents	5.8	10.7	14.4
Credit institutions <sup>3</sup>	3.3	- 7.6	- 2.5
Deutsche Bundesbank	12.8	17.3	18.7
Other sectors <sup>4</sup>	- 10.3	1.1	- 1.8
<i>of which</i>			
Domestic debt securities	- 6.2	0.0	1.7
Non-residents <sup>2</sup>	- 6.6	- 19.8	- 14.2
<b>Total sales/purchases</b>	<b>- 0.8</b>	<b>- 9.0</b>	<b>0.1</b>

1 Net sales at market values plus/minus changes in issuers' holdings of their own debt securities. 2 Transaction values. 3 Book values, statistically adjusted. 4 Residual.  
 Deutsche Bundesbank

and domestic non-banks likewise offloaded debt securities worth €2.5 billion and €1.8 billion net respectively. While the credit institutions chiefly parted with German securities, the non-banks exclusively sold foreign securities.

## Equity market

In the month under review, new shares totalling €0.7 billion net were issued in the German equity market, the majority of which emanated from listed enterprises. Sales of foreign shares in Germany amounted to €3.2 billion in the same period. Domestic non-banks dominated the buyers' side of the market, adding shares worth €3.2 billion net to their portfolios. Resident credit institutions acquired equities in the amount of €0.7 billion net, whereas non-resident investors sold domestic shares worth €0.1 billion.

*Net issuance in the German equity market*

## Mutual funds

Domestic mutual funds recorded inflows of €11.1 billion in November. Specialised funds reserved for institutional investors were the main beneficiaries (€9.0 billion). Of the various asset classes, mixed securities funds attracted the most investment (€5.6 billion). Funds of funds, real estate funds and equity funds also sold shares (€1.9 billion, €1.7 billion and €1.5 billion respectively). Meanwhile, foreign mutual funds recorded redemptions of €0.8 billion net in the German market. On balance, domestic non-banks were the sole purchasers of mutual fund shares in the reporting month (€12.8 billion). German credit institutions redeemed shares for €0.6 billion net, and foreign investors offloaded mutual fund shares worth €1.1 billion net.

*German mutual funds record inflows*

*Net redemptions by credit institutions*

notably, the outstanding volume of debt securities issued by specialised credit institutions (which include public promotional banks, for example) fell by €3.4 billion on balance. There were also net redemptions of public Pfandbriefe as well as other bank debt securities that can be structured flexibly (€1.8 billion and €1.1 billion respectively). By contrast, mortgage Pfandbriefe worth €1.1 billion net were issued.

*Minor reduction in enterprises' capital market debt*

Domestic enterprises also scaled back their capital market debt in November (by €0.4 billion). On balance, this decrease is mainly due to net redemptions of commercial paper.

*Purchases of debt securities*

The Bundesbank was ultimately the sole buyer of debt securities in November, acquiring bonds in the amount of €18.7 billion net under the Eurosystem's asset purchase programmes, amongst other things. The main sellers of debt securities were foreign investors, who disposed of a net €14.2 billion worth of such instruments. However, German credit institutions

## Balance of payments

Germany's current account recorded a surplus of €24.6 billion in November 2016, putting it €5.2 billion above the October level. This was

*Rise in current account surplus*

partly driven by an increase in the goods account surplus and a boosted invisible current transactions balance comprising services as well as primary and secondary income.

*Higher goods account surplus*

In November, the surplus on the goods account was up on the month by €3.2 billion to €24.3 billion, with exports rising more strongly than imports.

*Improved balance of invisible current transactions*

Invisible current transactions recorded a modest €0.3 billion surplus in November, compared with a deficit of €1.7 billion one month earlier. This turnaround was mainly due to a halving of the services account deficit by €1.8 billion to €1.8 billion, which in turn was principally attributable to the downturn in travel expenditure typical for this time of year. Moreover, net receipts in the primary income item saw a slight rise of €0.4 billion to €6.1 billion, whereas the secondary income deficit went up marginally by €0.2 billion to €4.0 billion.

*Foreign investors drive capital exports in portfolio investment*

In November, events on the international financial markets were dominated by the outcome of the US elections as well as expectations that the US Federal Reserve would raise rates in December, which is indeed what happened. All in all, German cross-border portfolio investment generated net capital exports of €14.9 billion, mainly on account of further disposals of German securities by foreign holders (€15.5 billion in November after €16.2 billion in October). These investors chiefly sold German money market paper worth €13.6 billion in net terms. They also parted with mutual fund shares (€1.1 billion) and bonds (€0.7 billion). By contrast, resident investors shed only a small amount of foreign securities from their portfolios (€0.6 billion). They sold debt securities (€2.3 billion) and mutual fund shares (€0.8 billion), while bolstering their holdings of foreign shares by €2.5 billion.

*Capital exports also recorded for direct investment ...*

Direct investment continued to record net capital exports in November, though down on the month from €16.0 billion to €2.3 billion. In the main, these outflows arose from intensified for-

## Major items of the balance of payments

€ billion

Item	2015		2016	
	Nov	Oct	Nov	P
I Current account	+ 24.9	+ 19.4	+ 24.6	
1 Goods <sup>1</sup>	+ 22.2	+ 21.1	+ 24.3	
Exports (fob)	101.5	100.7	108.1	
Imports (fob)	79.3	79.6	83.8	
Memo item				
Foreign trade <sup>2</sup>	+ 20.5	+ 19.4	+ 22.6	
Exports (fob)	102.7	101.6	108.5	
Imports (cif)	82.2	82.2	85.8	
2 Services <sup>3</sup>	- 1.7	- 3.7	- 1.8	
Receipts	19.3	20.7	20.6	
Expenditure	21.1	24.4	22.5	
3 Primary income	+ 6.9	+ 5.7	+ 6.1	
Receipts	15.5	14.7	15.0	
Expenditure	8.6	9.0	8.9	
4 Secondary income	- 2.5	- 3.8	- 4.0	
II Capital account	+ 0.2	- 0.2	- 0.1	
III Financial account (increase: +)	+ 20.1	+ 28.2	+ 30.5	
1 Direct investment	+ 14.8	+ 16.0	+ 2.3	
Domestic investment abroad	+ 20.1	+ 9.4	+ 9.1	
Foreign investment in the reporting country	+ 5.3	- 6.6	+ 6.8	
2 Portfolio investment	+ 10.9	+ 21.7	+ 14.9	
Domestic investment in foreign securities	+ 6.6	+ 5.5	- 0.6	
Shares <sup>4</sup>	+ 4.2	+ 1.6	+ 2.5	
Investment fund shares <sup>5</sup>	+ 1.1	+ 6.5	- 0.8	
Long-term debt securities <sup>6</sup>	+ 0.1	- 1.6	- 1.9	
Short-term debt securities <sup>7</sup>	+ 1.2	- 1.1	- 0.5	
Foreign investment in domestic securities	- 4.2	- 16.2	- 15.5	
Shares <sup>4</sup>	+ 3.3	+ 3.4	- 0.1	
Investment fund shares	- 0.9	+ 0.1	- 1.1	
Long-term debt securities <sup>6</sup>	+ 4.0	- 12.9	- 0.7	
Short-term debt securities <sup>7</sup>	- 10.6	- 6.8	- 13.6	
3 Financial derivatives <sup>8</sup>	+ 4.2	+ 4.4	+ 5.2	
4 Other investment <sup>9</sup>	- 9.1	- 13.8	+ 8.0	
Monetary financial institutions <sup>10</sup>	- 25.4	+ 4.4	- 25.3	
of which				
Short-term	- 13.7	- 1.3	- 36.4	
Enterprises and households <sup>11</sup>	- 0.4	- 9.4	+ 2.4	
General government	+ 3.5	- 5.9	- 3.9	
Bundesbank	+ 13.2	- 2.8	+ 34.8	
5 Reserve assets <sup>12</sup>	- 0.5	- 0.1	+ 0.1	
IV Errors and omissions <sup>13</sup>	- 4.9	+ 8.9	+ 6.0	

<sup>1</sup> Excluding freight and insurance costs of foreign trade. <sup>2</sup> Special trade according to the official foreign trade statistics (source: Federal Statistical Office). <sup>3</sup> Including freight and insurance costs of foreign trade. <sup>4</sup> Including participation certificates. <sup>5</sup> Including reinvestment of earnings. <sup>6</sup> Long-term: original maturity of more than one year or unlimited. <sup>7</sup> Short-term: original maturity of up to one year. <sup>8</sup> Balance of transactions arising from options and financial futures contracts as well as employee stock options. <sup>9</sup> Includes in particular loans and trade credits as well as currency and deposits. <sup>10</sup> Excluding the Bundesbank. <sup>11</sup> Includes the following sectors: financial corporations (excluding monetary financial institutions) as well as non-financial corporations, households and non-profit institutions serving households. <sup>12</sup> Excluding allocation of special drawing rights and excluding changes due to value adjustments. <sup>13</sup> Statistical errors and omissions, resulting from the difference between the balance on the financial account and the balances on the current account and the capital account.

eign investment on the part of domestic companies (€9.1 billion), with around two-thirds of this outlay being spent to boost equity capital abroad. These firms also channelled funds to their foreign subsidiaries through intra-group lending, relying almost exclusively on trade credits to do so. Conversely, there was a trend reversal in foreign enterprises' funding of their affiliates in Germany inasmuch as these non-resident firms provided their affiliates with funds to the tune of €6.8 billion, after having reduced such funding by roughly the same amount one month previously. The bulk of these funds were distributed using intra-group loans (€6.1 billion), primarily in the form of financial loans from fellow affiliated companies.

*... and other investment*

Ultimately, net capital exports (€8.0 billion) were also recorded for other statistically recorded investment, comprising loans and trade credits (where these do not constitute direct investment) as well as bank deposits and other investments. However, non-banks recorded net

inflows of funds (€1.5 billion). Capital imports recorded by general government (€3.9 billion) contrasted with capital exports on the part of enterprises and households (€2.4 billion). In contrast to this, monetary financial institutions (including the Bundesbank) recorded net capital outflows (€9.5 billion), not least thanks to the €34.8 billion rise in the Bundesbank's net claims on non-residents. This in turn was mainly the result of an increase in claims within its large-value payment system TARGET2 (+€46.0 billion), the highest increase since January 2015. By contrast, there was an upturn in the volume of other central banks' sight deposits held with the Bundesbank (€11.3 billion). Conversely, banks' transactions, notably steps taken to whittle down their deposits with foreign counterparties, led to net capital imports (€25.3 billion net).

The Bundesbank's reserve assets went up slightly – at transaction values – by €0.1 billion in November.

*Reserve assets*

## The Eurosystem's bond purchases and the exchange rate of the euro

*In January 2015, the Governing Council of the ECB announced an expanded asset purchase programme (APP) and thereafter twice extended its duration besides increasing the monthly volume of purchases. The aim of the programme is to bring inflation in the euro area back up to rates that are below, but close to, 2% over the medium term. Theoretical considerations suggest that there are a number of mechanisms through which asset purchases should be instrumental in achieving the desired effect. These mechanisms are aimed directly at investors' portfolio decisions and market players' monetary policy expectations; the relevant adjustments may also indirectly involve a depreciation of the euro.*

*Against this background, the present article is concerned with the impact of the Eurosystem's bond purchases on the euro's exchange rate. To this end, we first look at how the exchange rate responded on the dates on which the Governing Council of the ECB took its decisions on the asset purchase programme. In this context, the considerable depreciation of the euro on the day the APP was adopted is particularly striking; a larger daily fall in the euro's effective exchange rate had been recorded only once previously.*

*This is all the more notable considering that market expectations about such measures had already led to the euro depreciating in the preceding weeks. There are, however, numerous inherent difficulties in quantifying the effects that changes in expectations about the APP had on the euro's exchange rate. For example, a depreciation of the euro tends to reflect not only the quantitative easing of the Eurosystem, but also its standard policy measures as well as the gradual tightening of the monetary policy stance in the United States during the same period. A study conducted at the Bundesbank attempts to take into account the aspects raised as far as possible; this identifies a 4.7% depreciation in the nominal effective exchange rate of the euro and a 6.5% depreciation of the euro against the US dollar since 2014 as the aggregate effect of direct and expectation formation-related market reactions to the decisions taken by the ECB Governing Council on purchasing government bonds.*

*Besides the effects of the decisions to buy assets and related expectations, this article considers the potential exchange rate effects of the Eurosystem's actual purchase operations. To do this, the report presents two alternative empirical studies. Both are consistent in concluding that the Eurosystem's asset purchases themselves have not achieved any significant additional exchange rate effects beyond the cited announcement effects and corresponding expectations.*

## The Eurosystem's asset purchase programmes since autumn 2014

*Buying asset-backed securities and covered bonds*

Given repeated negative surprises with regard to the rate of inflation and declining inflation expectations in the euro area, in September 2014 the Governing Council of the ECB began taking step-by-step measures that can be summarised under the heading of "quantitative easing".<sup>1</sup> First, it announced the asset-backed securities purchase programme (ABPSPP) and the third covered bond purchase programme (CBPP3).<sup>2</sup> The net volumes of the securities acquired by the Eurosystem on the basis of these two programmes were still relatively small with monthly totals of between €1.1 billion and €13.6 billion.

*Expanded asset purchase programme (APP)*

In January 2015, the Governing Council of the ECB adopted the expanded asset purchase programme (APP), which comprised the public sector purchase programme (PSPP) in addition to CBPP3 and ABSP. Given the large volume and the liquidity of the outstanding sovereign bonds, the PSPP allowed the Eurosystem to greatly expand its purchases of securities. It was initially planned that purchases under the APP would have a monthly volume of €60 billion. The programme was originally scheduled to last until September 2016 with purchases totalling €1,140 billion; in December 2015, the period was extended until March 2017, raising the intended overall volume of the programme by €360 billion. In March 2016, the monthly purchases were raised to €80 billion, which expanded the overall volume of the programme by a further €240 billion. Besides the asset classes that were already eligible, the programme now also made provision for buying bonds issued by non-bank corporations. Finally, in December 2016, a further extension of the programme's duration with monthly purchases of €60 billion between April and December 2017 was announced. This represented an additional increase of €540 billion in the intended volume of purchases.

## Transmission channels of quantitative easing via the exchange rate

The Eurosystem's asset purchase programmes cited above were adopted with the aim of bringing price developments in the euro area into line with the Governing Council's definition of price stability. How far this goal is achieved depends in part, however, on how and how strongly the euro's exchange rate reacts to the measures taken; this is because a depreciation of the euro increases the prices of imported goods, thus placing upward pressure on prices in the euro area, whereas an appreciation of the euro tends to dampen domestic inflationary pressure. Theoretically, there are various conceivable mechanisms through which quantitative easing by the Eurosystem can influence the euro's exchange rate.

*Impact of the programmes on price stability also contingent on the reaction of the exchange rate*

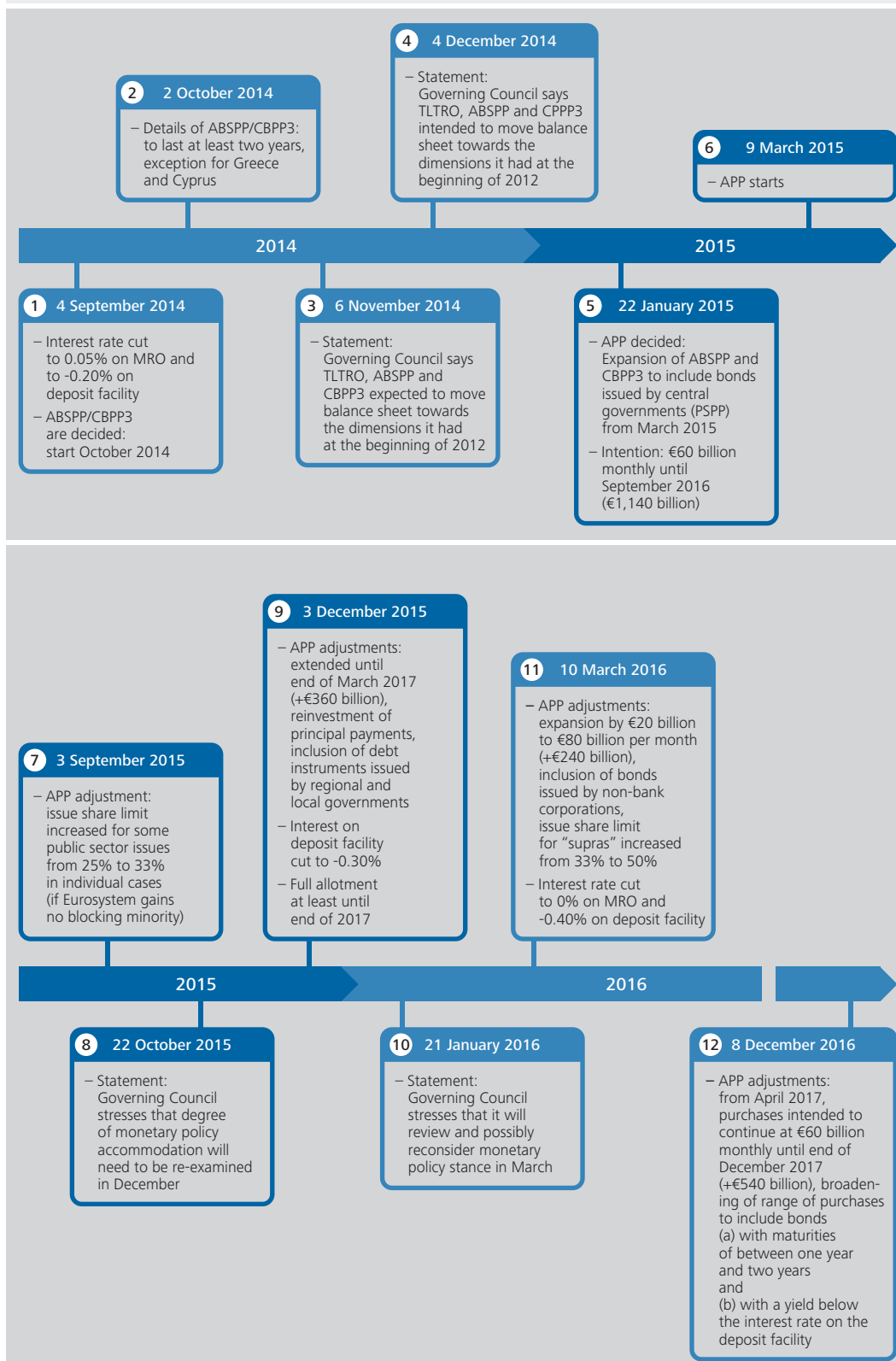
One of these mechanisms is the portfolio rebalancing channel. This posits that domestic and foreign securities are not regarded as being entirely identical (substitutable) in the eyes of investors in terms of their risk content, say, or their liquidity. Under this assumption, a bond purchase by a country's home central bank leads not only to a reduction in the bonds held in the domestic private sector, but also to an increase in the price/decline in the yield of these securities. This will prompt investors to adjust their portfolios by acquiring *inter alia* foreign bonds, thereby generating net outflows

*Portfolio rebalancing channel*

<sup>1</sup> A more detailed description of the Eurosystem's non-standard measures since mid-2014 is provided by Deutsche Bundesbank, The macroeconomic impact of quantitative easing in the euro area, Monthly Report, June 2016, pp 29-53.

<sup>2</sup> There had already been various Eurosystem asset purchase programmes in earlier years as part of the monetary policy response in coping with the financial, economic and sovereign debt crisis, but their volumes were comparatively small. These include covered bond purchase programmes 1 and 2 (CBPP1 und CBPP2) as well as the securities markets programme (SMP).

## Chronology of selected Eurosystem monetary policy measures since autumn 2014\*



\* Abbreviations used: ABSPP = Asset-backed securities purchase programme; APP = Expanded asset purchase programme; CBPP = Covered bond purchase programme; MRO = Main refinancing operation; PSPP = Public sector purchase programme; TLTRO = Targeted longer-term refinancing operations.

of capital which, in turn, bring about a depreciation of the domestic currency.<sup>3</sup>

*Any issuing activity weakens exchange rate effect*

The described sequence of events makes it clear that the portfolio adjustment in question and the resulting depreciation of the domestic currency is initiated only if there is sufficient scope for a corresponding reduction in the yield. Declining yields, in turn, set incentives for the issuers to expand their debt and borrow additional funds through new issues. If such a reaction occurs,<sup>4</sup> the decline in the yield and, therefore, the effect on the exchange rate is weakened.

*Signalling channel*

The signalling channel is a further mechanism through which asset purchases can impact on the exchange rate. This channel operates in such a way that market players could construe the announcement of quantitative easing as a signal that the monetary policy stance is going to remain expansionary for longer than previously expected and that future money market rates, too, will therefore stay low for longer. This, in turn, would bring current capital market rates under pressure. Much like with the portfolio rebalancing channel, such developments would tend to provoke net outflows of capital and a depreciation of the domestic currency.

*Other channels*

Besides the two channels already mentioned, a further mechanism is occasionally cited, which is also known as the "confidence channel".<sup>5</sup> This posits that the central bank's announcement of asset purchases can also have an impact on investors' attitude towards risk. As a result of such an announcement, for example, the view that the outlook for growth at home is less favourable than hitherto supposed might gain ground among market participants.<sup>6</sup> This would lead to a rise in risk premiums. Conversely, in a setting where heightened uncertainty already exists, the central bank's measures might strengthen investors' confidence, thus lowering the risk premium. This last-named effect could, all other things being equal, provoke inflows of capital, thus weaken-

ing the depreciation of the domestic currency induced through the other channels.

For quantitative easing actually to lead to the theoretically expected depreciation of the domestic currency, it is necessary for the trading partners also to allow a corresponding appreciation of the partner currencies. They might try to neutralise the expected capital inflows with their own expansionary – standard or non-standard – monetary policy measures or even introduce or strengthen capital controls. De-

*Monetary policy measures by partner countries can reduce exchange rate reactions*

<sup>3</sup> The Governing Council of the ECB was also quick to point out such portfolio rebalancing effects having an impact on the exchange rate; as, for instance, ECB President Draghi said at the Frankfurt European Banking Congress on 21 November 2014, "Substitution of assets can also take place across jurisdictions, which would take the form of investors rebalancing portfolios away from euro-denominated assets towards other jurisdictions and currencies providing higher yields. For example, there is evidence that both the various Large Scale Asset Purchase programmes of the Fed as well as the Bank of Japan's Quantitative and Qualitative Easing programme led to a significant depreciation of their respective exchange rates, even in a situation in which long-term yields were already very low, as in Japan."

<sup>4</sup> In actual fact, the Eurosystem's eligible assets database shows, for instance, that the outstanding volume of bonds issued by central governments in the euro area showed a net rise of €405 billion between the end of 2014 and mid-2016. More than €300 billion of this was due to net issuance by Italy, France and Spain. This contrasts with a volume of government bonds purchased under the PSPP in the total cumulative amount of €885 billion over the same period. This suggests that the programme's foreseeable effects on the yield and the exchange rate as a result of portfolio adjustments would have been perceptibly greater without this net issuance. In this connection, the German Council of Economic Experts writes in its annual report (Jahresgutachten) 2016, p 212, "Bei niedrigen Zinsen ergibt sich ein Anreiz, den Konsolidierungsprozess aufzuschieben. So könnten die bisherigen Zinssenkungen bereits zu höher als geplanten staatlichen Ausgaben beigetragen haben ..." ["With low interest rates, there is an incentive to postpone the consolidation process. The interest rate cuts so far could already have contributed to public expenditure being higher than planned ...".] The ECB Financial Stability Review, November 2016, p 31, states: "... fiscal reform efforts appear to have lost momentum as urgency has dwindled amid low sovereign financial market stress."

<sup>5</sup> See M Fratzscher, M Lo Duca and R Straub (2013), On the international spillovers of US quantitative easing, ECB Working Paper 1557, as well as M Fratzscher, M Lo Duca and R Straub (2016), ECB unconventional monetary policy: market impact and international spillovers, IMF Economic Review 64, pp 36-74.

<sup>6</sup> Such a reaction is discussed, for example, in connection with the US Federal Reserve's first asset purchase programme in 2008 and 2009, but is found not to be substantiated. See C J Neely (2011), The large-scale asset purchases had large international effects, Federal Reserve Bank of St. Louis Working Paper 2010-018C.



fensive measures of this kind are often motivated by the worry that the appreciation of their currency could impair their economy's price competitiveness or exert a deflationary impulse. If the partner currency is pegged to the euro by a fixed exchange rate, the foreign central bank is bound – on institutional grounds alone – to undertake foreign exchange interventions in order to prevent an appreciation of its currency. Monetary easing measures in partner countries that are adopted in the same period as the Eurosystem's asset purchase programmes do not necessarily have to be understood as a response to them. Global developments such as a fall in oil prices which – via second-round effects – lead to the outlook for inflation deviating worldwide from the intended target, may make expansionary policy measures seem advisable in different currency areas independently of each other.

## Exchange rate reactions on the day the Eurosystem decides on the public sector asset purchase programme

*Effective exchange rate of the euro based on euro foreign exchange reference rates*

As information that has a bearing on exchange rates can be processed quite rapidly on the foreign exchange markets, it is to be expected that Governing Council decisions on purchasing assets are reflected in marked exchange rate movements almost as soon as they are announced. To measure this effect, the rate of change in the nominal effective exchange rate of the euro over a period of one day is often used; this is calculated as a trade-weighted average of nominal bilateral rates between the euro and a large number of other currencies. The European Central Bank fixes the euro foreign exchange reference rates on every trading day based on a point-in-time snapshot at 14.15 CET. When the decisions of the Governing Council are made public at the press conference, which starts at 14.30 following the Governing Council meeting, the time until the reference rate is determined on the next day therefore spans a period of almost 24 hours.

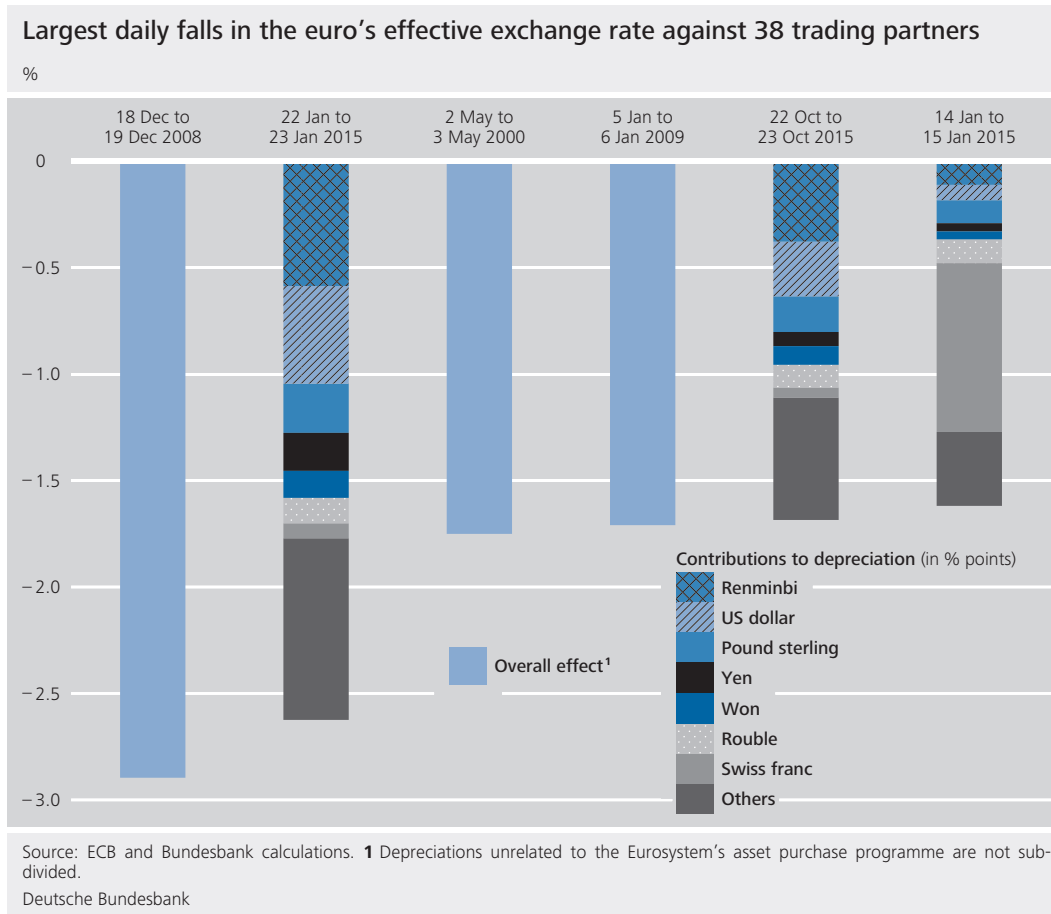
A comparison of the daily rates of change in the euro's effective exchange rate does indeed suggest that information connected with the Eurosystem's asset purchase programme can quite obviously trigger substantial exchange rate reactions over the short term. This is evident alone from the fact that, of the six largest daily falls in the euro's effective exchange rate against the currencies of 38 trading partners since the euro was launched in 1999, three are closely related to the APP.<sup>7</sup> For example, the euro's effective exchange rate fell by 1.7% between 22 October 2015 and the following day after the Governing Council announced that the degree of monetary policy accommodation would need to be re-examined at the December monetary policy meeting. This announcement was construed in the markets as hinting at a forthcoming monetary policy easing, perhaps also by means of marked expansion of the purchase programme. The effective exchange rate of the euro underwent a fall of a similar magnitude of 1.6% between 14 and 15 January 2015 when the Swiss National Bank discontinued the minimum rate of the Swiss franc against the euro in anticipation of the ECB Governing Council initiating a large-scale asset purchase programme.

However, the euro's effective exchange rate sustained a very heavy loss – of 2.6%, its second-largest loss ever – on the day the Governing Council announced the APP, ie between 22 and 23 January 2015. This strong depreciation of the euro's effective exchange rate resulted from broadly based losses against a large number of partner currencies. The currencies which have the highest weight in calculating the effective exchange rate of the euro are largely identical with those that played the largest part in the depreciation. This suggests that events outside the euro are hardly likely to have

*Of the six largest daily falls in the euro's effective exchange rate since 1999, three are closely related to the APP*

*Broad-based euro depreciation on the day of the APP decision ...*

<sup>7</sup> Two further falls, including the largest ever effective daily decline in the history of the euro at 2.9%, occurred at the height of the global financial and economic crisis in late 2008 and early 2009; finally, a further fall can be noted during the period of widespread scepticism about what was then still the new euro currency in spring 2000.



contributed to the fall in the effective exchange rate.

*... was particularly pronounced against non-European currencies ...*

Even so, the euro by no means depreciated uniformly against different currencies. The euro's daily loss against the US dollar amounted to 3.6%, for example, which means that 22 to 23 January 2015 also saw the euro's second-largest daily depreciation in its bilateral exchange rate against the US dollar since the single currency was introduced. Against the currencies of other major trading partners from outside Europe and Eurasia (China, Japan, Russia, South Korea and Turkey), the euro likewise depreciated by between 2.9% and 4.0%.

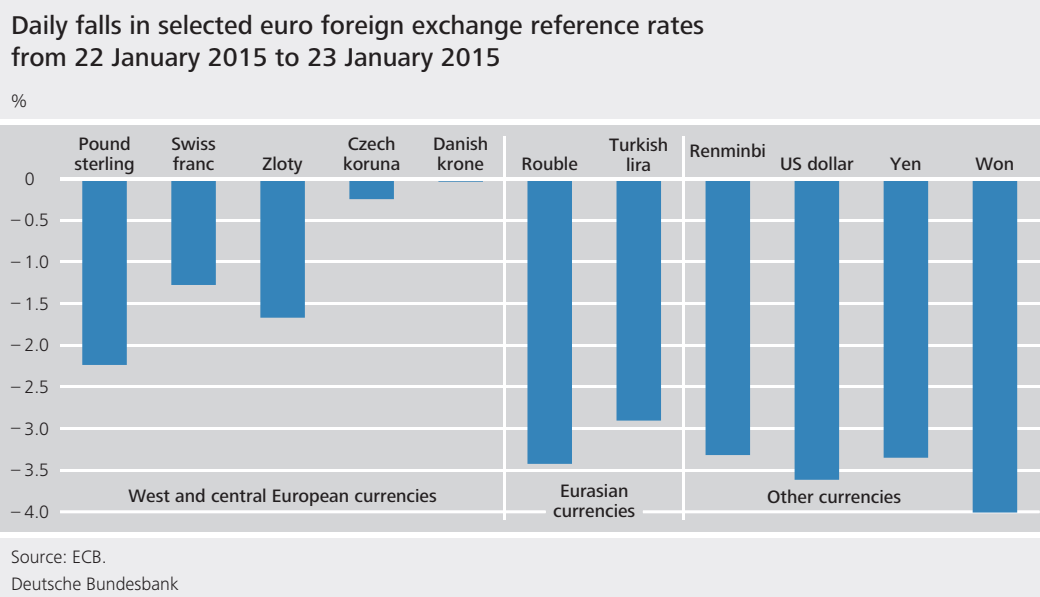
*... but disproportionately small against west and central European currencies*

Against west and central European currencies (the euro area's most important trading partners: the Czech Republic, Denmark, Poland, Switzerland and the United Kingdom), by contrast, the depreciation was consistently weaker. This was partly due to the fact that some European countries, such as Denmark, as members

of ERMII, peg their currencies to the euro and allow only very narrow fluctuations against it. The authorities of other countries intervened in the foreign exchange markets on a more or less discretionary basis against their own currencies, thus preventing them from appreciating against the euro. Finally, the high degree of economic integration within Europe may be accompanied by a stronger co-movement of the currencies concerned. This can be explained, say, by economic cycles within Europe being more synchronised than they are globally or by the national monetary policies of other European countries following the lead set by Eurosystem monetary policy.

The extremely sharp depreciation of the euro on the day when the APP was announced, when set in the context of other times, can be compared with the exchange rate reactions when asset purchase programmes are adopted in other major currency areas. Both the Federal Reserve and the Bank of England initiated pro-

*Similar exchange rate reactions to decisions on government bond purchases in other currency areas*



grammes to make large-scale purchases of assets for the first time in March 2009.<sup>8</sup> The US dollar's effective exchange rate fell by 2.3% on 18 March 2009, the day the decision was announced.<sup>9</sup> As early as 5 March 2009, the Bank of England announced its decision to use the asset purchase facility. In this instance, too, there was a marked depreciation, ie a fall of 2.5% in the pound sterling's effective exchange rate, albeit only with the rate of change from the following day onwards.<sup>10</sup> Thus, the depreciation of the euro following the APP decision is within the range also observed in other currency areas in connection with decisions to purchase assets.

meeting in December 2016. However, for the March date, it should be borne in mind that the Governing Council's monetary policy deci-

<sup>8</sup> As early as November 2008, however, the Fed had taken a decision to initiate a programme to purchase large volumes of mortgage-backed securities and direct obligations of housing-related government-sponsored enterprises.

<sup>9</sup> In order to improve comparability, the effective exchange rate of the US dollar is calculated here against the same broad range of currencies that is used to determine the effective exchange rate of the euro. As the decisions of the Federal Open Market Committee have generally been released, since March 2013, at 14.00 Eastern Standard Time (Eastern Daylight Time), which corresponds to 20.00 Central European Time (Central European Summer Time), the observation period of just under 24 hours is reduced by roughly one-quarter when using euro foreign exchange reference rates. On the financial market effects of the first US asset purchase programme, see, for example, J Gagnon, M Raskin, J Remache and B Sack (2011), The financial market effects of the Federal Reserve's large-scale asset purchases, *International Journal of Central Banking* 7(1), pp 3-43; the exchange rate reactions are analysed inter alia in C J Neely (2015), Unconventional monetary policy had large international effects, *Journal of Banking and Finance* 52, pp 101-111.

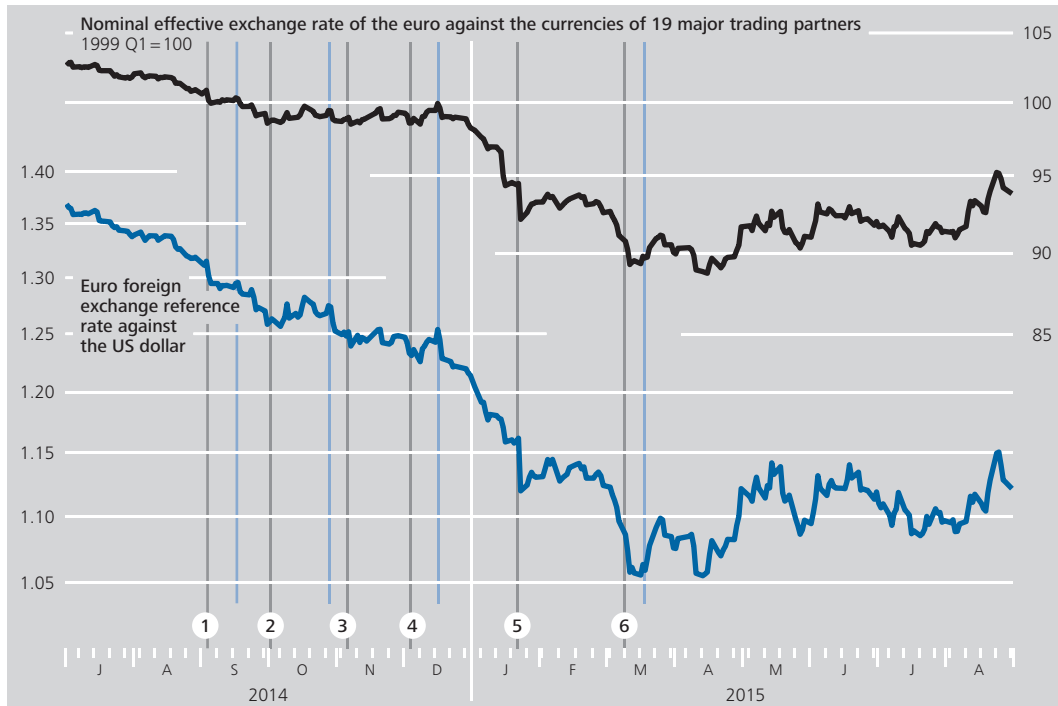
<sup>10</sup> The rate of change amounting to -2.5% is calculated in turn from the effective exchange rates of the pound sterling against the same basket of currencies on Friday 6 March and on Monday, 9 March 2009. From 5 March to 6 March, a 0.3% appreciation of the pound sterling was recorded. Even if the depreciation of the pound sterling up to 9 March was due entirely to the Bank of England's monetary policy decisions on 5 March, a qualification that has to be borne in mind is that, simultaneously with the decision on the asset purchase facility, there was a ½ percentage point cut in the Bank of England's base rate. A detailed account of the financial market effects of quantitative easing in the United Kingdom may be found, for example, in M A S Joyce, A Lasaosa, I Stevens and M Tong (2011), The financial market impact of quantitative easing, *International Journal of Central Banking* 7(3), pp 113-161.

*How the euro reacted to decisions to expand asset purchases*

Since asset purchases under the APP commenced on 9 March 2015, the programme has been expanded considerably on three occasions, as mentioned above. The corresponding decisions were taken at the Governing Council meetings dated 3 December 2015, 10 March 2016 and 8 December 2016. The first two decisions concerned packages of measures which, besides expanding the APP, comprised a further cut in policy rates as well as additional non-standard measures. Nevertheless, the effective exchange rate of the euro was markedly higher one day after each of these decisions (by 1.6% and 1.5% respectively), whereas it was down by 1.2% one day after the Governing Council

## Euro exchange rate\*

Daily data, log scale



Source for the time series: ECB. \* The vertical grey lines indicate selected days on which monetary policy easing measures by the Eurosystem were recorded (see chart on p 15). The vertical light blue lines indicate selected days on which monetary policy tightening measures by the Federal Reserve Board were recorded.

Deutsche Bundesbank

sions regarding the asset purchase programme – unlike in the past – had already been made public in a press release at 13.45, ie before the euro foreign exchange reference rates were determined at 14.15.<sup>11</sup> In the intervening half-hour, ie as an immediate response to the press release, the euro depreciated against major currencies. Yet even for the rate of change over two days (from 9 to 11 March 2016) there was still a 0.6% appreciation in the euro’s effective exchange rate.<sup>12</sup> What would appear, at first glance, to be a counter-intuitive response by the exchange rate to quantitative easing can be explained, at least in part, by the fact that market participants had already been expecting expansionary measures from the Governing Council, with the impact on the euro being dictated by how far the actual measures taken differed from the previously-held expectations.

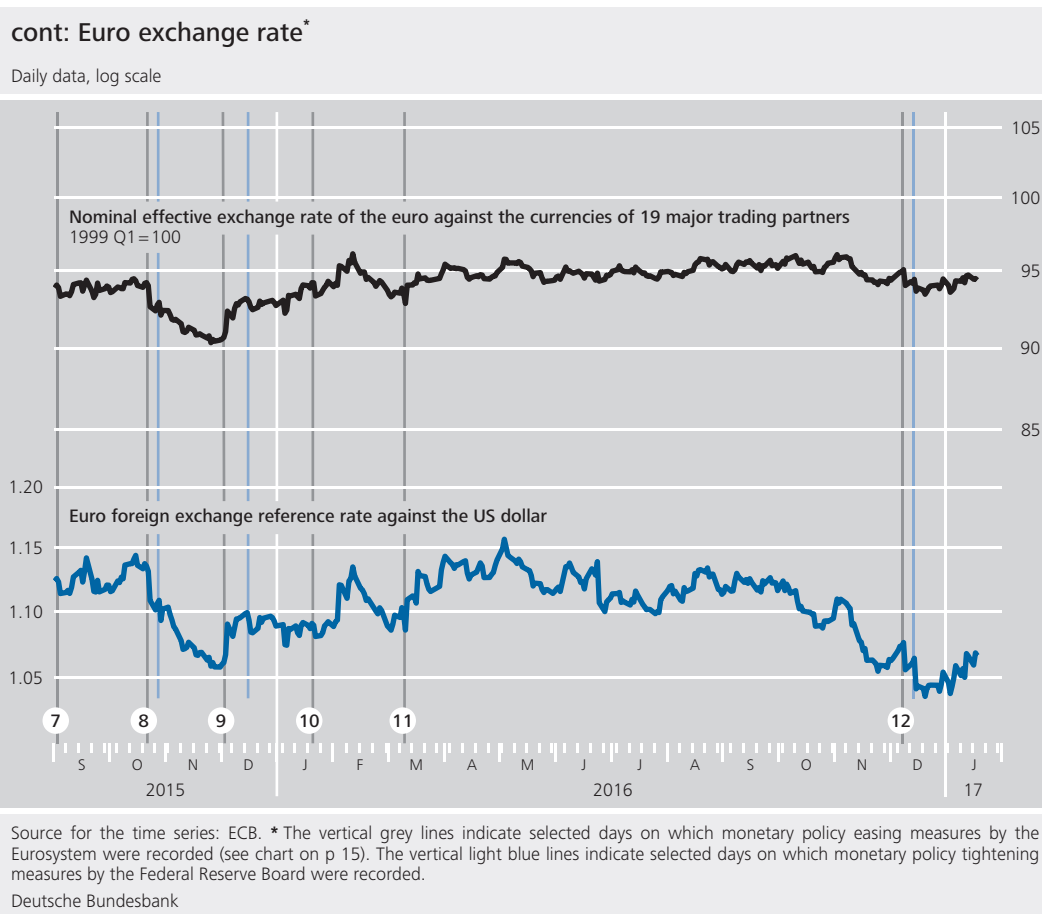
## Expectation and announcement effects

Neither the decision on the APP dated 22 January 2015 nor the three aforementioned decisions to expand the programme came as a complete surprise to foreign exchange market participants. Indeed, comments by Governing Council members in the weeks leading up to said dates, in particular, induced market participants to expect a more or less substantial eas-

*Expectation effects need to be considered when determining the APP’s overall impact on the euro*

<sup>11</sup> Previous to this date, the substance of press releases had been confined to policy rate decisions by the Governing Council. Press releases thus contained no information on non-standard monetary policy measures. Similarly, the decision dated 8 December 2016 to extend the programme had been made public earlier (at 13.45) in a press release. Here, too, it makes sense to measure from 7 to 9 December to determine the exchange rate reaction. Over this period, the effective exchange rate of the euro depreciated by 1.0%.

<sup>12</sup> Now proceeding to analyse the exchange rate reaction from 9 to 10 March on account of the press release would have the disadvantage of disregarding the impact on the euro of the ECB press conference on 10 March (scheduled for the usual time of 14.30), which provided further background on the decisions regarding the APP.



ing of monetary policy. If such expectations are formed or if, in the eyes of market participants, the probability of an expected easing measure increases, this ought to be directly reflected in a depreciation of the euro.<sup>13</sup> On the day of the decision itself, then, the euro should have responded only to the extent that the measures taken deviate from those expected on average. This makes the euro's strong reaction on 22 January 2015 all the more remarkable. By contrast, to determine the overall impact of the asset purchase programme on the euro exchange rate, it would then be necessary, however, to consider not just the reaction to the decisions themselves, but also the exchange rate effects attributable to news from the period before the decision which had a major bearing on the formation of expectations surrounding any potential forthcoming quantitative easing measures.

Against this backdrop, it is useful to begin by considering euro exchange rate developments

in the months leading up to the introduction of quantitative easing and the period since then. A corresponding time series reveals, for instance, that the euro experienced a perceptible and rather steady loss in value against the US dollar between mid-2014 and 23 January 2015, which is one day after the decision to launch the APP was taken. The euro dwindled from just under US\$1.37 on 30 June 2014 to as little as US\$1.12 on 23 January 2015. On balance, this equates to a depreciation of the euro by 18.0%. Although the euro suffered further marked losses in value at times (including in the first half of March 2015), the subsequent quarters saw the EUR/USD rate moved sideways, fluctuating within a range of between US\$1.05 and US\$1.16. The single currency came under pressure after the presidential elections in the

*Developments in the EUR/USD exchange rate ...*

<sup>13</sup> See, for example, T.G. Andersen, T. Bollerslev, F.X. Diebold and C. Vega (2003), Micro effects of macro announcements: real-time price discovery in foreign exchange, *American Economic Review* Vol 93, pp 38-62.

United States in November 2016 and was trading at US\$1.07 as this report went to press.

*... and the effective exchange rate of the euro since March 2014*

Developments in the nominal effective exchange rate of the euro<sup>14</sup> followed a similar pattern, with the euro depreciating by 10.4% against the currencies of 19 major partner countries between 30 June 2014 and 23 January 2015. However, this exchange rate did not move as smoothly as the bilateral EUR/USD rate during this period. Thus, the effective exchange rate of the euro remained almost static on balance between mid-September and mid-December 2014, before suffering a particularly substantial loss in value up to 23 January 2015. Although the effective euro rate likewise depreciated again in the first half of March 2015, it has tended to creep up again ever since, but especially from the beginning of December 2015 onwards, with the result that the effective exchange rate of the euro of late was up by 2.6% compared with 23 January 2015.

*Quantifying expectation effects difficult for several reasons*

The next question concerns the extent to which developments in the euro's exchange rate during this period, in particular its sharp depreciation in the months running up to the APP decision dated 22 January 2015, can be attributed to mounting expectations in foreign exchange markets, driven by new information, that quantitative easing measures were increasingly likely in the euro area. However, quantifying the corresponding impact is extremely difficult on several counts and generally fraught with considerable uncertainty.<sup>15</sup>

*First challenge: hard to distinguish from standard monetary policy*

The quantification process quickly comes up against its first challenge because ECB press conferences or speeches by members of the Governing Council containing remarks on asset purchases normally also address standard monetary policy and, in some cases, other non-standard measures as well. Moreover, decisions on quantitative easing were, in some instances, combined with other non-standard and standard monetary policy measures. A similar situation arises when the wording of a speech points to an increase in the degree of monetary

policy accommodation without indicating whether standard or non-standard policy measures are being considered. In all these cases, it is unclear whether it was really the remarks or decisions on the APP which triggered a potentially observable depreciation in the euro.

Two instances of standard and non-standard policy measures being jointly adopted were the Governing Council decisions on the expansion of the APP dated 3 December 2015 and 10 March 2016, which – as previously mentioned – also included a cut in the deposit facility rate. In the press conferences held after the respective preceding monetary policy meetings of the Governing Council on 22 October 2015 and 21 January 2016, ECB President Mario Draghi's introductory statement already contained remarks which could be interpreted as hinting at the possibility of forthcoming monetary easing measures. In his introductory statement on 21 January 2016, ECB President Draghi said the following. "It will therefore be necessary to review and possibly reconsider our monetary policy stance at our next meeting in early March [...]. In the meantime, work will be carried out to ensure that all the technical conditions are in place to make the full range of policy options available for implementation, if needed." Remarks of a similar nature were also

*Examples: decisions to expand APP and corresponding market expectations ...*

<sup>14</sup> Unlike the previous section, which focused on achieving the broadest-possible geographical coverage on individual days and therefore used the nominal effective exchange rate of the euro against a broad group of 38 currencies (EER-38), the section below is based on the nominal effective exchange rate of the euro against 19 partner currencies (EER-19). This is because the official EER-38 is not available on several days owing to public holidays, which makes it unsuitable for conducting a time series analysis based on daily data. The differences between the two effective exchange rates of the euro on the individual days mentioned in the last section are minimal. The depreciation of the euro from 22 to 23 January 2015 came to 2.5% according to EER-19 (instead of 2.6% based on EER-38); the appreciation from 3 to 4 December 2015 amounted to 1.4% (instead of 1.6%), the appreciation from 9 to 11 March 2016 in both cases was measured at 0.6%, and the depreciation from 7 to 9 December 2016 was 0.9% (instead of 1.0%).

<sup>15</sup> This is also highlighted in SD'Amico (2016), Discussion of "The financial and macroeconomic effects of the OMT announcements", International Journal of Central Banking, 12 (3), pp 59-68, for cases where expectation effects play a major role.

made on 22 October 2015.<sup>16</sup> That kind of wording obviously encompasses both standard and non-standard measures, with the result that any exchange rate reaction cannot be unambiguously pinned on the APP.

In response to these statements, the euro did indeed depreciate markedly – both in effective terms and bilaterally against the US dollar – from 22 to 23 October 2015 and from 21 to 22 January 2016. In effective terms against 38 major trading partners, the first of these exchange rate movements even saw the fifth-heaviest daily loss ever, as stated above. An appreciation of the euro on the dates of subsequent monetary policy meetings at which the expansionary measures were actually decided can be interpreted as a disappointment of some market participants' ambitious expectations.

*... as well as decisions on ABSPP and CBPP3 in the light of high frequency data*

High frequency data can sometimes provide further insight, albeit to a limited extent, into the exchange rate effects of individual measures. One example of this can be seen on 4 September 2014, when the Governing Council decided to purchase asset-backed securities and covered bonds, but also to cut policy rates by 10 basis points. This policy rate cut had already been made public at 13.45 in the form of a press release; however, the decision on the asset purchases was not announced until the press conference, which started at 14.30. The press release caused a severe exchange rate reaction. In the five minutes following its publication, the euro shed almost 1 US cent (a loss of 0.72%) against the US dollar, and there was no correction of any note in this movement by the time the press conference began. Five minutes into the press conference, the reaction was a great deal more subdued (-0.27%) and the exchange rate bounced back by half within the quarter of an hour that followed. Only after 16.30 did the euro resume a more sustained downward movement. The intra-day exchange rate movement thus implies that the euro's exchange rate over the course of 4 September 2014 was probably driven less by the Eurosyste-

tem's adoption of quantitative easing, but mainly by the cut in policy rates.<sup>17</sup>

Another challenge when it comes to quantifying expectation and announcement effects lies in determining the point in time at which the foreign exchange market received new information about future quantitative easing measures and which statements can even be classified as new information. Amongst other things, this concerns interviews and speeches by members of the Governing Council that only relate to quantitative easing in as far as they reiterate the substance and, in many cases, the exact wording of what has already been said else-

*Second challenge: relevance of new information*

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<sup>16</sup> It was worded as follows. "In this context, the degree of monetary policy accommodation will need to be re-examined at our December monetary policy meeting [...]. The Governing Council is willing and able to act by using all the instruments available within its mandate if warranted in order to maintain an appropriate degree of monetary accommodation."

<sup>17</sup> While the fixing of the euro foreign exchange reference rate at 14.15 may, on the face of it, appear to be an appropriate point in time to separate the two events, the rate of change in the euro's exchange rate from 3 to 4 September 2014 contained barely half an hour's reaction to the press release, whereas the rate of change from 4 to 5 September 2014 encompassed a reaction to the press conference of almost 24 hours. In addition, it is completely unclear whether the depreciation of the euro late in the afternoon of 4 September 2014, which had a bearing on the rate of change from 4 to 5 September 2014, can be traced back to the press conference or the press release. A situation similar to that on 4 September 2014 existed in principle on 3 December 2015, when the cut in the deposit facility rate had already been made public in the press release at 13.45, but the expansion of asset purchases was not revealed until the press conference which started at 14.30. However, the above-mentioned rate of change in the foreign exchange reference rate of the euro against the US dollar from 3 to 4 December 2015 was more obviously driven by the direct exchange rate reaction at the beginning of the press conference.

### EUR/USD exchange rate on days of significant Governing Council decisions on the Eurosystem's expanded asset purchase programme

Exchange rates at 5-minute intervals



Source: Bloomberg.  
 Deutsche Bundesbank



where, mainly at ECB press conferences.<sup>18</sup> In this context, information can only really be assumed to be new for the markets if market participants were expecting a different statement. In any case, it appears problematic to attribute movements in the euro's exchange rate on the corresponding days to the expectation effects of quantitative easing.<sup>19</sup>

first of these – as mentioned above – is to measure the exchange rate reaction in just a very short window. However, this might result in the market reaction being understated by far. For instance, movements in the euro's exchange rate over the course of the days on which the most important APP-related decisions were made do not give the impression that the response process was already over 15

*... and ways of eliminating this effect*

*Third challenge: assumptions about the window during which new information affects the euro exchange rate*

There is also disagreement over the window in which it can be assumed that the observed exchange rate movement is determined exclusively or largely by the new information. On the one hand, asset prices such as exchange rates ought to respond swiftly to new information in a highly liquid market. On the other, market participants need to be granted a certain amount of time to process indications of quantitative easing or an expansion thereof, as such information will in many cases have no comparable precedents and hardly be standardised. There is no doubt that the length of this window can have quite a substantial bearing indeed on the measured overall effect of the purchase programme on the exchange rate. In the present case, this is mainly true for the period until March 2015, when the euro depreciated relatively continuously over several weeks. In event studies conducted on the impact of non-standard monetary policy measures on the exchange rate, the chosen window ranges between half an hour<sup>20</sup> and two days<sup>21</sup> in length.

*Fourth challenge: impact of macroeconomic data releases ...*

There is a possibility, especially in cases where a longer window is used to measure how the exchange rate reacts to the announcement, that new macroeconomic data will be released during that window which also have an impact on the exchange rate. In this case, the two effects would overlap, thus distorting the estimated impact of the purchase programme. Added to this is the fact that the released data are sometimes factored into the decision-making process on monetary policy measures. This makes it even more difficult to isolate the individual effects on the exchange rate. The literature applies two alternative strategies to minimise any distortions this might cause in the results. The

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**18** One example of this is an interview which Europe 1 conducted with ECB President Mario Draghi on the morning of 24 September 2014 in which Mr Draghi, when asked about additional stimulus measures, made the following remarks. "... I can say that the Governing Council is unanimous in its commitment to use the available instruments within its mandate to bring inflation back to close to but below 2%." No further remarks concerning non-standard monetary policy were made in the interview. However, President Draghi's introductory statement to the ECB press conference on 4 September 2014 already contained the statement that "... in line with our aim of maintaining inflation rates below, but close to, 2%. ... Should it become necessary to further address risks of too prolonged a period of low inflation, the Governing Council is unanimous in its commitment to using additional unconventional instruments within its mandate." From 23 to 24 September 2014, the euro depreciated by 0.5% against the US dollar. It appears doubtful whether – with reference to the interview – this depreciation can be traced back solely to a suspected increase in market participants being convinced that potential additional quantitative easing measures would be introduced in the future.

**19** To get a better idea of the extent to which announcements of quantitative easing come as a surprise to market participants, some studies look at the immediate response of long-term government bond futures. Given that such measures aim at lowering long-term government bond yields, an unexpected statement in this regard – one which fuels expectations of a swift adoption of government bond purchases, say – can be expected to drive up the prices of futures of this kind. Studies which use this procedure to determine the exchange rate effects of asset purchase programmes include the following. R Glick and S Leduc (2013), The effects of unconventional and conventional U.S. monetary policy on the dollar, Federal Reserve Bank of San Francisco Working Paper 2013-11; JH Rogers, C Scotti and JH Wright (2014), Evaluating asset-market effects of unconventional monetary policy: a multi-country review, Economic Policy 29, pp 751-799; and JH Wright (2012), What does monetary policy do to long-term interest rates at the zero lower bound?, Economic Journal 122, pp F447-F466.

**20** In these studies, changes in the exchange rate are measured from ten minutes before a spoken remark or publication to 20 minutes after, or from a quarter of an hour before to a quarter of an hour after such an event. See the narrow windows used in Glick and Leduc (2013), op cit, Rogers et al (2014), op cit, or ET Swanson (2015), Measuring the effects of unconventional monetary policy on asset prices, NBER Working Paper No 21816.

**21** See, for example, the broad window used in Altavilla et al (2015), op cit, or Joyce et al (2011), op cit, who even use a three-day window for control purposes, amongst other things.

or 30 minutes after these decisions were made public.<sup>22</sup>

The second strategy for preventing macroeconomic data releases from distorting results is to explicitly factor them into estimates. Since forex market participants form expectations in advance not only over information on the monetary policy stance but also over macroeconomic data, only the surprise component of the release should be used here.<sup>23</sup> But this kind of approach will not necessarily eliminate the above-mentioned distortions in their entirety either because it cannot be taken for granted that the effect of macroeconomic surprises will remain constant over time,<sup>24</sup> and that effect might also hinge on the central bank's monetary policy stance. The response shown by the euro's exchange rate to an unexpectedly low rate of consumer price inflation, for example, might be more pronounced if the market already has the impression that the Eurosystem is considering quantitative easing measures. The chart discussed above showing the euro's heaviest daily losses, however, puts the importance of such reasoning into perspective insofar as – at least in the past few years – it was seemingly not so much macroeconomic data releases as monetary policy decisions which drove the biggest changes in the euro's exchange rate.

*Fifth challenge:  
impact of US  
monetary policy*

One final, materially important aspect to consider when quantifying the overall effect of quantitative easing decisions has to do with an exchange rate's function as a relative price between currencies. As such, it is determined, by its very nature, not only by the monetary policy stance in the domestic economy, but in a similar fashion by monetary policy developments abroad as well. On this score, monetary policy developments in the United States are of utmost importance, not just for the bilateral EUR/USD exchange rate but also for the effective exchange rate of the euro. The period since mid-2014, which was marked by the decisions to successively increase the degree of monetary accommodation in the Eurosystem, has seen

the US Federal Reserve gradually tighten its monetary policy. Taken by itself, this, too, acted to drive down the value of the euro, just like the Eurosystem's easing measures, with the result that the effects tended to overlap. While this is counteracted by the fact that the most important pieces of news about adjustments to the Fed's monetary policy path were not made public on the same days as those of the Governing Council, there is nonetheless a degree of risk, especially in the months leading up to March 2015, of wrongly identifying expectations regarding the Eurosystem's quantitative easing measures (rather than US monetary policy) as a significant contributor to the euro's quite steady depreciation observed at that time. That risk is intensified especially when movements in the euro's exchange rate over a comparatively long window are attributed to individual Eurosystem announcements and when very large numbers of at times relatively insignificant announcements are used to explain them.

The reasoning set out above illustrates that it is almost impossible to precisely determine the overall effect of the Governing Council's decisions regarding quantitative easing on the euro's exchange rate in a way that also takes into account the formation of expectations in foreign exchange markets. Hence, any estimate made in this regard will be fraught with a high degree of uncertainty. A study conducted at the Bundesbank which attempts to incorporate

*For all the uncertainty, a drop of around 4½% in the effective exchange rate of the euro can be identified as a response to the APP decisions and earlier APP-related information*

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<sup>22</sup> For that to have been the case, the euro's exchange rate ideally ought to have levelled off once those 15 or 30 minutes had elapsed. Yet in every single instance, the exchange rate movement observed during this window instead continued beyond the window, albeit subject to some volatility.

<sup>23</sup> Technically, this is done by deducting the median response to a survey conducted among financial market experts shortly prior to the data release from the value that is actually released, so that a surprise component remains.

<sup>24</sup> ET Swanson and JC Williams (2014), Measuring the effect of the zero lower bound on yields and exchange rates in the U.K. and Germany, *Journal of International Economics*, Vol 92, pp S2-S21, therefore estimate a time-varying reaction of exchange rates to macroeconomic data releases.

## Expectation and announcement effects of the expanded asset purchase programme on the euro's exchange rate: an event study

It is never easy to measure how monetary policy measures affect financial market prices with any degree of precision because market players are continually forming expectations about the future path of monetary policy, and any changes in their expectations impact directly on those prices. Analysts looking to gauge how far financial market prices have been influenced by expectation and announcement effects surrounding the expanded asset purchase programme (APP) therefore need to investigate how market expectations about the purchase programme – for example, the likelihood of it being implemented, as well as its design, possible launch date and volume – have evolved over time.

These expectations are not readily observable in practice, so analysts tend to use event studies to measure the overall effect of a policy measure on financial market variables. Event studies identify what are known as “event windows” – periods in which market opinion about a particular purchase programme might have changed. In the present case, suitable events would appear to be information made public by the ECB on the topic of the APP. Pages 22 to 26 of the main article explain why the analysis presented below is confined to ECB press conferences and press releases that follow Governing Council meetings on monetary policy matters which are very likely to have a bearing on the euro's exchange rate. Event windows are each one day long, not only to mitigate the risk of data being “contaminated” by other factors, but also to give market players enough time to react to the information made public by the ECB.

Once the relevant events have been identified, the rate of change shown by the ob-

served variables – in this case the euro's exchange rate – between the beginning and the end of the defined event window is measured. Assuming that the information made public on the purchase programme was the sole factor influencing the exchange rate during the event window, the measured change in the exchange rate can be attributed in full to the APP. By extension, it is possible to quantify the programme's overall effect on the euro's exchange rate by adding together the changes across all the event windows.

One criticism that can be levelled at this procedure used in classic event studies is the possibility that economic metrics (concerning the unemployment rate, say, or industrial production) were made public on the same day as the events. If such information had an independent effect on the euro's exchange rate, a classic event study will deliver distorted results.

In their estimation of the effects of the Eurosystem's purchase programme on financial market variables, Altavilla, Carboni and Motto (2015) include the surprise component of a host of macroeconomic releases from the euro area and the United States in an effort to segregate that component's influence from that of the asset purchases.<sup>1</sup> Specifically, this approach – an event study which “controls” for macroeconomic releases – estimates the following regression for each time series under observation:

$$\Delta y_t = \sum_{i=1}^k \alpha_i D_{i,t} + \sum_{j=1}^m \gamma_j News_{j,t} + \epsilon_t$$

<sup>1</sup> See C Altavilla, G Carboni and R Motto (2015), Asset purchase programmes and financial markets: lessons from the euro area, ECB Working Paper No 1864.

where

$\Delta y_t = \ln(y_t) - \ln(y_{t-1})$  is the one-day change in the log exchange rate of the euro;

$D_i$  is a dummy variable which takes the value 1 on the  $i = 1, \dots, k$  identified event days and otherwise 0;

$News_j$  is a measure for the surprise component of  $j = 1, \dots, m = 40$  macroeconomic metrics for Germany, France, Italy, Spain, the euro area as a whole and the United States.<sup>2</sup>

The overall effect of the purchase programme on the euro's exchange rate is then calculated as the sum of the estimated effects, transformed into a growth rate,  $\hat{\alpha}_i$ , on the event days – ie as  $\exp\left(\sum_{i=1}^k \hat{\alpha}_i\right) - 1$ .

We will now outline the results of a study that follows the approach used by Altavilla et al (2015) but with an observation period that extends into December 2016.<sup>3</sup> The regression equation shown above is estimated for the euro's nominal effective exchange rate<sup>4</sup> and, as an alternative, for its exchange rate against the US dollar.

An event study approach will inevitably have a degree of leeway in the choice of relevant events. The present analysis makes a distinction between two phases comprising nine APP-related events in all, shown in the chart on page 15 under numbers 3-5 and 7-12. The first phase covers the APP decision on 22 January 2015 as well as two earlier press conferences in which references were made to the Governing Council's intention to take measures that would have a sizeable impact on the balance sheet (6 November 2014 and 4 December 2014). The second phase, meanwhile, encompasses press releases and press conferences for Governing Council meetings that were associated with programme adjustments

which provided additional expansionary stimulus. These comprised, first, the press conferences on 3 September 2015, 22 October 2015 and 3 December 2015, which resulted in the term of the programme being extended; second, the press conferences and press releases on 21 January 2016 and 10 March 2016, which ultimately led, *inter alia*, to the monthly asset purchase volume being increased; and, third, the press conference and press release on 8 December 2016 announcing the decision to extend the programme by nine months.<sup>5</sup>

Altogether, the nine monetary policy events mentioned above were associated with a considerable same-day fall in the value of the euro, even after eliminating the influence of possible macroeconomic surprises on the event days. After controlling for this influence, the estimated overall effect thus

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<sup>2</sup> The time series were obtained from the data provider Bloomberg and express the difference between the value made public and the median analyst forecast value, divided by the standard deviation of the underlying projections. The macroeconomic metrics notably comprise releases on industrial production, the labour market and price developments.

<sup>3</sup> The regression analysis is thus based on an observation period from 2 January 2014 to 15 December 2016. This approach differs again from Altavilla et al (2015), *op cit*, in that it uses a far more restrictive selection of events considered relevant, particularly in the period prior to the decision to launch the APP on 22 January 2015 and also because it explicitly takes account of the influence of US monetary policy on the euro's exchange rate. Both studies use daily data and the same series of macroeconomic surprises in their estimations.

<sup>4</sup> The nominal effective euro rate against the currencies of 19 major trading partners of the euro area, which is calculated on the basis of the euro foreign exchange reference rates, is used here.

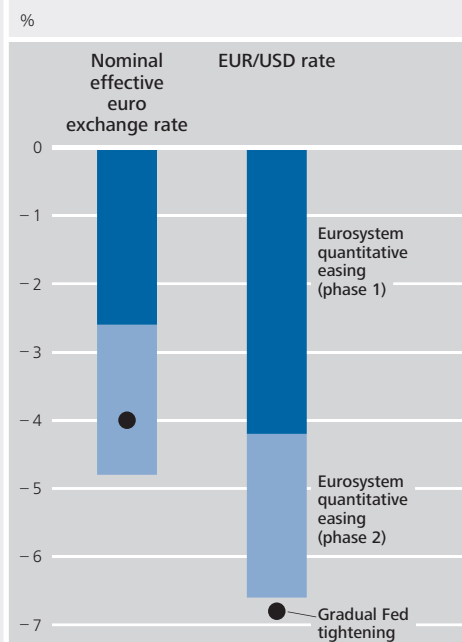
<sup>5</sup> If the press conferences on 4 September 2014, 2 October 2014, 8 September 2016 and 20 October 2016 had also been factored into the analysis, they would have had relatively little bearing on the results. The estimated fall in the nominal effective euro rate would have been 0.3 percentage point larger and that of the EUR/USD rate 1.6 percentage point larger. A problem of a more fundamental nature, however, is the fact that some event days saw the announcement of other monetary policy measures unrelated to the APP. As a case in point, three-quarters of an hour before the press conference on 4 September 2014 a press release announced a 10 bp reduction in the ECB's three main policy rates.

comes in at -4.7% for the nominal effective euro exchange rate against the currencies of 19 major trading partners and at -6.5% for the euro's exchange rate against the US dollar. F tests conducted on the results indicate that both effects are significant at the 5% level.

As the adjacent chart shows, the first phase of the Eurosystem's quantitative easing measures in particular – up to and including the APP announcement – saw a distinct fall in the euro's value. Later announcements extending the term of the APP and increasing the monthly purchase volume tended to have weaker effects on the whole.<sup>6</sup>

These results should, however, be viewed in light of the fact that the observation period also saw the euro depreciate discernibly on days other than the event days analysed here, with the euro's effective exchange rate falling by 9.6% on balance and its ex-

**Estimated controlled APP expectation and announcement effects\***



\* Estimated for the period from 2 January 2014 to 15 December 2016. The influence of new macroeconomic information is included in the estimation. APP: expanded asset purchase programme.

Deutsche Bundesbank

**6** The purchase volume of the three decisions to increase the volume and extend the term of the APP totalled €1,140 billion overall, which was exactly the same volume as that of the original APP decision; however, the effect measured for the second phase is smaller than that of the first. Added to this, of the six events from the second phase, only one (on 8 December 2016) was not also connected with a standard easing of monetary policy. Thus, since the effect measured for the second phase can be traced back to a combination of policy rate cuts and quantitative easing, it must be assumed that the undeterminable, hypothetical effect of the quantitative easing alone was smaller than indicated in the estimate.

**7** An exchange rate trend like the one seen primarily in the first phase observed here could be better captured by an event study, eg by also factoring a host of less obviously relevant events into the regression analysis. For instance, Altavilla et al (2015), op cit, identify 17, rather than just three, relevant events for this first phase alone. The overall effect they calculate for the first phase – a 5% euro depreciation against the US dollar – is nevertheless barely higher than the figure we come to for the same phase. But they do also report results for a two-day event window (ie exchange rate movements on two consecutive days are assigned to each of the 17 events), which means that they achieve even broader trend coverage and thus conclude that the overall effect for the first phase alone is a 12% euro depreciation against the US dollar which can be attributed to the APP.

**8** While there is a series for this in the set of macroeconomic surprises, it does not contain a single surprise for the entire observation period.

change rate against the US dollar losing as much as 24.5%. This raises the question of whether what is, potentially, a substantial portion of this development might be explained by gradually mounting market expectations about the introduction and, subsequently, about the expansion of quantitative easing measures by the Eurosystem, but without necessarily being able to pin this on specific events in the shape of new information made public.<sup>7</sup>

However, any such considerations need to allow for the fact that the monetary policy actions of the US Federal Reserve, and not just monetary policy developments in the euro area, are likely to have had a considerable impact on the euro's exchange rate against the US dollar in particular.<sup>8</sup> There were mounting signs during the observation period that US monetary policy was returning to normal, culminating, first, in the tapering of and exit from asset purchases and finally, from the end of 2015, in two

### Selected press releases by the Federal Reserve

Date	Substance of the Fed press release
17 September 2014	FOMC decides to slow the pace of monthly asset purchases and expects, based on its projections, the federal funds rate to be raised earlier on average in the USA.
29 October 2014	FOMC announces that the asset purchase programme will end that month.
17 December 2014	FOMC replaces the wording that it intends to maintain the federal funds rate for a considerable time after the asset purchase programme ends with the phrase that it can be patient in beginning to normalise the stance of monetary policy.
18 March 2015	First FOMC press release that does not contain the wording that it can be patient in beginning to normalise the stance of monetary policy.
28 October 2015	FOMC mentions its next meeting as a possible date for raising the federal funds rate.
16 December 2015	FOMC raises the federal funds rate.
14 December 2016	FOMC raises the federal funds rate.

Deutsche Bundesbank

policy rate hikes. Much like the Eurosystem's easing measures, a gradual tightening of the monetary reins in the United States will tend to push down the value of the euro.

The estimation seeks to model monetary policy symmetrically in the two foremost currency areas by also incorporating seven selected press releases from the US Federal Reserve which contained new information on the path of monetary policy. These releases are listed in the table above. Evidently, making this information public also sent the euro sharply lower in value. The estimated overall effect of this slight tightening of US monetary policy across both phases was a 4.0% drop in the euro's nominal effective exchange rate and a 6.8% fall in the euro's value against the US dollar (both effects being significant at the 5% level). This suggests that while events related to the Eurosystem's asset purchase

programme had a major bearing on the euro's exchange rate, under no circumstances should other factors – first and foremost monetary policy in the United States – be ignored. It is therefore possible to measure this effect more accurately by confining events to those most obviously relevant to the APP and by not being overly generous in setting the length of the event window.

As a caveat, it is worth noting that the results generated with the aid of event studies of this kind should be interpreted with some caution. One reason for this was mentioned above – the fact that it is virtually impossible to clearly and unambiguously identify events relevant to the APP. Another is that the high degree of exchange rate volatility on event days makes events very sensitive to the underlying event window. The length of the event window, in particular, has a major bearing, but even if a different daily rate were used – that is, if the event window were shifted but remained 24 hours in length – the results of the estimation might be substantially different. The results presented here, for instance, are based on euro exchange rates measured at 14.15 Central European Time (CET). If rates at 23.00 CET are used instead, for example, the estimated effect of the APP on the euro's exchange rate against the US dollar is a mere -2.2% (rather than -6.5%). One possible reason for this is that these daily rates capture an exchange rate reaction over just 8½ hours (rather than almost 24 hours when euro foreign exchange reference rates are used) from the start of each ECB press conference.

the issues raised as extensively as possible<sup>25</sup> finds that the overall effect since 2014 of the direct and expectation formation-related market reactions to the decisions taken to date by the Governing Council on government bond purchases has been a 4.7% depreciation in the nominal effective exchange rate of the euro and a 6.5% depreciation of the euro against the US dollar.<sup>26</sup>

When assessing the estimated announcement and expectation effects of the APP on the exchange rate of the euro, it should be noted that the present analysis does not allow any conclusions to be drawn with regard to the

*Analysis says nothing about the persistence of effects*

*APP decision triggers large effects, programme expansions smaller ones*

Much of this effect, relatively speaking (2.6 percentage points in the effective exchange rate of the euro and 4.2 percentage points bilaterally against the US dollar), is accounted for by the period up to the end of January 2015 – a spell in which market participants were increasingly anticipating government bond purchases and the APP decision was passed. The measures which expanded the programme, on the other hand, tended to have less of an impact on the euro's exchange rate. In addition, it is presumably not even possible to pin all these estimated smaller depreciation effects on the expansion of the APP as there is no way of distinguishing them from the effect of cuts in the deposit facility rate that were occasionally decided at the same time.

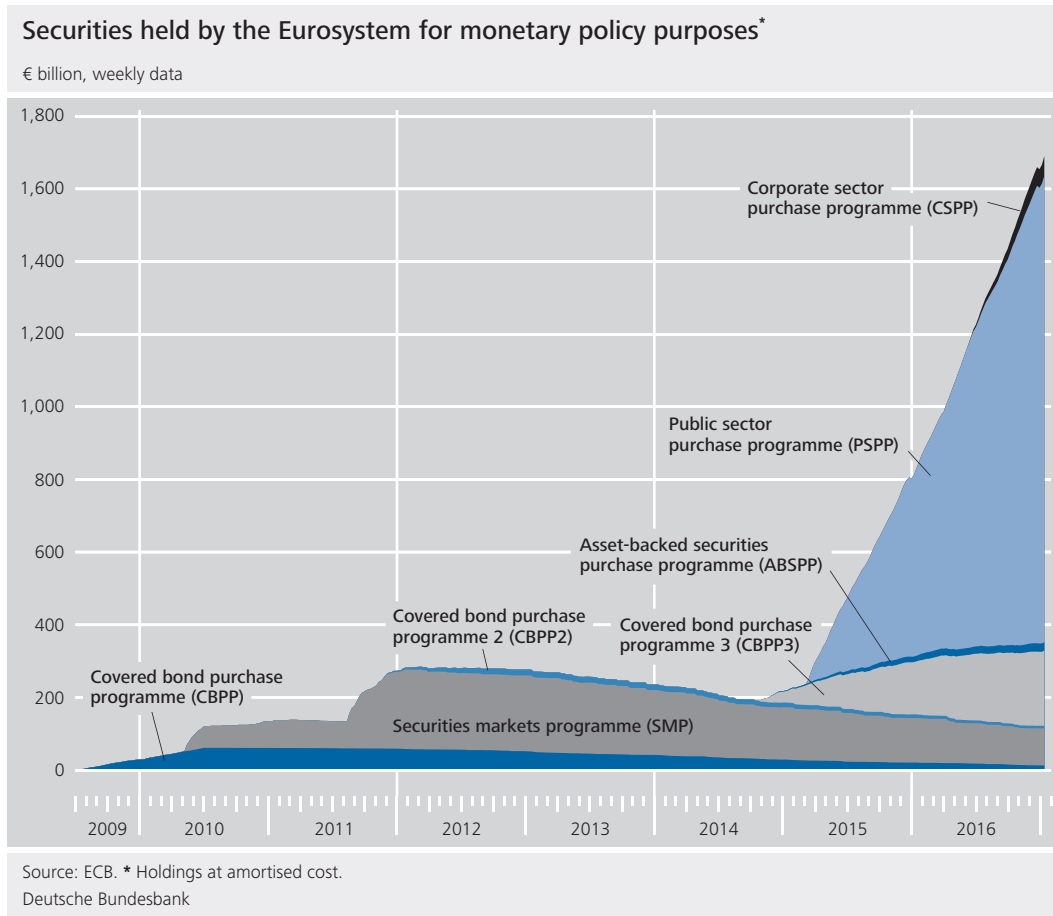
*Gradual tightening of US monetary policy more or less a factor of similar magnitude in euro depreciation as APP measures*

On the other hand, it cannot be ruled out that the actual exchange rate effect up until the APP decision in January 2015 was slightly larger than estimated because, as mentioned above, the study took into account only the most important pieces of new information relating to potential asset purchases. The study does, however, suggest that – compared with this lack of clarity – other factors had more of a bearing on the path followed by the euro's exchange rate. One notable such factor was US monetary policy, which was gradually tightened throughout the observation period and caused the euro to depreciate by an estimated 6.8% against the US dollar (and by 4.0% in effective terms). In terms of magnitude, this is comparable to the estimated effects of the quantitative easing in the euro area.

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<sup>25</sup> Following the reasoning outlined here, the change in the euro's exchange rate over the course of a trading day is attributed to a new piece of information about the APP (from the daily fixing of the euro foreign exchange reference rate prior to the announcement up to the one thereafter). All in all, this study takes nine APP-related announcements into account. As a rule, these are ECB press conferences, partly in conjunction with ECB press releases, and three of these took place in the period before the government bond purchases began in March 2015. The influence of macroeconomic data releases and US monetary policy is factored into the calculation of the effects. A detailed description of the estimation can be found in the box on pp 27-30.

<sup>26</sup> The result is not materially different (5.0% depreciation in the effective exchange rate of the euro and 8.0% bilaterally against the US dollar) when four additional ECB press conferences, and thus inter alia all the dates listed on p 15 up until 22 January 2015, are included in the estimate. That said, even the number of nine "event days" originally selected to cover the APP decision and APP expansions appears to be rather high compared with similar studies. For example, Neely (2015), op cit, uses five event days to capture the exchange rate reaction to the adoption and expansion of the first US asset purchase programme; Joyce et al (2011), op cit, base their estimate of the effects of the first UK purchase programme, including expansions, on six event days. The overall effects we identified are considerably smaller than those cited in European Central Bank, The transmission of the ECB's recent non-standard monetary policy measures, Economic Bulletin, Issue 7/2015, pp 32-51, with reference to Altavilla et al (2015), op cit, for the period from 4 September 2014 to 5 March 2015 alone – that is to say, the period up to the beginning of the government bond purchase operations. According to that study, the APP's overall effect until that time already came to an 8% depreciation of the euro in effective terms and a 12% bilateral fall in value against the US dollar. Those findings mainly differ from the results presented here because that estimate is based on as many as 17 event days just for that short phase and because developments in the euro's exchange rate in a window as long as two days are attributed to the respective events. The study by Altavilla et al (2015), op cit, though, also presents results of an estimation based on only a window of one day for the euro's exchange rate reaction. Under this assumption, it arrives at a result which, in terms of magnitude – a 5% depreciation of the euro against the US dollar – is similar to the study presented here for the corresponding period. Another finding made in the Bundesbank study shows how far the length of the window used to measure the reaction of the euro's exchange rate influences the estimated overall effect. Using daily euro rates fixed at 23.00 instead of those at 14.15 (which implies that the period from the start of the ECB press conference at 14.30 up to the fixing of the exchange rate is distinctly shorter) results in the euro depreciating by only 2.2% overall against the US dollar, rather than by 6.5%, although the duration of the exchange rate reaction attributed to each event remains unchanged at one trading day.



persistence of the effects identified.<sup>27</sup> Thus, the estimated 4.7% nominal effective depreciation of the euro may persist on a lasting basis, but it might just as well have unwound within a short space of time. This makes it more difficult to determine, for example, the extent to which a measured change in the euro's exchange rate over a given period can be attributed to the effect in question.

## Effects of the asset purchase operations

*Eurosystem holdings originating from purchase programmes*

The expectation and announcement effects of the APP, which also include the immediate exchange rate reactions on the day of APP-related decisions by the Governing Council, need to be distinguished from the effects of putting those decisions into practice, ie those stemming from the asset purchases themselves. Government bond purchases under the APP started on 9 March 2015, while purchases of covered

bonds and asset-backed securities, which likewise form part of the broader APP programme, began back in October and November 2014 respectively. However, there is a longer observation period available to analyse the effects of asset purchase operations in the euro area, given that the Eurosystem had already conducted purchases of covered bonds and government bonds between 2009 and 2012, albeit with the primary objective back then of safeguarding the functioning of the monetary policy transmission process. Even though the Eurosystem's holdings which originated from these earlier purchase programmes are gradually receding, they still amounted to a combined total of around €185 billion at the end of 2014.<sup>28</sup>

<sup>27</sup> This point has already been stressed by Wright (2012), op cit, and also by Rogers et al (2014), op cit, with regard to the effects of quantitative easing on interest rates.

<sup>28</sup> Purchases under the securities markets programme (SMP), which was adopted in May 2010, accounted for €144 billion of this total. Assets acquired under this programme are held to maturity, which means the holdings gradually diminish over time.



The onset of government bond purchases under the PSPP, especially, sent the Eurosystem's holdings of securities for monetary policy purposes sharply higher to €1.7 trillion, all told, by mid-January 2016.

*Causes of potential exchange rate effects arising from asset purchase operations*

There are some studies in the literature which assume that it is not only expectation and announcement effects, but also the actual purchases themselves, that influence variables such as the exchange rate.<sup>29</sup> They argue that the supply of government bonds available to private investors only decreases once the actual purchases are made, so while market participants may have been informed in advance about the point in time and volume of the intended purchases, it is entirely possible for their expectations regarding the effectiveness of these central bank operations to be fraught with uncertainty and error. Equally uncertain is the extent to which private investors reinvest the proceeds from the sale of bonds to the central bank in the alternative assets available in each case.

*Distinct net sales of PSPP-eligible bonds by non-euro-area residents*

The European securities holdings statistics by sector<sup>30</sup> can be used to gain a clearer picture of whether purchase operations under the APP triggered a portfolio shift into foreign asset holdings via the portfolio rebalancing channel, as would be expected in theory, and thus generated any downward pressure on the euro. A breakdown of the corresponding holdings shows that the holdings of euro-denominated bonds in the portfolios of investors excluding the Eurosystem declined in the one-and-a-half years between the end of 2014 and mid-2016. The statistics reveal that it was particularly non-euro-area residents which engaged in considerable net sales of PSPP-eligible bonds during this period. Sellers were chiefly private investors from the United States and the United Kingdom, the majority of whom are presumably financial sector participants. Furthermore, China's public sector (central bank and general government) decreased its holdings significantly. Assuming the proceeds from these sales were invested in non-euro-denominated assets,

this should, in itself, have exerted downward pressure on the euro. Analysis of the aggregate bond holdings which non-euro-area residents hold in custody within the euro area indicates that this may well have been the case.<sup>31</sup> Their holdings of euro-denominated bonds did indeed decrease sharply from the beginning of 2015 to mid-2016, while bond holdings denominated in other currencies increased markedly.

Since actual purchase operations under asset purchase programmes in other currency areas have been shown to have a marked impact on the exchange rate, and because the Eurosystem's securities holdings data point to the possibility of an APP-induced shift into foreign currency bonds, the Bundesbank conducted similar analyses of Eurosystem bond purchases in an effort to measure their effect. These analyses generally take into account not just APP asset purchases but those carried out under earlier Eurosystem purchase programmes (CBPP, CBPP2 and SMP) as well. Two alternative econometric methods were used in these analyses.

The first of these is a Bayesian vector autoregression (BVAR) model. The analysis (see the box on pages 34 to 36) uses sign restrictions to identify quantitative easing measures. It concludes, however, that these accommodative measures did not significantly affect the nominal effective exchange rate of the euro during the observation period. But since this finding was achieved using monthly data, it would not

*Indications of shifts out of euro-denominated bonds into other ones*

*Two alternative methods used for estimating the effects*

*No evidence of significant exchange rate effects of Eurosystem purchase operations identified by a BVAR model, ...*

<sup>29</sup> Fratzscher et al (2013), op cit, in particular, deem the relationship between these effects to be a significant factor. They examine the Fed's first two purchase programmes and identify a distinct depreciation of the US dollar in response to the actual government bond purchases. However, they also find that the purchases of mortgage-backed securities caused the US dollar to appreciate markedly.

<sup>30</sup> The European securities holdings statistics by sector (SHSS) comprise a sector-specific listing of all securities held in custody in the euro area. They do not capture securities held in portfolios outside the euro area.

<sup>31</sup> However, this again is subject to the caveat mentioned above: namely, that securities which are not held in custody in the euro area are not captured by the European securities holdings statistics by sector.

## Securities acquisitions within the Eurosystem's purchase programmes: a BVAR estimation of the effects on the euro exchange rate

The following analysis uses a Bayesian vector autoregression model (BVAR) to determine the quantitative effects of securities purchases by the Eurosystem on the euro's nominal exchange rate. In doing so, it essentially builds on the methodological approach used by Boeckx et al (2014), who identify a monetary policy shock predominantly by an expansion in the central bank balance sheet.<sup>1</sup> However, in order to isolate the effects of the purchasing programmes as precisely as possible in accordance with the initial question, our analysis modifies this approach by concentrating on the development of those balance sheet items which are determined by the purchase and redemption of securities.<sup>2</sup>

The VAR model used to estimate the effects of non-standard monetary policy shocks on the exchange rate of the euro can be written in reduced form as follows

$$x_t = c + \sum_{j=1}^p B_j x_{t-j} + u_t \text{ with } t = 1, \dots, T.$$

$x_t$  represents an ( $N \times 1$ ) vector with endogenous variables as described below;  $c$  denotes an ( $N \times 1$ ) constant and  $B_j$  an ( $N \times N$ ) coefficient matrix for the vector of endogenous variables lagged by  $j$  periods  $x_{t-j}$ . The ( $N \times 1$ ) vector  $u_t$  contains the error terms of the VAR model with  $E(u_t) = 0$  and covariance matrix  $E(u_t u_t') = \Omega$ . As in the literature, the number of lags is set to  $p = 2$ .<sup>3</sup>

In this VAR model, the vector of endogenous variables is specified as

$$x_t = [\textit{euro}_t \textit{asset}_t \textit{lend}_t \textit{mro}_t \textit{y}_t \textit{p}_t \textit{vstox}_t]'$$

where  $\textit{euro}_t$  represents the effective exchange rate of the euro against 19 major trading partners,  $\textit{asset}_t$  the Eurosystem's securities holdings for monetary policy purposes,  $\textit{lend}_t$  the Eurosystem's liquidity provision for monetary policy purposes,  $\textit{mro}_t$  the Eurosystem's main refinancing rate,  $\textit{y}_t$  the euro area's industrial production,  $\textit{p}_t$  the euro area's Harmonised Index of Consumer Prices (HICP), and  $\textit{vstox}_t$  the volatility index of the stock market index Euro Stoxx 50 (VSTOXX).<sup>4</sup>

All the variables enter the model as logarithmic levels, with the exception of the main refinancing rate, which is modelled as a percentage. Since the Eurosystem lowered

<sup>1</sup> See J Boeckx, M Dossche and G Peersman (2014), Effectiveness and transmission of the ECB's balance sheet policies, CESifo Working Paper 4907.

<sup>2</sup> The variable examined by Boeckx et al (2014), op cit, also contains balance sheet movements resulting from refinancing operations.

<sup>3</sup> See Boeckx et al (2014), op cit and L Gambacorta, B Hofmann and G Peersman (2014), The effectiveness of unconventional monetary policy at the zero lower bound: a cross-country analysis, Journal of Money, Credit and Banking 46, pp 615-642.

<sup>4</sup> Thus, the dataset is broadly the same as in the studies by G Peersman (2011), Macroeconomic effects of unconventional monetary policy in the euro area, CEPR Discussion Paper 8348, Gambacorta et al (2014), op cit, and Boeckx et al (2014), op cit. In contrast to these studies, however, instead of modelling the Eurosystem's overall balance sheet, the two balance sheet items "Lending to euro area credit institutions related to monetary policy operations denominated in euro" and "Securities held for monetary policy purposes" are modelled separately. The former comprises all monetary policy refinancing operations, while the latter shows the liquidity provision resulting from all the purchasing programmes. It should be noted here that the securities holdings for monetary policy purposes listed on the Eurosystem balance sheet are reported at amortised cost, and therefore only represent an approximation of the actual purchases. In order to identify a policy shock as precisely as possible, market interest rates, which may be influenced by other factors, are excluded. The data used were obtained from Datastream, Haver and the ECB's statistical data warehouse.

the deposit facility interest rate to zero in July 2012, monthly data are used for the period from July 2012 to June 2016, so that the estimations deliberately cover the period in which the zero lower bound on interest rates was significant for monetary policy. The model is estimated using Bayesian methods, with the aid of a “dummy observations prior”.<sup>5</sup>

In order to identify a structural shock, the model is written out in structural form as

$$A_0x_t = a + \sum_{j=1}^p A_jx_{t-j} + \varepsilon_t \text{ with } t = 1, \dots, T.$$

$A_0$  represents an ( $N \times N$ ) matrix, where  $A_j = A_0B_j$ ,  $a = A_0c$  and  $\varepsilon_t = A_0u_t$ . Here,  $\varepsilon_t \sim N(0, I_N)$  with  $I_N$  representing a unit matrix and  $E(u_tu_t') = (A_0'A_0)^{-1} = \Omega$ .

In order to identify a shock caused by quantitative easing by the Eurosystem, ie a QE shock,  $A_0$  is chosen in accordance with Arias et al (2014)<sup>6</sup> in such a way that the shock generates impulse response functions which comply with particular zero and sign restrictions over a given time horizon (see chart opposite).<sup>7</sup> The restrictions chosen enable the shock to be attributed plausibly, and on sound economic foundations, to exogenous quantitative easing, thus separating it as clearly as possible from other shocks.

The bond purchases cause an increase in the balance sheet item “Securities held for monetary policy purposes”, which is why a positive sign restriction is imposed here. In order to separate bond purchases from refinancing operations with banks<sup>8</sup>, it is assumed that the Eurosystem’s liquidity provision for monetary policy purposes does not change in the event of a QE shock. In addition, the shock is separated from conventional monetary policy shocks by assuming

### Restrictions assumed to identify a QE shock

Variable	Restriction	Time horizon
<i>euro<sub>t</sub></i>	*	
<i>asset<sub>t</sub></i>	+	0–1
<i>lend<sub>t</sub></i>	0	0
<i>mro<sub>t</sub></i>	0	0
<i>y<sub>t</sub></i>	0	0
<i>p<sub>t</sub></i>	0	0
<i>vstox<sub>t</sub></i>	–	0–1

Restrictions: 0 = The given variable does not initially change as a result of the shock. + (–) = The given variable increases (decreases). \* = No restriction is imposed. Time horizon: 0 = The restriction only applies contemporaneously, ie for the month in which the shock occurs. 0–1 = The given restriction is imposed not only contemporaneously but also for the following month.

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that the main refinancing rate does not change contemporaneously. Since the estimation is based on monthly data, it is also assumed that there are no contemporaneous changes in industrial production or prices. This approach conforms to the view that these two variables only react to a monetary policy shock with a time lag. The negative sign restriction for the VSTOXX is intended to exclude the possibility that the shock might reflect an endogenous reaction

<sup>5</sup> The dummy observations prior used is based on the Minnesota prior and expands the dataset with artificial data (dummy observations) containing the prior probability. In this case, the prior for the autoregressive coefficient is set to 1, since non-stationary data are used. The parameters for overall tightness, lag decay and exogenous variable tightness are set to 0.1, 1 and 100 respectively, in line with the usual values given in the literature. For more information, see M Bańbura, D Giannone and L Reichlin (2010), Large Bayesian vector auto regressions, *Journal of Applied Econometrics* 25, pp 71-92.

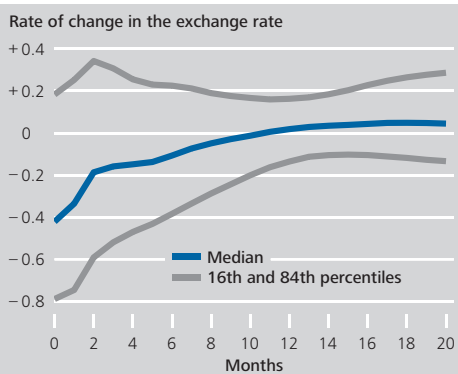
<sup>6</sup> See JE Arias, JF Rubio-Ramírez and DF Waggoner (2014), Inference based on SVARs identified with sign and zero restrictions: theory and applications, *International Finance Discussion Paper 1100*, Board of Governors of the Federal Reserve System.

<sup>7</sup> A total of 5,000 draws are used, following 5,000 rejected draws (burn-in).

<sup>8</sup> This includes euro-denominated claims on credit institutions in the euro area resulting from monetary policy operations, such as, for example, main refinancing operations and longer-term refinancing operations.

### Response of the effective exchange rate of the euro to a QE shock\*

As percentage



\* QE: Quantitative easing.

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by the central bank to increased financial market stress.<sup>9</sup>

Since this report concerns the exchange rate effects of quantitative easing, only the reaction of the exchange rate will be shown here. The chart above shows the impulse response function of the exchange rate as a result of a QE shock which expands the balance sheet item “Securities held for monetary policy purposes” by an initial 1%.<sup>10</sup> The impulse response function gives the rate of change in the exchange rate, with the blue line representing the median reaction and the grey lines representing the 16th and 84th percentiles of the posterior distributions.

Although the impulse response function indicates that the effective exchange rate of the euro against 19 major trading partners might depreciate as a result of the identified QE shock, this effect is not significant. Our analysis, therefore, reaches a different conclusion from studies such as those by, say, Boeckx et al (2014) and Wieladek and Pascual (2016); this may be attributable to the different methods used to identify shocks.<sup>11</sup> As mentioned above, Boeckx et al (2014) identify a non-standard monetary policy

shock by a general expansion in the Eurosystem’s balance sheet. They therefore consider a broader spectrum of monetary policy measures than securities purchase programmes alone. The fact that no significant impact was identified in our analysis, in contrast to Boeckx et al, could therefore indicate that the effects identified in the latter study are not exclusively attributable to the Eurosystem’s quantitative easing measures.<sup>12</sup>

Wieladek and Pascual (2016), on the other hand, concentrate on announcement effects, whereas our BVAR estimation only takes into account the actual purchase operations. Therefore, the results are not directly comparable. Moreover, the present analysis covers several programmes, so that the identified effects accordingly represent an average of the various purchasing programmes implemented since 2012.

<sup>9</sup> A restriction of this type is also used, for example, by Gambacorta et al (2014), op cit, as well as by P Anaya, M Hachula and C Offermanns (2015), Spillovers of U.S. unconventional monetary policy to emerging markets: the role of capital flows, School of Business & Economics Discussion Paper 2015/35, Freie Universität Berlin. In the study by Boeckx et al (2014), op cit, the ECB’s CISS indicator is used instead; however, this also reflects stress in foreign exchange markets. Since the present study concentrates particularly on exchange rate effects, the VSTOXX is therefore preferred. The results presented below do not change if no sign restriction is imposed on the VSTOXX.

<sup>10</sup> This corresponds to an average growth of €3 billion.

<sup>11</sup> For more information, see J Boeckx et al (2014), op cit, as well as T Wieladek and A G Pascual (2016), The European Central Bank’s QE: a new hope, CEPR Discussion Paper 11309.

<sup>12</sup> If the identification method used in the present study is unable to completely isolate the effects of purchasing operations from announcement effects, the estimated exchange rate reaction, which is already low, might even be overstated.

be possible to use this method to identify short-term exchange rate responses to bond purchases that subsided again over the course of a month.

*... or by a regression analysis approach, ...*

The second econometric method used to determine the exchange rate effects of actual asset purchase operations by the Eurosystem is a regression analysis approach. This method had previously been applied in a similar fashion to analyse asset purchases carried out by the US Federal Reserve, where it provided evidence of distinct reactions in the US dollar's exchange rate.<sup>32</sup> One advantage of this approach is its exclusive use of financial market variables available at a high frequency, which allows it to capture short-term exchange rate reactions as well. However, when applied to the Eurosystem's asset purchase operations, this approach was likewise unable to identify a statistically significant effect on the euro's effective exchange rate (see the box on pages 38 and 39), especially when the analysis is confined to the period of government bond purchases under the PSPP.<sup>33</sup>

*... that might have something to do with the euro's sharp depreciation before purchases started*

This finding raises the question as to what factors might be driving these observations. It is conceivable, for instance, that the euro's depreciation in the period leading up to March 2015 (which saw the start of the particularly large-volume government bond purchases), a movement which is sure to have been related to expectation and announcement effects associated with the purchase programme, already included all the effects of the programme on the euro's exchange rate, including future ones, or even that it represented an overshooting on the part of the euro's exchange rate.

## ■ Conclusion

Theoretical reasoning suggests that Eurosystem asset purchases ought to depress the value of the euro, and that was indeed the case on 23 January 2015, one day after the Governing

Council announced the APP, when the euro's effective exchange rate sustained its second-largest fall on the day since the single currency was introduced. This is all the more remarkable given that market participants' expectations in this regard had already helped send the euro's exchange rate lower in the preceding weeks. However, it is extremely difficult to quantify the relevant effects, and thus a distinct margin of uncertainty remains.

The decisions passed by the Governing Council in December 2015, March 2016 and December 2016 to expand the asset purchases tended to exert less downward pressure on the euro, even after factoring in the exchange rate response to the formation of expectations in the market. Furthermore, there are indications that non-euro-area residents had markedly reduced their holdings of PSPP-eligible bonds on balance by mid-2016, and that they had shifted their entire asset holdings held in custody in the euro area out of euro-denominated assets into other assets. All other things being equal, this ought to have broadly put a strain on the euro. Two alternative analyses, however, suggest that the Eurosystem's actual purchase operations had no significant additional effects on the effective exchange rate of the euro.

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<sup>32</sup> See Fratzscher et al (2013), op cit.

<sup>33</sup> The estimated impact on the EUR/USD exchange rate was also insignificant.

## Securities purchases under the Eurosystem's asset purchase programmes: a linear regression analysis of the euro's exchange rate

This article uses a regression analysis approach inspired by Fratzscher et al (2016)<sup>1</sup> to estimate the effects of the Eurosystem's actual purchasing operations on the effective exchange rate of the euro against 19 major trading partners. Its methodology differs from that of the study described on pages 34 to 36. One difference is that, in order to identify the effects of the Eurosystem's securities purchases, the following regression equation is estimated:

$$\Delta y_t = c + \alpha \Delta AS_t + \beta \Delta K_{t-1} + \varepsilon_t.$$

Let  $\Delta y_t$  represent the percentage change in the euro's exchange rate as a response variable. Positive values reflect an appreciation of the euro. This is regressed on a constant ( $c$ ) as well as on concurrent net bond purchases ( $\Delta AS_t$ ) and the first difference of control variables of the preceding period ( $\Delta K_{t-1}$ ). The regression coefficients  $\alpha$  and  $\beta$  describe the relationship between the bond purchases (or the control variables) and the euro's exchange rate;  $\varepsilon_t$  designates a disturbance term.

A second significant difference between this approach and the BVAR approach is that the current analysis is based solely on higher-

frequency financial market data, meaning that it can also capture shorter-term exchange rate effects of Eurosystem bond purchases. To this end, either the daily or weekly data for the period July 2009 to June 2016 are used for the estimation. This means that the beginning of the time horizon for the analysis coincides with the beginning of the purchases of assets held by the Eurosystem for monetary policy purposes. The period is divided into several sections in order to analyse the robustness of the estimated results. Firstly, the entire period taken into account in this study is analysed. Secondly, the period during which the interest rate on the deposit facility stood at 0% or below (July 2012 to June 2016) is studied. Thirdly, the estimation is based on the period during which the Eurosystem purchased government bonds within the framework of the Public Sector Purchase Programme (PSPP), which ran from March 2015 to June 2016.

The time series for executed bond purchases is based on the holdings of securities for monetary policy purposes, which are published by the ECB in its weekly financial statements (in trillions of euro).<sup>2</sup> The weekly inflows and outflows are used directly for estimations made on a weekly basis. Alternatively, they are distributed evenly over the trading days in a week, as in Fratzscher et al (2013), to obtain corresponding daily data through interpolation.<sup>3</sup>

As the time series is virtually linear in some places (see chart on page 32), an additional indicator variable is generated for asset pur-

### Control variables

Variable	Description
VSTOXX	First differences of the VSTOXX volatility index (in percentage points). Source: Datastream
Yields on ten-year bonds (euro area)	First differences of yields on ten-year government bonds in the euro area (benchmark: GDP-weighted average of issuing countries; in percentage points). Source: Bundesbank
Short-term interest rates (euro area)	First differences of a three-month OIS swap rate. Source: Bloomberg
Euro Stoxx 50	First differences of logs of the Euro Stoxx 50 index (percentage rates of change). Source: Datastream

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<sup>1</sup> See M Fratzscher, M Lo Duca and R Straub (2016), ECB unconventional monetary policy: market impact and international spillovers, IMF Economic Review 64, pp 36-74.

<sup>2</sup> The portfolios in the Eurosystem's balance sheet are valued at amortised cost.

<sup>3</sup> See M Fratzscher, M Lo Duca and R Straub (2013), On the international spillovers of US quantitative easing, ECB Working Paper 1557.

### Estimated values for $\alpha$ using alternative estimations

Estimation period	Daily data		Weekly data	
	Regressor: original time series	Regressor: indicator variable	Regressor: original time series	Regressor: indicator variable
July 2009 to June 2016	0.0234 (0.3591)	-0.0001* (-1.6577)	-0.0009 (-0.0177)	-0.0006 (-1.5562)
July 2012 to June 2016	0.0292 (0.4649)	-0.0001 (-1.4659)	0.0057 (0.1099)	-0.0006 (-1.6204)
March 2015 to June 2016	0.1984 (0.7540)	0.0005 (1.0948)	0.2127 (0.9646)	-0.0009 (-0.2578)

\* = significant at the 10% level; t-statistics in brackets.  
 Deutsche Bundesbank

chases. It takes the value of "1" in weeks of net asset purchases, "-1" in weeks of net reductions of bond holdings, and "0" otherwise. This series is used as an alternative to the actual time series for asset purchases.

To prevent potential endogeneity problems, only lagged values of the control variables listed in the table on page 38 are used. The control variables have the following functions within the regression analysis: VSTOXX and stock market indices cover the influence of uncertainty (market risk) on the exchange rate. Additionally, the stock price indices and the long-term interest rates can monitor expectations with regard to future economic developments. Exchange rate effects of conventional monetary policy are covered by short-term interest rates.

As financial market data time series often suffer from heteroscedasticity, the regressions for daily data are carried out with the aid of a heteroscedasticity and autocorrelation consistent estimation procedure (HAC estimator), which results in a consistent estimation of standard errors even if the assumptions of the classical regression model are violated. The OLS method is used for weekly data estimations.<sup>4</sup>

The results of the influence of Eurosystem asset purchases on the effective exchange rate of the euro against 19 trading partners (see table above) reveal that the relevant coefficient is generally insignificant, regardless of the selected estimation period, the data fre-

quency (daily or weekly data) or the regressor (asset purchase volumes or indicator variable). Slight indications of a significant influence appear at the 10% level if the maximum estimation period and daily data are used when applying an indicator variable. In such cases, the regression coefficient of asset purchases is negative, which corresponds to an effective depreciation of the euro in response to an expansion of bond holdings. On the other hand, if observation is restricted to the period since the beginning of PSPP asset purchases, the results are consistently positive, apart from dummy series for weekly data, and are by no means statistically significant.

On balance, the estimations cannot prove that the Eurosystem's actual asset purchase operations have affected the exchange rate of the euro.<sup>5</sup> However, the differing signs of the estimated coefficients for alternative estimation periods could suggest that the lack of significance is attributable to the inconclusive response of the euro to purchase operations over time.

<sup>4</sup> Such series of tests for heteroscedasticity (eg those of Breusch-Pagan-Godfrey and Harvey) advocate a different approach for handling daily and weekly data.

<sup>5</sup> Estimations for which the euro-US dollar exchange rate is used as the response variable instead of the effective exchange rate of the euro present a similar picture. For this estimation, the percentage change in the S&P500 as well as the first differences of the three-month swap rate on the US OIS rate and the yield on ten-year US Treasuries are used as control variables.





## Recent developments in the indebtedness of the private non-financial sector in selected euro-area countries

*In the 2000s, against the backdrop of optimistic income expectations and favourable financing conditions, there was a marked rise in the debt levels of non-financial corporations and households in some euro-area countries. In the wake of the financial and economic crisis and the European debt crisis, the income situation was reassessed and the financing conditions were tightened. The balance sheet mismatches that this uncovered revealed the need for balance sheet adjustments via a deleveraging process in the private non-financial sector.*

*While deleveraging did not make much headway in the first few years after the onset of the crisis, it has accelerated considerably since 2012. Although there is a certain heterogeneity in the adjustment progress from country to country and sector to sector, a significant portion of the pre-crisis rise in debt ratios has, for the most part, already been corrected. However, the deleveraging process has not yet been fully completed. The decline in debt has been driven primarily by the active repayment of debt from current income. By contrast, stock-flow adjustments in the form of write-downs have, with few exceptions, played only a minor role. This is currently reflected in the levels of non-performing loans on the books of the national banking systems, which for the most part remain high.*

*Historical examples suggest that the deleveraging process is faster where active deleveraging is accompanied by stock-flow adjustments. Economic developments in the euro area in recent years, which have been weak by international standards, are therefore likely to be at least partly attributable to the pronounced active repayment of debt from current income and the feedback effects this causes. However, stock-flow adjustments can also be accompanied by the misallocation of financial resources as a result of adverse incentives, as well as by heightened risks to financial stability. Insolvency frameworks are a prerequisite for a swift reduction in unsustainable debt via stock-flow adjustments. As these frameworks have undergone significant reform in recent years in most of the countries concerned, what matters now is their consistent application. An insolvency framework-induced reduction in debt levels, which are still high in some cases, could provide the deleveraging process with additional impetus. At the same time, this would encourage the reallocation of resources and thereby support potential growth, provided institutional reforms are carried out in a manner consistent with the protection of legitimate expectations and legal certainty.*

## ■ Introduction

*Sharp rise in pre-crisis debt levels of private non-financial sector in some euro-area countries*

In the years prior to the onset of the financial and economic crisis there was an unsustainable rise in the debt levels of the private non-financial sector in some euro-area countries. In the wake of the crisis, a reassessment of income prospects and asset valuations in all countries caught up in the European debt crisis revealed an extensive need for balance sheet adjustments in some cases. Households and non-financial corporations reacted to these balance sheet mismatches by reducing their debt levels.<sup>1</sup>

*Deleveraging can impact real economic development for a long period and weaken monetary policy measures*

Deleveraging is of relevance for economic policy makers in general and for monetary policy makers in particular, above all because of the possible negative repercussions on the real economy and thus also on price developments. For example, historical studies show that recessions accompanied by a necessary reduction in debt overhang are, on average, more prolonged and associated with markedly weaker economic activity.<sup>2</sup> In this adjustment phase, debtors in the private non-financial sector use their income to a greater extent to reduce their debt. Even if this only results in a redistribution of funds from debtors to creditors, the likely effect is to curb macroeconomic consumption and investment, as creditors generally have a lower propensity to spend than debtors.<sup>3</sup> In monetary policy terms, this means that expansionary monetary policy measures to stimulate aggregate demand for goods via consumption and investment can, in such an environment requiring adjustment processes, have a comparatively weak effect or work comparatively more slowly, as long as balance sheet constraints impede demand from the private non-financial sector. In addition to the negative effects on economic activity, the reallocation of the capital stock to more productive value-added areas can be negatively affected by low investment, which in turn could lead to lower potential growth.

Previous analyses of the debt situation of the private non-financial sector in the euro area concluded that the deleveraging process in the countries concerned following the onset of the financial crisis was rather weak in comparison to the typical path of previous deleveraging phases.<sup>4</sup> Against this backdrop, this article documents how far the reduction in the debt overhang has progressed since 2012 and the adjustment channels through which it has occurred. It also sets out potential implications of deleveraging for the real economy and draws conclusions for economic policy-making.

## ■ Assessment of the private non-financial sector debt situation

### Debt ratio over time

The debt ratio usually serves as the key indicator for assessing the debt situation of the private non-financial sector – not least because of the good data availability and the high international comparability. It places sectoral debt – calculated on the basis of the financial accounts and in the following defined as the sum of loans, debt securities, insurance technical reserves, trade credits and advances – in relation to an income stream such as gross domes-

*Debt ratio key indicator for assessing the debt situation*

<sup>1</sup> See Deutsche Bundesbank, Private debt – status quo, need for adjustment and policy implications, Monthly Report, January 2014, pp 53-65.

<sup>2</sup> See O Jordà, M Schularik and AM Taylor (2013), When credit bites back, *Journal of Money, Credit & Banking*, 45(2), pp 3-28; and Deutsche Bundesbank (2014), op cit.

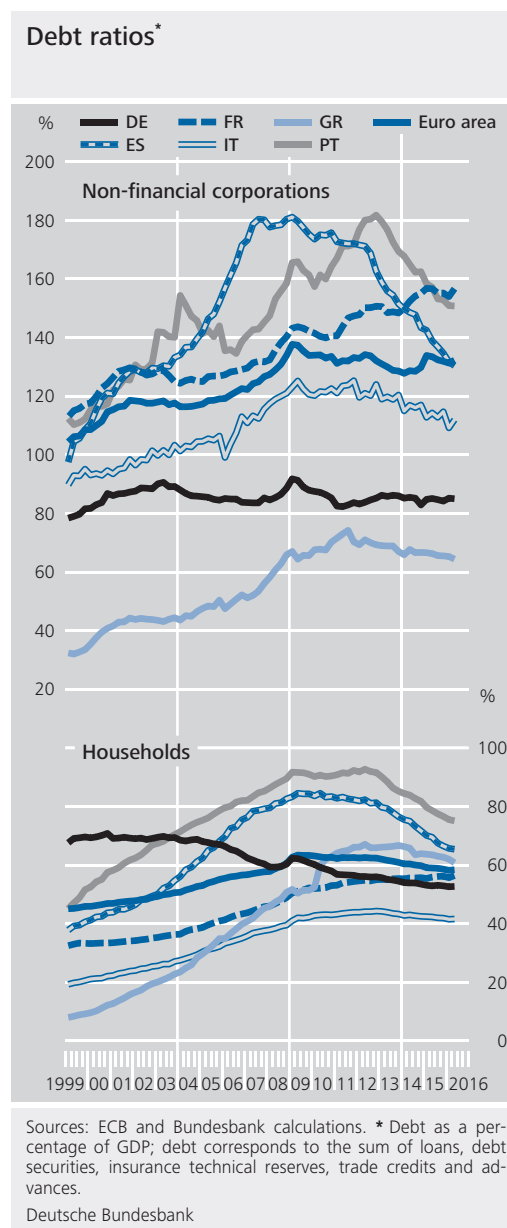
<sup>3</sup> See, for example, M Goretti and M Souto (2012), Macro financial implications of corporate (de)leveraging in the euro area periphery, IMF Working Paper No 154; A Mian, K Rao and A Sufi (2013), Household balance sheets, consumption, and the economic slump, *Quarterly Journal of Economics*, pp 1687-1726; B Albuquerque and G Krustev (2015), Debt overhang and deleveraging in the US household sector: gauging the impact on consumption, ECB Working Paper Series, No 1843; A Mian, A Sufi and E Verner (2015), Household debt and business cycles worldwide, mimeo.

<sup>4</sup> See Deutsche Bundesbank (2014), op cit.

tic product (GDP).<sup>5</sup> As debt is often repaid from current income, this indicator aims to show the long-term economic sustainability of the debt. A low debt ratio implies that the debt stock of a sector stands in relation to a relatively high income that can be used to repay the debt. The sectoral aggregate data used here therefore do not take into account possible distribution effects relating to debt and assets within the individual sectors.

*Strong increase in the 2000s, particularly in Portugal and Spain*

The adjacent chart shows the development of debt ratios for non-financial corporations and households in countries heavily affected by the European debt crisis, namely Greece, Italy, Spain and Portugal, as well as in the two largest euro-area countries, Germany and France.<sup>6</sup> The development of the euro-area aggregate is additionally shown as a benchmark. There was a strong rise in debt in the 2000s, particularly for non-financial corporations and households in Spain and Portugal. Fairly strong upward momentum could also be seen for households in Greece until 2012, albeit starting from an extremely low level. By contrast, non-financial corporations and households in Italy were characterised by a somewhat more modest development and a low debt level compared to other countries. On the other hand, German households, which were still the most indebted



<sup>5</sup> In earlier publications the debt definition included only loans, debt securities and insurance technical reserves. Since the change-over from the European System of Accounts (ESA) 1995 to ESA 2010, it is now also possible to statistically isolate trade credits and advances, which are also debt instruments. For an account of the change-over to ESA 2010, see Deutsche Bundesbank, Methodological changes in the financial accounts – background, approach and selected results, Monthly Report, October 2014, pp 13-26. The data are taken on an unconsolidated basis and thus include intra-sectoral liabilities such as loans between non-financial corporations. Ideally, the intra-sectoral liabilities should be corrected to exclude intra-group liabilities, as these do not represent a payment obligation in the stricter sense. However, as these cannot be distinguished from the remaining intra-sectoral loans on the basis of existing data sources, the debt level as relevant from an economic perspective tends to be overstated.

<sup>6</sup> The debt data are taken from the financial accounts compiled according to ESA 2010, as provided by the European Central Bank or the respective national central banks. For Italy, the backdata prior to 2012 are based on ESA 1995. The development in Ireland is not shown here because, in the case of non-financial corporations, it is distorted by the presence of international enterprises.

when the monetary union was founded, have gradually reduced their liabilities.

During the European debt crisis between 2010 and 2013, the debt ratios of the private non-financial sector began to fall, particularly in Spain and Portugal. This process has accelerated markedly since mid-2012. Compared to the respective peaks, there has been a substantial reduction in the debt ratios among non-financial corporations of just over 50 percentage points in Spain and around 30 percentage points in Portugal. Household debt ratios have fallen in each case by nearly 20 percentage points. Thus, in both countries, approximately

*Marked decline in Portugal and Spain since mid-2012*

half of the increase in debt ratios recorded between the beginning of 2000 and the respective peaks has since been cut back.

*Sideways movement in Germany, Italy and Greece; slight but persistent rise in France*

By contrast, the debt ratios of the private non-financial sectors in Germany, Italy and Greece, which have rather low debt levels by international standards, as well as in the euro area as a whole have shown a persistent sideways movement in recent years. Only in France has there been a continuation of the slight, but persistent, upward trend. At the current end of the data, non-financial corporations in France have the highest debt ratio among all of the countries considered here.<sup>7</sup> The sideways trend at the level of the euro area in recent years stands in contrast in part to the developments in other large economies (see box on pages 45 and 46).

## Determinants of the change in the debt ratio

*Change in the debt ratio ...*

In order to be able to draw conclusions on the type of deleveraging process, the change in the debt ratio is broken down into the contributions of its sub-components. The denominator of the debt ratio – GDP – is broken down into the contributions of real GDP and of the GDP deflator, ie an indicator of macroeconomic price developments; the change in the level of debt – the numerator in the debt ratio – is subdivided into three components: transactions, write-downs and other changes.

*... attributable to various factors*

Transactions correspond to active increases or reductions in debt. Stock-flow adjustments made in the form of write-downs are reductions in the nominal amount of existing liabilities and take place, for example, as a result of loan renegotiations in the case of payment difficulties or outright defaults in the case of insolvency. As write-downs are not listed separately in the financial accounts, the data from the monthly balance sheet statistics of the monetary financial institutions (MFIs) are also taken into account. The information on write-

downs thus relates only to bank loans. However, as these usually make up a large portion of the aggregate indebtedness of the private non-financial sector, a significant share of all write-downs should therefore be covered by this.<sup>8</sup> Other changes thus encompass all other factors that influence the debt level, except transactions and write-downs. These include market price or exchange rate fluctuations, statistical changes to the debt level, and write-downs on debt instruments other than bank loans. The chart on page 47 shows the contributions to the change in the debt ratio since the deleveraging process began to accelerate in mid-2012.

In all of the countries considered here, except Greece and Italy, both real GDP growth and the increase in the GDP deflator contributed to a reduction in the debt ratios. This means that the deleveraging process was supported by both economic developments and the increase in the price level. In Italy, by contrast, real economic growth did not make any contribution to the fall in the debt ratio, as the economic recovery there has thus far been very weak. In Spain, where, alongside Portugal, the debt ratio of the private non-financial sector has decreased the most over the last few years, a substantial part of the reduction in the debt ratio was due, in addition to active deleveraging, to write-downs on bank loans. This was particularly true for non-financial corporations, and, to a somewhat lesser extent, for households, too. The major importance of write-downs in Spain

*Economic growth and debt repayments contribute to a reduction in almost all countries*

<sup>7</sup> As intrasectoral loans are of major significance in the cross-country comparison and consist at least in part of intra-group liabilities that are of no consequence to debt sustainability, the unconsolidated debt shown here should paint a somewhat too negative picture of the debt situation of non-financial corporations in France. However, even after adjusting the debt ratio to exclude intrasectoral loans, a steady upward trend can still be observed and, at the current end of the data, France posts the second-highest value (after Portugal) of all countries under consideration here.

<sup>8</sup> In the MFI balance sheet statistics, other adjustments are comprised of write-downs and changes to the nominal value. As loans are not subject to market price fluctuations, other adjustments can be equated to write-downs. See Manual on MFI balance sheet statistics, Chapter 1, ECB, April 2012.

## Debt – an international comparison

While debt<sup>1</sup> accumulated in the euro area in the 2000s, the United States as well as several major emerging market economies also saw an increase in debt levels, which, in 2008, culminated both in the real estate crisis in the United States and the global financial crisis. However, the euro area, the United States, the United Kingdom, Japan and the group of emerging market economies have experienced very different developments in the wake of the crisis, particularly in recent years.

Debt in the United States accumulated at a similar pace to that in the euro area. However, after peaking in 2008 at a debt ratio of 169%, this trend gave way – earlier than in the euro area – to a phase of deleveraging, which lasted until 2012. In contrast to the situation in the euro area, this deleveraging – like the accumulation of debt before it – was driven mainly by households. Since then, the debt ratio of the private non-financial sector in the United States has remained largely constant, which can, as in the euro area, be attributed to the fact that nominal gross domestic product (GDP) has grown roughly in line with debt. However, back in 2012, the US debt ratio, at just under 150%, was already lower than the current level in the euro area (where it stood at 164% in the second quarter of 2016).

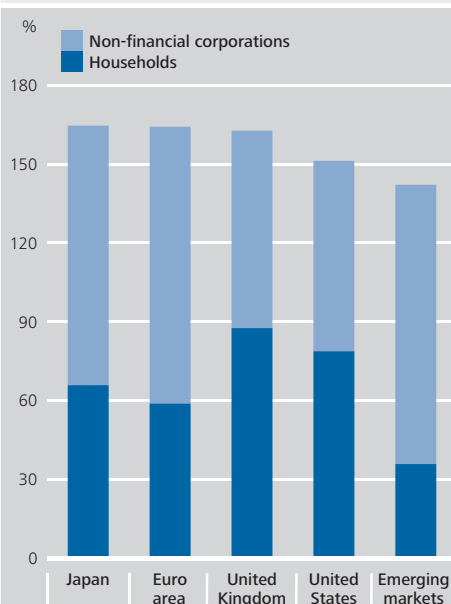
Developments in debt in the United Kingdom were similar to those in the United

States, only more pronounced, on the whole. Households and non-financial corporations in the United Kingdom contributed in roughly equal parts to both the accumulation and the reduction of debt. Somewhat later than in the United States, 2010 saw the beginning of an intensive phase of deleveraging, which started at a debt ratio of 192% and has persisted up to the current end (in the second quarter of 2016, the ratio was 163%). This can be attributed to strong GDP growth and, at times, active deleveraging. Household debt, in particular, is currently still high by international standards, however.

Developments in Japan and in the group of emerging market economies were strikingly different. In Japan, the private non-financial sector, predominantly the part consisting of

### Debt ratios\* of the private non-financial sectors of selected economic areas

As at 2016 Q2

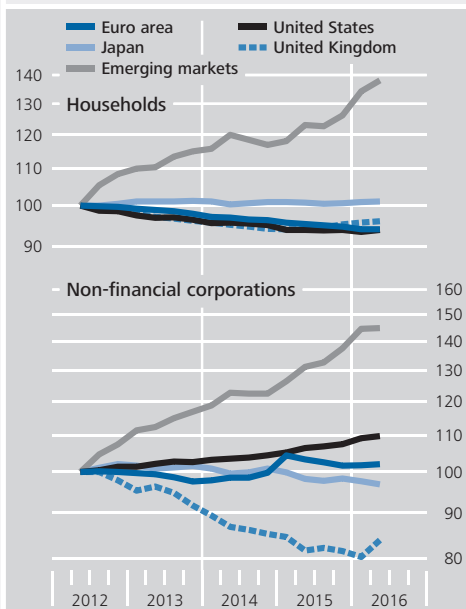


Sources: BIS total credit statistics and Bundesbank calculations.  
 \* The debt ratio is defined as debt (which here comprises only loans and debt securities due to limited data availability) as a percentage of GDP.  
 Deutsche Bundesbank

<sup>1</sup> For the purposes of this international comparison, debt is defined only as loans and debt securities and, therefore, excludes pension provisions and trade credits. This facilitates the international comparability of the data, which are taken from the Bank for International Settlements' total credit statistics. Consequently, the debt ratio cited here is lower than elsewhere in this article.

### Debt ratios\* of the private non-financial sectors of selected economic areas

2012 Q2 = 100



Sources: BIS total credit statistics and Bundesbank calculations.  
 \* The debt ratio is defined as debt (which here comprises only loans and debt securities due to limited data availability) as a percentage of GDP.  
 Deutsche Bundesbank

non-financial corporations, was very heavily indebted, with debt ratios of up to 220% in the 1980s and 1990s. In the mid-1990s, an adjustment process was set in train, in which the private non-financial sector underwent significant deleveraging, while government debt inversely started to grow and, as a percentage of GDP, currently exceeds other industrial countries' levels. This development meant that Japan, unlike many other countries, experienced a decline in the debt ratio of the private non-financial sector in the run-up to the financial and economic crisis. Even after the onset of the financial crisis, which in Japan was accompanied by a slight increase in debt, a sideways movement started, with debt even, at times, declining somewhat. This was the result of broadly similar developments in debt and GDP. At 165%, the debt ratio of the private non-financial sector in Japan in mid-2016 was, however, still very high by international standards, which

was attributable mainly to non-financial corporations.

Developments in the emerging market economies also diverged significantly from those in the United States, the United Kingdom and the euro-area countries. Whereas debt levels in the private non-financial sector were still very low in the years leading up to the financial crisis and grew relatively slowly, a sharp increase started in 2008, bringing the debt ratio (currently 142%) close to that of the other countries under review. The muted GDP growth experienced in many emerging economies, particularly since 2015, was unable to keep up with the active accumulation of debt. The rise in debt was propelled mainly by non-financial corporations, whose current-end debt ratio, at 106%, has even exceeded that of non-financial corporations in the euro area. Given low interest rates in the industrial countries, large volumes of liabilities denominated in foreign currency were established, thus increasing vulnerability to exchange rate fluctuations and changes in commodity prices. Among the emerging economies, China in particular drove the build-up of debt, with the debt ratio of the private non-financial sector rising from 115% in 2008 to values in excess of 200% at the current end – here, too, driven principally by non-financial corporations. Conversely, the ratios of other large emerging economies, such as Brazil, Russia, India or South Africa, are currently significantly smaller – at less than 75% each – although Russia and Brazil have also experienced a substantial rise in debt from a low level since 2008.

is closely linked to the SAREB bad bank, which took on a substantial volume of non-performing assets from Spanish banks, with significant haircuts on the nominal value, and liquidated them in a value-preserving manner. It therefore contributed to a comprehensive balance sheet restructuring in the Spanish banking sector and, mirroring this, provided relief for the balance sheets of the private non-financial sector.<sup>9</sup> In Portugal, Italy and Greece, by contrast, write-downs played only a minor role. Here, developments were driven to a greater extent by active deleveraging.

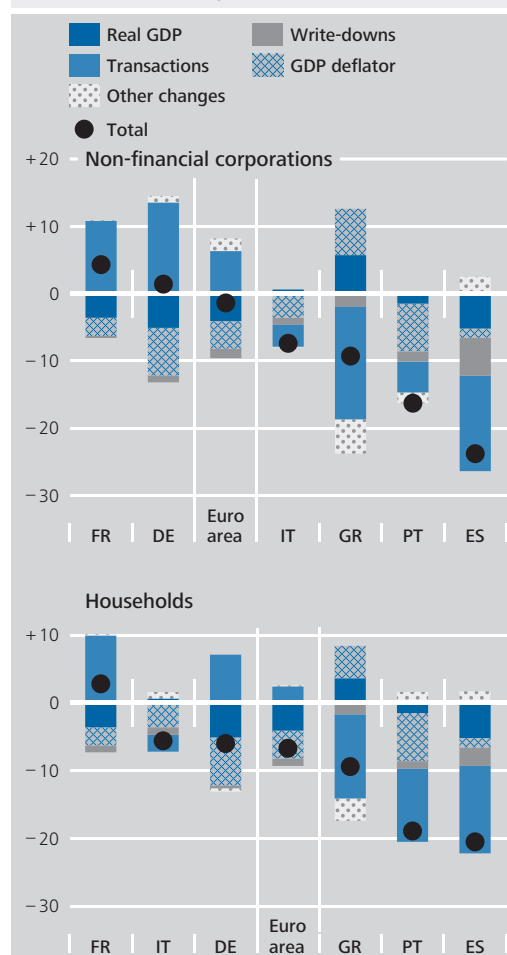
## Alternative indicators for assessing the debt situation

*Debt service ratio measures the portion of income used to service debt*

In addition to the importance of current income in the long term, debt sustainability can also be influenced by other factors in the short term. For example, the actual interest burden associated with servicing the debt can vary temporarily. This is especially the case when the interest payment obligations are variable and linked to a benchmark interest rate that, in turn, is influenced by monetary policy. One indicator that takes this circumstance into account is the debt service ratio. This places the sum of the interest and redemption payments made in a single period in relation to aggregate income in the same period. Unlike the debt ratio, where a stock variable, ie indebtedness, is placed in relation to a flow variable, ie income, in this case the numerator is therefore also a flow variable. The indicator thus measures the share of income that must be used to service debt, ie for interest and redemption payments. All other things being equal, a given debt level will be more sustainable and, in the short term, require fewer balance sheet adjustments in the form of foregoing consumption or scaling back investment when the interest and repayment burden relative to income is low. For a given debt level, this can be the result of low interest rates – for example, owing to an expansionary monetary policy – or of a long borrowing term in which the redemption pay-

### Change in the debt ratio\* and contributions made by its components

Percentage change between 2012 Q2 and 2016 Q2 and contributions in percentage points

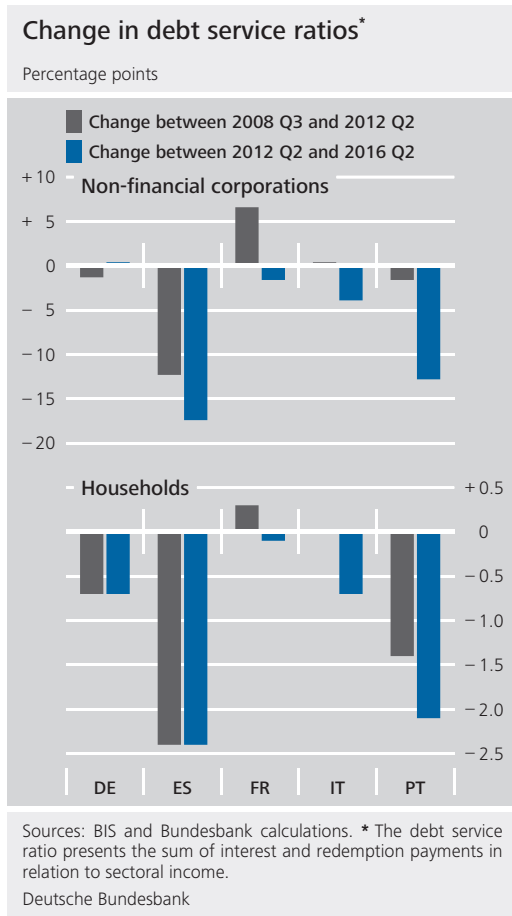


Sources: ECB and Bundesbank calculations. \* Debt as a percentage of GDP; debt corresponds to the sum of loans, debt securities, insurance technical reserves, trade credits and advances.

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ments in each period are correspondingly low. The chart on page 48 shows the change in debt service ratios between the second quarter of 2012 (when the deleveraging process began to intensify) and the current end of the data (second quarter of 2016). For the purposes of comparison, the change between the third quarter of 2008 (the onset of the global finan-

<sup>9</sup> For more information, see Fund for Orderly Bank Restructuring, Asset Management Company for Assets Arising from the Bank Restructuring, 16 November 2012.



cial and economic crisis) and mid-2012 is also shown.<sup>10</sup>

*Debt service ratio falling in Spain and Portugal even prior to start of deleveraging process*

In the case of non-financial corporations and households in Spain and Portugal, which were particularly highly indebted prior to the onset of the crisis, the debt service ratio had already started to fall in the wake of key interest rate cuts by the Eurosystem in the second half of 2008, meaning that it decreased much sooner and to a considerably greater extent than the debt ratio. As the share of income needed for interest payments was subsequently lower, balance sheet constraints were eased in the private non-financial sector and, when viewed in isolation, the decline in consumption and investment via this channel was mitigated.<sup>11</sup> This development may be partly due to the fact that loans subject to variable interest rates that move in line with a money market yield are more common in these two countries than in other euro-area countries.<sup>12</sup> By contrast, the

debt service ratios and debt ratios of the remaining countries under review here, in which loans are usually granted on a fixed-rate basis, followed a fairly similar pattern.<sup>13</sup>

While short-term payment obligations are better captured by the debt service ratio than the debt ratio, the former takes no account of the fact that debt can be reduced by selling existing assets to free up funds. Since liquidating the real assets of households (residential properties, in particular) and of non-financial corporations (fixed assets, in particular) as well as certain components of long-term financial assets in times of crisis is usually either difficult

*Selling liquid assets can free up funds to service debt*

<sup>10</sup> The data are based on BIS calculations. See M Drehmann, A Illes, M Juselius and M Santos (2015), How much income is used for debt payments? A new database for debt service ratios, BIS Quarterly Review. The authors assume here that on the macroeconomic level, aggregate interest and amortisations are paid in approximately equal amounts in each period, similarly to an instalment loan. The debt service ratio (DSR) at time  $t$  is thus calculated using the following formula:  $DSR_t = (i_t * D_t) / ((1 + (1 + i_t)^{-s_t}) * Y_t$ , where  $i_t$  corresponds to the average interest that has to be paid on the debt,  $D_t$  is the amount of debt,  $s_t$  is the average remaining maturity and  $Y_t$  is gross disposable income. As no time series are available for Greece, it is excluded from the analysis. Given the assumption for the debt service ratio that the remaining maturity of the debt is constant over time and across countries, all the differences between the debt service ratio and the debt ratio are attributable to divergent developments in interest payments.

<sup>11</sup> In addition to having a stabilising effect, this development simultaneously creates incentives to only gradually address the actual issue of excessive indebtedness, which could, all in all, go as far as to render the economy more vulnerable to future shocks.

<sup>12</sup> For information on interest rate characteristics for non-financial corporations, see Eurosystem Working Group (2013), Corporate finance and economic activity in the euro area, ECB Occasional Paper, No 151. For households, see ECB (2009), Housing finance in the euro area, Structural Issues Report, p 26.

<sup>13</sup> Using the Bank's econometric estimates, the extent to which interest rate changes prompted by monetary policy are passed through to the interest rate on the outstanding debt of households and non-financial corporations was examined. In the context of the global financial crisis and the sovereign debt crisis in the euro area, such an analysis comes with various caveats. For instance, the effects arising from possible changes in financing patterns or in the transmission mechanism can only be approximately estimated at the current juncture. That said, the findings tend to suggest that monetary policy stimulus has, first and foremost, a greater and swifter impact on the debt servicing of households and non-financial corporations in Portugal, Spain and – albeit to a lesser extent – Italy than those in Germany or France. With respect to possible changes in the interest rate pass-through, see Deutsche Bundesbank, The interest rate pass-through in the crisis, Monthly Report, September 2015, p 33.



or entails heavy markdowns, making them unlikely to be readily available to service debt, this article focuses solely on liquid financial assets. These are assets in the form of cash, deposits, shares, investment funds and debt securities that can be liquidated or sold without incurring significant costs.<sup>14</sup> Debt and liquid financial assets therefore serve as two stock variables that can be compared in a ratio. A low ratio of debt to liquid financial assets means that, all other things being equal, the debt is set against sizeable assets that could be used to service the debt, irrespective of current income. The adjacent chart shows the change in this indicator for non-financial corporations and households between mid-2012 and the current end of the data, with the overall change also broken down into the contributions made by debt and liquid assets.

*Ratio of debt to liquid assets down in most countries and sectors under review*

With the exception of non-financial corporations in Greece, all countries and sectors under review have recorded a fall in the ratio of debt to liquid assets since mid-2012. In both sub-sectors of the private non-financial sector in Spain and Portugal, as well as in the case of non-financial corporations in Italy, this development was attributable to both active debt reduction and a rise in liquid assets. Debt reduction therefore goes hand in hand with a higher volume of assets that can be liquidated at short notice, which ought to increase resilience to any negative income and asset price shocks. There was a disproportionately sharp rise in liquid assets in the case of the private non-financial sectors in Germany and France, which led to the ratio dwindling despite an accumulation of debt over the past few years.<sup>15</sup> By contrast, liquid assets – particularly deposits – held by non-financial corporations and households in Greece fell. Based on this development, it can be assumed that the private non-financial sector has temporarily used its liquid assets here for debt-servicing purposes. While this has reduced the debt burden, it has also lessened the private non-financial sector’s ability to absorb any future adverse income and asset price

### Change in the ratio of debt to liquid assets and contributions made by its components\*

Percentage change between 2012 Q2 and 2016 Q2 and contributions in percentage points



Sources: ECB and Bundesbank calculations. \* Debt corresponds to the sum of loans, debt securities, insurance technical reserves, trade credits and advances. Liquid assets comprise the sum of cash, deposits, shares, investment funds and debt securities.

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<sup>14</sup> Other, illiquid assets, such as claims against insurance corporations and pension funds or unlisted equity instruments, can usually only be converted into cash at great expense and are therefore poorly suited to mobilisation at short notice. In qualitative terms, the results discussed in this article would be virtually identical if a narrow definition of liquid (current) assets limited to cash, deposits, short-term loans and debt securities were chosen.

<sup>15</sup> Looking at the level of, rather than change in, the ratio of debt to liquid assets, it differs significantly from the debt ratio with respect to relative positioning in the case of non-financial corporations in France. While, according to the latest data available, their debt ratio rose steadily to become the highest debt ratio among the countries and sectors under review, debt was at the second-lowest level relative to liquid assets and has remained more or less constant, both over the longer term and in recent years. The high debt levels are thus accompanied by sizeable liquid financial assets.

### Indicators for assessing the debt situation of the private non-financial sector\*

Change between 2012 Q2 and 2016 Q2 in percentage points

Item	Germany	Spain	France	Italy	Greece	Portugal
<b>Debt ratio</b>						
Non-financial corporations	1.2	- 40.8	6.5	- 9.0	- 6.6	- 29.3
Households	- 3.3	- 16.9	1.5	- 2.5	- 6.3	- 17.6
<b>Debt service ratio</b>						
Non-financial corporations	0.4	- 17.4	- 1.6	- 3.9	-	- 12.8
Households	- 0.7	- 2.4	- 0.1	- 0.7	-	- 2.1
<b>Ratio of debt to liquid assets</b>						
Non-financial corporations	- 18.1	- 171.3	- 10.3	- 60.8	29.6	- 124.1
Households	- 5.4	- 19.0	- 2.4	- 1.4	- 7.5	- 11.8

Sources: BIS, ECB and Bundesbank calculations. \* The debt ratio presents debt (sum of loans, debt securities, insurance technical reserves, trade credits and advances) as a percentage of GDP. The debt service ratio presents the sum of interest and redemption payments as a percentage of sectoral income. Liquid assets comprise the sum of cash, deposits, shares, investment fund shares and debt securities.

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shocks.<sup>16</sup> The table above summarises the change in the three indicators under review.

The ability to service debt is mirrored in creditors' balance sheets. Creditors are almost exclusively from the domestic banking sector in the case of households and largely from said sector in the case of non-financial corporations. The share of non-performing loans as a percentage of banks' total loans provides insight into whether borrowers are making their interest and redemption payments as contractually agreed. A high percentage of delinquent loans may be deemed indicative of an unsustainable level of indebtedness on the part of the private non-financial sector.

Particularly in Greece, but also in Italy and Portugal, the high and rising share of non-performing loans as a percentage of total loans is a sign that, as a result of weak income growth, it remains difficult for many borrowers in the private non-financial sector to service their debt. The Spanish banking system was likewise initially weighed down by a sharp rise in non-performing loans in the wake of the crisis. However, the volume of non-performing loans has dropped discernibly since the transfer of legacy loan portfolios to a resolution agency at the turn of 2012-13 and the country's significant economic recovery.<sup>17</sup> In Germany and

France, non-performing loans are at a moderate and stable level and testify to the high credit quality of borrowers from the private non-financial sector.

The volume of non-performing loans may also restrict banks' credit supply. As loan impairments are recognised in banks' profit or loss, they have a negative impact on their earnings and hinder their efforts to build up capital internally. This, in turn, may increase their funding costs and limit their access to funding. These two factors did indeed deteriorate significantly against the backdrop of strains on the European banking sector during the acute phase of the European debt crisis; together with the necessary balance sheet adjustments in the private non-financial sector, they contributed to a sharp drop in loan dynamics, to which the Eurosystem responded with a series of non-standard monetary policy measures.<sup>18</sup>

*... and may lead to banks imposing restrictions on lending*

*Banks' non-performing loans as a mirror image of debt situation in private non-financial sector*

*High and rising share of non-performing loans indicative of problems servicing debt in Greece, Italy and Portugal ...*

<sup>16</sup> To a certain extent, the decline in deposits is likely also attributable to withdrawals in the wake of the uncertainties surrounding negotiations concerning the third Greek bailout package.

<sup>17</sup> See Deutsche Bundesbank, Recent developments in loans to euro-area non-financial corporations, Monthly Report, September 2015, pp 15-39.

<sup>18</sup> See Deutsche Bundesbank (2015), op cit.

## Final assessment of the debt situation

*Mapping developments in historical context*

In the following, debt reduction in the countries affected by the crisis is compared with several typical developments that have been observed in the past, with the aim of making it possible to assess changes in the private non-financial sector's debt situation. To this end, the chart on page 52 shows the course of the debt ratio for the private non-financial sector as a whole before and after the GDP peak was reached at the end of 2008 for the countries under review here compared with two historical scenarios cited in the relevant literature: a typical business cycle and a typical private sector debt crisis. The classification of each business cycle is based on a dataset of 15 industrial countries between 1960 and 2012: Australia, Canada, Denmark, Finland, France, Germany, Italy, Japan, the Netherlands, Norway, Spain, Sweden, Switzerland, the United Kingdom and the United States. All in all, 40 typical business cycles and five debt crises (Spain in 1978, Norway in 1987, Finland in 1991, Sweden in 1991 and Japan in 1992) can be identified in the dataset.<sup>19</sup> Private sector debt crises differ from typical business cycles in that they are preceded by a sharp rise in the debt ratio that, once the GDP peak has been reached, decreases just as clearly again in the medium term. Typical business cycles are characterised by a weak but persistent upward movement of the debt ratio both before and after the GDP peak has been reached.

*Deleveraging process in Spain already appears to be well underway*

While the rise in the debt ratio for the private non-financial sector in Spain and Greece was considerably more dynamic than in comparable periods that culminated in a private sector debt crisis, developments in Italy and Portugal, on the other hand, were very similar to those arising during a typical debt crisis. With respect to the debt ratio's period of decline, it is evident that, in Spain, this set in significantly more quickly than in previous private sector debt crises and the decline was much more extensive. Even taking into account the somewhat

stronger momentum during the debt build-up phase, it can therefore be concluded that the deleveraging process in Spain already appears to be well underway. While the debt ratio initially fell with a considerable time lag in Portugal, it has now reached a level that corresponds to developments in comparable historical periods. In each of these countries, this process is underpinned by a decline in the debt service ratio that is disproportionately large in comparison with the debt ratio. Resilience to negative shocks has also risen recently as a result of holdings of liquid assets being expanded relative to debt levels. However, the comparatively rapid adjustment of lending rates to move in line with money market developments is also likely to make the non-financial sectors of these countries more vulnerable to any normalisation of the monetary policy stance.

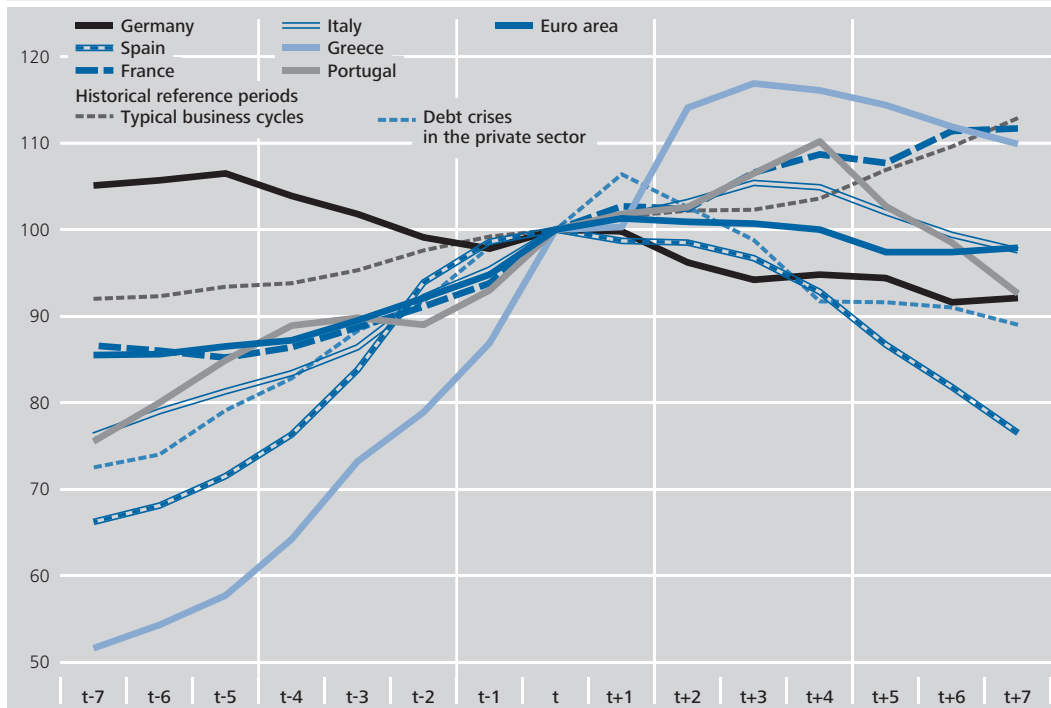
By contrast, the decline in the debt ratio for the private non-financial sector in Italy, and particularly in Greece, is lagging behind what would typically be expected. In Greece's case, this is primarily on account of the sharp fall in economic output in the wake of the Greek sovereign debt crisis. In Italy's case, weak economic performance – which has been persisting for years now – is also hampering a more significant fall in the debt ratio. To put matters into perspective, however, it may be concluded for both countries that, in a cross-country comparison, their debt ratios are rather low, meaning that the need for deleveraging could accordingly be lower than indicated by developments prior to the crisis. Strain is placed on non-financial corporations in Italy, however, due to the buffer of liquid assets being rather low, leaving them with only limited opportunities to service their debt by selling assets in the event of adverse shocks. Households in Italy,

*Sluggish economic performance hampering deleveraging process in Greece and Italy*

<sup>19</sup> The data pool comprises data from the BIS, ECB and M Schularik and AM Taylor (2012), Credit booms gone bust: monetary policy, leverage cycles and financial crises: 1870-2008, *American Economic Review*, 102(2), pp 1029-1061. For details on the country sample and classification of historical cycles, see Eurosystem Working Group (2013), Corporate finance and economic activity in the euro area, ECB Occasional Paper, No 151.

### Debt ratio\* of the private non-financial sector by historical standards

GDP peak = 100



Sources: BIS, ECB and Bundesbank calculations. For details on the country sample and classification of historical cycles, see Eurosystem Working Group, Corporate finance and economic activity in the euro area, ECB Occasional Paper 151, August 2013. \* Debt as a percentage of GDP; debt corresponds to the sum of loans, debt securities, insurance technical reserves, trade credits and advances.

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on the other hand, find themselves in a relatively comfortable position with respect to liquid assets. The private non-financial sector in Greece has increasingly used liquid assets over the past few years to service its debt, thereby depleting existing reserves. That said, from a cross-country perspective, the ratio of debt to liquid assets remains at a high level, particularly in the case of non-financial corporations.

*Developments in France most closely represent typical business cycle; stable debt situation in Germany*

With respect to the private non-financial sector in France, it may be concluded that the persistent, but only moderate, increase in the debt ratio most closely represents developments during a typical business cycle and therefore marks a significant departure from the strong growth recorded in the countries affected by the crisis. While, according to the latest data available, non-financial corporations in France have a relatively high debt ratio, this is put into perspective by the fact that the ratio of debt to liquid assets is very low compared with that of other countries. Germany is the only country

under review here in which there was no phase of marked upward movement for the private non-financial sector's debt ratio during the observation period in the case of both non-financial corporations and households. This phase of debt reduction can, in part, be interpreted as a countermovement to the debt overhang of the 1990s. Growing profitability was another factor that helped non-financial corporations, as it facilitated a shift towards internal financing.<sup>20</sup> The course of the debt ratio over recent years and decades therefore attests to the fact that developments in Germany have diverged greatly from those in other euro-area member states and can, at the same time, be taken as evidence of a now relatively stable debt situation.

<sup>20</sup> For non-financial corporations, see Deutsche Bundesbank, Long-term developments in corporate financing in Germany – evidence based on the financial accounts, Monthly Report, January 2012, pp 13-27.

*Developments also need to be viewed with euro-area circumstances in mind*

The hitherto sluggish pace of adjustment in some countries must, however, also be assessed against the backdrop of the economic situation in the euro area. Compared with the average course of a private sector debt crisis, developments in the euro area were also shaped, *inter alia*, by balance of payments problems, the lack of private capital flows, the fact that price competitiveness can no longer be improved by making nominal exchange rate adjustments, and strained public finances. It cannot be ruled out that the private and/or public sector would not have been capable of fully bearing the financial burden of broader stock-flow adjustments, with the result that long-lasting active debt repayments came to the fore.

## Macroeconomic implications of debt reduction

*Debt reduction can have a negative impact on economic developments*

Debt reduction is of relevance to economic policy makers in general and monetary policy makers in particular, above all because of the possible negative repercussions for the real economy. A particularly adverse scenario that can arise as a result of the deleveraging process is known as debt deflation.<sup>21</sup> This occurs when the private non-financial sector, finding itself in a state of overindebtedness, reduces its liabilities. As a result of highly pronounced negative feedback loops in the real economy, however, this scenario gives rise to a disproportionately large reduction in real income and prices, which runs counter to debt reduction and culminates in the debt ratio going up. Despite actively reducing debt, balance sheet constraints are tightened in such an extreme scenario.

*Successful deleveraging in Greece, Italy, Portugal and Spain*

The chart on page 54 shows that this adverse scenario has not occurred in any of the countries under review here.<sup>22</sup> Debt deflation occurs when debt is reduced in a country but the debt ratio increases (upper left quadrant). The private non-financial sectors in Greece, Italy, Portugal and Spain can be found in the lower left quadrant of the successful debt reduction scenario. This is characterised by the fact that the

active debt reduction was accompanied by a reduction in the debt ratio and, as a result, balance sheet constraints were removed. The debt ratio fell even in Greece despite a decline in its real GDP and price level. This implies that nominal income fell in the wake of the deleveraging process, albeit to a lesser extent than the debt.

One reason for the comparatively weak impact of deleveraging on the (domestic) economic performance of these countries could be that the reduction in debt was reflected, at least in part, in a decline in imports, which is having a dampening effect on the decline in domestic demand.<sup>23</sup> At the same time, the deleveraging process in the private non-financial sector was reflected, at least in part, by an increase in public debt resulting from the crisis-related measures taken to stabilise the financial sector and to stimulate economic developments.<sup>24</sup> However, it can be said for most of the countries hit by the European debt crisis that even the total debt ratios of non-financial sectors – thus in-

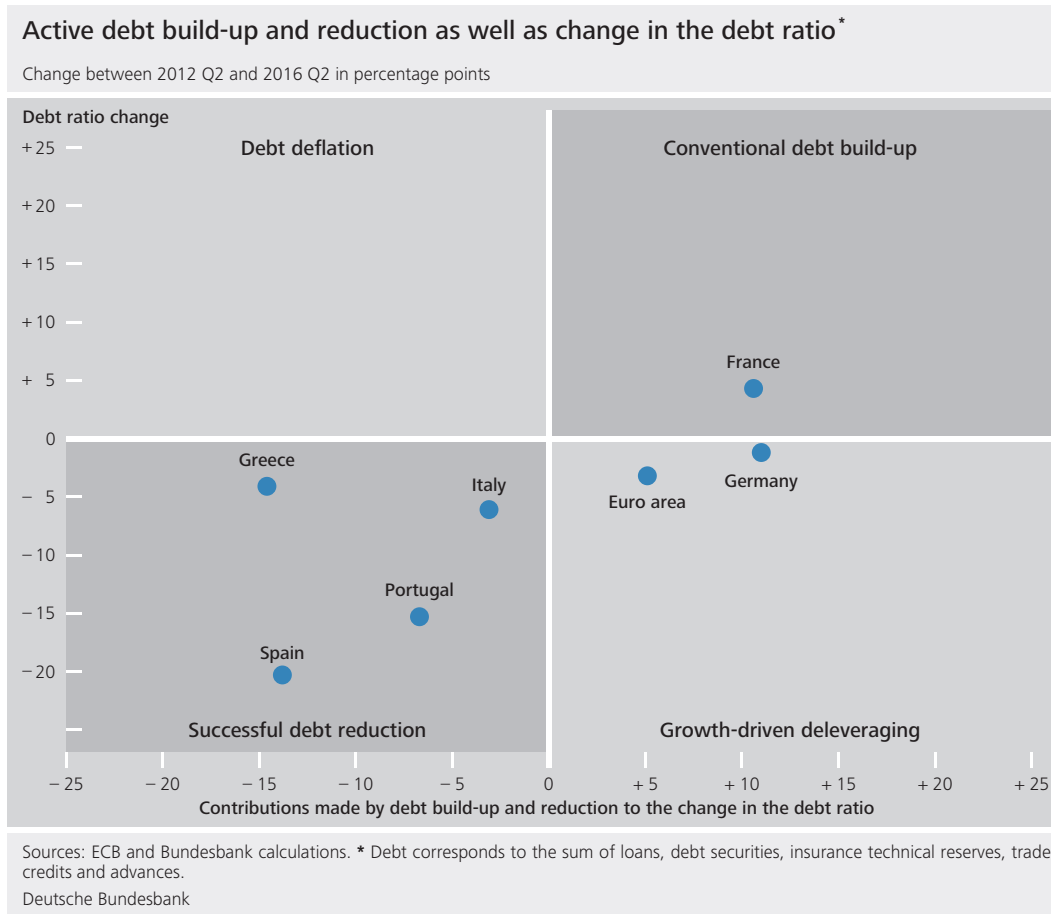
*Debt ratios in most countries under review below 2014 peak*

<sup>21</sup> The idea of debt deflation dates back to the work of Irving Fisher. See I Fisher (1933), The debt-deflation theory of great depressions, *Econometrica* 1, pp 337-357. The approach has been further developed by Hyman Minsky and Richard Koo, among others. See HP Minsky (1981), Debt deflation processes in today's institutional environment, Hyman P Minsky Archive, Paper No 299, and R Koo (2009), The holy grail of macroeconomics – lessons from Japan's great recession, Wiley, Singapore. A formalised version of these approaches can be found in GB Eggertsson and P Krugman (2012), Debt, deleveraging, and the liquidity trap: a Fisher-Minsky-Koo approach, *The Quarterly Journal of Economics* 127(3), pp 1469-1513.

<sup>22</sup> The chart is based on a graph in European Commission, Private sector deleveraging: where do we stand?, Quarterly report on the euro area, Vol 13 (3), October 2014. The calculations focus on changes in recent years because most of the active deleveraging only took place over this period. With the exception of Greece, the results are almost identical if the starting point for the review period is pushed further back into the past. The case of Greece shows that active deleveraging causes an increase in the debt ratio. However, the sharp decline in economic activity should not be attributed primarily to active deleveraging in the private non-financial sector but rather to the Greek sovereign debt crisis.

<sup>23</sup> Empirical studies show that changes in the private non-financial sector's level of debt had a significant impact on the current accounts of the countries affected by the crisis. See R Unger (2017), Asymmetric credit growth and current account imbalances in the euro area, *Journal of International Money and Finance*, forthcoming.

<sup>24</sup> See L Buttiglione, P Lane, L Reichlin and V Reinhart (2014), Deleveraging, what deleveraging?, The 16th Geneva Report on the World Economy.



cluding the public sector – have now fallen below their record highs, most of which were reached towards the end of 2014. This macro-economic deleveraging was, in turn, reflected in lower net external liabilities, thus reducing dependence on cross-border funding.

Despite active leveraging, the debt ratio decreased for the private non-financial sector in Germany and across the euro area as a whole. This is because income rose more sharply in the wake of the credit expansion (lower right quadrant). In France, on the other hand, the active build-up of debt ended in a slight increase in the debt ratio (upper right quadrant).

When comparing developments in the real economy with the course of the reference scenarios defined above, however, it becomes apparent that real GDP recovery was significantly weaker in the countries most affected by the European debt crisis, namely in Italy, Spain and Portugal, and especially in Greece (see

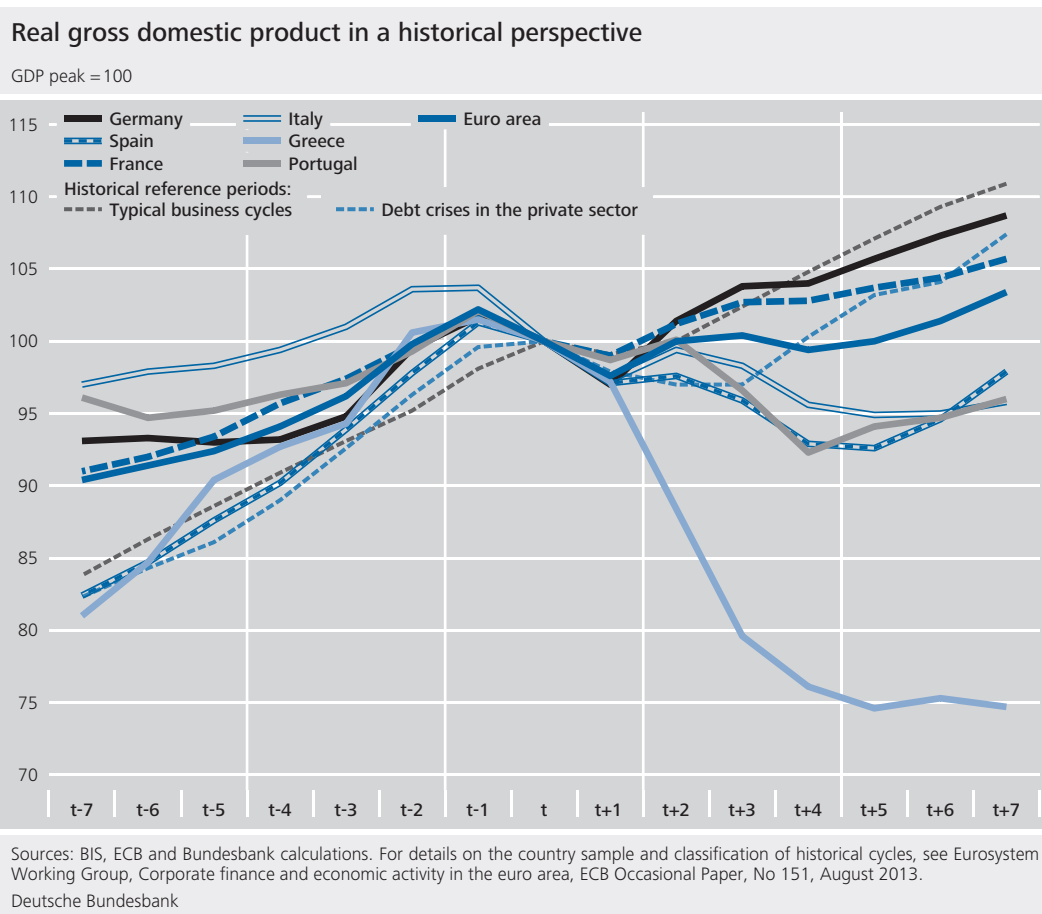
*Developments in the real economy during the deleveraging period in crisis countries significantly weaker than in historical reference periods*

chart on page 55). By contrast, previous debt crises in the private sector were characterised by the fact that a strong economic recovery took hold around three years after reaching peak GDP.

## Policy implications

### Classification of the deleveraging process

As the previous comments showed, the deleveraging process in the private non-financial sector has now picked up speed and in some cases it is at an advanced stage. While the deleveraging process has not ended in dangerous debt deflation in any of the countries under review, economic recovery in the euro area as a whole and especially in the countries affected by the crisis has been relatively weak, however, by international standards.



*Comparatively weak economic development in the absence of stock-flow adjustments*

This development is likely due, among other things, to the high importance of active deleveraging. Historical experience shows that a phase of debt reduction goes faster if the active debt reduction is accompanied by stock-flow adjustments.<sup>25</sup> On the one hand, this is due to the fact that, when there are stock-flow adjustments, debtors have to use a lower share of their income to service the debt. As a result, balance sheet constraints on debtors are eased and there is a correspondingly lower strain on aggregate demand. On the other hand, creditors experience an immediate restructuring of their balance sheets. In principle, this will encourage lending and will thus prompt structural adjustments in the wake of a reallocation of resources within the economy.<sup>26</sup>

*Need to avoid moral hazard and destabilisation following stock-flow adjustments*

It should be noted, however, that stock-flow adjustments in the private non-financial sector are also passed on to their creditors' balance sheets. Further financial turmoil may occur as a result of contagion effects, which could, for in-

stance, make it necessary to take recapitalisation measures or to wind up ailing financial institutions. Moreover, moral hazard such as taking on excessive risk when granting loans or misuse of funds should be avoided to ensure that real resources are handled responsibly.

With the exception of Spain, stock-flow adjustments did not play a significant role in any of the countries heavily affected by the debt crisis. Developments in the euro area therefore stand in contrast to those in the United States, where

<sup>25</sup> A classic example of successful deleveraging is the Nordic countries at the end of the 1980s and the beginning of the 1990s. After the debt-financed house price bubbles burst, unsustainable debt in the private non-financial sector was quickly written off and the banking systems were subsequently recapitalised. See Deutsche Bundesbank (2014), op cit, pp 63-64 and the literature cited there.

<sup>26</sup> Without stock-flow adjustments, on the other hand, there is the danger that insolvent enterprises will be kept alive artificially, tying up real resources and preventing the emergence of new productive enterprises. See R Caballero, T Hoshi and A Kashyap (2008), Zombie lending and depressed restructuring in Japan, American Economic Review, 98(5), pp 1943-1977.

the debt level of households in particular fell following defaults on real estate loans.<sup>27</sup> While this directly triggered losses for the banks, they were recapitalised early on and were therefore able to accommodate a renewed increase in demand for credit once the economy recovered.<sup>28</sup>

*Minor importance of stock-flow adjustments reflected in high stocks of non-performing loans*

A reflection of the comparatively low importance of stock-flow adjustments in the euro area is the continuing high stocks of non-performing loans on the balance sheets of most countries' banks. While the comprehensive assessment of the European Single Supervisory Mechanism (SSM) provided greater clarity regarding the volume of exposures in default, so far this has not led to a significant reduction in most countries. On the one hand, write-downs on the stocks of non-performing loans would accelerate the private non-financial sector's deleveraging process. On the other hand, the rehabilitation of banks' balance sheets and the improved opportunities to find funding on the market would encourage lending and thereby enable the reallocation of resources. In the event that individual credit institutions might be unable to meet the regulatory capital requirements as a result of these write-downs, the "bail-in" provisions in force since 1 January 2016 facilitate the institutions' proper recovery or resolution while minimising the impact on the real economy and public finances.<sup>29</sup>

## The importance of effective insolvency frameworks

*Effective insolvency frameworks facilitate the reduction of bad debts, support the reallocation of real resources ...*

The manner in which insolvent debtors and the associated reduction of debt are handled depends on how the insolvency framework is structured, including, in particular, the conditions under which insolvency proceedings are initiated, the rights and obligations of the lenders and borrowers and the role of jurisdiction.<sup>30</sup> The costs and time frame of the proceedings are also relevant in this context. Insolvency proceedings primarily regulate how recoverable receivables are repaid and unrecoverable debts

are settled. Unlike solutions that are negotiated *ad hoc*, insolvency proceedings ensure lower friction losses and promote the efficient allocation of resources from a macroeconomic perspective. In the case of enterprises, insolvency proceedings generally aim to maintain as far as possible the value of the productive part of a business and, if need be, to liquidate it in a manner that preserves its value. For personal insolvency, the realisation of collateral such as real estate is standard practice and is supported, if necessary, by debt renegotiations or restructuring.

Structuring an insolvency framework appropriately is very complex because many factors and influences play a role. For example, the presence of an insolvency framework already affects the willingness of the private sector to borrow and lend even before any insolvency proceedings are initiated. Comprehensive creditor protection may also help best protect the interests of creditors in the event of a borrower's insolvency. Nevertheless, it should not go so far as to encourage creditors to take on excessive risk. At the same time, clear liability principles for borrowers mean that investment risks are sufficiently taken into account, thereby avoiding the risk of the funds provided being misused (moral hazard). Borrowers should not,

*... and affect the willingness of private sectors to borrow and lend*

<sup>27</sup> See Banco de España, Private-sector deleveraging channels: an international comparison, Economic Bulletin, November 2013, pp 19-29.

<sup>28</sup> Since the securitised real estate loans of US households were held by investors worldwide, a significant proportion of the losses due to write-offs was able to be "exported" abroad, thereby reducing the US banking system's need to be recapitalised. By contrast, exposures to the private non-financial sector in the euro-area countries worst affected by the crisis were primarily held by their domestic banking sectors, which in turn obtained funding from banks in European core countries. This led to a concentration of losses at the national level which, when viewed in isolation, made balance sheet restructuring more difficult in the banking sector.

<sup>29</sup> See Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms.

<sup>30</sup> For an overview of the economic importance of insolvency frameworks, see, for example, J-C Bricongne, M Demertzis, P Pontuch and A Turrini (2016), Macroeconomic relevance of insolvency frameworks in a high-debt context: an EU perspective, European Commission Discussion Paper No 32.



however, be barred from profitable investment projects from the outset. In addition to these effects, which could arise even before insolvency occurs, insolvency frameworks that avoid placing an excessive and prolonged burden on borrowers may also give them the incentive to continue their business activities even after insolvency. All in all, suitable insolvency frameworks can thus help bring unproductive activities to an end and redirect the resources that are freed up to an efficient use.

*Insolvency frameworks in the euro area heterogeneous despite recent reforms*

Individual countries in the euro area display a high degree of heterogeneity in the structure of their existing insolvency frameworks. For example, Germany's insolvency framework is characterised by a comparatively varied set of measures, for both businesses and households. In France, the insolvency framework aims especially at maintaining business activities and retaining jobs. However, the situation in countries heavily affected by the crisis is rather different. For example, most insolvent companies in Spain are traditionally wound up. Recently, however, restructuring programmes and personal insolvency have been made increasingly easier. While Greece has relatively well-developed insolvency legislation, which has been reformed several times since 2010, the structural nature of the debt and the comparatively lengthy processes involved in institutional implementation mean that the reduction of non-performing business loans has so far been sluggish. Similarly, non-performing loans rose sharply in Italy in the wake of the crisis, prompting the initiation of previously lacking legal and institutional reforms to increase the effectiveness of the insolvency framework.

This heterogeneity in insolvency frameworks can also be seen in the data from the World Bank's Doing Business report, which includes an indicator of the general quality of various countries' insolvency frameworks.<sup>31</sup> According to this comprehensive indicator, Germany and Portugal have especially effective insolvency frameworks compared to the rest of the euro area, while Spain and France are just above

average. While the indicator for France has greatly improved in recent years, the value for Greece remains at a very low level. Italy's insolvency framework stands out due to the fact that the costs of settling non-performing loans are very high by global standards. The related reforms, which have been initiated multiple times since 2012, could soon make any necessary stock-flow adjustments in this regard easier – provided these reforms target inadequate provisions and increase confidence in the legal framework – and thus contribute to a quicker reduction in non-performing loans.

In this context, however, it should generally be noted that changes to insolvency frameworks do represent an encroachment on existing debtor-creditor relationships. These should be carried out carefully so as not to damage trust in the underlying conditions and to avoid causing ultimately avoidable risk premiums with their corresponding feedback effects on macro-economic demand.

## ■ Conclusion

On the whole, it can be said that noticeable progress has been achieved in recent years with regard to the deleveraging process in the private non-financial sector in countries especially hit by the crisis. Compared to historical reference periods, the reduction of debt has been heavily driven by debt repayment – stock-flow adjustments played only a minor role in most countries. Only in Spain were the comparatively extensive write-downs accompanied by government takeovers and the value-preserving resolution of commercial banks' distressed assets, contributing to balance sheet restructuring in the private financial and non-

*Significant progress in the reduction of debt, reduction of non-performing loans still needed*

<sup>31</sup> The World Bank's Doing Business project develops measures of various aspects of regulation and general conditions regarding the business activities of small and medium-sized enterprises in 190 countries. Sources of information especially include relevant legislation, World Bank surveys, the respective government authorities and World Bank employees. See World Bank, Doing Business 2017: equal opportunity for all, report, October 2016.

financial sector. The lesser importance of stock-flow adjustments in the remaining countries is likely to have contributed to the sluggishness of the economic recovery, however.

It is expected that the adjustment processes in the private sector's sectoral balance sheets will continue. In this context, stock-flow adjustments addressing the stocks of non-performing loans, which are still high in some cases, in the

banking systems concerned could provide considerable support to the deleveraging process. However, it must be ensured that the macro-economic burden of stock-flow adjustments can be borne in principle. To take into account liability principles, funding should be provided by the private sector as far as possible. Reform measures regarding insolvency frameworks and consolidation efforts in euro-area countries should especially be considered in this context.

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## I Key economic data for the euro area

### 1 Monetary developments and interest rates

Period	Money stock in various definitions 1,2				Determinants of the money stock 1			Interest rates			
	M1	M2	M 3 3		MFI lending, total	MFI lending to enterprises and households	Monetary capital formation 4	Eonia 5,7	3-month Euribor 6,7	Yield on European government bonds outstanding 8	
				3-month moving average (centred)							
	Annual percentage change							% Annual percentage as a monthly average			
2015 Mar	9.5	4.3	4.3	4.5	0.5	- 0.1	- 2.6	- 0.05	0.03	0.8	
Apr	10.4	4.8	5.2	4.8	0.9	0.1	- 2.9	- 0.07	0.00	0.8	
May	11.0	4.8	4.8	4.9	1.3	0.5	- 3.0	- 0.11	- 0.01	1.3	
June	11.2	4.9	4.7	4.8	1.3	0.2	- 3.0	- 0.12	- 0.01	1.6	
July	11.6	5.2	4.9	4.8	1.8	0.7	- 3.0	- 0.12	- 0.02	1.5	
Aug	11.3	5.0	4.8	4.8	2.2	1.0	- 3.2	- 0.12	- 0.03	1.3	
Sep	11.3	5.0	4.7	4.9	2.2	0.7	- 3.4	- 0.14	- 0.04	1.3	
Oct	11.5	5.4	5.2	5.0	2.3	0.9	- 3.4	- 0.14	- 0.05	1.1	
Nov	10.8	5.1	4.9	5.0	2.6	1.1	- 3.3	- 0.13	- 0.09	1.1	
Dec	10.6	5.3	4.7	4.9	2.2	0.6	- 3.1	- 0.20	- 0.13	1.2	
2016 Jan	10.4	5.5	5.1	5.0	2.7	1.1	- 3.4	- 0.24	- 0.15	1.1	
Feb	10.3	5.5	5.0	5.1	3.2	1.2	- 3.4	- 0.24	- 0.18	1.0	
Mar	10.2	5.6	5.2	5.0	3.1	1.1	- 3.3	- 0.29	- 0.23	0.9	
Apr	9.7	5.2	4.8	5.0	3.4	1.3	- 2.8	- 0.34	- 0.25	0.9	
May	9.1	5.1	4.9	4.9	3.6	1.4	- 2.5	- 0.34	- 0.26	0.8	
June	8.8	5.1	5.1	5.1	3.8	1.5	- 2.3	- 0.33	- 0.27	0.7	
July	8.6	5.1	5.1	5.1	3.8	1.3	- 2.6	- 0.33	- 0.29	0.6	
Aug	8.7	5.1	5.1	5.1	3.8	1.6	- 2.5	- 0.34	- 0.30	0.5	
Sep	8.4	5.0	5.1	4.8	3.8	1.9	- 2.5	- 0.34	- 0.30	0.6	
Oct	8.0	4.6	4.4	4.7	4.1	2.2	- 2.1	- 0.35	- 0.31	0.7	
Nov	8.7	4.9	4.8	...	4.2	2.2	- 1.9	- 0.35	- 0.31	1.0	
Dec	...	...	...	...	...	...	...	- 0.35	- 0.32	1.0	

1 Source: ECB. 2 Seasonally adjusted. 3 Excluding money market fund shares/units, money market paper and debt securities with a maturity of up to two years held by non-euro-area residents. 4 Longer-term liabilities to euro-area non-MFIs. 5 Euro

OverNight Index Average. 6 Euro Interbank Offered Rate. 7 See also footnotes to Table VI.4, p 43\* 8 GDP-weighted yield on ten-year government bonds. Countries include: DE,FR,NL,BE,AT,FI,IE,PT,ES,IT,GR,SK.

### 2 External transactions and positions \*

Period	Selected items of the euro-area balance of payments								Euro exchange rates 1		
	Current account		Financial account						Dollar rate	Effective exchange rate 3	
	Balance	of which Goods	Balance	Direct investment	Portfolio investment	Financial derivatives 2	Other investment	Reserve assets		Nominal	Real
	€ million								1 EUR = ... USD	Q1 1999 = 100	
2015 Mar	+ 32,539	+ 29,698	+ 41,319	+ 102,796	- 70,562	+ 10,635	- 1,841	+ 291	1.0838	90.6	86.9
Apr	+ 24,556	+ 29,837	- 15,944	+ 15,420	+ 24,203	+ 4,510	- 56,282	- 3,795	1.0779	89.7	86.1
May	+ 5,617	+ 26,483	+ 54,744	+ 5,252	+ 40,435	+ 4,794	+ 5,937	- 1,674	1.1150	91.6	87.8
June	+ 35,316	+ 34,541	+ 43,464	- 5,518	+ 32,875	- 5,602	+ 18,615	+ 3,093	1.1213	92.3	88.5
July	+ 39,320	+ 39,428	+ 31,405	+ 6,278	+ 75,561	+ 10,958	- 54,393	- 7,000	1.0996	91.3	87.5
Aug	+ 20,424	+ 19,392	+ 13,732	+ 9,996	+ 22,184	- 6,862	- 12,975	+ 1,390	1.1139	93.0	88.9
Sep	+ 34,955	+ 30,024	+ 49,124	- 455	+ 22,322	- 4,851	+ 23,825	+ 8,282	1.1221	93.8	89.6
Oct	+ 30,300	+ 33,219	+ 112,822	+ 38,618	+ 37,886	+ 12,468	+ 29,858	- 6,009	1.1235	93.6	89.6
Nov	+ 30,977	+ 32,225	- 34,645	- 73,413	+ 17,916	+ 21,426	- 3,037	+ 2,462	1.0736	91.1	87.1
Dec	+ 41,382	+ 31,353	+ 78,235	+ 55,333	+ 67,028	+ 21,758	- 74,010	+ 8,126	1.0877	92.5	88.3
2016 Jan	+ 8,607	+ 13,713	- 15,112	- 19,623	+ 71,724	+ 15,117	- 81,176	- 1,155	1.0860	93.6	89.1
Feb	+ 14,431	+ 27,486	- 17,151	+ 42,519	+ 22,529	+ 13,156	- 96,416	+ 1,061	1.1093	94.7	90.0
Mar	+ 36,478	+ 39,231	+ 36,866	+ 16,100	- 707	- 942	+ 21,351	+ 1,064	1.1100	94.1	89.5
Apr	+ 35,309	+ 35,279	+ 21,012	- 8,526	+ 123,736	- 21,344	- 71,237	- 1,618	1.1339	94.8	90.1
May	+ 15,523	+ 32,604	+ 11,444	+ 21,888	+ 5,245	- 12,989	- 5,810	+ 3,109	1.1311	95.1	90.5
June	+ 37,242	+ 39,174	+ 29,799	- 51,467	+ 27,570	- 10,273	+ 63,274	+ 695	1.1229	94.7	90.2
July	+ 36,053	+ 33,577	+ 24,385	+ 31,871	+ 58,822	+ 14,718	- 80,148	- 877	1.1069	94.9	90.4
Aug	+ 23,718	+ 25,629	+ 51,851	+ 42,180	+ 70,365	+ 6,742	- 69,248	+ 1,812	1.1212	95.2	90.6
Sep	+ 33,951	+ 33,918	+ 89,485	+ 51,183	+ 38,633	+ 4,563	- 11,697	+ 6,802	1.1212	95.4	90.6
Oct	+ 32,756	+ 27,039	- 11,718	+ 68,628	- 3,495	+ 8,952	- 81,890	- 3,913	1.1026	95.5	p 90.8
Nov	...	...	...	...	...	...	...	...	1.0799	95.0	p 90.1
Dec	...	...	...	...	...	...	...	...	1.0543	94.2	p 89.3

\* Source: ECB, according to the international standards of the Balance of Payments Manual in the 6th edition of the International Monetary Fund. 1 See also Tables

XII.10 and 12, pp 81-82\* 2 Including employee stock options. 3 Vis-à-vis the currencies of The-EER-19 group.

## I Key economic data for the euro area

### 3 General economic indicators

Period	Euro area	Belgium	Germany	Estonia	Finland	France	Greece	Ireland	Italy	Latvia
<b>Real gross domestic product <sup>1,2</sup></b>										
2014	1.2	1.6	1.6	2.8	- 0.7	0.6	0.4	8.5	0.1	2.1
2015	2.0	1.5	1.7	1.4	0.2	1.3	- 0.2	26.3	0.7	2.7
2016	...	...	1.9	...	...	...	...	...	...	...
2015 Q2	2.0	1.8	1.8	1.9	0.6	1.3	0.6	24.3	0.9	2.8
Q3	1.9	1.3	1.8	1.9	- 0.1	1.1	- 2.3	24.4	0.6	3.5
Q4	2.0	1.6	2.1	0.8	0.8	1.3	0.9	28.4	1.0	2.7
2016 Q1	1.7	1.2	1.5	1.5	1.7	1.3	- 0.8	3.9	0.9	2.1
Q2	1.7	1.3	3.1	0.7	1.6	1.7	- 0.4	3.1	1.1	2.0
Q3	1.7	1.3	1.5	1.3	1.6	0.8	1.6	6.9	0.6	0.3
<b>Industrial production <sup>1,3</sup></b>										
2013	- 0.7	1.0	0.2	4.2	- 3.2	- 0.6	- 3.2	- 2.2	- 3.1	- 0.7
2014	0.9	0.9	1.3	4.3	- 1.9	- 0.9	- 2.0	20.9	- 0.7	- 0.9
2015	2.0	- 0.1	0.8	- 2.4	- 1.0	1.6	1.0	36.9	1.1	3.6
2015 Q2	1.9	- 1.7	1.6	- 1.7	- 1.1	1.7	- 2.8	26.8	1.1	5.7
Q3	2.5	0.1	1.6	- 4.0	- 0.1	1.2	1.5	38.5	2.1	3.8
Q4	1.8	1.3	- 0.3	- 5.5	0.0	2.0	2.6	36.6	1.3	3.0
2016 Q1	1.3	4.7	1.3	- 2.4	- 0.4	0.9	- 1.0	- 0.2	1.7	3.8
Q2	1.1	3.6	0.6	- 1.8	2.9	0.6	5.0	0.7	0.0	4.4
Q3	1.1	4.8	0.7	3.1	2.8	- 0.3	1.7	- 0.8	1.6	1.4
<b>Capacity utilisation in industry <sup>4</sup></b>										
2014	80.4	79.3	83.9	73.0	79.0	81.9	67.7	-	73.7	72.2
2015	81.3	79.7	84.5	71.4	79.2	82.7	66.2	-	75.5	71.5
2016	81.8	80.0	85.0	73.6	78.0	83.2	67.6	-	76.3	72.6
2015 Q3	81.2	80.0	84.0	72.7	79.0	82.9	63.5	-	75.5	71.4
Q4	81.6	79.2	84.6	71.0	80.1	83.4	64.2	-	75.9	71.0
2016 Q1	81.9	80.0	85.0	72.5	79.5	82.6	65.5	-	77.1	72.3
Q2	81.5	79.3	84.6	73.8	78.0	82.8	67.8	-	76.5	73.0
Q3	81.6	79.7	84.8	73.0	73.8	83.8	67.8	-	76.0	71.8
Q4	82.3	80.9	85.7	75.0	80.6	83.4	69.3	-	75.7	73.1
<b>Standardised unemployment rate <sup>5</sup></b>										
2014	11.6	8.5	5.0	7.4	8.7	10.3	26.5	11.3	12.7	10.8
2015	10.9	8.5	4.6	6.2	9.4	10.4	24.9	9.4	11.9	9.9
2016	...	...	...	...	...	...	...	8.0	...	...
2016 July	10.0	8.0	4.2	7.0	8.8	10.1	23.3	8.0	11.6	9.9
Aug	10.0	7.9	4.2	7.6	8.7	10.2	23.3	7.9	11.5	9.8
Sep	9.9	7.6	4.0	7.2	8.7	9.9	23.1	7.7	11.8	9.7
Oct	9.8	7.6	4.1	7.4	8.7	9.7	23.0	7.5	11.8	9.6
Nov	9.8	7.6	3.9	...	8.8	9.5	...	7.3	11.9	9.6
Dec	...	...	...	...	...	...	...	7.2	...	...
<b>Harmonised Index of Consumer Prices <sup>1</sup></b>										
2014	<sup>6</sup> 0.4	0.5	0.8	0.5	1.2	0.6	- 1.4	0.3	0.2	0.7
2015	<sup>7</sup> 0.0	0.6	0.1	0.1	- 0.2	0.1	- 1.1	0.0	0.1	0.2
2016	0.2	1.8	0.4	0.8	0.4	0.3	0.0	<sup>p</sup> - 0.2	- 0.1	0.1
2016 July	0.2	2.0	0.4	0.8	0.5	0.4	0.2	0.1	- 0.2	0.1
Aug	0.2	2.0	0.3	1.1	0.5	0.4	0.4	- 0.4	- 0.1	- 0.1
Sep	0.4	1.8	0.5	1.7	0.5	0.5	- 0.1	- 0.3	0.1	0.5
Oct	0.5	1.9	0.7	1.0	0.6	0.5	0.6	- 0.4	- 0.1	1.1
Nov	0.6	1.7	0.7	1.4	0.6	0.7	- 0.2	- 0.2	0.1	1.2
Dec	1.1	2.2	1.7	2.4	1.1	0.8	0.3	<sup>p</sup> - 0.2	0.5	2.1
<b>General government financial balance <sup>8</sup></b>										
2013	- 3.0	- 3.0	- 0.2	- 0.2	- 2.6	- 4.0	- 13.2	- 5.7	- 2.7	- 0.9
2014	- 2.6	- 3.1	0.3	0.7	- 3.2	- 4.0	- 3.6	- 3.7	- 3.0	- 1.6
2015	- 2.1	- 2.5	0.7	0.1	- 2.8	- 3.5	- 7.5	- 1.9	- 2.6	- 1.3
<b>General government debt <sup>8</sup></b>										
2013	91.3	105.4	77.5	10.2	56.5	92.3	177.4	119.5	129.0	39.0
2014	92.0	106.5	74.9	10.7	60.2	95.3	179.7	105.2	131.9	40.7
2015	90.4	105.8	71.2	10.1	63.6	96.2	177.4	78.6	132.3	36.3

Sources: National data, European Commission, Eurostat, European Central Bank. Latest data are partly based on press reports and are provisional. <sup>1</sup> Annual percentage change. <sup>2</sup> GDP of the euro-area aggregate calculated from seasonally adjusted data. <sup>3</sup> Manufacturing, mining and energy; adjusted for working-day varia-

tions. <sup>4</sup> Manufacturing, in %; seasonally adjusted; data are collected in January, April, July and October. <sup>5</sup> As a percentage of the civilian labour force; seasonally adjusted. Standardised unemployment rate of Germany: calculation based on unadjusted data from the Federal Statistical Office.



I Key economic data for the euro area

Lithuania	Luxembourg	Malta	Netherlands	Austria	Portugal	Slovakia	Slovenia	Spain	Cyprus	Period
<b>Real gross domestic product <sup>1,2</sup></b>										
3.5	4.7	8.4	1.4	0.6	0.9	2.6	3.1	1.4	- 1.5	2014
1.8	3.5	7.4	2.0	1.0	1.6	3.8	2.3	3.2	1.7	2015
...	...	...	...	...	...	...	...	...	...	2016
1.6	4.9	7.7	1.9	0.5	1.5	3.6	2.0	3.2	2.0	2015 Q2
1.8	1.6	7.3	2.0	1.4	1.6	3.9	2.0	3.5	2.1	Q3
2.1	3.2	7.1	1.4	1.1	1.5	4.6	2.8	3.3	2.6	Q4
2.4	3.5	5.5	1.5	1.6	0.9	3.4	2.3	3.6	2.6	2016 Q1
1.9	5.0	3.4	2.3	1.2	1.0	3.8	2.9	3.5	2.8	Q2
1.7	4.6	3.0	2.4	1.2	1.4	3.0	2.7	3.3	2.9	Q3
<b>Industrial production <sup>1,3</sup></b>										
3.2	- 3.0	- 5.3	0.5	0.8	0.5	3.9	- 0.9	- 1.7	- 13.5	2013
0.3	4.4	- 5.7	- 2.9	0.9	1.8	8.6	1.7	1.3	- 0.7	2014
4.5	1.1	6.3	- 3.4	2.1	1.7	7.0	5.1	3.4	3.4	2015
4.5	1.4	8.3	- 4.8	1.0	1.9	5.0	5.6	3.2	2.6	2015 Q2
4.0	0.5	7.3	- 5.4	3.1	2.4	6.1	5.3	4.2	4.6	Q3
5.3	1.1	5.1	- 4.5	2.4	2.2	5.1	3.7	4.8	6.2	Q4
5.7	1.5	- 5.2	- 2.9	1.2	0.9	2.3	5.7	3.0	9.9	2016 Q1
- 0.9	- 0.6	- 4.6	2.7	2.2	0.8	6.2	5.7	1.4	8.4	Q2
2.6	- 1.5	- 3.4	3.0	1.5	0.6	1.9	7.0	0.9	5.8	Q3
<b>Capacity utilisation in industry <sup>4</sup></b>										
74.9	66.2	78.1	80.2	84.3	78.4	80.7	80.3	75.8	53.9	2014
74.2	68.3	78.6	81.8	84.0	80.4	82.4	83.6	77.8	58.2	2015
75.9	76.9	79.1	81.7	84.3	80.2	84.5	83.5	78.6	59.8	2016
73.6	69.0	77.2	82.2	84.4	80.1	86.2	83.6	77.6	56.4	2015 Q3
74.3	72.2	77.9	82.2	83.4	80.4	83.4	82.3	78.1	61.1	Q4
75.9	72.4	77.8	81.4	85.0	80.0	85.4	83.2	79.0	56.9	2016 Q1
76.1	76.1	78.9	81.7	84.0	80.8	83.0	83.1	77.8	63.9	Q2
75.5	77.6	79.8	81.5	83.2	79.6	84.3	83.7	78.4	58.7	Q3
76.0	81.3	79.9	82.1	85.1	80.3	85.4	84.1	79.1	59.6	Q4
<b>Standardised unemployment rate <sup>5</sup></b>										
10.7	6.0	5.8	7.4	5.6	14.1	13.2	9.7	24.5	16.1	2014
9.1	6.5	5.4	6.9	5.7	12.6	11.5	9.0	22.1	15.0	2015
...	...	...	...	...	...	...	...	...	...	2016
7.8	6.3	4.9	6.0	6.2	10.9	9.7	7.8	19.5	12.9	2016 July
7.6	6.3	4.8	5.8	6.2	10.9	9.6	7.8	19.4	13.1	Aug
7.6	6.3	4.8	5.7	6.0	10.9	9.4	7.7	19.3	13.5	Sep
7.6	6.3	5.0	5.6	5.8	10.6	9.2	7.6	19.2	13.8	Oct
7.9	6.2	4.8	5.6	5.8	10.5	9.0	7.6	19.2	14.2	Nov
...	...	...	...	...	...	...	...	...	...	Dec
<b>Harmonised Index of Consumer Prices <sup>1</sup></b>										
- 0.2	0.7	0.8	0.3	1.5	- 0.2	- 0.1	0.4	- 0.2	- 0.3	2014
0.7	0.1	1.2	0.2	0.8	0.5	- 0.3	- 0.8	- 0.6	- 1.5	2015
0.7	0.0	0.9	0.1	1.0	0.6	- 0.5	- 0.2	- 0.3	- 1.2	2016
0.0	- 0.4	0.9	- 0.6	0.6	0.7	- 0.9	- 0.1	- 0.7	- 0.4	2016 July
0.5	- 0.2	1.0	0.1	0.6	0.8	- 0.8	- 0.2	- 0.3	- 0.6	Aug
0.6	0.3	0.9	- 0.1	1.1	0.7	- 0.5	0.2	0.0	- 0.4	Sep
0.7	0.7	0.5	0.3	1.4	1.1	- 0.3	0.7	0.5	- 1.0	Oct
1.1	0.6	0.8	0.4	1.5	0.5	- 0.2	0.7	0.5	- 0.8	Nov
2.0	1.6	1.0	0.7	1.6	0.9	0.2	0.6	1.4	0.1	Dec
<b>General government financial balance <sup>8</sup></b>										
- 2.6	1.0	- 2.6	- 2.4	- 1.4	- 4.8	- 2.7	- 15.0	- 7.0	- 4.9	2013
- 0.7	1.5	- 2.1	- 2.3	- 2.7	- 7.2	- 2.7	- 5.0	- 6.0	- 8.8	2014
- 0.2	1.6	- 1.4	- 1.9	- 1.0	- 4.4	- 2.7	- 2.7	- 5.1	- 1.1	2015
<b>General government debt <sup>8</sup></b>										
38.7	23.5	68.4	67.7	81.3	129.0	54.7	71.0	95.4	102.2	2013
40.5	22.7	67.0	67.9	84.4	130.6	53.6	80.9	100.4	107.1	2014
42.7	22.1	64.0	65.1	85.5	129.0	52.5	83.1	99.8	107.5	2015

<sup>6</sup> Including Latvia from 2014 onwards. <sup>7</sup> Including Lithuania from 2015 onwards.  
<sup>8</sup> As a percentage of GDP (Maastricht Treaty definition). Euro-area aggregate: European Central Bank, regularly updated. Member states excluding Germany:

latest data publication under the excessive deficit procedure (Eurostat). Germany: current data according to the Federal Statistical Office and Bundesbank calculations.

## II Overall monetary survey in the euro area

### 1 The money stock and its counterparts \* (a) Euro area

€ billion

Period	I Lending to non-banks (non-MFIs) in the euro area					II Net claims on non-euro-area residents			III Monetary capital formation at monetary financial institutions (MFIs) in the euro area				
	Total	Enterprises and households		General government		Total	Claims on non-euro-area residents	Liabilities to non-euro-area residents	Total	Deposits with an agreed maturity of over 2 years	Deposits at agreed notice of over 3 months	Debt securities with maturities of over 2 years (net) <sup>2</sup>	Capital and reserves <sup>3</sup>
		Total	of which Securities	Total	of which Securities								
2015 Apr	53.1	16.3	16.8	36.8	32.5	- 57.6	38.7	96.3	- 46.2	- 18.9	- 2.1	- 15.9	- 9.3
May	33.3	16.9	- 0.8	16.4	31.2	25.1	- 55.1	- 80.2	- 21.6	- 8.3	- 1.7	- 23.9	12.3
June	10.9	- 12.3	- 28.2	23.3	24.5	57.4	- 88.0	- 145.3	- 21.5	- 13.9	- 1.2	- 13.4	6.9
July	54.7	50.9	51.5	3.8	4.1	- 66.4	- 0.0	66.4	- 5.0	11.2	- 0.9	- 21.8	6.5
Aug	18.6	- 20.1	6.1	38.7	47.6	- 23.1	10.5	33.5	- 11.5	- 3.3	- 1.4	- 9.1	2.3
Sep	32.9	- 6.5	- 8.8	39.4	45.8	- 7.9	- 94.9	- 87.0	- 20.9	- 3.2	- 0.7	- 26.1	9.2
Oct	22.9	0.8	- 15.3	22.1	18.6	9.7	22.7	13.0	- 39.8	- 25.7	- 1.1	- 17.3	4.3
Nov	88.2	49.1	2.0	39.1	47.1	4.4	- 15.3	- 19.6	- 5.5	- 13.6	- 1.7	- 4.4	14.1
Dec	- 110.1	- 71.2	- 2.0	- 38.9	- 33.7	- 10.5	- 197.4	- 186.9	- 8.9	4.1	- 0.6	- 27.0	14.5
2016 Jan	156.2	45.9	6.0	110.3	95.2	- 45.0	129.0	174.0	- 26.8	- 8.1	- 0.4	- 18.1	- 0.3
Feb	86.4	45.1	- 0.5	41.3	50.1	- 82.0	32.0	114.0	- 15.3	11.2	- 1.2	- 23.8	- 1.5
Mar	62.8	22.2	- 5.6	40.6	41.3	21.6	- 86.1	- 107.7	- 17.5	- 6.5	- 0.9	- 1.4	- 8.7
Apr	93.9	47.7	27.7	46.2	41.1	- 62.0	119.0	181.0	- 3.1	- 3.7	- 1.3	- 0.5	2.5
May	67.9	20.5	12.9	47.3	53.6	- 0.3	62.3	62.6	1.0	- 5.0	- 0.5	0.3	6.2
June	52.0	4.7	- 7.2	47.3	58.9	23.5	- 31.5	- 55.0	- 10.8	- 20.8	- 0.8	- 10.2	21.0
July	51.3	29.7	15.4	21.6	20.7	- 84.9	62.0	146.9	- 27.0	- 7.1	- 0.5	- 23.7	4.3
Aug	15.0	16.6	27.0	- 1.7	6.9	- 39.7	7.5	47.2	- 0.2	- 4.9	- 0.6	- 0.3	5.6
Sep	38.0	26.3	- 7.6	11.7	15.9	- 20.8	- 72.5	- 51.7	- 26.1	- 12.2	- 0.6	- 19.5	6.2
Oct	81.3	37.8	6.9	43.5	41.0	- 54.3	144.4	198.6	- 4.9	- 3.3	- 0.6	- 8.0	7.0
Nov	100.4	51.9	11.1	48.5	60.8	7.7	- 19.9	- 27.6	4.5	0.9	- 0.7	- 1.0	5.2

### (b) German contribution

Period	I Lending to non-banks (non-MFIs) in the euro area					II Net claims on non-euro-area residents			III Monetary capital formation at monetary financial institutions (MFIs) in the euro area				
	Total	Enterprises and households		General government		Total	Claims on non-euro-area residents	Liabilities to non-euro-area residents	Total	Deposits with an agreed maturity of over 2 years	Deposits at agreed notice of over 3 months	Debt securities with maturities of over 2 years (net) <sup>2</sup>	Capital and reserves <sup>3</sup>
		Total	of which Securities	Total	of which Securities								
2015 Apr	17.3	3.3	0.7	14.0	4.9	7.7	33.9	26.2	- 13.2	- 10.0	- 2.2	- 0.6	- 0.4
May	- 3.5	4.5	- 4.8	- 8.0	4.4	1.1	- 11.7	- 12.8	- 14.6	- 1.6	- 1.6	- 11.7	0.4
June	- 0.9	- 2.7	- 5.7	1.7	5.1	16.2	- 25.0	- 41.1	0.4	- 3.8	- 1.4	1.8	3.7
July	31.5	22.9	21.3	8.6	6.4	- 27.6	- 8.7	19.0	12.5	16.5	- 1.5	- 0.6	- 1.9
Aug	12.9	7.2	- 1.5	5.7	9.0	- 20.7	- 0.9	19.9	- 6.5	0.5	- 1.5	- 4.5	- 1.0
Sep	11.5	4.1	- 2.6	7.3	8.7	15.9	- 2.0	- 17.9	- 11.7	- 2.5	- 1.4	- 7.4	- 0.4
Oct	3.4	- 3.8	- 9.4	7.1	3.5	- 8.5	- 13.1	- 4.6	- 10.7	- 9.0	- 1.3	0.7	- 1.1
Nov	27.3	21.3	7.8	6.0	10.6	- 13.0	- 35.7	- 22.7	- 12.8	- 3.6	- 1.2	- 3.9	- 4.1
Dec	- 19.9	- 11.6	- 5.8	- 8.2	- 2.8	5.2	- 52.1	- 57.3	- 24.0	- 3.9	- 0.9	- 22.1	2.9
2016 Jan	19.7	5.7	- 3.0	14.0	10.4	- 21.1	24.7	45.8	- 1.2	- 1.5	- 1.3	2.8	- 1.2
Feb	15.6	10.9	- 4.2	4.7	4.8	- 29.2	7.3	36.5	- 11.8	- 1.8	- 1.3	- 7.7	- 1.0
Mar	12.3	4.4	0.6	7.8	8.2	7.3	- 22.6	- 29.8	0.9	- 0.0	- 1.1	2.4	- 0.4
Apr	22.8	12.3	0.7	10.6	5.9	- 40.1	13.5	53.7	- 2.3	- 3.3	- 1.1	1.7	0.4
May	22.0	16.2	4.9	5.8	9.1	1.7	1.2	- 0.5	4.8	0.8	- 1.0	5.0	- 0.0
June	2.5	1.7	0.5	0.8	6.5	- 2.9	23.9	26.8	- 5.7	- 1.5	- 0.7	- 7.3	3.8
July	25.7	13.2	1.4	12.5	9.5	- 18.5	7.0	25.5	- 10.5	- 0.8	- 0.9	- 5.1	- 3.7
Aug	9.0	8.8	1.4	0.2	2.0	- 16.5	2.5	19.0	- 0.1	- 1.8	- 0.8	4.0	- 1.6
Sep	20.9	13.0	3.3	7.9	9.1	- 37.2	- 11.1	26.1	- 10.8	- 1.1	- 0.7	- 6.2	- 2.8
Oct	18.3	11.7	2.5	6.6	3.4	- 3.5	42.2	45.7	3.6	2.2	- 0.8	6.0	- 3.8
Nov	25.8	18.4	4.3	7.4	12.2	- 22.7	- 25.6	- 2.9	17.3	9.8	- 0.5	9.6	- 1.6

\* The data in this table are based on the consolidated balance sheet of monetary financial institutions (MFIs) (Table II.2); statistical breaks have been eliminated from the flow figures (see also the "Notes on the figures" in the "Explanatory notes" in the Statistical Supplement to the Monthly Report 1, p 30\*). 1 Source: ECB. 2 Excluding

MFIs' portfolios. 3 After deduction of inter-MFI participations. 4 Including the counterparts of monetary liabilities of central governments. 5 Including the monetary liabilities of central governments (Post Office, Treasury). 6 In Germany, only savings deposits. 7 Paper held by residents outside the euro area has been eliminated.

II Overall monetary survey in the euro area

(a) Euro area

IV De- posits of central gov- ernments	V Other factors			VI Money stock M3 (balance I plus II less III less IV less V)										Period
	Total 4	of which Intra- Eurosystem liability/ claim related to banknote issue	Total	Money stock M2						Repo transac- tions	Money market fund shares (net) 2,7,8	Debt secur- ities with maturities of up to 2 years (incl money market paper) (net) 2,7		
				Total	Money stock M1			Deposits with an agreed maturity of up to 2 years 5	Deposits at agreed notice of up to 3 months 5,6					
					Total	Currency in circula- tion	Overnight deposits 5							
- 43.3	- 28.6	-	113.7	78.5	91.8	8.8	83.0	- 15.1	1.8	- 17.0	21.5	6.3	2015 Apr	
44.1	5.2	-	30.7	64.7	94.7	6.7	88.0	- 34.8	4.8	- 5.9	- 9.0	6.9	May	
14.0	66.4	-	9.4	39.3	63.5	10.7	52.8	- 24.2	0.0	- 18.7	- 15.4	8.2	June	
- 43.2	- 28.5	-	65.1	45.1	43.1	14.2	28.9	2.5	- 0.6	- 11.1	22.7	- 12.2	July	
- 14.8	2.2	-	19.7	11.8	13.2	- 1.9	15.1	- 4.9	3.6	4.5	11.1	- 4.6	Aug	
28.6	30.5	-	- 13.3	7.0	23.2	- 2.8	26.0	- 7.7	- 8.5	- 0.9	- 15.6	- 0.8	Sep	
32.9	- 64.0	-	103.4	67.9	82.9	2.2	80.7	- 10.2	- 4.8	- 7.1	21.9	1.4	Oct	
- 17.0	60.8	-	54.3	55.7	58.5	5.7	52.8	- 0.7	- 2.2	3.4	15.9	0.6	Nov	
- 71.4	- 44.2	-	4.1	54.1	44.2	14.4	29.7	9.0	0.9	- 28.3	- 22.6	- 10.8	Dec	
87.7	- 19.7	-	70.0	38.2	36.3	- 11.1	47.4	- 8.4	10.4	21.8	11.0	8.1	2016 Jan	
- 14.1	0.1	-	33.7	15.2	21.7	1.2	20.5	- 11.7	5.2	44.5	- 1.3	6.9	Feb	
31.8	31.6	-	38.5	55.9	42.6	3.7	39.0	11.0	2.3	- 6.2	- 11.9	1.4	Mar	
- 35.9	- 29.5	-	100.4	75.3	92.7	4.6	88.2	- 17.2	- 0.3	- 4.5	17.1	2.4	Apr	
20.1	12.8	-	33.7	35.1	47.5	2.3	45.3	- 20.2	7.8	- 9.5	- 0.1	- 2.0	May	
60.5	6.4	-	19.5	31.3	34.6	8.4	26.2	- 1.9	- 1.4	2.5	- 9.4	6.3	June	
- 29.0	- 75.2	-	97.6	73.6	67.1	10.1	57.0	6.1	0.5	- 22.7	16.0	5.5	July	
- 54.7	41.0	-	- 10.9	9.0	5.1	- 3.5	1.6	- 4.5	0.7	2.4	0.7	- 2.6	Aug	
2.7	38.2	-	2.4	18.6	23.9	2.2	21.7	1.5	- 6.7	- 4.8	- 1.7	- 6.5	Sep	
- 3.0	7.5	-	27.5	14.2	54.6	2.8	51.7	- 34.2	- 6.2	- 17.0	17.0	0.5	Oct	
3.8	11.2	-	88.7	85.6	96.3	1.7	94.6	- 8.9	- 1.8	- 1.9	9.9	- 3.3	Nov	

(b) German contribution

IV De- posits of central gov- ernments	V Other factors			VI Money stock M3 (balance I plus II less III less IV less V) 10										Period
	Total	of which Intra- Eurosystem liability/ claim related to banknote issue 9,11	Currency in circula- tion	Total	Components of the money stock						Money market fund shares (net) 7,8	Debt securities with maturities of up to 2 years (incl money market paper)(net) 7		
					Overnight deposits	Deposits with an agreed maturity of up to 2 years	Deposits at agreed notice of up to 3 months 6	Repo transac- tions						
									Total	Currency in circula- tion			Overnight deposits	
- 2.7	5.0	2.2	1.8	35.9	29.6	- 1.2	- 0.2	3.8	- 0.1	4.1	2015 Apr			
1.4	- 4.8	2.4	1.1	15.5	28.1	- 3.3	- 0.2	6.4	0.1	3.1	May			
2.2	12.7	0.9	3.5	- 0.1	5.6	- 3.5	- 0.3	1.6	0.1	0.3	June			
- 3.2	- 18.6	4.7	3.3	13.1	12.9	- 0.0	- 0.4	1.2	0.0	0.6	July			
- 0.3	- 13.1	2.4	- 0.5	12.1	14.7	- 3.8	0.3	2.0	0.1	1.2	Aug			
1.8	16.8	2.8	- 0.8	20.5	14.4	- 3.4	0.8	0.5	0.5	7.8	Sep			
- 0.6	- 25.3	3.0	- 0.3	31.4	30.7	- 3.8	1.3	- 0.5	- 0.0	3.7	Oct			
- 1.2	- 15.2	2.0	1.8	43.4	34.3	6.8	0.9	- 0.5	- 0.1	2.1	Nov			
10.3	15.2	2.6	2.3	- 16.2	- 21.3	6.3	3.0	- 3.6	- 0.4	0.2	Dec			
- 0.8	- 24.2	- 0.7	- 1.9	24.7	27.8	- 5.5	0.9	0.3	0.3	0.9	2016 Jan			
7.1	- 24.1	0.6	0.4	15.3	13.3	- 1.9	1.6	1.4	- 0.1	1.0	Feb			
21.0	3.1	2.1	0.6	- 5.5	- 12.5	10.9	- 0.8	- 0.9	- 0.2	2.0	Mar			
- 17.4	- 20.6	1.2	1.0	23.1	24.1	- 1.1	- 0.7	0.5	- 0.5	0.7	Apr			
18.7	- 19.6	2.9	- 0.5	19.9	21.5	0.3	- 0.6	- 0.2	- 0.4	0.7	May			
13.0	- 7.9	4.2	1.5	0.2	2.0	- 0.7	- 0.4	- 1.0	0.0	0.4	June			
- 31.8	25.0	3.7	2.1	24.5	12.3	4.0	- 0.1	0.9	- 0.2	7.6	July			
8.8	- 22.3	2.3	- 0.8	6.2	11.3	- 1.6	0.1	- 0.2	- 0.1	3.4	Aug			
8.6	- 21.2	4.7	- 0.6	7.2	3.0	5.5	- 0.6	- 0.3	0.0	0.5	Sep			
- 8.8	18.7	3.2	- 0.5	1.4	12.0	- 10.2	0.2	0.3	- 0.1	0.8	Oct			
6.9	- 58.9	1.9	0.3	37.9	37.0	3.4	0.1	- 0.2	0.0	2.4	Nov			

8 Less German MFIs' holdings of paper issued by euro-area MFIs. 9 Including national banknotes still in circulation. 10 The German contributions to the Eurosystem's monetary aggregates should on no account be interpreted as national monetary aggregates and are therefore not comparable with the erstwhile German

money stocks M1, M2 or M3. 11 The difference between the volume of euro banknotes actually issued by the Bundesbank and the amount disclosed in accordance with the accounting regime chosen by the Eurosystem (see also footnote 2 on banknote circulation in Table III.2).

## II Overall monetary survey in the euro area

### 2 Consolidated balance sheet of monetary financial institutions (MFIs) \*

End of year/month	Assets											
	Lending to non-banks (non-MFIs) in the euro area										Claims on non-euro-area residents	Other assets
	Total assets or liabilities	Total	Enterprises and households				General government					
Total			Loans	Debt securities <sup>2</sup>	Shares and other equities	Total	Loans	Debt securities <sup>3</sup>				
<b>Euro area (€ billion) <sup>1</sup></b>												
2014 Oct	25,677.5	16,174.0	12,646.8	10,556.0	1,290.2	800.5	3,527.2	1,106.5	2,420.7	4,969.1	4,534.4	
Nov	26,010.6	16,221.2	12,675.7	10,573.1	1,296.8	805.9	3,545.5	1,109.7	2,435.8	5,040.3	4,749.1	
Dec	25,873.2	16,227.8	12,671.7	10,633.1	1,271.8	766.8	3,556.1	1,132.4	2,423.6	4,972.7	4,672.7	
2015 Jan	26,851.3	16,310.0	12,666.0	10,615.7	1,274.4	775.9	3,644.0	1,158.9	2,485.1	5,407.3	5,134.0	
Feb	26,794.9	16,337.4	12,697.9	10,637.4	1,276.5	784.0	3,639.5	1,144.2	2,495.3	5,402.4	5,055.2	
Mar	27,171.3	16,427.5	12,747.6	10,680.2	1,275.9	791.5	3,679.9	1,148.8	2,531.1	5,476.3	5,267.4	
Apr	26,839.2	16,451.5	12,745.8	10,663.6	1,274.8	807.4	3,705.7	1,152.9	2,552.8	5,415.3	4,972.5	
May	26,684.6	16,471.5	12,762.3	10,681.3	1,276.3	804.8	3,709.2	1,138.4	2,570.8	5,410.4	4,802.8	
June	26,126.8	16,434.6	12,727.8	10,683.3	1,254.0	790.5	3,706.8	1,136.8	2,570.1	5,269.7	4,422.5	
July	26,346.2	16,514.0	12,784.9	10,682.2	1,301.0	801.7	3,729.1	1,135.4	2,593.7	5,290.6	4,541.7	
Aug	26,195.9	16,493.4	12,735.0	10,645.4	1,302.6	786.9	3,758.4	1,126.5	2,631.9	5,242.0	4,460.5	
Sep	26,144.4	16,525.4	12,713.6	10,639.2	1,303.0	771.4	3,811.8	1,121.0	2,690.7	5,158.6	4,460.4	
Oct	26,336.6	16,575.4	12,732.0	10,661.2	1,288.0	782.7	3,843.4	1,125.0	2,718.5	5,245.2	4,516.0	
Nov	26,652.8	16,691.1	12,802.9	10,715.9	1,295.5	791.5	3,888.3	1,117.1	2,771.2	5,308.1	4,653.6	
Dec	25,851.2	16,541.4	12,703.0	10,627.4	1,296.3	779.3	3,838.4	1,110.2	2,728.2	5,022.3	4,287.5	
2016 Jan	26,415.1	16,689.5	12,731.2	10,656.8	1,306.9	767.5	3,958.2	1,127.1	2,831.2	5,137.5	4,588.1	
Feb	26,749.7	16,774.6	12,771.5	10,700.6	1,313.1	757.8	4,003.1	1,118.6	2,884.5	5,216.0	4,759.1	
Mar	26,407.4	16,825.5	12,776.3	10,709.9	1,312.0	754.4	4,049.1	1,117.9	2,931.3	5,019.0	4,563.0	
Apr	26,558.2	16,909.0	12,815.8	10,721.4	1,325.7	768.7	4,093.2	1,127.9	2,965.3	5,162.2	4,487.0	
May	26,807.5	16,993.8	12,842.4	10,733.3	1,341.3	767.8	4,151.4	1,121.7	3,029.6	5,258.3	4,555.4	
June	27,073.1	17,041.0	12,828.9	10,732.0	1,344.2	752.7	4,212.1	1,110.6	3,101.4	5,261.1	4,771.0	
July	27,140.6	17,093.6	12,852.5	10,736.8	1,360.4	755.3	4,241.0	1,111.6	3,129.5	5,314.8	4,732.3	
Aug	27,042.9	17,105.3	12,866.3	10,722.2	1,365.8	778.3	4,239.0	1,102.9	3,136.1	5,309.2	4,628.4	
Sep	26,976.7	17,147.0	12,892.1	10,755.7	1,359.9	776.5	4,254.9	1,098.8	3,156.1	5,244.8	4,584.8	
Oct	27,039.2	17,206.2	12,927.7	10,786.6	1,364.2	776.9	4,278.5	1,101.2	3,177.3	5,398.2	4,434.8	
Nov	27,157.1	17,296.3	12,984.7	10,832.5	1,380.3	771.9	4,311.6	1,088.9	3,222.8	5,427.6	4,433.2	
<b>German contribution (€ billion)</b>												
2014 Oct	5,864.9	3,695.6	2,922.0	2,528.3	141.7	251.9	773.6	366.9	406.8	1,192.8	976.5	
Nov	5,960.0	3,711.2	2,938.5	2,537.3	145.5	255.7	772.6	363.9	408.7	1,225.3	1,023.5	
Dec	5,973.4	3,696.4	2,931.4	2,527.7	143.6	260.1	764.9	364.1	400.8	1,209.1	1,068.0	
2015 Jan	6,233.3	3,728.3	2,948.0	2,536.5	142.2	269.2	780.4	372.4	408.0	1,313.5	1,191.4	
Feb	6,174.3	3,739.4	2,953.8	2,542.4	142.3	269.1	785.5	375.5	410.0	1,301.2	1,133.7	
Mar	6,272.2	3,758.2	2,967.1	2,546.4	144.1	276.5	791.2	374.0	417.2	1,306.4	1,207.5	
Apr	6,202.9	3,772.6	2,966.9	2,546.0	135.6	285.3	805.7	382.9	422.8	1,317.1	1,113.2	
May	6,140.5	3,770.8	2,972.2	2,555.9	135.0	281.3	798.6	370.7	427.9	1,317.8	1,052.0	
June	5,995.7	3,767.1	2,967.3	2,557.3	133.3	276.7	799.9	367.0	432.9	1,279.1	949.4	
July	6,058.3	3,803.0	2,993.0	2,561.0	153.8	278.2	810.0	368.0	442.0	1,274.1	981.2	
Aug	6,026.6	3,813.0	2,996.1	2,567.6	155.4	273.1	816.9	364.9	452.0	1,260.5	953.1	
Sep	6,041.7	3,824.0	2,996.1	2,572.5	157.2	266.4	827.9	364.5	463.4	1,257.0	960.7	
Oct	6,041.6	3,832.0	2,994.6	2,578.6	150.5	265.6	837.4	368.4	469.0	1,257.1	952.5	
Nov	6,104.5	3,864.8	3,019.5	2,594.8	153.5	271.2	845.3	363.9	481.3	1,236.6	1,003.2	
Dec	5,924.8	3,839.8	3,003.6	2,586.5	155.7	261.3	836.3	358.3	477.9	1,166.4	918.6	
2016 Jan	6,057.5	3,858.0	3,004.8	2,592.8	154.8	257.3	853.1	362.0	491.2	1,191.2	1,008.3	
Feb	6,155.1	3,874.6	3,014.0	2,607.0	151.1	255.9	860.6	362.0	498.6	1,209.7	1,070.8	
Mar	6,060.3	3,885.2	3,015.6	2,607.8	151.8	256.0	869.6	361.6	508.0	1,163.7	1,011.4	
Apr	6,049.9	3,908.1	3,026.3	2,617.8	152.2	256.3	881.8	366.1	515.7	1,181.7	960.2	
May	6,090.9	3,934.4	3,043.0	2,629.7	153.3	260.0	891.4	362.8	528.6	1,187.1	969.4	
June	6,220.9	3,939.5	3,042.5	2,629.1	152.9	260.5	897.0	357.3	539.7	1,221.3	1,060.1	
July	6,245.3	3,968.2	3,054.3	2,639.3	155.3	259.7	913.9	360.3	553.6	1,228.3	1,048.8	
Aug	6,218.7	3,977.6	3,062.7	2,646.2	155.3	261.2	914.8	358.5	556.4	1,226.9	1,014.2	
Sep	6,201.9	4,001.6	3,075.1	2,655.3	157.6	262.1	926.5	357.2	569.3	1,215.0	985.4	
Oct	6,207.5	4,018.7	3,087.3	2,664.9	161.9	260.5	931.4	360.3	571.1	1,259.9	928.9	
Nov	6,184.8	4,045.8	3,107.0	2,680.4	164.9	261.7	938.8	355.5	583.3	1,242.8	896.2	

\* Monetary financial institutions (MFIs) comprise banks (including building and loan associations), money market funds, and the European Central Bank and national central banks (the Eurosystem). <sup>1</sup> Source: ECB. <sup>2</sup> Including money market paper of

enterprises. <sup>3</sup> Including Treasury bills and other money market paper issued by general government. <sup>4</sup> Euro currency in circulation (see also footnote 8 on p 12\*) Excluding MFIs' cash in hand (in euro). The German contribution includes the volume

II Overall monetary survey in the euro area

Liabilities											End of year/month
Currency in circulation <sup>4</sup>	Deposits of non-banks (non-MFIs) in the euro area										
	Total	of which in euro <sup>5</sup>	Enterprises and households								
			Total	Overnight	With agreed maturities of			At agreed notice of <sup>6</sup>			
					up to 1 year	over 1 year and up to 2 years	over 2 years	up to 3 months	over 3 months		
<b>Euro area (€ billion) <sup>1</sup></b>											
950.6	11,004.8	10,402.5	10,465.5	4,557.8	1,109.4	415.2	2,212.0	2,084.5	86.5	2014 Oct	
956.8	11,109.7	10,480.5	10,532.6	4,637.2	1,099.7	407.6	2,213.2	2,088.7	86.1	Nov	
980.6	11,155.3	10,549.3	10,627.7	4,728.8	1,089.3	399.5	2,217.4	2,105.6	87.0	Dec	
979.1	11,229.8	10,515.0	10,619.4	4,827.3	1,069.1	379.6	2,145.1	2,109.9	88.4	2015 Jan	
983.2	11,213.4	10,523.0	10,622.2	4,847.7	1,034.8	379.6	2,162.7	2,110.3	87.2	Feb	
990.9	11,280.6	10,557.1	10,669.0	4,899.7	1,036.3	375.2	2,153.5	2,118.2	85.9	Mar	
999.8	11,275.5	10,603.0	10,703.7	4,972.1	1,027.3	369.2	2,131.8	2,119.4	83.9	Apr	
1,006.4	11,372.2	10,646.1	10,744.0	5,049.9	998.8	364.6	2,124.5	2,123.9	82.3	May	
1,017.1	11,392.1	10,647.3	10,748.5	5,096.4	975.7	361.0	2,110.1	2,124.1	81.2	June	
1,031.3	11,393.2	10,683.0	10,798.2	5,135.0	982.3	358.9	2,119.8	2,121.8	80.4	July	
1,029.4	11,377.1	10,679.6	10,789.6	5,137.0	980.8	353.8	2,114.8	2,124.1	79.1	Aug	
1,026.5	11,411.9	10,695.8	10,797.6	5,162.5	976.7	350.6	2,110.9	2,118.6	78.3	Sep	
1,028.8	11,499.8	10,740.7	10,849.7	5,244.5	972.3	349.1	2,092.0	2,114.5	77.3	Oct	
1,034.5	11,525.4	10,775.4	10,871.1	5,288.4	970.1	343.9	2,081.4	2,111.6	75.7	Nov	
1,048.9	11,488.5	10,815.7	10,924.5	5,325.7	981.5	343.8	2,083.3	2,114.9	75.2	Dec	
1,037.7	11,613.5	10,854.2	10,955.0	5,365.0	973.3	344.1	2,074.6	2,123.8	74.3	2016 Jan	
1,038.9	11,622.8	10,873.7	10,977.8	5,385.0	967.8	340.6	2,085.3	2,126.0	73.1	Feb	
1,042.5	11,688.2	10,918.6	11,009.0	5,418.7	973.3	339.8	2,076.3	2,128.7	72.3	Mar	
1,047.1	11,717.4	10,980.0	11,074.7	5,504.2	963.0	337.5	2,071.0	2,128.5	70.5	Apr	
1,049.3	11,768.7	11,007.8	11,094.3	5,545.0	945.2	331.9	2,066.3	2,135.9	70.0	May	
1,057.7	11,830.9	11,003.1	11,091.0	5,565.0	944.9	330.2	2,046.5	2,135.1	69.3	June	
1,067.8	11,851.3	11,055.5	11,135.4	5,614.9	952.1	325.6	2,039.3	2,134.8	68.8	July	
1,064.3	11,785.2	11,039.5	11,122.6	5,611.2	952.5	320.7	2,034.0	2,136.0	68.1	Aug	
1,066.5	11,790.8	11,034.3	11,132.4	5,636.9	960.1	315.0	2,021.8	2,131.1	67.4	Sep	
1,069.3	11,799.2	11,049.7	11,136.5	5,684.0	932.6	307.2	2,019.7	2,125.7	67.2	Oct	
1,071.1	11,892.9	11,119.8	11,224.2	5,785.5	923.4	303.7	2,023.2	2,121.9	66.6	Nov	
<b>German contribution (€ billion)</b>											
223.6	3,199.5	3,133.6	3,020.0	1,507.0	189.9	32.5	684.8	527.9	78.1	2014 Oct	
224.8	3,222.7	3,157.5	3,038.6	1,531.2	186.7	33.4	682.2	527.4	77.7	Nov	
229.7	3,207.5	3,142.6	3,019.1	1,507.1	191.8	32.3	680.6	531.0	76.4	Dec	
228.9	3,233.6	3,156.6	3,045.0	1,541.7	188.3	31.3	677.5	528.8	77.4	2015 Jan	
229.7	3,249.6	3,172.0	3,062.0	1,562.7	187.1	31.0	675.4	529.6	76.1	Feb	
232.0	3,253.1	3,175.8	3,062.6	1,569.0	187.1	31.4	671.6	528.7	74.8	Mar	
233.8	3,265.4	3,191.1	3,080.3	1,598.9	187.3	31.7	661.3	528.5	72.7	Apr	
234.9	3,289.4	3,214.1	3,094.6	1,620.0	183.7	31.9	659.5	528.5	71.1	May	
238.3	3,287.5	3,208.9	3,090.0	1,626.3	178.9	32.2	654.6	528.3	69.7	June	
241.6	3,312.5	3,236.6	3,120.9	1,643.3	179.8	32.4	669.3	527.9	68.2	July	
241.2	3,321.2	3,246.0	3,123.4	1,651.0	175.8	32.2	669.5	528.2	66.7	Aug	
240.3	3,330.8	3,253.8	3,131.7	1,667.0	172.0	31.7	666.7	529.0	65.3	Sep	
240.1	3,349.1	3,271.6	3,154.0	1,698.6	170.8	32.9	657.5	530.3	64.0	Oct	
241.9	3,386.8	3,309.9	3,182.3	1,732.8	168.6	33.2	653.8	531.1	62.8	Nov	
244.2	3,379.0	3,293.1	3,168.8	1,711.8	176.9	34.4	649.6	534.1	61.9	Dec	
242.2	3,398.2	3,312.7	3,191.1	1,739.2	172.6	35.6	647.9	535.1	60.7	2016 Jan	
242.7	3,412.8	3,319.7	3,197.4	1,747.9	172.1	35.8	645.5	536.7	59.4	Feb	
243.3	3,428.4	3,315.7	3,188.8	1,735.7	176.5	37.5	644.9	535.9	58.3	Mar	
244.2	3,429.1	3,334.3	3,208.5	1,759.1	178.5	38.3	640.3	535.1	57.2	Apr	
243.7	3,469.8	3,356.2	3,222.9	1,779.2	175.2	37.3	640.6	534.4	56.2	May	
245.2	3,481.5	3,352.9	3,218.7	1,779.1	173.1	38.3	638.8	533.9	55.4	June	
247.4	3,464.1	3,368.1	3,233.1	1,793.5	174.7	38.2	638.3	533.8	54.6	July	
246.5	3,480.0	3,376.0	3,238.3	1,803.0	173.4	38.2	636.2	533.8	53.8	Aug	
245.9	3,494.5	3,380.7	3,247.0	1,807.9	179.4	38.3	635.0	533.3	53.1	Sep	
245.4	3,489.6	3,386.4	3,254.0	1,821.1	172.1	37.8	637.3	533.5	52.3	Oct	
245.7	3,547.8	3,435.2	3,299.3	1,858.5	171.1	37.4	647.0	533.7	51.7	Nov	

of euro banknotes put into circulation by the Bundesbank in accordance with the accounting regime chosen by the Eurosystem (see also footnote 2 on banknote circulation in Table III.2). The volume of currency actually put into circulation by the

Bundesbank can be calculated by adding to this total the item "Intra-Eurosystem liability/claim related to banknote issue" (see "Other liability items"). <sup>5</sup> Excluding central governments' deposits. <sup>6</sup> In Germany, only savings deposits.

## II Overall monetary survey in the euro area

### 2 Consolidated balance sheet of monetary financial institutions (MFIs) (cont'd) \*

Liabilities (cont'd)																		
Deposits of non-banks (non-MFIs) in the euro area (cont'd)																		
General government											Repo transactions with non-banks in the euro area		Money market fund shares (net) <sup>3</sup>	Debt securities				
End of year/month	Other general government										Total	of which Enterprises and households	Money market fund shares (net) <sup>3</sup>	Total	of which denominated in euro			
	Central governments	Total	Overnight	With agreed maturities of			At agreed notice of <sup>2</sup>		Total	of which Enterprises and households						Money market fund shares (net) <sup>3</sup>	Total	of which denominated in euro
				up to 1 year	over 1 year and up to 2 years	over 2 years	up to 3 months	over 3 months										
<b>Euro area (€ billion) <sup>1</sup></b>																		
2014 Oct	236.2	303.1	133.1	95.0	9.3	45.1	15.5	5.1	313.2	302.7	428.9	2,489.0	1,839.8					
Nov	262.2	315.0	142.1	97.0	10.1	44.9	15.8	5.1	310.5	301.4	434.4	2,474.9	1,824.9					
Dec	216.7	310.9	138.0	100.5	11.5	39.5	16.4	5.1	297.0	290.7	414.2	2,479.0	1,820.8					
2015 Jan	300.7	309.7	134.9	99.3	11.3	39.9	18.8	5.4	314.8	304.7	438.3	2,509.3	1,800.5					
Feb	272.1	319.1	142.1	99.8	11.6	40.0	20.2	5.3	352.4	342.3	447.3	2,506.4	1,786.2					
Mar	294.7	316.9	139.7	100.2	12.7	39.2	19.9	5.3	354.1	347.9	437.3	2,496.3	1,764.6					
Apr	251.4	320.4	144.8	97.9	12.8	39.5	20.3	5.1	336.7	329.0	458.8	2,464.9	1,745.0					
May	295.5	332.7	157.0	97.0	13.1	39.9	20.7	5.0	331.0	324.4	449.8	2,446.1	1,720.6					
June	309.5	334.1	157.1	97.6	13.1	40.9	20.5	4.9	312.2	308.7	434.4	2,433.8	1,706.0					
July	266.4	328.6	149.2	100.3	13.3	38.8	22.3	4.9	301.3	298.1	457.1	2,405.5	1,682.1					
Aug	251.6	335.9	155.2	100.4	13.3	38.8	23.4	4.8	305.4	300.3	455.7	2,374.3	1,672.4					
Sep	280.6	333.7	153.5	101.4	13.2	39.4	21.5	4.8	304.5	296.9	449.9	2,344.0	1,660.5					
Oct	315.5	334.6	157.4	98.6	13.2	39.6	20.9	4.7	297.6	288.1	471.8	2,337.7	1,640.6					
Nov	298.5	355.7	168.0	108.4	13.0	39.7	21.9	4.7	301.4	296.2	487.7	2,367.3	1,646.3					
Dec	227.4	336.6	154.4	104.6	13.7	39.7	19.5	4.7	272.8	270.9	465.2	2,318.9	1,633.8					
2016 Jan	315.1	343.4	160.9	102.3	14.3	39.7	21.0	5.2	294.5	292.9	475.6	2,301.4	1,614.9					
Feb	301.0	344.0	162.6	98.1	14.4	39.9	24.0	5.1	339.1	335.1	474.3	2,287.9	1,597.4					
Mar	333.3	345.9	159.5	102.0	15.1	40.8	23.6	5.0	332.3	329.1	462.9	2,265.5	1,589.8					
Apr	297.6	345.2	161.9	97.2	15.4	42.2	23.5	4.9	327.9	323.1	480.3	2,269.4	1,585.4					
May	317.7	356.6	167.0	102.1	15.5	43.1	24.0	4.9	318.7	312.8	480.4	2,277.6	1,574.5					
June	378.3	361.6	171.3	102.4	15.9	43.7	23.5	4.8	321.3	318.0	471.1	2,275.2	1,568.2					
July	349.2	366.7	174.1	101.6	18.2	43.8	24.2	4.8	298.6	297.4	486.6	2,252.0	1,543.3					
Aug	294.6	368.1	175.7	100.8	18.7	44.3	23.8	4.9	301.0	299.9	487.5	2,246.9	1,534.0					
Sep	297.4	361.0	170.5	99.5	19.4	44.4	22.3	5.0	286.5	285.7	485.7	2,220.2	1,516.1					
Oct	295.3	367.5	182.2	94.1	19.8	44.7	21.3	5.3	266.4	265.7	502.7	2,221.2	1,504.6					
Nov	299.1	369.6	178.5	98.9	21.2	44.2	21.6	5.2	264.8	264.1	512.6	2,234.2	1,505.0					
<b>German contribution (€ billion)</b>																		
2014 Oct	12.6	166.8	41.6	77.1	5.8	38.9	2.8	0.6	9.1	8.4	3.4	549.3	287.7					
Nov	12.4	171.7	44.0	79.2	6.4	38.7	2.8	0.6	9.6	9.0	3.4	550.5	285.7					
Dec	11.3	177.1	50.7	82.3	7.6	32.8	3.0	0.7	3.4	3.1	3.3	547.3	280.7					
2015 Jan	18.7	170.0	44.7	81.2	7.5	32.9	3.1	0.7	6.8	4.7	3.3	566.9	283.7					
Feb	12.0	175.7	47.5	82.9	8.1	33.5	3.1	0.7	8.0	5.6	3.3	573.3	287.6					
Mar	14.7	175.8	47.7	82.3	9.2	32.8	3.1	0.7	7.6	5.2	3.3	573.0	285.6					
Apr	12.0	173.1	46.9	80.2	9.3	33.0	3.1	0.7	11.4	8.7	3.2	567.3	280.9					
May	13.4	181.4	54.6	80.0	9.7	33.3	3.2	0.6	5.0	3.8	3.3	557.3	272.4					
June	15.6	181.8	53.2	80.8	9.7	34.4	3.1	0.6	3.3	2.2	3.4	555.5	269.8					
July	12.4	179.3	49.8	83.6	9.8	32.3	3.1	0.6	4.5	3.3	3.4	558.4	267.2					
Aug	12.1	185.7	56.0	83.8	9.8	32.5	3.1	0.6	6.6	4.6	3.5	547.0	266.9					
Sep	14.0	185.1	54.4	84.5	9.7	32.8	3.1	0.6	7.0	4.9	4.0	547.0	272.6					
Oct	13.4	181.6	54.1	80.9	9.8	33.1	3.1	0.6	6.6	5.0	3.9	555.3	275.2					
Nov	12.3	192.2	55.6	90.2	9.5	33.2	3.1	0.6	6.1	4.5	3.8	562.5	270.9					
Dec	22.6	187.6	54.3	86.0	10.2	33.4	3.1	0.5	2.5	2.0	3.4	533.4	254.9					
2016 Jan	21.8	185.2	54.5	83.2	10.5	33.4	3.1	0.5	2.8	2.7	3.7	534.8	257.0					
Feb	28.9	186.5	59.1	79.7	10.5	33.7	3.1	0.5	4.2	3.7	3.6	527.9	250.2					
Mar	49.3	190.2	57.4	84.1	10.8	34.3	3.1	0.5	3.2	2.0	3.4	518.7	250.5					
Apr	31.9	188.7	58.2	80.3	10.9	35.6	3.2	0.5	3.7	2.4	3.0	521.8	249.1					
May	50.6	196.3	60.4	84.9	11.1	36.2	3.3	0.5	3.5	2.4	2.5	530.9	244.9					
June	63.6	199.2	62.2	85.0	11.5	36.6	3.3	0.5	2.5	2.3	2.6	523.0	241.2					
July	31.9	199.1	59.9	85.2	13.3	36.8	3.3	0.5	3.4	3.2	2.4	524.2	241.2					
Aug	40.6	201.0	61.7	84.6	13.6	37.2	3.4	0.5	3.2	3.2	2.3	524.4	241.5					
Sep	49.3	198.3	59.7	83.5	14.0	37.2	3.4	0.5	2.9	2.9	2.4	516.7	240.8					
Oct	40.5	195.1	58.8	80.4	14.9	37.2	3.4	0.5	3.2	3.2	2.3	526.0	242.2					
Nov	47.4	201.0	59.5	84.2	16.1	37.3	3.3	0.6	3.0	3.0	2.3	541.2	250.9					

\* Monetary financial institutions (MFIs) comprise banks (including building and loan associations), money market funds, and the European Central Bank and national central banks (the Eurosystem). <sup>1</sup> Source: ECB. <sup>2</sup> In Germany, only savings deposits. <sup>3</sup> Excluding holdings of MFIs; for the German contribution, excluding German MFIs' portfolios of securities issued by MFIs in the euro area. <sup>4</sup> In Germany, bank debt securities with maturities of up to one year are classed as money market

paper. <sup>5</sup> Excluding liabilities arising from securities issued. <sup>6</sup> After deduction of inter-MFI participations. <sup>7</sup> The German contributions to the Eurosystem's monetary aggregates should on no account be interpreted as national monetary aggregates and are therefore not comparable with the erstwhile German money stocks M1, M2 or M3. <sup>8</sup> Including DM banknotes still in circulation (see also footnote 4 on p 10\*) <sup>9</sup> For the German contribution, the difference between the volume of

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											Memo item				
issued (net) <sup>3</sup>			Liabilities to non-euro-area residents <sup>5</sup>	Capital and reserves <sup>6</sup>	Excess of inter-MFI liabilities	Other liability items		Monetary aggregates <sup>7</sup> (From 2002, German contribution excludes currency in circulation)			Monetary capital formation <sup>13</sup>	Monetary liabilities of central governments (Post Office, Treasury) <sup>14</sup>	End of year/month		
With maturities of						Total <sup>8</sup>	of which Intra-Eurosystem-liability/claim related to banknote issue <sup>9</sup>	M1 <sup>10</sup>	M2 <sup>11</sup>	M3 <sup>12</sup>					
up to 1 year <sup>4</sup>	over 1 year and up to 2 years	over 2 years													
<b>Euro area (€ billion) <sup>1</sup></b>															
30.8	36.9	2,421.3	3,563.2	2,491.2	- 83.4	4,520.1	-	5,726.9	9,478.2	10,104.8	7,261.3	107.8	2014 Oct		
29.7	38.8	2,406.4	3,573.4	2,504.1	- 68.5	4,715.3	-	5,827.3	9,568.3	10,197.2	7,259.8	113.3	Nov		
61.6	42.8	2,374.7	3,561.6	2,459.6	- 45.1	4,570.9	-	5,938.9	9,682.5	10,313.4	7,183.3	112.3	Dec		
58.8	42.4	2,408.1	3,915.5	2,552.3	- 101.7	5,013.8	-	6,030.9	9,739.9	10,388.9	7,239.3	110.6	2015 Jan		
59.3	43.4	2,403.7	3,942.8	2,545.2	- 115.3	4,919.6	-	6,061.3	9,738.4	10,410.7	7,244.0	109.1	Feb		
53.6	44.3	2,398.4	3,974.6	2,574.2	- 68.7	5,132.0	-	6,119.4	9,802.4	10,452.9	7,256.5	109.5	Mar		
57.1	45.9	2,361.9	4,002.6	2,541.5	- 78.5	4,838.1	-	6,203.6	9,871.1	10,555.3	7,163.8	107.6	Apr		
54.1	42.3	2,349.8	3,960.1	2,549.9	- 67.3	4,636.4	-	6,302.5	9,941.4	10,592.0	7,151.4	110.0	May		
58.7	44.8	2,330.3	3,789.6	2,532.2	- 59.5	4,274.9	-	6,361.2	9,974.9	10,594.4	7,099.7	112.4	June		
46.0	45.1	2,314.4	3,888.7	2,531.2	- 67.0	4,405.0	-	6,408.3	10,029.0	10,668.5	7,089.5	114.8	July		
35.7	47.4	2,291.3	3,883.4	2,529.7	- 65.9	4,306.7	-	6,416.1	10,033.7	10,664.8	7,058.5	116.3	Aug		
32.7	46.5	2,264.9	3,808.9	2,533.7	- 52.7	4,317.7	-	6,438.2	10,041.6	10,659.1	7,032.0	117.3	Sep		
32.6	47.2	2,257.9	3,861.9	2,559.8	- 75.9	4,355.2	-	6,525.3	10,115.1	10,767.6	7,031.4	115.7	Oct		
31.1	49.2	2,286.9	3,915.4	2,565.1	- 77.2	4,533.2	-	6,592.2	10,181.7	10,833.1	7,053.5	121.9	Nov		
22.9	47.8	2,248.2	3,662.8	2,548.9	- 49.3	4,094.4	-	6,631.5	10,230.1	10,832.5	7,000.0	123.0	Dec		
29.2	50.9	2,221.3	3,809.9	2,572.8	- 76.5	4,386.2	-	6,665.8	10,265.9	10,900.7	6,987.8	123.6	2016 Jan		
33.6	54.3	2,199.9	3,922.0	2,609.7	- 98.0	4,553.1	-	6,688.2	10,280.1	10,934.5	7,013.0	122.8	Feb		
37.2	51.9	2,176.4	3,739.2	2,592.2	- 93.9	4,378.3	-	6,721.4	10,324.4	10,961.5	6,962.9	121.3	Mar		
41.4	49.8	2,178.1	3,927.3	2,604.1	- 98.8	4,283.4	-	6,815.2	10,400.9	11,063.2	6,971.0	122.7	Apr		
39.7	49.1	2,188.9	4,033.3	2,600.6	- 82.9	4,361.8	-	6,867.4	10,442.6	11,103.3	6,973.8	126.6	May		
49.8	47.2	2,178.2	3,955.3	2,664.7	- 62.0	4,558.8	-	6,901.2	10,473.7	11,124.7	7,007.2	127.7	June		
54.9	48.1	2,149.1	4,091.2	2,678.4	- 105.0	4,519.7	-	6,967.5	10,544.7	11,219.6	6,984.1	131.5	July		
54.3	46.3	2,146.3	4,132.9	2,676.0	- 84.9	4,434.1	-	6,961.8	10,535.1	11,208.5	6,973.5	131.4	Aug		
48.7	46.0	2,125.6	4,088.3	2,698.1	- 46.5	4,387.0	-	6,984.5	10,552.7	11,210.4	6,962.2	131.3	Sep		
53.0	43.5	2,124.6	4,292.4	2,683.8	- 31.1	4,235.3	-	7,046.6	10,568.2	11,240.8	6,945.3	131.8	Oct		
50.2	42.2	2,141.7	4,333.7	2,662.7	- 65.2	4,250.3	-	7,149.9	10,661.1	11,336.1	6,943.6	135.4	Nov		
<b>German contribution (€ billion)</b>															
11.3	7.8	530.2	636.4	529.7	- 620.1	1,557.6	261.8	1,548.6	2,384.5	2,416.2	1,862.2	-	2014 Oct		
10.4	7.9	532.2	654.2	532.9	- 621.3	1,608.0	264.4	1,575.2	2,411.1	2,442.4	1,864.4	-	Nov		
10.3	7.7	529.4	633.4	535.7	- 605.7	1,648.7	267.9	1,557.8	2,405.7	2,430.3	1,855.6	-	Dec		
11.8	8.2	546.9	763.4	553.3	- 674.0	1,780.3	270.3	1,586.4	2,426.5	2,456.5	1,888.6	-	2015 Jan		
14.3	7.9	551.0	751.7	550.7	- 678.0	1,715.9	272.4	1,610.2	2,452.0	2,485.5	1,887.4	-	Feb		
14.9	8.5	549.6	755.9	557.2	- 670.7	1,793.0	274.7	1,616.8	2,458.5	2,492.8	1,886.7	-	Mar		
18.9	8.3	540.2	770.7	553.7	- 666.9	1,698.4	276.9	1,645.8	2,485.8	2,527.5	1,861.4	-	Apr		
18.6	5.6	533.1	764.2	556.8	- 676.8	1,641.5	279.3	1,674.6	2,511.5	2,544.0	1,854.4	-	May		
18.5	5.4	531.7	718.1	555.8	- 670.9	1,543.2	280.2	1,679.6	2,512.5	2,543.1	1,846.8	-	June		
18.2	5.2	535.1	742.1	552.4	- 692.2	1,577.2	284.9	1,693.1	2,529.7	2,561.0	1,857.9	-	July		
16.2	5.9	524.9	754.9	552.8	- 711.7	1,552.8	287.3	1,707.0	2,539.8	2,571.9	1,847.1	-	Aug		
21.9	8.0	517.2	736.7	553.5	- 709.5	1,572.5	290.1	1,721.4	2,551.4	2,592.3	1,836.0	-	Sep		
25.8	7.8	521.7	737.2	558.6	- 735.5	1,566.6	293.1	1,752.7	2,580.5	2,624.6	1,835.4	-	Oct		
26.4	9.6	526.5	724.9	553.7	- 754.5	1,621.4	295.2	1,788.4	2,624.1	2,670.0	1,830.6	-	Nov		
26.3	9.3	497.8	659.6	552.5	- 742.7	1,537.4	297.8	1,766.1	2,610.8	2,652.3	1,795.8	-	Dec		
25.2	11.2	498.4	702.8	560.8	- 766.0	1,620.7	297.1	1,793.6	2,633.8	2,676.6	1,801.7	-	2016 Jan		
25.5	11.8	490.7	739.6	574.8	- 790.7	1,683.0	297.7	1,807.0	2,644.8	2,689.9	1,804.6	-	Feb		
24.0	10.9	483.8	699.0	569.9	- 784.5	1,622.4	299.8	1,793.1	2,641.1	2,682.7	1,791.6	-	Mar		
23.9	11.7	486.1	753.1	575.6	- 803.0	1,566.8	300.9	1,817.3	2,663.6	2,705.9	1,795.3	-	Apr		
22.8	12.3	495.8	758.5	571.4	- 823.1	1,577.5	303.9	1,839.6	2,685.7	2,726.9	1,800.7	-	May		
23.8	11.8	487.5	783.3	592.6	- 834.3	1,670.0	308.0	1,841.3	2,686.4	2,727.1	1,811.5	-	June		
30.5	12.6	481.1	807.8	595.1	- 824.9	1,673.4	311.7	1,853.4	2,702.0	2,750.9	1,806.5	-	July		
27.4	12.5	484.5	826.1	589.2	- 846.9	1,640.6	314.1	1,864.6	2,711.7	2,757.1	1,801.3	-	Aug		
26.4	12.9	477.4	851.2	594.2	- 876.5	1,616.7	318.8	1,867.6	2,719.5	2,764.2	1,797.3	-	Sep		
25.3	13.4	487.3	899.9	585.3	- 863.2	1,564.6	322.0	1,879.9	2,721.9	2,766.1	1,799.8	-	Oct		
22.0	14.6	504.7	906.7	578.0	- 928.9	1,534.8	323.9	1,918.0	2,763.8	2,805.7	1,813.3	-	Nov		

euro banknotes actually issued by the Bundesbank and the amount disclosed in accordance with the accounting regime chosen by the Eurosystem (see also footnote 2 on banknote circulation in Table III.2). **10** Overnight deposits (excluding central governments' deposits), and (for the euro area) currency in circulation, central governments' overnight monetary liabilities, which are not included in the consolidated balance sheet. **11** M1 plus deposits with agreed maturities of up to 2

years and at agreed notice of up to 3 months (excluding central governments' deposits) and (for the euro area) central governments' monetary liabilities with such maturities. **12** M2 plus repo transactions, money market fund shares, money market paper and debt securities up to 2 years. **13** Deposits with agreed maturities of over 2 years and at agreed notice of over 3 months, debt securities with maturities of over 2 years, capital and reserves. **14** Non-existent in Germany.

## II Overall monetary survey in the euro area

### 3 Banking system's liquidity position \* Stocks

€ billion; period averages of daily positions

Reserve maintenance period ending in 1	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current account balances (including minimum reserves) 7	Base money 8
	Net assets in gold and foreign currency	Monetary policy operations of the Eurosystem				Deposit facility	Other liquidity-absorbing operations 4	Banknotes in circulation 5	Central government deposits	Other factors (net) 6		
		Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations 3							
<b>Eurosystem 2</b>												
2014 July	540.0	111.7	460.1	0.1	209.0	23.9	27.2	958.1	110.0	- 12.5	214.3	1 196.3
Aug	547.6	106.6	414.7	0.3	202.2	24.6	0.0	967.6	92.4	- 23.6	210.2	1 202.5
Sep	547.8	114.7	387.4	0.2	196.3	25.2	0.0	971.8	66.2	- 27.0	210.1	1 207.1
Oct	552.0	98.9	398.2	0.2	194.7	24.3	0.0	971.3	78.4	- 22.6	192.6	1 188.2
Nov	562.0	95.2	412.5	0.3	193.3	31.0	0.0	973.6	76.1	- 5.7	188.3	1 192.8
Dec	564.3	103.3	396.1	0.2	202.0	27.3	0.0	979.8	71.7	1.8	185.4	1 192.5
2015 Jan	576.4	119.0	454.4	0.5	217.9	50.2	0.0	1 005.5	66.3	9.8	236.3	1 292.1
Feb	.	.	.	.	.	.	.	.	.	.	.	.
Mar	589.2	142.6	375.0	0.4	230.8	42.4	0.0	1 005.4	62.1	2.7	225.3	1 273.1
Apr	625.9	118.9	386.1	0.2	290.6	68.6	0.0	1 015.9	70.2	5.1	261.8	1 346.4
May	.	.	.	.	.	.	.	.	.	.	.	.
June	655.7	95.9	406.6	0.1	383.1	99.7	0.0	1 027.4	76.5	34.5	303.4	1 430.5
July	642.9	82.4	443.2	0.3	471.8	103.1	0.0	1 042.7	96.3	17.2	381.4	1 527.2
Aug	.	.	.	.	.	.	.	.	.	.	.	.
Sep	627.4	72.4	462.2	0.6	550.8	148.0	0.0	1 055.3	63.4	18.1	428.4	1 631.8
Oct	619.1	70.2	462.1	0.1	643.2	152.8	0.0	1 052.4	95.2	28.9	465.3	1 670.5
Nov	.	.	.	.	.	.	.	.	.	.	.	.
Dec	612.2	66.1	459.3	0.1	730.7	173.1	0.0	1 056.5	93.5	51.5	493.8	1 723.4
2016 Jan	611.6	71.6	466.9	0.2	811.8	196.6	0.0	1 072.8	82.5	53.2	557.1	1 826.5
Feb	.	.	.	.	.	.	.	.	.	.	.	.
Mar	607.8	62.9	461.7	0.1	907.6	230.5	0.0	1 063.4	115.6	73.9	556.5	1 850.4
Apr	627.3	58.1	460.8	0.2	1 000.1	262.0	0.0	1 069.3	147.4	97.7	570.0	1 901.3
May	.	.	.	.	.	.	.	.	.	.	.	.
June	640.3	53.9	456.3	0.2	1 105.3	309.0	0.0	1 076.6	123.9	122.8	623.8	2 009.4
July	666.1	47.6	471.6	0.1	1 227.1	323.1	0.0	1 087.1	175.5	169.4	657.5	2 067.7
Aug	.	.	.	.	.	.	.	.	.	.	.	.
Sep	685.0	43.5	483.7	0.0	1 339.7	355.1	0.0	1 096.2	137.8	214.0	748.8	2 200.2
Oct	687.8	37.4	503.5	0.1	1 447.0	387.3	0.0	1 094.7	168.3	248.0	777.4	2 259.4
Nov	.	.	.	.	.	.	.	.	.	.	.	.
Dec	687.4	34.0	511.8	0.2	1 570.2	439.4	0.0	1 103.1	159.7	277.6	823.9	2 366.3
<b>Deutsche Bundesbank</b>												
2014 July	136.9	10.0	16.1	0.1	48.9	8.4	9.0	228.1	1.6	- 99.6	64.6	301.0
Aug	138.8	6.2	11.3	0.0	47.4	6.8	0.0	230.5	0.9	- 96.7	62.3	299.5
Sep	138.7	4.1	10.0	0.1	45.9	8.7	0.0	231.1	1.0	- 103.5	61.5	301.2
Oct	139.4	5.6	12.2	0.0	45.5	9.0	0.0	231.7	1.2	- 102.2	63.1	303.8
Nov	141.0	8.0	14.9	0.1	45.5	9.0	0.0	231.4	0.9	- 89.5	57.6	298.0
Dec	140.8	6.6	16.6	0.0	47.3	9.3	0.0	232.4	0.9	- 86.7	55.5	297.2
2015 Jan	141.9	13.4	30.7	0.0	50.4	14.9	0.0	237.3	1.2	- 92.3	75.3	327.5
Feb	.	.	.	.	.	.	.	.	.	.	.	.
Mar	143.2	6.6	30.9	0.0	52.4	12.4	0.0	237.0	1.5	- 92.6	74.7	324.1
Apr	151.5	5.6	29.5	0.1	64.8	21.2	0.0	239.9	1.1	- 100.3	89.4	350.5
May	.	.	.	.	.	.	.	.	.	.	.	.
June	159.2	3.6	28.8	0.0	83.9	28.6	0.0	242.5	2.0	- 100.4	102.8	373.9
July	155.4	2.1	36.4	0.0	102.5	25.5	0.0	246.2	3.4	- 101.4	122.8	394.4
Aug	.	.	.	.	.	.	.	.	.	.	.	.
Sep	151.2	1.8	40.0	0.0	119.1	42.4	0.0	249.5	2.9	- 118.3	135.9	427.7
Oct	148.4	2.8	40.8	0.0	138.2	40.8	0.0	248.8	5.2	- 115.9	151.2	440.9
Nov	.	.	.	.	.	.	.	.	.	.	.	.
Dec	146.1	3.2	43.3	0.0	156.3	56.1	0.0	249.1	9.3	- 116.3	150.7	455.9
2016 Jan	144.8	3.6	48.4	0.1	174.0	50.0	0.0	252.4	18.0	- 124.0	174.4	476.8
Feb	.	.	.	.	.	.	.	.	.	.	.	.
Mar	143.7	1.9	46.3	0.0	193.9	59.8	0.0	250.4	26.1	- 113.3	162.9	473.1
Apr	152.2	3.1	45.0	0.0	214.1	67.6	0.0	252.1	37.3	- 105.1	162.4	482.1
May	.	.	.	.	.	.	.	.	.	.	.	.
June	156.4	3.3	45.3	0.0	237.2	87.3	0.0	254.7	41.1	- 127.2	186.5	528.4
July	163.3	2.7	44.7	0.0	263.4	89.8	0.0	257.4	47.2	- 117.0	196.6	543.9
Aug	.	.	.	.	.	.	.	.	.	.	.	.
Sep	168.3	1.9	44.0	0.0	288.2	90.8	0.0	258.7	36.2	- 112.6	229.3	578.9
Oct	168.7	1.5	50.6	0.0	311.9	105.2	0.0	258.6	50.5	- 125.2	243.6	607.4
Nov	.	.	.	.	.	.	.	.	.	.	.	.
Dec	167.7	0.9	54.0	0.0	339.2	129.7	0.0	260.3	43.7	- 141.9	270.0	660.0

Discrepancies may arise from rounding. \* The banking system's liquidity position is defined as the current account holdings in euro of euro-area credit institutions with the Eurosystem. Amounts are derived from the consolidated financial statement of the Eurosystem and the financial statement of the Bundesbank. 1 Figures are daily averages for the reserve maintenance period ending in the month indicated. Following the changeover in the frequency of Governing Council monetary policy meetings to a six-week cycle, a reserve maintenance period no longer ends in every month. No

figures are available in such cases. 2 Source: ECB. 3 Includes liquidity provided under the Eurosystem's securities purchase programmes. 4 From Aug. 2009, includes liquidity absorbed as a result of the Eurosystem's foreign exchange swap operations. 5 From 2002, euro banknotes and other banknotes which have been issued by the national central banks of the Eurosystem and which are still in circulation. In accordance with the accounting procedure chosen by the Eurosystem for the issue of euro banknotes, 8% of the total value of the euro banknotes in circulation are



II Overall monetary survey in the euro area

Flows

Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current account balances (including minimum reserves) 7	Base money 8	Reserve maintenance period ending in 1
Net assets in gold and foreign currency	Monetary policy operations of the Eurosystem				Deposit facility	Other liquidity-absorbing operations 4	Banknotes in circulation 5	Central government deposits	Other factors (net) 6			
	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations 3								
<b>Eurosystem 2</b>												
+ 3.2	- 36.4	- 47.7	+ 0.0	- 6.9	- 4.4	- 98.8	+ 7.1	- 1.6	- 12.0	+ 22.0	+ 24.7	2014 July
+ 7.6	- 5.1	- 45.4	+ 0.2	- 6.8	+ 0.7	- 27.2	+ 9.5	- 17.6	- 11.1	- 4.1	+ 6.2	Aug
+ 0.2	+ 8.1	- 27.3	- 0.1	- 5.9	+ 0.6	± 0.0	+ 4.2	- 26.2	- 3.4	- 0.1	+ 4.6	Sep
+ 4.2	- 15.8	+ 10.8	± 0.0	- 1.6	- 0.9	± 0.0	- 0.5	+ 12.2	+ 4.4	- 17.5	- 18.9	Oct
+ 10.0	- 3.7	+ 14.3	+ 0.1	- 1.4	+ 6.7	± 0.0	+ 2.3	- 2.3	+ 16.9	- 4.3	+ 4.6	Nov
+ 2.3	+ 8.1	- 16.4	- 0.1	+ 8.7	- 3.7	± 0.0	+ 6.2	- 4.4	+ 7.5	- 2.9	- 0.3	Dec
+ 12.1	+ 15.7	+ 58.3	+ 0.3	+ 15.9	+ 22.9	± 0.0	+ 25.7	- 5.4	+ 8.0	+ 50.9	+ 99.6	2015 Jan
+ 12.8	+ 23.6	- 79.4	- 0.1	+ 12.9	- 7.8	± 0.0	- 0.1	- 4.2	- 7.1	- 11.0	- 19.0	Feb
+ 36.7	- 23.7	+ 11.1	- 0.2	+ 59.8	+ 26.2	± 0.0	+ 10.5	+ 8.1	+ 2.4	+ 36.5	+ 73.3	Mar
+ 29.8	- 23.0	+ 20.5	- 0.1	+ 92.5	+ 31.1	± 0.0	+ 11.5	+ 6.3	+ 29.4	+ 41.6	+ 84.1	Apr
- 12.8	- 13.5	+ 36.6	+ 0.2	+ 88.7	+ 3.4	± 0.0	+ 15.3	+ 19.8	- 17.3	+ 78.0	+ 96.7	May
- 15.5	- 10.0	+ 19.0	+ 0.3	+ 79.0	+ 44.9	± 0.0	+ 12.6	- 32.9	+ 0.9	+ 47.0	+ 104.6	June
- 8.3	- 2.2	- 0.1	- 0.5	+ 92.4	+ 4.8	± 0.0	- 2.9	+ 31.8	+ 10.8	+ 36.9	+ 38.7	July
- 6.9	- 4.1	- 2.8	- 0.0	+ 87.5	+ 20.3	± 0.0	+ 4.1	- 1.7	+ 22.6	+ 28.5	+ 52.9	Aug
- 0.6	+ 5.5	+ 7.6	+ 0.1	+ 81.1	+ 23.5	± 0.0	+ 16.3	- 11.0	+ 1.7	+ 63.3	+ 103.1	Sep
- 3.8	- 8.7	- 5.2	- 0.1	+ 95.8	+ 33.9	± 0.0	- 9.4	+ 33.1	+ 20.7	- 0.6	+ 23.9	Oct
+ 19.5	- 4.8	- 0.9	+ 0.1	+ 92.5	+ 31.5	± 0.0	+ 5.9	+ 31.8	+ 23.8	+ 13.5	+ 50.9	Nov
+ 13.0	- 4.2	- 4.5	± 0.0	+ 105.2	+ 47.0	± 0.0	+ 7.3	- 23.5	+ 25.1	+ 53.8	+ 108.1	Dec
+ 25.8	- 6.3	+ 15.3	- 0.1	+ 121.8	+ 14.1	± 0.0	+ 10.5	+ 51.6	+ 46.6	+ 33.7	+ 58.3	2016 Jan
+ 18.9	- 4.1	+ 12.1	- 0.1	+ 112.6	+ 32.0	± 0.0	+ 9.1	- 37.7	+ 44.6	+ 91.3	+ 132.5	Feb
+ 2.8	- 6.1	+ 19.8	+ 0.1	+ 107.3	+ 32.2	± 0.0	- 1.5	+ 30.5	+ 34.0	+ 28.6	+ 59.2	Mar
- 0.4	- 3.4	+ 8.3	+ 0.1	+ 123.2	+ 52.1	± 0.0	+ 8.4	- 8.6	+ 29.6	+ 46.5	+ 106.9	Apr
<b>Deutsche Bundesbank</b>												
+ 0.7	- 18.4	- 2.0	+ 0.1	- 1.7	+ 0.7	- 32.9	+ 2.1	+ 0.2	- 0.6	+ 9.1	+ 11.9	2014 July
+ 1.9	- 3.8	- 4.8	- 0.1	- 1.5	- 1.6	- 9.0	+ 2.4	- 0.6	+ 2.9	- 2.3	- 1.5	Aug
- 0.2	- 2.0	- 1.3	+ 0.1	- 1.6	+ 1.9	± 0.0	+ 0.6	+ 0.1	- 6.8	- 0.7	+ 1.7	Sep
+ 0.8	+ 1.5	+ 2.2	- 0.0	- 0.4	+ 0.4	± 0.0	+ 0.6	+ 0.2	+ 1.3	+ 1.6	+ 2.5	Oct
+ 1.5	+ 2.4	+ 2.7	+ 0.1	- 0.1	+ 0.0	± 0.0	- 0.3	- 0.3	+ 12.7	- 5.5	- 5.8	Nov
- 0.1	- 1.4	+ 1.7	- 0.1	+ 1.8	+ 0.3	± 0.0	+ 1.0	- 0.0	+ 2.8	- 2.0	- 0.8	Dec
+ 1.1	+ 6.7	+ 14.1	- 0.0	+ 3.1	+ 5.6	± 0.0	+ 4.9	+ 0.3	- 5.7	+ 19.8	+ 30.4	2015 Jan
+ 1.2	- 6.7	+ 0.2	+ 0.0	+ 2.0	- 2.5	± 0.0	- 0.3	+ 0.3	- 0.2	- 0.7	- 3.5	Feb
+ 8.3	- 1.1	- 1.4	+ 0.0	+ 12.4	+ 8.8	± 0.0	+ 3.0	- 0.4	- 7.8	+ 14.7	+ 26.4	Mar
+ 7.7	- 2.0	- 0.7	- 0.0	+ 19.2	+ 7.4	± 0.0	+ 2.6	+ 0.8	- 0.0	+ 13.5	+ 23.4	Apr
- 3.8	- 1.5	+ 7.6	- 0.0	+ 18.6	- 3.1	± 0.0	+ 3.7	+ 1.4	- 1.0	+ 19.9	+ 20.5	May
- 4.1	- 0.3	+ 3.7	+ 0.0	+ 16.6	+ 16.9	± 0.0	+ 3.2	- 0.4	- 17.0	+ 13.1	+ 33.2	June
- 2.9	+ 0.9	+ 0.8	- 0.0	+ 19.1	- 1.5	± 0.0	- 0.6	+ 2.3	+ 2.4	+ 15.4	+ 13.2	July
- 2.3	+ 0.4	+ 2.5	- 0.0	+ 18.1	+ 15.2	± 0.0	+ 0.3	+ 4.1	- 0.4	- 0.6	+ 15.0	Aug
- 1.3	+ 0.5	+ 5.1	+ 0.1	+ 17.7	- 6.0	± 0.0	+ 3.3	+ 8.7	- 7.6	+ 23.7	+ 21.0	Sep
- 1.0	- 1.7	- 2.1	- 0.0	+ 19.9	+ 9.8	± 0.0	- 2.1	+ 8.1	+ 10.7	- 11.5	- 3.8	Oct
+ 8.4	+ 1.1	- 1.3	+ 0.0	+ 20.3	+ 7.8	± 0.0	+ 1.7	+ 11.3	+ 8.2	- 0.4	+ 9.0	Nov
+ 4.3	+ 0.3	+ 0.4	- 0.0	+ 23.1	+ 19.7	± 0.0	+ 2.6	+ 3.8	- 22.1	+ 24.1	+ 46.3	Dec
+ 6.9	- 0.6	- 0.6	- 0.0	+ 26.2	+ 2.6	± 0.0	+ 2.8	+ 6.1	+ 10.2	+ 10.1	+ 15.4	2016 Jan
+ 5.1	- 0.8	- 0.7	- 0.0	+ 24.8	+ 1.0	± 0.0	+ 1.3	- 11.0	+ 4.4	+ 32.7	+ 35.0	Feb
+ 0.4	- 0.5	+ 6.6	+ 0.0	+ 23.7	+ 14.4	± 0.0	- 0.1	+ 14.3	- 12.6	+ 14.2	+ 28.5	Mar
- 0.9	- 0.5	+ 3.3	+ 0.0	+ 27.3	+ 24.4	± 0.0	+ 1.7	- 6.8	- 16.7	+ 26.5	+ 52.6	Apr

allocated on a monthly basis to the ECB. The counterpart of this adjustment is shown under "Other factors". The remaining 92% of the value of the euro banknotes in circulation is allocated, likewise on a monthly basis, to the NCBS, with each NCB showing in its balance sheet the percentage of the euro banknotes in circulation that corresponds to its paid-up share in the ECB's capital. The difference between the value of the euro banknotes allocated to an NCB and the value of the euro banknotes which that NCB has put into circulation is likewise shown under

"Other factors". From 2003 euro banknotes only. 6 Remaining items in the consolidated financial statement of the Eurosystem and the financial statement of the Bundesbank. 7 Equal to the difference between the sum of liquidity-providing factors and the sum of liquidity-absorbing factors. 8 Calculated as the sum of the "deposit facility", "banknotes in circulation" and "credit institutions' current account holdings".

### III Consolidated financial statement of the Eurosystem

#### 1 Assets \*

€ billion

On reporting date/ End of month 1	Total assets	Gold and gold receivables	Claims on non-euro area residents denominated in foreign currency			Claims on euro area residents denominated in foreign currency	Claims on non-euro area residents denominated in euro			
			Total	Receivables from the IMF	Balances with banks, security investments, external loans and other external assets		Total	Balances with banks, security investments and loans	Claims arising from the credit facility under ERM II	
<b>Eurosystem <sup>2</sup></b>										
2016 May	6	3,017.8	377.3	298.2	77.0	221.1	29.0	17.5	17.5	–
	13	3,032.8	377.3	298.7	77.0	221.8	29.7	17.6	17.6	–
	20	3,054.1	377.3	297.6	76.8	220.8	30.9	18.0	18.0	–
	27	3,067.5	377.3	299.0	76.8	222.2	30.4	18.4	18.4	–
June	3	3,078.6	377.3	300.6	76.8	223.7	30.1	18.6	18.6	–
	10	3,093.9	377.3	300.0	76.6	223.4	30.3	18.8	18.8	–
	17	3,109.6	377.3	298.0	76.6	221.4	31.1	17.8	17.8	–
	24	3,131.1	377.3	299.6	76.6	223.1	30.1	18.3	18.3	–
July	1	3,232.6	413.1	309.0	77.6	231.3	33.2	18.3	18.3	–
	8	3,237.9	413.1	307.8	77.6	230.1	34.7	18.4	18.4	–
	15	3,249.2	413.1	305.9	77.6	228.3	33.9	17.9	17.9	–
	22	3,265.8	413.1	308.6	77.6	231.0	30.6	17.3	17.3	–
	29	3,284.3	413.1	307.6	77.4	230.1	33.2	17.5	17.5	–
Aug	5	3,286.1	413.1	308.4	77.2	231.2	32.9	16.6	16.6	–
	12	3,296.6	413.1	307.3	77.2	230.1	33.6	17.1	17.1	–
	19	3,313.3	413.1	308.9	77.2	231.6	32.2	17.2	17.2	–
	26	3,330.5	413.1	310.1	77.2	232.8	32.6	17.2	17.2	–
Sep	2	3,341.8	413.1	311.3	77.3	234.0	30.5	17.3	17.3	–
	9	3,358.7	413.1	311.6	77.3	234.3	30.4	17.2	17.2	–
	16	3,372.4	413.1	312.3	77.3	235.0	29.9	17.0	17.0	–
	23	3,391.4	413.1	314.5	77.3	237.3	29.6	17.8	17.8	–
	30	3,438.1	412.6	315.2	77.8	237.4	33.9	19.6	19.6	–
2016 Oct	7	3,451.4	412.6	313.7	77.8	235.8	32.5	19.0	19.0	–
	14	3,469.3	412.6	313.0	77.8	235.2	33.3	18.2	18.2	–
	21	3,494.9	412.6	313.1	77.8	235.3	35.3	18.5	18.5	–
	28	3,507.4	412.6	311.5	78.3	233.1	36.1	17.9	17.9	–
Nov	4	3,518.5	412.6	312.9	78.2	234.7	36.1	17.6	17.6	–
	11	3,534.3	412.6	314.3	78.2	236.1	32.4	17.1	17.1	–
	18	3,553.4	412.6	314.6	78.2	236.4	32.5	18.3	18.3	–
	25	3,566.2	412.6	314.1	77.4	236.6	32.3	18.2	18.2	–
Dec	2	3,587.4	412.6	314.4	77.4	237.0	34.0	17.4	17.4	–
	9	3,609.8	412.6	316.5	77.5	239.1	36.1	17.9	17.9	–
	16	3,630.7	412.6	319.5	77.5	242.0	36.9	18.1	18.1	–
	23	3,685.7	412.6	317.8	77.1	240.6	35.5	18.3	18.3	–
	30	3,662.9	382.1	327.9	78.8	249.1	30.7	19.1	19.1	–
2017 Jan	6	3,672.6	382.1	326.6	78.7	247.8	31.9	18.5	18.5	–
<b>Deutsche Bundesbank</b>										
2015 Feb		800.2	107.5	51.9	20.3	31.6	–	–	–	–
Mar		847.9	120.0	56.9	21.3	35.7	–	–	–	–
Apr		856.5	120.0	56.9	21.2	35.6	0.0	–	–	–
May		860.3	120.0	56.8	21.1	35.7	0.0	–	–	–
June		880.1	113.8	54.5	20.6	33.8	–	–	–	–
July		903.5	113.8	53.3	19.9	33.4	–	–	–	–
Aug		930.8	113.8	53.1	20.2	32.9	–	–	–	–
Sep		936.9	109.0	53.0	20.1	32.8	–	–	–	–
Oct		956.3	109.0	53.1	20.1	33.0	–	–	–	–
Nov		1 002.6	109.0	52.6	20.0	32.6	0.0	–	–	–
Dec		1 011.5	105.8	53.7	20.3	33.4	–	0.0	0.0	–
2016 Jan		1 018.5	105.8	53.6	20.4	33.2	0.0	–	–	–
Feb		1 043.7	105.8	55.0	22.0	33.0	0.0	–	–	–
Mar		1 077.6	117.8	53.4	21.5	32.0	0.0	–	–	–
Apr		1 112.7	117.8	54.1	21.5	32.7	0.0	0.0	0.0	–
May		1 159.5	117.8	54.9	21.5	33.4	0.0	–	–	–
June		1 214.0	129.0	55.7	21.5	34.1	0.7	–	–	–
July		1 209.4	129.0	56.0	21.5	34.5	0.2	–	–	–
Aug		1 239.2	129.0	56.1	21.4	34.7	0.3	–	–	–
Sep		1 305.3	128.8	55.0	21.3	33.7	2.3	0.4	0.4	–
Oct		1 312.2	128.8	54.9	21.3	33.6	– 0.0	0.3	0.3	–
Nov		1 376.5	128.8	55.0	21.1	33.9	0.1	0.4	0.4	–
Dec		1 392.7	119.3	56.5	21.5	35.0	1.8	0.4	0.4	–

\* The consolidated financial statement of the Eurosystem comprises the financial statement of the European Central Bank (ECB) and the financial statements of the

national central banks of the euro area member states (NCBs). The balance sheet items for foreign currency, securities, gold and financial instruments are valued at the

III Consolidated financial statement of the Eurosystem

Lending to euro area credit institutions related to monetary policy operations denominated in euro							Other claims on euro area credit institutions denominated in euro	Securities of euro area residents in euro			General government debt denominated in euro	Other assets	On reporting date/ End of month <sup>1</sup>	
Total	Main re-financing operations	Longer-term re-financing operations	Fine-tuning reverse operations	Structural reverse operations	Marginal lending facility	Credits related to margin calls		Total	Securities held for monetary policy purposes	Other securities				
<b>Eurosystem <sup>2</sup></b>														
512.4	53.5	458.5	–	–	0.3	–	117.6	1 425.4	1 077.7	347.7	27.0	213.5	2016 May	6
510.1	51.4	458.5	–	–	0.1	–	114.4	1 443.0	1 096.0	347.0	27.0	215.2		13
508.6	49.9	458.5	–	–	0.1	–	117.3	1 460.7	1 113.8	346.9	27.0	216.8		20
511.7	60.2	451.2	–	–	0.3	–	108.1	1 480.9	1 133.7	347.1	27.0	214.8		27
503.2	51.9	451.2	–	–	0.1	–	108.3	1 499.4	1 152.4	347.0	27.0	214.2	June	3
502.1	50.8	451.2	–	–	0.1	–	107.4	1 517.3	1 171.3	346.1	27.0	213.7		10
500.4	49.1	451.2	–	–	0.1	–	107.7	1 537.0	1 191.4	345.6	27.0	213.4		17
501.2	49.9	451.2	–	–	0.1	–	103.5	1 559.0	1 212.9	346.1	27.0	215.1		24
540.0	53.1	486.8	–	–	0.2	–	96.5	1 573.4	1 225.6	347.8	26.5	222.5	July	1
531.2	44.1	486.8	–	–	0.3	–	95.3	1 589.0	1 243.7	345.3	26.5	221.9		8
529.3	42.5	486.8	–	–	0.0	–	95.8	1 605.9	1 263.6	342.3	26.5	220.8		15
530.6	43.6	486.8	–	–	0.2	–	94.4	1 623.7	1 281.4	342.3	26.5	221.1		22
533.6	49.6	484.0	–	–	0.0	–	94.0	1 639.4	1 298.8	340.6	26.5	219.5		29
527.1	43.0	484.0	–	–	0.1	–	93.1	1 650.0	1 312.3	337.6	26.5	218.4	Aug	5
525.6	41.6	484.0	–	–	–	–	92.2	1 663.2	1 325.6	337.6	26.5	217.9		12
525.7	41.7	484.0	–	–	0.0	–	93.8	1 676.5	1 339.3	337.2	26.5	219.5		19
526.8	42.8	484.0	–	–	0.0	–	95.7	1 689.0	1 351.8	337.2	26.5	219.5		26
526.5	43.8	482.7	–	–	0.0	–	96.3	1 702.2	1 365.6	336.6	26.5	218.0	Sep	2
524.5	41.8	482.7	–	–	–	–	94.8	1 721.4	1 385.2	336.2	26.5	219.2		9
524.4	41.6	482.7	–	–	0.0	–	93.9	1 734.8	1 402.2	332.7	26.5	220.5		16
526.0	43.2	482.7	–	–	0.1	–	90.0	1 751.6	1 420.3	331.3	26.5	222.4		23
552.6	38.7	513.8	–	–	0.0	–	83.4	1 764.1	1 434.8	329.3	26.4	230.4		30
548.2	34.4	513.8	–	–	0.1	–	90.0	1 784.5	1 454.9	329.6	26.4	224.6	2016 Oct	7
546.8	32.9	513.8	–	–	–	–	88.9	1 805.1	1 475.7	329.4	26.4	225.0		14
547.3	33.4	513.8	–	–	0.0	–	91.7	1 822.0	1 492.7	329.3	26.4	228.0		21
548.3	36.0	512.2	–	–	0.1	–	93.9	1 840.4	1 513.0	327.5	26.4	220.1		28
545.1	32.7	512.2	–	–	0.2	–	91.8	1 856.6	1 531.4	325.1	26.4	219.3	Nov	4
543.7	31.4	512.2	–	–	0.1	–	91.4	1 875.6	1 551.1	324.5	26.4	220.6		11
544.9	32.6	512.2	–	–	0.0	–	87.5	1 895.5	1 572.3	323.3	26.4	221.0		18
546.1	33.7	512.2	–	–	0.2	–	83.8	1 913.9	1 590.1	323.8	26.4	218.7		25
546.6	36.0	510.5	–	–	0.2	–	83.1	1 932.3	1 608.1	324.2	26.4	220.6	Dec	2
546.5	35.8	510.5	–	–	0.2	–	81.7	1 950.6	1 626.5	324.1	26.4	221.4		9
547.4	36.8	510.5	–	–	0.1	–	79.8	1 967.1	1 644.0	323.1	26.4	222.9		16
589.8	32.9	556.6	–	–	0.4	–	71.7	1 982.3	1 659.5	322.9	26.4	231.3		23
595.9	39.1	556.6	–	–	0.2	–	69.1	1 974.9	1 654.0	320.9	26.5	236.8		30
.	34.0	556.6	–	–	0.2	–	70.9	1 987.0	1 666.1	320.9	26.5	238.5	2017 Jan	6
<b>Deutsche Bundesbank</b>														
37.3	8.6	28.7	–	–	0.0	–	4.6	52.9	52.9	–	4.4	541.5	2015 Feb	
37.2	7.3	29.7	–	–	0.1	–	3.6	65.7	65.7	–	4.4	560.0	Mar	
33.7	4.7	29.1	–	–	–	–	4.2	77.1	77.1	–	4.4	560.2	Apr	
31.0	3.4	27.6	–	–	0.0	–	3.7	90.3	90.3	–	4.4	554.2	May	
43.3	2.5	40.7	–	–	0.1	–	3.3	102.1	102.1	–	4.4	558.7	June	
42.2	2.1	40.0	–	–	0.1	–	5.1	114.6	114.6	–	4.4	570.1	July	
41.6	1.8	39.7	–	–	0.1	–	4.6	124.4	124.4	–	4.4	588.9	Aug	
46.3	4.1	42.2	–	–	0.0	–	4.2	136.8	136.8	–	4.4	583.2	Sep	
45.8	4.1	41.7	–	–	0.0	–	3.8	149.1	149.1	–	4.4	591.2	Oct	
50.2	3.1	47.1	–	–	0.0	–	3.5	161.7	161.7	–	4.4	621.2	Nov	
58.1	9.1	48.6	–	–	0.3	–	3.5	172.3	172.3	–	4.4	613.7	Dec	
51.2	2.6	48.5	–	–	0.0	–	2.8	185.0	185.0	–	4.4	615.7	2016 Jan	
44.9	1.9	43.0	–	–	0.0	–	2.3	197.6	197.6	–	4.4	633.6	Feb	
49.7	3.7	46.0	–	–	0.0	–	3.4	210.4	210.4	–	4.4	638.4	Mar	
49.7	4.2	45.5	–	–	0.0	–	4.3	227.3	227.3	–	4.4	655.0	Apr	
48.8	3.8	45.0	–	–	0.0	–	4.3	244.8	244.8	–	4.4	684.4	May	
47.3	2.8	44.5	–	–	0.0	–	5.2	261.8	261.8	–	4.4	710.0	June	
46.4	2.3	44.1	–	–	0.0	–	5.5	279.9	279.9	–	4.4	688.0	July	
46.3	2.3	44.1	–	–	0.0	–	5.5	292.6	292.6	–	4.4	705.0	Aug	
55.3	1.3	54.0	–	–	–	–	5.7	309.3	309.3	–	4.4	744.1	Sep	
55.5	0.9	53.9	–	–	0.7	–	5.4	326.7	326.7	–	4.4	736.2	Oct	
55.2	1.0	53.9	–	–	0.3	–	4.8	345.4	345.4	–	4.4	782.3	Nov	
65.5	1.8	63.5	–	–	0.1	–	3.0	357.7	357.7	–	4.4	784.1	Dec	

end of the quarter. <sup>1</sup> For the Eurosystem: financial statements for specific weekly dates; for the Bundesbank: end of month financial statement. <sup>2</sup> Source: ECB.

### III Consolidated financial statement of the Eurosystem

#### 2 Liabilities \*

€ billion

On reporting date/ End of month 1	Total liabilities	Banknotes in circulation 2	Liabilities to euro area credit institutions related to monetary policy operations denominated in euro						Other liabilities to euro-area credit institutions denominated in euro	Debt certificates issued	Liabilities to other euro area residents denominated in euro		
			Total	Current accounts (covering the minimum reserve system)	Deposit facility	Fixed-term deposits	Fine-tuning reverse operations	Deposits related to margin calls			Total	General government	Other liabilities
<b>Eurosystem 4</b>													
2016 May 6	3,017.8	1,077.7	949.2	633.4	315.6	-	-	0.2	3.8	-	182.0	85.1	96.9
13	3,032.8	1,078.0	944.8	635.4	309.2	-	-	0.2	4.0	-	200.0	102.7	97.3
20	3,054.1	1,075.5	911.9	604.1	307.6	-	-	0.2	4.2	-	247.5	150.8	96.7
27	3,067.5	1,076.4	920.8	611.8	308.8	-	-	0.2	4.2	-	262.7	167.6	95.1
June 3	3,078.6	1,081.3	968.5	620.8	347.5	-	-	0.3	3.9	-	223.3	122.6	100.7
10	3,093.9	1,081.8	984.3	643.8	340.3	-	-	0.2	3.9	-	220.9	117.9	103.1
17	3,109.6	1,081.7	932.6	611.2	321.2	-	-	0.2	4.0	-	287.4	183.7	103.7
24	3,131.1	1,082.2	911.0	613.1	297.6	-	-	0.3	3.8	-	332.3	233.0	99.3
July 1	3,232.6	1,088.5	1,023.4	693.0	330.3	-	-	0.0	3.8	-	251.2	154.2	97.0
8	3,237.9	1,092.1	1,030.7	688.5	342.1	-	-	0.1	3.6	-	237.1	140.9	96.3
15	3,249.2	1,093.8	1,008.0	674.6	333.3	-	-	0.0	3.6	-	275.2	177.8	97.4
22	3,265.8	1,093.5	985.5	664.9	320.6	-	-	0.0	3.6	-	309.5	213.3	96.2
29	3,284.3	1,097.0	1,029.7	698.4	331.2	-	-	0.0	3.6	-	277.0	179.4	97.7
Aug 5	3,286.1	1,099.2	1,094.4	753.7	340.8	-	-	0.0	3.6	-	208.9	111.2	97.7
12	3,296.6	1,100.4	1,097.3	742.5	354.8	-	-	0.0	3.9	-	225.0	126.4	98.6
19	3,313.3	1,096.8	1,099.6	740.9	358.7	-	-	0.0	3.9	-	240.9	142.7	98.2
26	3,330.5	1,093.1	1,086.5	740.0	346.4	-	-	0.0	4.2	-	270.2	171.6	98.6
Sep 2	3,341.8	1,095.5	1,143.0	764.0	378.9	-	-	0.1	4.1	-	217.0	118.2	98.8
9	3,358.7	1,095.6	1,163.4	777.5	385.9	-	-	0.0	3.9	-	227.8	128.6	99.2
16	3,372.4	1,094.3	1,133.6	767.9	365.7	-	-	0.0	3.9	-	258.9	157.3	101.6
23	3,391.4	1,092.2	1,127.2	764.4	362.8	-	-	0.0	3.9	-	273.6	171.0	102.5
30	3,438.1	1,096.3	1,157.9	759.8	398.0	-	-	0.1	3.8	-	261.0	155.4	105.6
2016 Oct 7	3,451.4	1,097.2	1,186.9	777.4	409.4	-	-	0.1	3.8	-	264.2	158.0	106.2
14	3,469.3	1,096.2	1,195.0	793.5	401.5	-	-	0.0	3.5	-	276.9	171.4	105.5
21	3,494.9	1,095.1	1,178.3	781.2	397.0	-	-	0.0	3.6	-	304.0	192.8	111.3
28	3,507.4	1,100.3	1,197.2	812.8	384.4	-	-	0.0	3.4	-	290.5	186.2	104.3
Nov 4	3,518.5	1,102.5	1,256.7	801.1	455.6	-	-	0.0	3.5	-	241.6	136.3	105.3
11	3,534.3	1,100.7	1,260.2	800.3	459.7	-	-	0.1	3.8	-	258.8	150.7	108.1
18	3,553.4	1,099.3	1,261.5	802.5	459.0	-	-	0.0	3.8	-	270.6	164.1	106.6
25	3,566.2	1,099.8	1,249.2	820.4	428.8	-	-	0.0	3.5	-	290.2	184.7	105.5
Dec 2	3,587.4	1,108.4	1,301.3	849.7	451.6	-	-	0.0	3.6	-	253.8	147.0	106.8
9	3,609.8	1,114.3	1,321.0	869.0	451.9	-	-	0.1	3.4	-	249.0	144.9	104.1
16	3,630.7	1,117.4	1,298.1	879.7	418.4	-	-	0.0	4.9	-	271.8	168.9	102.9
23	3,685.7	1,126.7	1,353.8	930.9	422.9	-	-	0.0	8.8	-	238.0	133.1	104.9
30	3,662.9	1,126.2	1,313.3	889.0	424.2	-	-	0.1	9.4	-	220.8	114.9	105.9
2017 Jan 6	3,672.6	1,122.2	1,369.2	928.6	440.5	-	-	0.0	8.9	-	213.8	110.2	103.6
<b>Deutsche Bundesbank</b>													
2015 Feb	800.2	236.8	77.3	71.0	6.2	-	-	-	-	-	28.8	1.1	27.7
Mar	847.9	239.0	115.5	99.5	16.0	-	-	-	-	-	35.1	1.7	33.4
Apr	856.5	241.4	120.1	93.5	26.6	-	-	-	-	-	38.6	1.3	37.3
May	860.3	242.7	122.3	97.6	24.7	-	-	-	-	-	42.0	0.7	41.2
June	880.1	245.1	141.6	115.5	26.1	-	-	0.0	-	-	45.9	3.2	42.7
July	903.5	248.6	155.8	118.0	37.8	-	-	-	-	-	44.3	2.3	42.0
Aug	930.8	248.0	185.8	135.3	50.6	-	-	-	-	-	42.2	1.9	40.3
Sep	936.9	247.5	173.5	139.4	34.1	-	-	0.0	-	-	56.8	2.3	54.5
Oct	956.3	247.9	184.3	140.9	43.3	-	-	0.0	-	-	65.5	2.8	62.7
Nov	1 002.6	249.0	212.4	154.3	58.0	-	-	0.0	-	-	79.3	2.9	76.4
Dec	1 011.5	254.8	208.7	155.1	53.6	-	-	0.0	-	-	71.9	11.6	60.2
2016 Jan	1 018.5	249.9	228.7	172.7	56.0	-	-	-	-	-	75.6	10.7	64.8
Feb	1 043.7	250.1	231.5	165.9	65.6	-	-	-	-	-	88.2	18.7	69.5
Mar	1 077.6	251.9	227.3	167.8	59.6	-	-	-	-	-	108.8	39.9	69.0
Apr	1 112.7	252.5	272.4	180.8	91.6	-	-	-	-	-	96.3	24.2	72.1
May	1 159.5	253.4	293.2	200.0	93.2	-	-	-	-	-	121.2	41.8	79.4
June	1 214.0	255.6	299.7	214.4	85.3	-	-	0.0	-	-	130.6	56.5	74.1
July	1 209.4	258.0	320.7	235.4	85.4	-	-	0.0	-	-	101.4	25.3	76.1
Aug	1 239.2	257.1	334.5	242.3	92.2	-	-	0.0	0.0	-	110.4	33.5	76.9
Sep	1 305.3	257.9	362.6	244.7	117.9	-	-	-	0.1	-	122.4	43.9	78.6
Oct	1 312.2	259.2	380.0	260.5	119.5	-	-	-	0.3	-	110.8	35.6	75.3
Nov	1 376.5	259.5	428.0	293.1	134.9	-	-	-	0.3	-	116.6	40.0	76.6
Dec	1 392.7	264.9	411.4	284.9	126.4	-	-	-	0.5	-	105.8	32.5	73.4

\* The consolidated financial statement of the Eurosystem comprises the financial statement of the European Central Bank (ECB) and the financial statements of the national central banks of the euro area member states (NCBs). The balance sheet items for foreign currency, securities, gold and financial instruments are valued at market rates at the end of the quarter. 1 For Eurosystem: financial statements for

specific weekly dates; for the Bundesbank: end-of-month financial statements. 2 According to the accounting regime chosen by the Eurosystem on the issue of euro banknotes, a share of 8% of the total value of the euro banknotes in circulation is allocated to the ECB on a monthly basis. The counterpart of this adjustment is disclosed as an "Intra-Eurosystem liability related to euro banknote issue". The

III Consolidated financial statement of the Eurosystem

Liabilities to non-euro area residents denominated in euro	Liabilities to euro area residents in foreign currency	Liabilities to non-euro area residents denominated in foreign currency			Counterpart of special drawing rights allocated by the IMF	Other liabilities <sup>3</sup>	Intra-Eurosystem liability related to euro banknote issue <sup>2</sup>	Revaluation accounts	Capital and reserves	On reporting date/ End of month <sup>1</sup>
		Total	Deposits, balances and other liabilities	Liabilities arising from the credit facility under ERM II						
<b>Eurosystem <sup>4</sup></b>										
57.0	2.8	4.2	4.2	–	57.5	208.5	–	376.0	99.0	2016 May 6
59.0	2.8	4.9	4.9	–	57.5	206.7	–	376.0	99.1	13
62.2	3.3	5.1	5.1	–	57.5	211.9	–	376.0	99.0	20
58.5	2.9	5.7	5.7	–	57.5	203.9	–	376.0	99.0	27
56.1	3.2	6.3	6.3	–	57.5	203.5	–	376.0	99.0	June 3
58.2	3.3	6.0	6.0	–	57.5	202.9	–	376.0	99.0	10
59.7	2.9	5.0	5.0	–	57.5	203.8	–	376.0	99.0	17
56.6	3.1	4.5	4.5	–	57.5	203.3	–	376.0	100.8	24
70.9	3.0	5.2	5.2	–	58.5	206.3	–	420.9	100.8	July 1
79.2	3.4	5.5	5.5	–	58.5	206.0	–	420.9	100.8	8
72.8	3.5	6.2	6.2	–	58.5	205.8	–	420.9	100.8	15
79.0	3.0	6.4	6.4	–	58.5	205.0	–	420.9	100.8	22
83.0	3.1	7.4	7.4	–	58.5	203.3	–	420.9	100.8	29
83.8	3.2	7.9	7.9	–	58.5	204.8	–	420.9	100.8	Aug 5
76.1	3.1	7.8	7.8	–	58.5	202.7	–	420.9	100.8	12
77.4	3.1	8.1	8.1	–	58.5	203.4	–	420.9	100.8	19
81.2	3.1	8.6	8.6	–	58.5	203.4	–	420.9	100.8	26
85.6	3.2	8.6	8.6	–	58.5	204.5	–	420.9	100.8	Sep 2
72.6	3.1	8.2	8.2	–	58.5	204.0	–	420.9	100.8	9
84.0	3.0	8.7	8.7	–	58.5	205.8	–	420.9	100.8	16
93.4	2.9	8.8	8.8	–	58.5	209.2	–	420.9	100.8	23
122.8	2.8	8.8	8.8	–	58.1	207.3	–	418.5	100.8	30
101.7	4.2	8.8	8.8	–	58.1	207.1	–	418.5	100.8	2016 Oct 7
97.7	5.6	9.3	9.3	–	58.1	207.6	–	418.5	100.8	14
106.1	4.6	9.6	9.6	–	58.1	216.2	–	418.5	100.8	21
108.2	5.5	9.7	9.7	–	58.1	215.1	–	418.5	100.8	28
103.8	4.0	12.5	12.5	–	58.1	216.3	–	418.5	100.8	Nov 4
101.5	3.8	10.6	10.6	–	58.1	217.4	–	418.5	100.8	11
109.9	4.4	10.0	10.0	–	58.1	216.4	–	418.5	100.8	18
117.4	2.8	10.5	10.5	–	58.1	215.2	–	418.5	100.8	25
113.2	3.8	10.9	10.9	–	58.1	214.7	–	418.5	100.8	Dec 2
112.0	6.2	12.2	12.2	–	58.1	215.4	–	418.5	99.5	9
127.3	7.1	12.2	12.2	–	58.1	215.6	–	418.5	99.5	16
145.7	7.0	10.4	10.4	–	58.1	219.0	–	418.5	99.5	23
205.7	3.6	9.3	9.3	–	59.3	221.4	–	394.4	99.5	30
167.4	5.7	10.7	10.7	–	59.3	221.3	–	394.4	99.8	2017 Jan 6
<b>Deutsche Bundesbank</b>										
33.9	0.0	1.9	1.9	–	14.4	25.2	272.4	104.5	5.0	2015 Feb
17.1	0.0	2.1	2.1	–	15.5	23.0	274.7	121.0	5.0	Mar
12.9	0.0	2.1	2.1	–	15.5	23.1	276.9	121.0	5.0	Apr
7.2	0.0	2.2	2.2	–	15.5	23.2	279.3	121.0	5.0	May
9.2	0.0	1.3	1.3	–	15.2	23.5	280.2	113.1	5.0	June
12.1	0.0	0.9	0.9	–	15.2	23.6	284.9	113.1	5.0	July
10.0	0.0	0.5	0.5	–	15.2	23.7	287.3	113.1	5.0	Aug
16.2	0.0	0.5	0.5	–	15.1	24.0	290.1	108.2	5.0	Sep
12.4	0.0	0.8	0.8	–	15.1	24.1	293.1	108.2	5.0	Oct
13.9	0.0	0.4	0.4	–	15.1	24.2	295.2	108.2	5.0	Nov
27.2	0.0	0.6	0.6	–	15.3	24.4	297.8	105.7	5.0	Dec
16.0	0.0	0.1	0.1	–	15.3	25.0	297.1	105.7	5.0	2016 Jan
28.0	0.0	0.2	0.2	–	15.3	22.0	297.7	105.7	5.0	Feb
30.5	0.0	0.3	0.3	–	14.9	22.8	299.8	116.2	5.0	Mar
30.7	0.0	0.8	0.8	–	14.9	22.9	300.9	116.2	5.0	Apr
27.2	0.0	1.4	1.4	–	14.9	23.1	303.9	116.2	5.0	May
47.0	0.0	1.0	1.0	–	15.2	23.4	308.0	128.5	5.0	June
43.8	0.0	1.4	1.4	–	15.2	23.6	311.7	128.5	5.0	July
48.9	0.0	1.7	1.7	–	15.2	23.7	314.1	128.5	5.0	Aug
70.3	0.0	1.1	1.1	–	15.1	24.0	318.8	128.0	5.0	Sep
66.5	0.0	1.0	1.0	–	15.1	24.3	322.0	128.0	5.0	Oct
74.7	0.0	1.0	1.0	–	15.1	24.4	323.9	128.0	5.0	Nov
117.0	0.0	1.2	1.2	–	15.4	24.7	327.3	119.7	5.0	Dec

remaining 92 % of the value of the euro banknote in circulation is also allocated to the NCBs on a monthly basis, and each NCB shows in its balance sheet the share of the euro banknotes issued which corresponds to its paid-up share in the ECB's capital. The difference between the value of the euro banknotes allocated to the NCB

according to the aforementioned accounting regime and the value of euro banknotes put into circulation is also disclosed as an "Intra-Eurosystem claim/ liability related to banknote issue". <sup>3</sup> For the Deutsche Bundesbank: including DM banknotes still in circulation. <sup>4</sup> Source: ECB.

## IV Banks

### 1 Assets and liabilities of monetary financial institutions (excluding the Bundesbank) in Germany \*

#### Assets

€ billion

Period	Balance sheet total <sup>1</sup>	Cash in hand	Lending to banks (MFIs) in the euro area						Lending to non-banks (non-MFIs) in the					
			Total	to banks in the home country			to banks in other member states			Total	to non-banks in the home country			
				Total	Loans	Secur-ities issued by banks	Total	Loans	Secur-ities issued by banks		Total	Total	Enterprises and house-holds	Loans
<b>End of year or month</b>														
2007	7,592.4	17.8	2,523.4	1,847.9	1,290.4	557.5	675.4	421.6	253.8	3,487.3	3,061.8	2,556.0	2,288.8	
2008	7,892.7	17.8	2,681.8	1,990.2	1,404.3	585.8	691.6	452.9	238.8	3,638.2	3,163.0	2,686.9	2,357.3	
2009	7,436.1	17.2	2,480.5	1,813.2	1,218.4	594.8	667.3	449.5	217.8	3,638.3	3,187.9	2,692.9	2,357.5	
2010	8,304.8	16.5	2,361.6	1,787.8	1,276.9	510.9	573.9	372.8	201.0	3,724.5	3,303.0	2,669.2	2,354.7	
2011	8,393.3	16.4	2,394.4	1,844.5	1,362.2	482.2	550.0	362.3	187.7	3,673.5	3,270.5	2,709.4	2,415.1	
2012	8,226.6	19.2	2,309.0	1,813.2	1,363.8	449.4	495.9	322.2	173.7	3,688.6	3,289.4	2,695.5	2,435.7	
2013	7,528.9	18.7	2,145.0	1,654.8	1,239.1	415.7	490.2	324.6	165.6	3,594.3	3,202.1	2,616.3	2,354.0	
2014	7,802.3	19.2	2,022.8	1,530.5	1,147.2	383.3	492.3	333.9	158.4	3,654.5	3,239.4	2,661.2	2,384.8	
2015	7,665.2	19.5	2,013.6	1,523.8	1,218.0	305.8	489.8	344.9	144.9	3,719.9	3,302.5	2,727.4	2,440.0	
2015 Feb	8,061.5	15.4	2,096.3	1,578.2	1,195.7	382.4	518.2	362.5	155.7	3,698.4	3,275.9	2,680.8	2,397.4	
Mar	8,173.0	15.5	2,123.5	1,608.3	1,224.8	383.5	515.2	360.7	154.5	3,708.5	3,283.5	2,690.5	2,400.0	
Apr	8,084.0	16.1	2,105.0	1,587.5	1,209.5	378.0	517.5	364.5	153.1	3,715.9	3,292.4	2,691.1	2,397.8	
May	8,004.0	16.4	2,097.4	1,584.0	1,209.8	374.2	513.4	361.4	151.9	3,706.2	3,279.2	2,693.9	2,407.4	
June	7,799.5	15.3	2,040.3	1,561.8	1,197.9	363.9	478.5	329.7	148.8	3,695.7	3,271.8	2,691.9	2,413.0	
July	7,867.6	15.6	2,049.3	1,569.4	1,209.5	359.9	479.9	332.5	147.4	3,722.3	3,299.7	2,716.2	2,415.5	
Aug	7,840.0	15.5	2,059.4	1,574.0	1,220.8	353.2	485.3	340.0	145.3	3,726.2	3,301.6	2,716.9	2,421.1	
Sep	7,829.3	15.8	2,042.0	1,547.5	1,200.0	347.6	494.5	348.7	145.8	3,728.0	3,301.1	2,716.7	2,426.3	
Oct	7,856.5	16.5	2,082.1	1,584.2	1,240.4	343.8	497.9	352.0	145.9	3,727.4	3,302.2	2,716.0	2,431.7	
Nov	7,940.1	15.9	2,106.9	1,613.7	1,275.3	338.4	493.2	347.0	146.2	3,751.3	3,319.2	2,733.8	2,446.0	
Dec	7,665.2	19.5	2,013.6	1,523.8	1,218.0	305.8	489.8	344.9	144.9	3,719.9	3,302.5	2,727.4	2,440.0	
2016 Jan	7,823.5	16.5	2,057.4	1,562.4	1,257.7	304.8	494.9	352.3	142.6	3,727.4	3,307.6	2,729.1	2,443.1	
Feb	7,913.1	16.2	2,072.2	1,566.4	1,263.3	303.1	505.8	361.1	144.7	3,734.6	3,317.1	2,739.2	2,453.8	
Mar	7,783.4	17.5	2,039.2	1,547.2	1,243.5	303.7	492.0	347.9	144.1	3,736.0	3,316.8	2,742.1	2,458.5	
Apr	7,806.5	17.2	2,089.1	1,594.3	1,291.0	303.3	494.8	352.8	142.0	3,747.3	3,329.8	2,753.3	2,467.1	
May	7,817.2	18.7	2,070.3	1,587.2	1,284.7	302.4	483.1	342.8	140.4	3,759.2	3,334.1	2,762.8	2,476.2	
June	7,920.6	19.3	2,072.8	1,592.2	1,292.9	299.3	480.6	338.2	142.4	3,745.9	3,321.4	2,759.7	2,473.7	
July	7,942.1	19.7	2,086.0	1,604.7	1,308.1	296.6	481.2	341.4	139.8	3,758.8	3,333.6	2,766.6	2,479.7	
Aug	7,908.5	19.7	2,086.1	1,611.7	1,317.0	294.7	474.4	336.0	138.5	3,758.4	3,335.4	2,774.3	2,486.3	
Sep	7,863.9	21.0	2,074.5	1,636.4	1,343.9	292.5	438.2	300.7	137.5	3,766.0	3,343.0	2,785.6	2,497.3	
Oct	7,868.7	22.8	2,079.5	1,641.2	1,349.4	291.8	438.3	301.6	136.7	3,773.0	3,349.9	2,793.6	2,502.5	
Nov	7,911.4	22.9	2,155.2	1,712.6	1,421.7	291.0	442.6	306.3	136.2	3,785.7	3,361.6	2,810.0	2,518.4	
<b>Changes <sup>3</sup></b>														
2008	313.3	- 0.1	183.6	- 164.3	- 127.5	36.9	- 19.3	- 33.7	- 14.4	140.4	102.6	130.9	65.5	
2009	- 454.5	- 0.5	- 189.0	- 166.4	- 182.2	15.8	- 22.5	- 1.8	- 20.7	17.4	38.3	17.0	6.6	
2010	- 136.3	- 0.7	- 111.6	- 15.6	58.5	- 74.1	- 95.9	- 80.9	- 15.1	96.4	126.0	- 13.7	0.7	
2011	54.1	- 0.1	32.6	- 58.7	91.7	- 33.0	- 26.0	- 12.1	- 13.9	- 51.8	- 35.3	38.7	56.7	
2012	- 129.2	2.9	- 81.9	- 28.4	3.0	- 31.4	- 53.5	- 39.7	- 13.8	27.5	27.7	17.0	28.8	
2013	- 703.6	- 0.5	- 257.1	- 249.2	- 216.5	- 32.7	- 7.9	1.6	- 9.5	13.6	16.6	23.6	21.6	
2014	206.8	0.4	- 126.2	- 128.6	- 95.3	- 33.4	2.4	7.2	- 4.8	55.1	40.0	52.3	36.8	
2015	- 179.5	0.3	- 16.0	- 11.0	66.8	- 77.8	- 5.0	7.7	- 12.7	66.4	64.9	68.8	57.3	
2015 Mar	86.5	0.1	23.5	28.4	27.5	0.9	- 4.9	- 3.5	- 1.3	6.1	4.4	6.9	1.0	
Apr	- 63.9	0.6	- 14.1	- 18.8	- 13.9	- 4.9	4.7	5.7	- 1.0	11.3	11.9	3.2	- 0.2	
May	- 92.5	0.3	- 9.5	- 4.5	- 0.5	- 4.0	- 5.0	- 3.9	- 1.2	- 10.6	- 13.4	2.7	9.0	
June	- 191.7	- 1.1	- 55.0	- 20.9	- 11.2	- 9.8	- 34.0	- 31.0	- 3.0	- 7.8	- 5.9	- 0.8	6.7	
July	57.5	0.3	7.3	6.7	11.1	- 4.3	0.6	2.0	- 1.4	24.8	26.9	22.3	0.8	
Aug	- 8.8	- 0.1	13.0	6.1	12.3	- 6.1	6.8	8.7	- 1.9	7.9	4.4	3.3	7.2	
Sep	- 7.3	0.3	- 17.3	- 26.7	- 20.8	- 5.9	9.3	8.8	0.6	4.0	1.1	2.3	6.7	
Oct	25.1	0.7	39.8	36.4	40.4	- 4.0	3.4	3.3	0.1	- 2.1	0.4	- 0.9	6.1	
Nov	59.7	- 0.6	21.2	27.7	33.7	- 6.0	- 6.5	- 6.8	0.3	20.0	14.7	15.6	12.6	
Dec	- 252.6	3.6	- 88.8	- 87.4	- 56.1	- 31.3	- 1.3	- 0.6	- 0.8	- 26.5	- 13.7	- 3.6	- 4.5	
2016 Jan	169.4	- 3.1	45.1	39.8	39.9	- 0.1	5.3	7.3	- 2.0	12.0	7.7	4.3	4.4	
Feb	94.5	- 0.3	16.6	5.2	6.3	- 1.1	11.4	9.1	- 2.3	8.8	10.5	11.1	11.4	
Mar	- 107.0	1.3	- 29.1	- 17.2	- 18.4	1.2	- 11.8	- 11.2	- 0.6	4.5	1.7	4.7	6.7	
Apr	31.0	- 0.3	49.9	47.2	47.6	- 0.4	2.7	4.8	- 2.1	13.0	14.4	12.6	9.9	
May	35.3	1.5	8.5	20.2	21.4	- 1.2	- 11.7	- 10.1	- 1.6	11.4	5.3	10.5	9.9	
June	108.2	0.7	3.7	5.6	8.2	- 2.6	- 1.9	- 4.2	2.3	- 10.4	- 11.4	- 1.7	- 1.2	
July	23.5	0.4	13.1	12.4	15.2	- 2.8	0.7	3.4	- 2.7	14.5	13.4	8.2	7.3	
Aug	- 31.4	- 0.0	0.4	7.1	9.0	- 1.9	- 6.7	- 5.3	- 1.4	0.2	2.1	8.0	6.8	
Sep	- 42.7	1.3	- 11.3	24.9	26.9	- 2.0	- 36.3	- 35.2	- 1.1	8.3	8.3	11.7	11.4	
Oct	- 0.4	1.8	4.8	5.2	5.6	- 0.4	- 0.3	0.5	- 0.9	6.5	7.1	7.9	5.2	
Nov	44.0	0.1	75.7	71.4	72.3	- 0.9	4.3	4.8	- 0.5	13.8	12.3	16.9	16.3	

\* This table serves to supplement the "Overall monetary survey" in section II. Unlike the other tables in section IV, this table includes – in addition to the figures reported

by banks (including building and loan associations) – data from money market funds. <sup>1</sup> See footnote 1 in Table IV.2. <sup>2</sup> Including debt securities arising from the

IV Banks

euro area										Claims on non-euro-area residents			Period
										to non-banks in other member states		Other assets <sup>1</sup>	
General government				Enterprises and households			General government			Total	of which		
Secur-ities	Total	Loans	Secur-ities <sup>2</sup>	Total	Total	of which	Total	Loans	Secur-ities				
<b>End of year or month</b>													
267.3	505.8	360.7	145.0	425.5	294.6	124.9	130.9	26.0	104.9	1,339.5	1,026.9	224.4	2007
329.6	476.1	342.8	133.4	475.1	348.1	172.1	127.0	27.6	99.4	1,279.2	1,008.6	275.7	2008
335.4	495.0	335.1	160.0	450.4	322.2	162.9	128.2	23.5	104.7	1,062.6	821.1	237.5	2009
314.5	633.8	418.4	215.3	421.6	289.2	164.2	132.4	24.8	107.6	1,021.0	792.7	1,181.1	2010
294.3	561.1	359.8	201.2	403.1	276.9	161.2	126.2	32.6	93.6	995.1	770.9	1,313.8	2011
259.8	594.0	350.3	243.7	399.2	275.1	158.1	124.1	30.4	93.7	970.3	745.0	1,239.4	2012
262.3	585.8	339.2	246.6	392.3	267.6	144.6	124.6	27.8	96.9	921.2	690.5	849.7	2013
276.4	578.2	327.9	250.4	415.0	270.0	142.7	145.0	31.9	113.2	1,050.1	805.0	1,055.8	2014
287.4	575.1	324.5	250.6	417.5	276.0	146.4	141.5	29.4	112.1	1,006.5	746.3	905.6	2015
283.4	595.1	339.8	255.3	422.5	272.8	144.8	149.7	31.3	118.4	1,128.8	880.6	1,122.6	2015 Feb
290.5	593.0	339.0	253.9	425.0	276.3	146.2	148.7	30.5	118.2	1,129.2	872.6	1,196.3	Mar
293.3	601.3	347.6	253.7	423.5	275.6	148.0	147.8	30.9	117.0	1,145.0	890.4	1,101.9	Apr
286.6	585.3	336.3	249.0	427.0	278.1	148.3	148.9	29.9	119.0	1,143.6	887.2	1,040.4	May
278.9	579.9	332.5	247.4	423.9	275.2	144.1	148.7	30.0	118.7	1,110.5	851.9	937.6	June
300.7	583.5	333.2	250.3	422.6	276.6	145.3	146.0	30.4	115.6	1,110.7	854.8	969.6	July
295.8	584.7	330.3	254.4	424.6	278.9	146.2	145.7	30.1	115.5	1,097.3	843.1	941.6	Aug
290.4	584.3	330.1	254.2	426.9	279.2	146.0	147.7	30.0	117.8	1,094.7	841.4	948.8	Sep
284.3	586.1	333.2	252.9	425.2	278.4	146.7	146.8	30.8	116.1	1,090.1	833.3	940.4	Oct
287.8	585.4	329.5	255.9	432.0	285.5	148.6	146.6	30.0	116.6	1,075.0	813.3	991.0	Nov
287.4	575.1	324.5	250.6	417.5	276.0	146.4	141.5	29.4	112.1	1,006.5	746.3	905.6	Dec
286.1	578.4	328.4	250.1	419.8	275.5	149.5	144.3	29.2	115.2	1,026.3	765.1	996.1	2016 Jan
285.4	578.0	328.0	249.9	417.4	274.6	153.0	142.8	29.5	113.4	1,031.4	767.7	1,058.7	Feb
283.6	574.7	327.8	246.9	419.2	273.3	149.1	145.9	29.3	116.6	992.1	727.7	998.5	Mar
286.2	576.5	331.6	244.8	417.6	272.8	150.4	144.8	30.0	114.8	1,005.6	741.1	947.2	Apr
286.6	571.3	329.5	241.9	425.1	280.0	153.3	145.1	28.9	116.2	1,012.9	750.5	956.2	May
286.0	561.8	323.9	237.9	424.4	281.2	155.2	143.2	28.9	114.3	1,036.4	774.7	1,046.2	June
286.8	567.0	327.0	240.0	425.2	284.2	159.3	141.0	28.9	112.1	1,041.7	785.1	1,036.0	July
288.0	561.0	324.9	236.1	423.1	283.3	159.7	139.8	29.1	110.7	1,042.6	786.2	1,001.7	Aug
288.3	557.5	323.0	234.5	422.9	282.2	157.8	140.7	29.8	110.9	1,030.5	774.4	971.9	Sep
291.0	556.4	326.3	230.0	423.0	284.6	162.1	138.5	29.5	108.9	1,077.9	823.1	915.5	Oct
291.6	551.6	321.9	229.7	424.1	285.9	161.9	138.3	29.2	109.1	1,065.1	811.1	882.5	Nov
<b>Changes <sup>3</sup></b>													
65.4	- 28.4	- 16.9	- 11.5	37.8	- 42.3	- 40.4	- 4.5	- 1.6	- 6.1	- 40.3	- 7.6	29.7	2008
10.5	21.3	- 5.1	26.4	- 20.9	- 20.9	- 7.1	0.0	- 3.9	3.9	- 182.5	- 162.3	- 99.8	2009
- 14.3	139.7	83.4	56.3	- 29.6	- 36.4	0.2	6.8	3.1	3.7	- 74.1	- 61.9	- 46.3	2010
- 18.0	- 74.0	- 59.1	- 14.9	- 16.6	- 13.8	- 5.5	- 2.7	8.0	- 10.7	- 39.5	- 34.9	- 112.9	2011
- 11.8	10.7	- 10.5	21.2	- 0.2	- 0.7	- 1.5	0.5	- 2.2	2.7	- 15.5	- 17.7	- 62.2	2012
2.0	- 7.0	- 10.9	3.9	- 3.0	- 3.4	- 9.3	0.5	- 2.6	3.1	- 38.8	- 47.2	- 420.8	2013
15.5	- 12.3	- 15.1	2.9	15.1	0.4	- 4.0	14.6	0.9	13.8	83.6	72.0	194.0	2014
11.5	- 3.9	- 4.2	0.3	1.4	5.1	2.4	- 3.7	- 0.9	- 2.7	- 80.1	- 93.5	- 150.1	2015
5.8	- 2.4	- 0.9	- 1.5	1.6	2.8	0.3	- 1.2	- 0.7	- 0.4	- 17.0	- 24.3	73.7	2015 Mar
3.4	8.7	8.7	0.0	- 0.6	0.0	2.8	- 0.6	0.5	- 1.1	32.6	34.1	- 94.4	Apr
- 6.3	- 16.1	- 11.4	- 4.6	2.7	1.8	0.3	1.0	- 1.0	1.9	- 11.1	- 12.2	- 61.5	May
- 7.5	- 5.1	- 3.7	- 1.5	- 1.8	- 1.8	- 3.7	0.0	0.3	- 0.3	- 25.1	- 28.1	- 102.8	June
21.5	4.6	1.8	2.8	- 2.1	0.6	0.8	- 2.7	0.4	- 3.0	- 7.0	- 3.9	32.0	July
- 3.9	1.1	- 3.0	4.1	3.6	3.9	1.5	- 0.3	- 0.2	- 0.1	- 1.6	- 1.2	- 28.0	Aug
- 4.4	- 1.2	- 1.0	- 0.2	2.9	1.8	0.1	1.1	- 0.4	1.5	- 1.5	- 1.0	7.2	Sep
- 7.1	1.4	2.9	- 1.5	- 2.5	- 1.5	0.8	- 1.0	0.8	- 1.8	- 4.9	- 7.9	- 8.4	Oct
3.0	- 0.9	- 3.8	2.9	5.3	- 5.7	0.9	- 0.4	- 0.8	0.4	- 31.5	- 35.3	50.6	Nov
0.9	- 10.1	- 4.9	- 5.2	- 12.8	- 8.0	- 1.3	- 4.8	- 0.6	- 4.2	- 55.6	- 55.3	- 85.4	Dec
- 0.1	3.4	3.8	- 0.4	4.3	1.4	4.3	2.9	- 0.2	3.1	24.8	22.8	90.5	2016 Jan
- 0.3	- 0.7	- 0.4	- 0.2	- 1.6	- 0.2	3.7	- 1.4	0.3	- 1.8	5.8	3.0	63.5	Feb
- 1.9	- 3.0	- 0.2	- 2.9	2.8	- 0.3	- 2.8	3.1	- 0.2	3.3	- 23.5	- 25.4	- 60.2	Mar
2.7	1.8	3.9	- 2.1	- 1.4	- 0.3	1.7	- 1.1	0.7	- 1.8	12.9	13.1	- 44.4	Apr
0.6	- 5.2	- 2.3	- 2.9	6.1	5.7	1.4	0.4	- 1.0	1.4	1.0	3.7	13.0	May
- 0.5	- 9.7	- 5.7	- 4.0	1.0	2.0	2.4	- 1.0	0.0	- 1.0	24.7	25.5	89.5	June
0.8	5.3	3.1	2.2	1.0	3.2	4.4	- 2.2	- 0.0	- 2.1	6.6	11.8	- 11.1	July
1.2	- 5.9	- 2.0	- 3.9	- 1.9	- 0.6	0.6	- 1.3	0.2	- 1.5	2.4	2.4	- 34.3	Aug
0.3	- 3.4	- 1.8	- 1.6	0.0	- 0.8	- 1.7	0.8	0.6	0.1	- 10.8	- 10.5	- 30.3	Sep
2.8	- 0.9	- 3.5	- 4.3	- 0.6	1.9	- 4.0	- 2.5	- 0.3	- 2.2	- 42.8	- 44.1	- 56.4	Oct
0.6	- 4.6	- 4.4	- 0.2	1.5	1.7	- 0.2	- 0.2	- 0.4	0.2	- 12.5	- 11.8	- 33.0	Nov

exchange of equalisation claims. <sup>3</sup> Statistical breaks have been eliminated from the flow figures (see also footnote \* in Table II.1).

#### IV Banks

### 1 Assets and liabilities of monetary financial institutions (excluding the Bundesbank) in Germany \* Liabilities

€ billion

Period	Deposits of banks (MFIs) in the euro area				Deposits of non-banks (non-MFIs) in the euro area									
	Balance sheet total <sup>1</sup>	of banks			Total	Deposits of non-banks in the home country					Deposits of non-banks			
		Total	in the home country	in other member states		Total	Total	Over-night	With agreed maturities		At agreed notice		Total	Over-night
									Total	of which up to 2 years	Total	of which up to 3 months		
End of year or month														
2007	7,592.4	1,778.6	1,479.0	299.6	2,633.6	2,518.3	769.6	1,193.3	477.9	555.4	446.0	75.1	19.6	
2008	7,892.7	1,827.7	1,583.0	244.7	2,798.2	2,687.3	809.5	1,342.7	598.7	535.2	424.8	74.2	22.4	
2009	7,436.1	1,589.7	1,355.6	234.0	2,818.0	2,731.3	997.8	1,139.1	356.4	594.4	474.4	63.9	17.7	
2010	8,304.8	1,495.8	1,240.1	255.7	2,925.8	2,817.6	1,089.1	1,110.3	304.6	618.2	512.5	68.4	19.3	
2011	8,393.3	1,444.8	1,210.3	234.5	3,033.4	2,915.1	1,143.3	1,155.8	362.6	616.1	515.3	78.8	25.9	
2012	8,226.6	1,371.0	1,135.9	235.1	3,091.4	2,985.2	1,294.9	1,072.8	320.0	617.6	528.4	77.3	31.2	
2013	7,528.9	1,345.4	1,140.3	205.1	3,130.5	3,031.5	1,405.3	1,016.2	293.7	610.1	532.4	81.3	33.8	
2014	7,802.3	1,324.0	1,112.3	211.7	3,197.7	3,107.4	1,514.3	985.4	298.1	607.7	531.3	79.7	34.4	
2015	7,665.2	1,267.8	1,065.9	201.9	3,307.1	3,215.1	1,670.2	948.4	291.5	596.4	534.5	80.8	35.3	
2015 Feb	8,061.5	1,368.7	1,134.4	234.3	3,220.8	3,126.5	1,543.4	977.0	294.6	606.1	530.0	83.3	38.9	
2015 Mar	8,173.0	1,382.3	1,134.8	247.5	3,218.1	3,120.2	1,542.4	973.8	295.3	603.9	529.1	84.8	40.8	
2015 Apr	8,084.0	1,367.5	1,118.0	249.5	3,226.8	3,129.0	1,565.9	961.6	292.7	601.5	528.8	86.9	42.4	
2015 May	8,004.0	1,343.4	1,103.5	239.9	3,247.4	3,148.5	1,592.3	956.2	289.1	600.0	529.0	86.1	40.9	
2015 June	7,799.5	1,303.2	1,090.5	212.7	3,241.5	3,140.1	1,594.8	947.1	283.6	598.3	528.6	88.9	42.0	
2015 July	7,867.6	1,294.3	1,080.0	214.3	3,268.2	3,169.4	1,608.2	964.8	288.6	596.4	528.2	88.5	42.7	
2015 Aug	7,840.0	1,281.1	1,072.9	208.1	3,279.0	3,182.1	1,625.2	961.8	286.7	595.1	528.5	86.5	41.3	
2015 Sep	7,829.3	1,281.8	1,076.3	205.5	3,274.0	3,174.2	1,624.8	959.4	283.2	594.5	529.3	87.9	41.9	
2015 Oct	7,856.5	1,295.4	1,096.9	198.5	3,283.6	3,187.7	1,650.4	942.7	278.9	594.6	530.6	85.1	39.5	
2015 Nov	7,940.1	1,312.0	1,108.5	203.5	3,307.5	3,215.4	1,672.6	948.6	287.1	594.2	531.5	82.8	39.5	
2015 Dec	7,665.2	1,267.8	1,065.9	201.9	3,307.1	3,215.1	1,670.2	948.4	291.5	596.4	534.5	80.8	35.3	
2016 Jan	7,823.5	1,266.8	1,066.5	200.3	3,322.6	3,225.5	1,686.6	942.9	286.9	596.0	535.4	85.3	41.5	
2016 Feb	7,913.1	1,264.9	1,062.1	202.8	3,324.6	3,227.5	1,694.0	937.1	283.2	596.3	537.0	86.0	42.5	
2016 Mar	7,783.4	1,252.3	1,058.8	193.5	3,319.6	3,221.8	1,682.6	944.7	290.4	594.4	536.2	86.8	40.1	
2016 Apr	7,806.5	1,258.6	1,060.8	197.8	3,332.8	3,240.8	1,704.9	943.2	291.0	592.7	535.6	82.4	38.4	
2016 May	7,817.2	1,230.3	1,027.5	202.8	3,348.6	3,253.7	1,717.2	945.3	292.6	591.1	535.0	84.9	41.7	
2016 June	7,920.6	1,241.7	1,039.1	202.6	3,350.9	3,250.2	1,718.1	942.1	290.9	590.0	534.5	89.4	44.9	
2016 July	7,942.1	1,226.7	1,023.7	203.0	3,362.7	3,267.1	1,733.1	945.0	295.2	589.1	534.5	85.5	40.7	
2016 Aug	7,908.5	1,211.5	1,016.5	195.0	3,369.5	3,274.0	1,744.5	941.2	292.8	588.4	534.6	85.5	40.4	
2016 Sep	7,863.9	1,194.8	1,029.1	165.7	3,372.1	3,274.9	1,743.8	944.0	297.4	587.1	534.0	88.0	41.4	
2016 Oct	7,868.7	1,186.8	1,025.4	161.3	3,378.8	3,286.5	1,763.9	936.0	288.5	586.6	534.3	83.7	37.1	
2016 Nov	7,911.4	1,195.4	1,032.7	162.7	3,431.2	3,331.7	1,795.8	949.8	292.8	586.1	534.4	89.8	43.4	
Changes <sup>4</sup>														
2008	313.3	65.8	121.7	- 55.8	162.3	173.1	38.7	154.6	123.5	- 20.2	- 21.2	- 7.5	- 0.1	
2009	- 454.5	- 235.4	- 224.6	- 10.8	31.9	43.9	205.0	- 220.4	- 259.3	59.3	50.3	- 9.6	4.1	
2010	- 136.3	- 75.2	- 99.4	24.2	72.3	59.7	88.7	- 53.0	- 52.2	24.0	38.3	- 4.4	2.2	
2011	54.1	- 48.4	- 28.8	- 19.6	102.1	97.4	52.4	- 47.6	- 58.8	- 2.6	1.3	- 4.8	6.5	
2012	- 129.2	- 68.7	- 70.0	1.3	57.8	67.1	156.1	- 90.4	- 50.2	1.5	14.1	- 1.4	5.4	
2013	- 703.6	- 106.2	- 73.9	- 32.3	39.1	47.8	111.5	- 56.3	- 26.6	- 7.3	4.0	2.6	3.3	
2014	206.8	- 28.4	- 32.2	3.9	62.7	71.6	106.0	- 32.1	3.1	- 2.4	- 2.4	- 2.5	0.0	
2015	- 179.5	- 61.1	- 49.6	- 11.5	104.9	105.5	153.7	- 36.9	- 10.0	- 11.3	4.2	- 0.2	0.3	
2015 Mar	86.5	10.9	- 1.2	12.0	- 4.6	- 8.0	- 1.9	- 4.0	0.2	- 2.2	- 0.9	1.2	1.8	
2015 Apr	- 63.9	- 11.7	- 15.3	3.7	9.7	10.2	24.5	- 11.9	- 2.3	- 2.4	- 0.2	1.7	1.0	
2015 May	- 92.5	- 25.5	- 15.3	- 10.2	19.8	18.8	25.9	- 5.6	- 3.8	- 1.5	0.2	- 0.9	1.7	
2015 June	- 191.7	- 39.1	- 12.4	- 26.7	- 5.2	- 7.8	2.9	- 9.0	- 5.3	- 1.7	- 0.4	2.9	1.2	
2015 July	57.5	- 9.9	- 11.0	1.1	25.9	28.6	12.9	17.6	1.0	- 1.9	- 0.4	- 0.5	0.6	
2015 Aug	- 8.8	- 11.6	- 6.1	- 5.5	11.9	13.6	17.7	- 2.8	- 1.8	- 1.3	0.3	- 1.8	1.3	
2015 Sep	- 7.3	0.8	3.6	- 2.8	- 4.9	- 7.7	- 0.4	- 6.7	- 3.3	- 0.6	0.8	1.4	0.6	
2015 Oct	25.1	13.7	20.6	- 7.0	9.5	13.5	25.6	- 12.2	- 4.3	0.1	1.3	- 2.8	2.5	
2015 Nov	59.7	14.4	10.3	4.1	22.2	26.3	21.0	5.6	8.0	- 0.3	0.9	- 2.6	0.2	
2015 Dec	- 252.6	- 42.5	- 41.5	- 1.0	1.0	0.9	- 1.4	0.1	4.5	2.2	3.0	- 1.8	4.1	
2016 Jan	169.4	- 0.4	1.0	- 1.4	16.0	10.8	16.5	- 5.3	- 4.5	- 0.4	0.9	4.6	6.3	
2016 Feb	94.5	- 0.5	- 3.3	2.7	4.3	4.2	7.4	- 3.5	- 1.8	0.3	1.6	0.7	1.0	
2016 Mar	- 107.0	- 10.1	- 1.9	- 8.3	- 3.2	- 4.6	- 10.1	7.4	7.0	- 1.9	- 0.8	1.1	- 2.3	
2016 Apr	31.0	6.3	2.0	4.3	13.1	18.9	22.2	- 1.5	0.6	- 1.8	- 0.7	- 4.5	- 1.6	
2016 May	35.3	- 1.4	- 5.7	4.2	14.8	12.0	11.7	- 1.8	1.4	- 1.5	- 0.6	2.4	3.2	
2016 June	108.2	13.0	12.4	0.6	2.2	- 3.0	1.0	- 2.9	- 1.5	- 1.1	- 0.4	3.9	3.2	
2016 July	23.5	- 14.9	- 15.4	0.5	11.9	17.1	15.1	2.9	4.3	- 0.9	- 0.1	- 3.9	- 4.2	
2016 Aug	- 31.4	- 15.0	- 7.0	- 7.9	7.0	7.0	11.5	- 3.8	- 2.4	- 0.7	- 0.1	0.1	- 0.3	
2016 Sep	- 42.7	- 16.5	12.7	- 29.2	2.7	1.0	- 0.6	2.9	4.6	- 1.2	- 0.5	2.5	1.1	
2016 Oct	- 0.4	- 8.4	- 3.7	- 4.7	6.2	11.2	19.8	- 8.1	- 8.9	- 0.6	0.2	- 4.3	- 4.4	
2016 Nov	44.0	8.7	7.3	1.4	52.4	45.2	31.9	13.7	4.3	- 0.4	0.1	6.0	6.2	

\* This table serves to supplement the "Overall monetary survey" in section II. Unlike the other tables in section IV, this table includes – in addition to the figures reported

by banks (including building and loan associations) – data from money market funds. <sup>1</sup> See footnote 1 in Table IV.2. <sup>2</sup> Excluding deposits of central



IV Banks

in other member states <sup>2</sup>				Deposits of central governments		Liabilities arising from repos with non-banks in the euro area	Money market fund shares issued <sup>3</sup>	Debt securities issued <sup>3</sup>		Liabilities to non-euro-area residents	Capital and reserves	Other Liabilities <sup>1</sup>	Period
With agreed maturities		At agreed notice		Total	of which domestic central governments			Total	of which with maturities of up to 2 years <sup>3</sup>				
Total	of which up to 2 years	Total	of which up to 3 months										
53.2	22.0	2.3	1.8	40.1	38.3	26.6	28.6	1,637.6	182.3	661.0	428.2	398.2	2007
49.5	24.9	2.4	1.8	36.6	34.8	61.1	16.4	1,609.9	233.3	666.3	461.7	451.5	2008
43.7	17.0	2.5	2.0	22.8	22.2	80.5	11.4	1,500.5	146.3	565.6	454.8	415.6	2009
46.4	16.1	2.8	2.2	39.8	38.7	86.7	9.8	1,407.8	82.3	636.0	452.6	1,290.2	2010
49.6	18.4	3.3	2.5	39.5	37.9	97.1	6.2	1,345.7	75.7	561.5	468.1	1,436.6	2011
42.3	14.7	3.8	2.8	28.9	25.9	80.4	7.3	1,233.1	56.9	611.4	487.3	1,344.7	2012
44.0	16.9	3.5	2.7	17.6	16.0	6.7	4.1	1,115.2	39.0	479.5	503.0	944.5	2013
42.0	15.9	3.3	2.7	10.6	10.5	3.4	3.5	1,077.6	39.6	535.3	535.4	1,125.6	2014
42.2	16.0	3.3	2.8	11.3	9.6	2.5	3.5	1,017.7	48.3	526.2	569.3	971.1	2015
41.0	14.5	3.4	2.7	11.0	8.9	8.0	3.5	1,104.3	44.7	610.1	557.4	1,188.7	2015 Feb
40.5	14.7	3.4	2.7	13.1	9.2	7.6	3.5	1,108.0	46.2	624.5	565.4	1,263.6	Mar
41.1	15.7	3.4	2.7	10.9	9.4	11.4	3.3	1,098.8	47.6	647.9	563.4	1,164.9	Apr
41.9	16.2	3.4	2.7	12.8	9.5	5.0	3.4	1,087.3	42.9	645.6	567.6	1,104.3	May
43.5	18.0	3.4	2.8	12.5	10.9	3.3	3.5	1,076.1	41.2	605.9	564.7	1,001.3	June
42.4	16.9	3.4	2.7	10.3	8.9	4.5	3.5	1,077.7	39.0	627.0	565.1	1,027.2	July
41.8	14.9	3.4	2.8	10.4	9.7	6.6	3.5	1,061.0	36.3	634.9	573.2	1,000.8	Aug
42.6	14.8	3.4	2.7	12.0	10.5	7.0	4.1	1,060.5	43.6	606.7	577.1	1,018.1	Sep
42.2	15.5	3.4	2.8	10.8	8.7	6.6	4.1	1,069.9	48.1	609.1	578.5	1,009.4	Oct
40.0	14.3	3.4	2.8	9.3	7.8	6.1	3.9	1,075.9	50.6	599.6	574.7	1,060.4	Nov
42.2	16.0	3.3	2.8	11.3	9.6	2.5	3.5	1,017.7	48.3	526.2	569.3	971.1	Dec
40.4	15.0	3.3	2.7	11.8	8.4	2.8	3.8	1,021.1	49.5	583.5	566.5	1,056.5	2016 Jan
40.1	14.9	3.3	2.7	11.2	8.5	4.2	3.7	1,020.2	51.2	595.3	579.5	1,120.8	Feb
43.5	18.6	3.3	2.7	11.0	8.3	3.2	3.5	1,014.7	49.0	557.1	576.3	1,056.7	Mar
40.7	17.0	3.2	2.7	9.6	7.9	3.7	3.1	1,019.3	50.3	606.6	583.6	998.9	Apr
40.0	15.9	3.2	2.7	10.0	8.1	3.5	2.7	1,029.8	49.8	611.6	583.9	1,007.0	May
41.3	17.1	3.2	2.7	11.3	8.8	2.5	2.7	1,023.9	50.0	618.1	587.3	1,093.4	June
41.6	16.2	3.2	2.7	10.1	8.1	3.4	2.5	1,021.8	56.6	656.1	578.1	1,090.9	July
42.0	17.0	3.2	2.7	10.0	7.9	3.2	2.4	1,020.1	52.7	663.4	581.9	1,056.4	Aug
43.4	17.9	3.1	2.7	9.2	8.1	2.9	2.5	1,011.1	51.9	655.7	596.9	1,028.0	Sep
43.6	16.6	3.1	2.6	8.5	7.6	3.2	2.4	1,019.6	50.7	710.2	594.9	972.9	Oct
43.4	16.0	3.1	2.6	9.7	8.2	3.0	2.4	1,034.9	47.7	711.7	592.0	940.8	Nov
<b>Changes <sup>4</sup></b>													
- 7.5	- 0.6	0.1	- 0.0	- 3.3	- 3.2	36.1	- 12.2	- 33.9	- 50.2	- 0.1	- 39.3	- 56.1	2008
- 5.7	- 7.7	0.1	- 0.2	- 2.4	- 0.8	19.4	- 5.0	- 104.6	- 87.1	- 95.3	- 0.3	- 65.0	2009
- 6.8	- 5.8	0.3	0.3	17.0	16.5	6.2	- 1.6	- 106.7	- 63.2	- 54.4	- 7.1	- 78.6	2010
- 2.2	- 1.7	0.5	0.3	- 0.1	- 0.7	10.0	- 3.7	- 76.9	- 6.6	- 80.5	13.7	137.8	2011
- 7.2	- 3.6	0.5	0.3	- 7.9	- 9.2	- 19.6	- 1.2	- 107.0	- 18.6	- 54.2	21.0	- 68.5	2012
- 0.5	2.2	- 0.3	- 0.1	- 11.3	- 10.0	- 4.1	- 3.2	- 104.9	- 17.6	- 134.1	18.9	- 417.1	2013
- 2.3	- 1.2	- 0.2	- 0.1	- 6.4	- 4.8	- 3.4	- 0.6	- 63.7	- 0.2	- 35.9	26.1	178.3	2014
- 0.0	0.0	0.0	0.1	- 0.4	- 1.9	- 0.9	- 0.0	- 80.5	9.3	- 26.6	28.0	- 143.3	2015
- 0.5	0.1	- 0.0	- 0.0	2.2	0.4	- 0.4	- 0.0	- 6.5	1.2	6.4	5.4	75.3	2015 Mar
0.7	1.1	0.0	0.0	- 2.2	0.2	3.8	- 0.2	0.4	1.7	31.8	0.6	- 98.3	Apr
0.7	0.5	0.0	0.0	1.9	0.1	- 6.4	0.1	- 16.7	- 4.9	- 7.1	2.8	- 59.4	May
1.6	1.8	0.0	0.0	- 0.3	1.5	- 1.6	0.1	- 7.2	- 1.6	- 36.0	- 1.8	- 100.8	June
- 1.1	- 1.1	- 0.0	- 0.0	- 2.1	- 2.0	1.2	- 0.0	- 3.1	- 2.4	17.4	- 0.7	26.6	July
- 0.5	- 2.0	- 0.0	0.0	0.1	0.8	2.0	0.1	- 10.3	- 2.6	13.0	9.7	- 23.6	Aug
0.8	- 0.1	- 0.0	- 0.0	1.4	0.6	0.5	0.5	- 0.2	- 7.3	- 27.9	4.0	19.9	Sep
- 0.3	0.7	- 0.0	0.0	- 1.1	- 1.8	- 0.4	0.0	10.8	5.9	2.3	0.0	- 10.7	Oct
- 2.4	- 1.2	- 0.0	- 0.0	- 1.5	- 0.9	- 0.5	- 0.1	- 4.0	2.3	- 16.8	- 6.7	51.2	Nov
2.3	1.8	- 0.0	0.0	2.0	1.8	- 3.6	- 0.5	- 50.1	- 2.1	- 67.8	- 2.8	- 86.4	Dec
- 1.7	- 1.0	- 0.0	- 0.0	0.5	- 1.3	0.3	0.3	5.8	1.3	59.2	- 2.2	90.4	2016 Jan
- 0.3	- 0.1	- 0.0	- 0.0	- 0.6	0.1	1.4	- 0.1	- 1.1	1.6	11.6	13.2	65.7	Feb
3.5	4.0	- 0.0	- 0.0	0.3	0.4	- 0.9	- 0.2	4.8	- 1.8	- 30.7	- 0.2	- 66.4	Mar
- 2.8	- 1.6	- 0.0	- 0.0	- 1.3	- 0.5	0.5	- 0.4	3.9	1.2	49.2	7.2	- 48.8	Apr
- 0.8	- 1.2	- 0.0	- 0.0	0.4	0.3	- 0.2	- 0.4	4.9	- 0.7	0.9	4.3	12.4	May
0.7	0.8	- 0.0	- 0.0	1.3	0.7	- 1.0	0.0	- 5.0	0.3	8.4	3.9	86.7	June
0.3	- 0.3	- 0.0	- 0.0	- 1.3	- 0.7	0.9	- 0.2	- 1.2	6.6	38.6	- 8.9	- 2.7	July
0.4	0.8	- 0.0	- 0.0	- 0.1	- 0.2	- 0.2	- 0.1	- 1.1	- 3.8	7.9	6.6	- 36.6	Aug
1.5	0.8	- 0.0	- 0.0	- 0.8	0.1	- 0.3	0.0	- 8.1	- 0.8	- 7.0	12.0	- 25.5	Sep
0.1	- 1.3	- 0.1	- 0.0	- 0.7	- 0.5	0.3	- 0.1	5.3	- 1.3	52.6	- 2.9	- 53.4	Oct
- 0.2	- 0.6	- 0.0	- 0.0	1.2	0.6	- 0.2	0.1	17.7	- 0.6	1.5	- 5.3	- 30.9	Nov

governments. <sup>3</sup> In Germany, debt securities with maturities of up to one year are classed as money market paper; up to the January 2002 Monthly Report they were

published together with money market fund shares. <sup>4</sup> Statistical breaks have been eliminated from the flow figures (see also footnote \* in Table II.1).

## IV Banks

### 2 Principal assets and liabilities of banks (MFIs) in Germany, by category of banks\*

€ billion

End of month	Number of reporting institutions	Balance sheet total <sup>1</sup>	Cash in hand and credit balances with central banks	Lending to banks (MFIs)			Lending to non-banks (non-MFIs)					Participating interests	Other assets <sup>1</sup>
				Total	of which		Total	of which			Securities issued by non-banks		
					Balances and loans	Securities issued by banks		Loans		Bills			
							for up to and including 1 year	for more than 1 year					
<b>All categories of banks</b>													
2016 June	1,764	7,963.8	243.4	2,447.8	1,929.9	512.6	4,010.8	355.9	2,876.6	0.6	769.7	119.4	1,142.4
July	1,754	7,985.3	264.9	2,438.2	1,928.9	505.3	4,030.4	366.6	2,887.9	0.5	769.5	119.7	1,132.0
Aug	1,749	7,951.8	273.2	2,429.6	1,923.8	502.0	4,031.3	360.2	2,900.7	0.5	763.4	120.0	1,097.7
Sep	1,734	7,907.1	279.9	2,414.9	1,903.3	507.9	4,025.2	360.3	2,903.4	0.5	754.7	119.4	1,067.8
Oct	1,720	7,911.9	293.3	2,449.5	1,940.5	505.5	4,039.1	370.5	2,912.3	0.5	749.9	118.8	1,011.2
Nov	1,711	7,955.0	326.6	2,471.8	1,966.7	502.3	4,058.3	369.9	2,929.3	0.5	751.9	118.5	979.8
<b>Commercial banks <sup>6</sup></b>													
2016 Oct	262	3,204.7	181.2	1,030.4	943.3	86.9	1,195.7	194.6	759.7	0.3	238.0	56.3	741.1
Nov	263	3,234.2	215.0	1,047.1	962.6	84.3	1,203.6	197.9	765.0	0.3	236.6	55.9	712.6
<b>Big banks <sup>7</sup></b>													
2016 Oct	4	1,896.8	61.1	579.0	541.8	37.1	503.1	108.4	278.3	0.1	114.0	49.7	703.9
Nov	4	1,887.8	82.5	575.1	540.1	34.9	505.9	110.5	279.9	0.1	112.1	49.7	674.5
<b>Regional banks and other commercial banks</b>													
2016 Oct	156	940.8	56.5	230.7	185.2	45.4	617.6	63.8	440.5	0.2	112.9	5.7	30.3
Nov	156	963.6	65.9	240.5	195.4	45.0	620.9	63.8	443.4	0.2	113.2	5.2	31.0
<b>Branches of foreign banks</b>													
2016 Oct	102	367.1	63.5	220.8	216.4	4.4	75.0	22.5	41.0	0.0	11.2	0.9	6.9
Nov	103	382.9	66.6	231.6	227.1	4.4	76.8	23.6	41.6	-	11.3	0.9	7.0
<b>Landesbanken</b>													
2016 Oct	9	924.5	21.7	272.3	203.9	68.0	501.2	54.8	359.7	0.1	85.4	10.8	118.5
Nov	9	917.4	23.4	268.4	202.3	65.6	503.8	52.1	363.5	0.1	86.9	10.8	111.0
<b>Savings banks</b>													
2016 Oct	408	1,162.4	26.1	186.4	66.0	120.2	920.0	49.4	717.6	0.0	152.7	14.5	15.5
Nov	408	1,169.7	27.1	190.4	69.7	120.5	922.2	48.3	720.0	0.0	153.5	14.5	15.6
<b>Credit cooperatives</b>													
2016 Oct	986	842.1	14.4	167.5	58.4	108.5	626.3	32.2	492.7	0.1	101.2	15.8	18.1
Nov	976	848.7	15.0	171.0	61.5	108.8	628.6	31.6	495.0	0.0	101.7	15.9	18.2
<b>Mortgage banks</b>													
2016 Oct	15	281.6	1.1	50.2	35.4	14.5	220.8	5.4	176.2	-	39.1	0.2	9.4
Nov	15	279.6	0.7	49.4	34.6	14.5	220.1	4.9	176.6	-	38.7	0.2	9.3
<b>Building and loan associations</b>													
2016 Oct	20	215.5	1.4	57.0	40.1	16.9	152.4	1.3	128.1	.	22.9	0.3	4.4
Nov	20	217.8	0.7	59.2	42.4	16.8	153.1	1.3	128.4	.	23.4	0.3	4.5
<b>Banks with special, development and other central support tasks</b>													
From July 2016 including DZ BANK AG Deutsche Zentral- Genossenschaftsbank, Frankfurt am Main (DZ Bank)													
2016 Oct	20	1,281.1	47.5	685.7	593.4	90.6	422.8	32.7	278.2	0.0	110.6	20.8	104.3
Nov	20	1,287.5	44.7	686.4	593.5	91.7	427.0	33.9	280.7	0.0	111.1	20.9	108.6
<b>Memo item: Foreign banks <sup>8</sup></b>													
2016 Oct	137	1,064.4	97.1	401.9	358.8	42.9	464.4	68.4	284.1	0.2	108.7	4.4	96.6
Nov	138	1,097.1	109.5	415.9	373.1	42.6	469.3	68.4	286.7	0.2	111.0	4.4	98.1
<b>of which: Banks majority-owned by foreign banks <sup>9</sup></b>													
2016 Oct	35	697.4	33.6	181.1	142.5	38.5	389.5	46.0	243.1	0.2	97.5	3.5	89.7
Nov	35	714.2	42.9	184.3	146.0	38.2	392.5	44.8	245.1	0.2	99.8	3.5	91.1

\* Assets and liabilities of monetary financial institutions (MFIs) in Germany. The assets and liabilities of foreign branches, of money market funds (which are also classified as MFIs) and of the Bundesbank are not included. For the definitions of the respective items, see the footnotes to Table IV.3. <sup>1</sup> Owing to the Act Modernising Accounting Law (Gesetz zur Modernisierung des Bilanzrechts) of 25 May 2009, derivative financial instruments in the trading portfolio (trading portfolio derivatives) within the

meaning of section 340e (3) sentence 1 of the German Commercial Code (Handels-gesetzbuch) read in conjunction with section 35 (1) No 1a of the Credit Institution Accounting Regulation (Verordnung über die Rechnungslegung der Kreditinstitute) are classified under "Other assets and liabilities" as of the December 2010 reporting date. Trading portfolio derivatives are listed separately in the Statistical Supplement to the Monthly Report 1, Banking statistics, in Tables I.1 to I.3. <sup>2</sup> For building and

IV Banks

Deposits of banks (MFIs)			Deposits of non-banks (non-MFIs)								Bearer debt securities outstanding 5	Capital including published reserves, participation rights capital, funds for general banking risks	Other liabilities 1	End of month
Total	of which		Total	Sight deposits	Time deposits 2		Memo item Liabilities arising from repos 3	Savings deposits 4						
	Sight deposits	Time deposits			for up to and including 1 year	for more than 1 year 2		Total	of which At three months' notice	Bank savings bonds				
<b>All categories of banks</b>														
1,717.7	550.2	1,167.4	3,495.4	1,855.4	285.8	694.0	48.7	598.6	541.8	61.7	1,125.6	485.3	1,139.9	2016 June
1,729.0	548.3	1,180.6	3,519.6	1,866.2	299.0	695.6	60.7	597.6	541.7	61.3	1,113.0	486.6	1,137.1	July
1,717.1	535.9	1,181.1	3,530.4	1,875.8	302.4	694.7	65.0	596.8	541.7	60.7	1,116.8	484.9	1,102.6	Aug
1,708.3	498.1	1,210.1	3,517.0	1,872.6	294.3	694.2	52.7	595.4	541.1	60.4	1,119.9	487.8	1,074.1	Sep
1,717.7	535.7	1,182.0	3,561.0	1,914.2	294.8	697.2	70.9	594.8	541.3	60.0	1,126.4	487.8	1,019.0	Oct
1,734.8	562.6	1,172.1	3,595.2	1,938.6	305.6	696.9	74.0	594.3	541.3	59.7	1,138.1	488.1	999.0	Nov
<b>Commercial banks 6</b>														
798.1	366.3	431.8	1,381.8	844.3	167.4	243.4	50.6	101.9	94.4	24.8	160.1	164.4	700.3	2016 Oct
812.0	387.1	424.8	1,405.5	853.4	181.0	244.2	57.0	101.8	94.1	25.0	167.2	164.6	684.9	Nov
<b>Big banks 7</b>														
424.5	180.6	243.9	602.5	350.0	97.8	85.6	50.6	63.3	62.0	5.8	127.3	97.1	645.5	2016 Oct
420.7	183.2	237.4	615.4	351.1	109.6	85.6	56.4	63.1	61.8	5.9	133.5	97.3	620.9	Nov
<b>Regional banks and other commercial banks</b>														
174.3	54.7	119.5	627.8	393.9	47.2	130.8	0.0	38.1	32.2	17.8	32.4	59.3	47.1	2016 Oct
176.4	58.7	117.7	638.2	401.6	48.6	131.9	0.6	38.3	32.1	17.8	33.4	59.3	56.2	Nov
<b>Branches of foreign banks</b>														
199.4	131.0	68.4	151.5	100.3	22.4	27.1	–	0.5	0.2	1.3	0.4	8.0	7.8	2016 Oct
214.9	145.2	69.7	151.9	100.6	22.7	26.7	–	0.5	0.2	1.3	0.4	8.0	7.8	Nov
<b>Landesbanken</b>														
259.0	63.0	196.0	294.4	121.6	62.0	96.9	15.8	13.5	10.5	0.4	202.5	55.3	113.3	2016 Oct
258.2	61.5	196.8	291.9	120.3	60.2	97.6	13.5	13.4	10.4	0.5	201.9	55.2	110.1	Nov
<b>Savings banks</b>														
131.7	9.3	122.5	873.6	524.0	15.4	15.5	–	293.0	263.5	25.7	13.8	101.2	42.2	2016 Oct
130.2	7.8	122.3	882.6	534.3	14.9	15.3	–	292.7	263.7	25.3	13.9	101.2	41.9	Nov
<b>Credit cooperatives</b>														
105.3	2.6	102.7	627.5	385.9	32.1	16.2	–	185.9	172.4	7.4	7.9	68.9	32.5	2016 Oct
105.6	2.6	103.0	634.6	393.5	31.9	15.9	–	185.9	172.7	7.3	7.6	68.9	32.0	Nov
<b>Mortgage banks</b>														
50.4	5.5	44.9	117.5	8.6	9.5	99.4	–	0.1	0.1	–	93.5	9.8	10.4	2016 Oct
50.2	6.8	43.4	115.5	8.7	8.6	98.2	–	0.1	0.1	–	93.5	9.9	10.5	Nov
<b>Building and loan associations</b>														
21.5	4.0	17.5	166.6	1.0	1.0	164.1	–	0.3	0.3	0.2	2.6	10.2	14.6	2016 Oct
21.5	4.5	17.0	166.9	1.0	1.1	164.4	–	0.3	0.3	0.1	2.0	10.2	17.2	Nov
<b>Banks with special, development and other central support tasks</b>														
From July 2016 including DZ Bank														
351.7	85.1	266.7	99.5	28.8	7.4	61.8	4.5	–	–	–	646.1	78.0	105.8	2016 Oct
357.1	92.3	264.9	98.0	27.3	7.8	61.3	3.5	–	–	–	652.0	78.0	102.4	Nov
<b>Memo item: Foreign banks 8</b>														
362.3	192.6	169.7	531.7	366.5	54.8	80.6	10.8	21.3	20.7	8.5	21.7	50.7	98.1	2016 Oct
383.9	216.5	167.3	539.9	372.4	57.6	80.1	12.0	21.2	20.7	8.6	22.5	50.7	100.1	Nov
<b>of which: Banks majority-owned by foreign banks 9</b>														
162.9	61.6	101.3	380.2	266.2	32.4	53.5	10.8	20.8	20.5	7.2	21.3	42.7	90.3	2016 Oct
169.0	71.4	97.6	388.0	271.7	34.9	53.4	12.0	20.7	20.4	7.3	22.1	42.7	92.4	Nov

loan associations: Including deposits under savings and loan contracts (see Table IV.12). 3 Included in time deposits. 4 Excluding deposits under savings and loan contracts (see also footnote 2). 5 Including subordinated negotiable bearer debt securities; excluding non-negotiable bearer debt securities. 6 Commercial banks comprise the sub-groups "Big banks", "Regional banks and other commercial banks" and "Branches of foreign banks". 7 Deutsche Bank AG, Dresdner Bank AG (up to

Nov. 2009), Commerzbank AG, UniCredit Bank AG (formerly Bayerische Hypo- und Vereinsbank AG) and Deutsche Postbank AG. 8 Sum of the banks majority-owned by foreign banks and included in other categories of banks and the category "Branches (with dependent legal status) of foreign banks". 9 Separate presentation of the banks majority-owned by foreign banks included in other banking categories.

#### IV Banks

#### 3 Assets and liabilities of banks (MFIs) in Germany vis-à-vis residents \*

€ billion

Period	Cash in hand (euro-area banknotes and coins)	Credit balances with the Bundesbank	Lending to domestic banks (MFIs)						Lending to domestic non-banks (non-MFIs)				
			Total	Credit balances and loans	Bills	Negotiable money market paper issued by banks	Securities issued by banks	Memo item Fiduciary loans	Total	Loans	Bills	Treasury bills and negotiable money market paper issued by non-banks	Securities issued by non-banks <sup>1</sup>
<b>End of year or month *</b>													
2006	16.0	49.4	1,637.8	1,086.3	–	9.3	542.2	1.9	3,000.7	2,630.3	1.9	2.0	366.5
2007	17.5	64.6	1,751.8	1,222.5	0.0	25.3	504.0	2.3	2,975.7	2,647.9	1.6	1.5	324.7
2008	17.4	102.6	1,861.7	1,298.1	0.0	55.7	507.8	2.0	3,071.1	2,698.9	1.2	3.1	367.9
2009	16.9	78.9	1,711.5	1,138.0	–	31.6	541.9	2.2	3,100.1	2,691.8	0.8	4.0	403.5
2010	16.0	79.6	1,686.3	1,195.4	–	7.5	483.5	1.8	3,220.9	2,770.4	0.8	27.9	421.8
2011	15.8	93.8	1,725.6	1,267.9	–	7.1	450.7	2.1	3,197.8	2,774.6	0.8	6.4	415.9
2012	18.5	134.3	1,655.0	1,229.1	–	2.4	423.5	2.4	3,220.4	2,785.5	0.6	2.2	432.1
2013	18.5	85.6	1,545.6	1,153.1	0.0	1.7	390.8	2.2	3,131.6	2,692.6	0.5	1.2	437.2
2014	18.9	81.3	1,425.9	1,065.6	0.0	2.1	358.2	1.7	3,167.3	2,712.2	0.4	0.7	454.0
2015	19.2	155.0	1,346.6	1,062.6	0.0	1.7	282.2	1.7	3,233.9	2,764.0	0.4	0.4	469.0
2015 June	15.1	115.4	1,424.2	1,082.1	0.0	3.3	338.8	1.6	3,200.4	2,745.2	0.3	2.4	452.5
July	15.4	116.6	1,429.7	1,091.8	0.0	2.7	335.2	1.6	3,228.7	2,748.4	0.3	2.4	477.6
Aug	15.2	133.6	1,418.0	1,086.8	0.0	2.1	329.1	1.6	3,230.9	2,751.1	0.3	1.9	477.5
Sep	15.6	139.8	1,384.6	1,059.7	0.0	2.3	322.7	1.6	3,230.8	2,756.1	0.3	1.7	472.8
Oct	16.2	140.0	1,421.3	1,100.0	0.0	2.1	319.1	1.6	3,232.0	2,764.6	0.3	1.5	465.6
Nov	15.7	152.2	1,438.4	1,122.6	0.0	2.6	313.2	1.6	3,249.0	2,775.2	0.3	1.0	472.5
Dec	19.2	155.0	1,346.6	1,062.6	0.0	1.7	282.2	1.7	3,233.9	2,764.0	0.4	0.4	469.0
2016 Jan	16.2	170.9	1,368.7	1,086.0	0.0	2.0	280.8	1.6	3,238.7	2,771.0	0.4	0.7	466.5
Feb	15.9	164.3	1,379.8	1,098.3	0.0	1.8	279.7	1.6	3,248.0	2,781.4	0.4	1.5	464.7
Mar	17.2	166.6	1,358.5	1,076.3	0.0	2.0	280.2	1.6	3,247.2	2,785.9	0.3	1.2	459.7
Apr	16.9	179.8	1,392.1	1,110.3	0.0	2.1	279.7	1.6	3,260.6	2,798.3	0.4	1.3	460.6
May	18.4	197.2	1,367.7	1,086.7	0.0	1.8	279.2	1.5	3,264.8	2,805.3	0.3	1.4	457.8
June	19.1	213.5	1,356.7	1,078.8	0.0	1.6	276.2	1.7	3,252.1	2,797.2	0.3	1.8	452.9
July	19.4	233.0	1,349.1	1,074.3	0.0	1.3	273.4	1.7	3,264.5	2,806.4	0.3	1.7	456.1
Aug	19.4	240.9	1,348.1	1,075.2	0.0	1.2	271.7	1.7	3,265.9	2,810.9	0.3	1.3	453.5
Sep	20.7	246.0	1,368.1	1,097.3	0.0	1.2	269.5	1.7	3,274.2	2,819.9	0.3	1.6	452.4
Oct	22.6	258.7	1,360.3	1,090.2	0.0	1.4	268.7	1.7	3,281.0	2,828.6	0.2	1.6	450.6
Nov	22.6	291.7	1,397.6	1,128.8	0.0	1.1	267.6	1.7	3,293.1	2,840.0	0.2	1.3	451.6
<b>Changes *</b>													
2007	+ 1.5	+ 15.2	+ 114.8	+ 137.6	+ 0.0	+ 17.0	– 39.8	+ 0.4	– 15.9	+ 12.1	– 0.3	– 0.5	– 27.2
2008	– 0.1	+ 39.4	+ 125.9	+ 90.1	± 0.0	+ 30.6	+ 5.2	– 0.8	+ 92.0	+ 47.3	– 0.4	+ 1.8	+ 43.3
2009	– 0.5	– 23.6	– 147.2	– 157.3	– 0.0	– 24.1	+ 34.3	+ 0.2	+ 25.7	– 11.2	– 0.4	+ 1.4	+ 35.9
2010	– 0.9	+ 0.6	– 19.3	+ 61.5	± 0.0	– 24.0	– 56.8	– 0.3	+ 130.5	+ 78.7	+ 0.0	+ 23.8	+ 28.0
2011	– 0.2	+ 14.2	+ 47.3	+ 80.5	–	– 0.4	– 32.8	– 0.1	– 30.6	– 3.2	+ 0.0	– 21.5	– 5.9
2012	+ 2.7	+ 40.5	– 68.6	– 37.5	–	– 4.6	– 26.5	+ 0.1	+ 21.0	+ 9.8	– 0.2	– 4.3	+ 15.7
2013	+ 0.0	– 48.8	– 204.1	– 170.6	+ 0.0	– 0.7	– 32.7	– 0.2	+ 4.4	+ 0.3	– 0.1	– 0.6	+ 4.8
2014	+ 0.4	– 4.3	– 119.3	– 87.1	+ 0.0	+ 0.4	– 32.6	+ 0.1	+ 36.7	+ 20.6	– 0.1	– 0.6	+ 16.8
2015	+ 0.3	+ 73.7	– 80.7	– 4.3	– 0.0	– 0.4	– 75.9	– 0.1	+ 68.9	+ 54.1	– 0.0	– 0.3	+ 15.1
2015 June	– 1.1	+ 20.4	– 42.1	– 32.1	– 0.0	– 0.2	– 9.8	+ 0.1	– 7.5	+ 1.9	– 0.0	+ 0.7	– 10.1
July	+ 0.3	+ 1.2	+ 5.5	+ 9.7	– 0.0	– 0.6	– 3.6	– 0.0	+ 28.3	+ 3.1	+ 0.0	+ 0.0	+ 25.1
Aug	– 0.1	+ 17.0	– 12.4	– 5.6	+ 0.0	– 0.7	– 6.1	+ 0.0	+ 2.3	+ 2.9	+ 0.0	– 0.5	– 0.1
Sep	+ 0.3	+ 6.3	– 33.3	– 27.1	–	+ 0.2	– 6.4	– 0.0	– 0.1	+ 4.9	+ 0.0	– 0.3	– 4.7
Oct	+ 0.7	+ 0.1	+ 36.6	+ 40.3	– 0.0	– 0.2	– 3.5	– 0.0	+ 1.2	+ 8.5	+ 0.0	– 0.1	– 7.2
Nov	– 0.6	+ 12.3	+ 17.3	+ 22.7	–	+ 0.5	– 5.9	+ 0.0	+ 16.7	+ 10.3	– 0.0	– 0.5	+ 6.9
Dec	+ 3.6	+ 2.8	– 91.8	– 59.9	–	– 0.9	– 31.0	+ 0.1	– 15.1	– 11.1	+ 0.1	– 0.6	– 3.5
2016 Jan	– 3.1	+ 15.9	+ 22.2	+ 23.4	–	+ 0.3	– 1.5	– 0.0	+ 4.5	+ 6.7	– 0.0	+ 0.3	– 2.4
Feb	– 0.3	– 6.5	+ 11.9	+ 13.1	–	– 0.2	– 1.0	– 0.0	+ 9.6	+ 10.6	– 0.1	+ 0.8	– 1.7
Mar	+ 1.3	+ 2.3	– 21.3	– 22.1	–	+ 0.2	+ 0.5	+ 0.0	– 0.8	+ 4.5	– 0.0	– 0.3	– 5.0
Apr	– 0.3	+ 13.2	+ 33.6	+ 34.0	–	+ 0.1	– 0.6	– 0.1	+ 13.3	+ 12.3	+ 0.0	+ 0.1	+ 0.8
May	+ 1.5	+ 17.4	+ 3.9	+ 4.8	–	– 0.4	– 0.5	– 0.0	+ 5.7	+ 8.4	– 0.1	+ 0.1	– 2.7
June	+ 0.7	+ 16.4	– 10.9	– 7.8	–	– 0.1	– 3.0	+ 0.2	– 11.9	– 7.3	– 0.0	+ 0.4	– 5.0
July	+ 0.4	+ 19.4	– 7.6	– 4.5	–	– 0.3	– 2.8	– 0.1	+ 13.3	+ 10.2	– 0.0	– 0.0	+ 3.2
Aug	– 0.0	+ 7.9	– 1.0	+ 0.9	–	– 0.1	– 1.8	+ 0.0	+ 1.5	+ 4.6	+ 0.0	– 0.4	– 2.6
Sep	+ 1.3	+ 5.1	+ 20.0	+ 22.1	–	+ 0.0	– 2.1	– 0.0	+ 8.2	+ 9.1	– 0.0	+ 0.3	– 1.1
Oct	+ 1.8	+ 12.7	– 7.3	– 6.6	–	+ 0.1	– 0.8	– 0.0	+ 7.0	+ 8.6	– 0.0	+ 0.0	– 1.7
Nov	+ 0.1	+ 33.0	+ 37.3	+ 38.7	–	– 0.3	– 1.1	+ 0.0	+ 12.1	+ 11.4	– 0.0	– 0.3	+ 1.0

\* See Table IV.2, footnote\*; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent revisions which appear in the following Monthly Report, are not specially marked. <sup>1</sup> Excluding debt securities arising from the exchange of equalisation claims

(see also footnote 2). <sup>2</sup> Including debt securities arising from the exchange of equalisation claims. <sup>3</sup> Including liabilities arising from registered debt securities, registered money market paper and non-negotiable bearer debt securities; including subordinated liabilities. <sup>4</sup> Including liabilities arising from monetary policy operations

IV Banks

Equalisation claims 2	Memo item Fiduciary loans	Participating interests in domestic banks and enterprises	Deposits of domestic banks (MFIs) 3					Deposits of domestic non-banks (non-MFIs)					Period	
			Total	Sight deposits 4	Time deposits 4	Redis-counted bills 5	Memo item Fiduciary loans	Total	Sight deposits 6	Time deposits 6	Savings deposits 7	Bank savings bonds 8		Memo item Fiduciary loans
<b>End of year or month *</b>														
-	53.0	106.3	1,348.2	125.4	1,222.7	0.0	22.3	2,394.6	747.7	962.8	586.5	97.5	37.8	2006
-	51.1	109.4	1,478.6	122.1	1,356.5	0.0	20.0	2,579.1	779.9	1,125.4	555.4	118.4	36.4	2007
-	47.2	111.2	1,582.5	138.5	1,444.0	0.0	41.6	2,781.4	834.6	1,276.1	535.2	135.4	32.3	2008
-	43.9	106.1	1,355.1	128.9	1,226.2	0.0	35.7	2,829.7	1,029.5	1,102.6	594.5	103.2	43.4	2009
-	33.7	96.8	1,238.3	135.3	1,102.6	0.0	13.8	2,935.2	1,104.4	1,117.1	618.2	95.4	37.5	2010
-	36.3	94.6	1,210.5	114.8	1,095.3	0.0	36.1	3,045.5	1,168.3	1,156.2	616.1	104.8	36.5	2011
-	34.8	90.0	1,135.5	132.9	1,002.6	0.0	36.3	3,090.2	1,306.5	1,072.5	617.6	93.6	34.9	2012
-	31.6	92.3	1,140.3	125.6	1,014.7	0.0	33.2	3,048.7	1,409.9	952.0	610.1	76.6	32.9	2013
-	26.5	94.3	1,111.9	127.8	984.0	0.0	11.7	3,118.2	1,517.8	926.7	607.8	66.0	30.9	2014
-	20.4	89.6	1,065.6	131.1	934.5	0.0	6.1	3,224.7	1,673.7	898.4	596.5	56.1	29.3	2015
-	25.3	92.5	1,090.2	161.7	928.4	0.0	11.1	3,151.7	1,600.1	892.9	598.3	60.4	29.6	2015 June
-	25.0	92.4	1,079.0	152.5	926.5	0.0	10.8	3,179.3	1,612.9	910.4	596.4	59.5	29.5	July
-	25.0	92.1	1,072.5	149.0	923.4	0.0	10.8	3,193.8	1,630.7	909.1	595.2	58.8	29.5	Aug
-	24.9	92.0	1,076.0	153.1	922.9	0.0	10.8	3,186.8	1,630.7	903.5	594.6	58.1	29.5	Sep
-	24.7	91.9	1,096.4	150.5	945.8	0.0	10.6	3,197.7	1,655.5	890.2	594.6	57.5	29.5	Oct
-	24.5	92.0	1,108.0	158.2	949.7	0.0	10.5	3,224.8	1,676.9	896.7	594.3	56.8	29.5	Nov
-	20.4	89.6	1,065.6	131.1	934.5	0.0	6.1	3,224.7	1,673.7	898.4	596.5	56.1	29.3	Dec
-	20.3	90.0	1,066.1	145.0	921.1	0.0	6.0	3,233.8	1,689.6	893.3	596.1	54.8	29.3	2016 Jan
-	20.2	89.8	1,061.7	151.8	909.9	0.0	5.9	3,236.2	1,697.4	887.8	596.4	54.6	29.3	Feb
-	19.9	90.3	1,058.6	147.9	910.7	0.0	5.9	3,231.2	1,687.4	894.9	594.5	54.4	29.1	Mar
-	19.8	89.8	1,060.2	149.7	910.4	0.0	5.9	3,249.8	1,709.6	893.5	592.7	54.0	29.0	Apr
-	19.7	89.9	1,026.8	142.0	884.7	0.0	5.8	3,262.7	1,721.8	896.1	591.2	53.7	29.0	May
-	19.6	89.9	1,038.6	152.5	886.0	0.0	6.0	3,259.9	1,722.6	894.1	590.0	53.1	28.7	June
-	19.5	90.1	1,022.8	140.0	882.7	0.0	5.9	3,275.7	1,737.1	896.8	589.1	52.7	28.6	July
-	19.4	90.3	1,015.7	137.3	878.3	0.0	5.9	3,282.1	1,748.5	893.1	588.4	52.2	28.7	Aug
-	19.3	89.8	1,028.7	132.1	896.6	0.0	5.8	3,283.7	1,748.1	896.6	587.2	51.8	28.6	Sep
-	19.1	89.7	1,025.1	137.1	887.9	0.0	5.7	3,294.7	1,768.0	888.8	586.6	51.3	28.6	Oct
-	19.1	89.3	1,030.8	145.9	884.9	0.0	5.6	3,328.9	1,800.3	891.5	586.2	50.9	28.6	Nov
<b>Changes *</b>														
-	- 2.3	+ 3.1	+ 132.0	- 3.3	+ 135.3	- 0.0	- 2.3	+ 181.1	+ 31.6	+ 160.5	- 31.1	+ 20.1	- 2.0	2007
-	- 5.4	+ 7.8	+ 124.3	+ 23.0	+ 101.3	- 0.0	- 3.6	+ 207.6	+ 54.3	+ 156.6	- 20.2	+ 17.0	- 1.3	2008
-	- 4.2	+ 0.7	- 225.4	- 9.7	- 215.7	- 0.0	- 5.7	+ 59.7	+ 211.4	- 179.3	+ 59.3	- 31.6	- 0.9	2009
-	- 2.1	- 9.2	- 96.5	+ 22.3	- 119.1	- 0.0	- 0.2	+ 77.8	+ 76.0	- 18.9	+ 24.0	- 3.3	- 1.7	2010
-	- 1.1	- 2.2	- 25.0	- 20.0	- 5.1	- 0.0	+ 0.1	+ 111.2	+ 63.7	+ 40.9	- 2.6	+ 9.3	- 1.1	2011
-	- 1.3	- 4.1	- 70.8	+ 21.5	- 91.9	- 0.0	+ 0.2	+ 42.2	+ 138.7	- 86.7	+ 1.5	- 11.2	- 1.6	2012
-	- 3.3	+ 2.4	- 79.4	- 24.1	- 55.3	+ 0.0	- 3.4	+ 40.2	+ 118.4	- 53.9	- 7.4	- 17.0	- 1.7	2013
-	- 1.9	+ 2.0	- 29.0	+ 2.2	- 31.2	- 0.0	- 0.6	+ 69.7	+ 107.9	- 25.3	- 2.4	- 10.6	- 2.0	2014
-	- 2.1	- 4.3	- 46.6	+ 3.3	- 50.0	+ 0.0	- 1.3	+ 106.5	+ 156.2	- 28.3	- 11.3	- 10.1	- 1.6	2015
-	- 0.3	- 0.3	- 12.9	- 2.8	- 10.1	- 0.0	- 0.1	- 7.1	+ 2.7	- 7.5	- 1.7	- 0.6	- 0.5	2015 June
-	- 0.3	- 0.2	- 11.1	- 9.2	- 1.9	+ 0.0	- 0.2	+ 27.5	+ 12.9	+ 17.7	- 1.9	- 1.1	- 0.1	July
-	- 0.1	- 0.3	- 7.1	- 3.4	- 3.7	- 0.0	+ 0.0	+ 14.5	+ 17.8	- 1.3	- 1.3	- 0.7	+ 0.0	Aug
-	- 0.1	- 0.1	+ 3.7	+ 4.1	- 0.4	+ 0.0	+ 0.0	- 7.0	- 0.1	- 5.6	- 0.6	- 0.7	- 0.1	Sep
-	- 0.2	- 0.1	+ 20.3	- 2.6	+ 22.9	+ 0.0	- 0.2	+ 10.9	+ 24.8	- 13.3	+ 0.1	- 0.6	- 0.0	Oct
-	- 0.2	+ 0.1	+ 11.6	+ 7.7	+ 3.9	+ 0.0	- 0.1	+ 27.0	+ 21.5	+ 6.5	- 0.3	- 0.6	- 0.0	Nov
-	- 0.1	- 2.0	- 42.4	- 27.1	- 15.2	- 0.0	- 0.1	- 0.0	- 3.2	+ 1.7	+ 2.2	- 0.7	- 0.2	Dec
-	- 0.1	+ 0.4	+ 0.5	+ 13.9	- 13.4	- 0.0	- 0.1	+ 9.1	+ 15.8	- 5.8	- 0.4	- 0.6	+ 0.0	2016 Jan
-	- 0.1	- 0.2	+ 3.1	+ 7.0	- 10.1	+ 0.0	- 0.0	+ 4.8	+ 7.9	- 3.1	+ 0.3	- 0.2	- 0.0	Feb
-	- 0.3	+ 0.5	- 3.2	- 4.0	+ 0.8	- 0.0	- 0.1	- 5.0	- 10.0	+ 7.0	- 1.9	- 0.2	- 0.2	Mar
-	- 0.1	- 0.3	+ 1.6	+ 1.9	- 0.3	- 0.0	+ 0.0	+ 18.6	+ 22.2	- 1.3	- 1.8	- 0.5	- 0.1	Apr
-	- 0.1	+ 0.1	- 5.1	- 2.9	- 2.2	+ 0.0	- 0.0	+ 12.9	+ 12.2	+ 2.5	- 1.5	- 0.3	- 0.0	May
-	- 0.1	+ 0.0	+ 12.8	+ 10.8	+ 2.0	- 0.0	+ 0.2	- 2.5	+ 0.9	- 1.7	- 1.1	- 0.5	- 0.3	June
-	- 0.1	- 0.0	- 15.8	- 12.5	- 3.3	- 0.0	- 0.1	+ 15.8	+ 14.5	+ 2.7	- 0.9	- 0.5	- 0.0	July
-	- 0.1	+ 0.2	- 7.1	- 2.7	- 4.4	- 0.0	- 0.0	+ 6.4	+ 11.4	- 3.8	- 0.7	- 0.5	+ 0.0	Aug
-	- 0.1	- 0.5	+ 13.0	- 5.3	+ 18.3	- 0.0	- 0.1	+ 1.6	- 0.4	+ 3.6	- 1.2	- 0.3	- 0.0	Sep
-	- 0.2	+ 0.1	- 3.2	+ 1.5	- 4.7	+ 0.0	- 0.1	+ 11.0	+ 20.0	- 7.9	- 0.6	- 0.5	- 0.0	Oct
-	- 0.0	- 0.4	+ 5.8	+ 8.8	- 3.0	- 0.0	- 0.0	+ 34.2	+ 32.3	+ 2.7	- 0.4	- 0.4	-	Nov

with the Bundesbank. 5 Own acceptances and promissory notes outstanding. 6 Since the inclusion of building and loan associations in January 1999, including deposits under savings and loan contracts (see Table IV.12). 7 Excluding deposits under

savings and loan contracts (see also footnote 8). 8 Including liabilities arising from non-negotiable bearer debt securities.

#### IV Banks

#### 4 Assets and liabilities of banks (MFIs) in Germany vis-à-vis non-residents \*

€ billion

Period	Cash in hand (non-euro-area banknotes and coins)	Lending to foreign banks (MFIs)							Lending to foreign non-banks (non-MFIs)					
		Total	Credit balances and loans, bills			Negotiable money market paper issued by banks	Securities issued by banks	Memo item Fiduciary loans	Total	Loans and bills			Treasury bills and negotiable money market paper issued by non-banks	Securities issued by non-banks
			Total	Short-term	Medium and long-term					Total	Short-term	Medium and long-term		
<b>End of year or month *</b>														
2006	0.4	1,266.9	1,003.2	744.5	258.7	13.3	250.4	0.8	777.0	421.0	156.0	264.9	7.2	348.9
2007	0.3	1,433.5	1,105.9	803.6	302.4	13.4	314.2	0.5	908.3	492.9	197.5	295.4	27.5	387.9
2008	0.3	1,446.6	1,131.6	767.2	364.3	15.6	299.5	1.9	908.4	528.9	151.4	377.5	12.9	366.6
2009	0.3	1,277.4	986.1	643.5	342.6	6.2	285.0	2.9	815.7	469.6	116.9	352.7	9.8	336.3
2010	0.5	1,154.1	892.7	607.7	285.1	2.1	259.3	1.8	773.8	461.4	112.6	348.8	10.1	302.3
2011	0.6	1,117.6	871.0	566.3	304.8	4.6	241.9	2.6	744.4	455.8	102.0	353.8	8.5	280.1
2012	0.8	1,046.0	813.5	545.5	268.1	5.4	227.0	2.6	729.0	442.2	105.1	337.1	9.0	277.8
2013	0.2	1,019.7	782.4	546.6	235.8	7.2	230.1	2.5	701.0	404.9	100.3	304.6	8.2	287.8
2014	0.2	1,125.2	884.8	618.7	266.1	7.9	232.5	1.1	735.1	415.2	94.4	320.8	6.5	313.5
2015	0.3	1,066.9	830.7	555.9	274.7	1.2	235.0	1.0	751.5	424.3	83.8	340.5	7.5	319.7
2015 June	0.3	1,142.5	903.1	617.1	286.0	8.1	231.3	1.1	765.7	435.1	104.4	330.7	7.5	323.1
July	0.3	1,149.0	911.5	625.0	286.5	6.6	230.9	1.1	760.0	433.4	103.3	330.1	5.0	321.6
Aug	0.3	1,140.9	904.7	619.3	285.3	6.1	230.2	1.1	761.5	435.8	106.9	328.8	5.8	319.9
Sep	0.3	1,152.8	914.7	627.4	287.4	4.4	233.7	1.1	760.7	434.9	106.6	328.3	6.0	319.8
Oct	0.3	1,138.7	900.4	617.1	283.4	2.9	235.3	1.1	772.2	446.5	116.4	330.1	6.1	319.6
Nov	0.3	1,112.9	873.2	598.4	274.8	2.8	237.0	1.1	784.8	450.0	103.7	346.4	6.9	327.9
Dec	0.3	1,066.9	830.7	555.9	274.7	1.2	235.0	1.0	751.5	424.3	83.8	340.5	7.5	319.7
2016 Jan	0.3	1,080.5	844.9	570.2	274.8	1.9	233.6	1.0	766.7	440.2	101.3	338.8	8.9	317.6
Feb	0.3	1,095.3	854.5	580.2	274.3	3.1	237.8	1.0	765.9	445.3	102.6	342.7	10.2	310.3
Mar	0.3	1,057.4	816.6	551.7	264.9	3.0	237.8	1.0	754.4	427.1	87.9	339.2	9.1	318.2
Apr	0.3	1,064.5	824.2	559.7	264.5	3.3	237.1	1.0	762.5	440.0	99.9	340.0	9.4	313.1
May	0.3	1,063.5	825.4	554.4	271.0	3.5	234.6	1.0	766.3	439.7	94.3	345.4	8.9	317.7
June	0.3	1,091.2	851.1	580.7	270.4	3.6	236.4	1.0	758.7	435.5	89.4	346.1	6.4	316.8
July	0.3	1,089.1	854.6	586.5	268.0	2.7	231.9	1.0	766.0	448.5	100.1	348.4	4.1	313.4
Aug	0.3	1,081.5	848.6	577.9	270.7	2.5	230.4	1.0	765.4	450.3	99.9	350.4	5.1	310.0
Sep	0.3	1,046.8	806.0	535.5	270.5	2.5	238.4	1.0	751.0	444.0	93.6	350.4	4.7	302.3
Oct	0.3	1,089.3	850.4	571.3	279.0	2.1	236.8	1.0	758.1	454.5	102.9	351.6	4.2	299.3
Nov	0.3	1,074.2	837.9	541.7	296.2	1.7	234.7	1.0	765.2	459.4	103.6	355.9	5.5	300.3
<b>Changes *</b>														
2007	- 0.0	+ 190.3	+ 123.7	+ 72.9	+ 50.8	+ 7.5	+ 59.1	- 0.4	+ 167.7	+ 94.3	+ 50.1	+ 44.2	+ 20.1	+ 53.3
2008	+ 0.0	+ 8.5	+ 20.2	- 43.0	+ 63.2	+ 2.1	- 13.7	- 0.0	+ 4.3	+ 45.1	- 31.9	+ 77.0	- 14.5	- 26.3
2009	- 0.0	- 170.0	- 141.3	- 122.5	- 18.8	- 10.3	- 18.4	- 0.2	- 72.8	- 43.8	- 31.7	- 12.1	- 3.3	- 25.7
2010	+ 0.1	- 141.5	- 116.2	- 47.3	- 68.9	- 4.8	- 20.4	- 0.2	- 62.0	- 24.5	- 12.6	- 11.9	+ 0.4	- 38.0
2011	+ 0.1	- 48.4	- 32.6	- 45.3	+ 12.7	+ 2.5	- 18.4	+ 0.0	- 38.9	- 13.6	- 12.8	- 0.9	+ 1.6	- 23.6
2012	+ 0.1	- 70.1	- 56.8	- 23.1	- 33.7	+ 0.9	- 14.1	- 0.1	- 9.4	- 7.5	+ 8.3	- 15.9	+ 0.6	- 2.5
2013	- 0.5	- 22.7	- 26.9	- 1.3	- 25.6	+ 1.8	+ 2.4	- 0.0	- 21.2	- 33.1	- 5.8	- 27.2	- 0.7	+ 12.6
2014	- 0.0	+ 86.1	+ 80.1	+ 63.2	+ 16.8	+ 0.7	+ 5.3	- 0.6	+ 5.7	- 10.2	- 12.8	+ 2.7	- 1.8	+ 17.7
2015	+ 0.1	- 91.8	- 86.0	- 82.2	- 3.8	- 6.7	+ 0.8	- 0.1	- 6.1	- 9.2	- 6.5	- 2.7	+ 1.1	+ 2.0
2015 June	+ 0.0	- 41.3	- 40.1	- 44.0	+ 4.0	- 0.9	- 0.3	- 0.0	- 18.3	- 21.2	- 20.7	- 0.5	+ 1.2	+ 1.7
July	+ 0.0	+ 1.3	+ 3.3	+ 4.9	- 1.6	- 1.5	- 0.5	-	- 9.1	- 4.4	- 1.7	- 2.7	- 2.5	- 2.2
Aug	- 0.0	+ 0.6	+ 1.6	- 0.3	+ 1.9	- 0.5	- 0.5	- 0.0	+ 6.6	+ 6.4	+ 4.4	+ 2.0	+ 0.8	- 0.7
Sep	+ 0.0	+ 14.0	+ 12.2	+ 10.0	+ 2.2	- 1.7	+ 3.6	- 0.0	- 2.1	- 2.2	- 1.9	- 0.3	+ 0.1	- 0.0
Oct	+ 0.0	- 20.2	- 20.2	- 13.9	- 6.3	- 1.5	+ 1.5	+ 0.0	+ 7.7	+ 8.5	+ 9.1	- 0.6	+ 0.1	- 0.9
Nov	+ 0.0	- 38.2	- 39.4	- 25.9	- 13.5	- 0.1	+ 1.4	+ 0.0	+ 4.9	- 2.7	- 5.5	+ 2.8	+ 0.7	+ 6.8
Dec	- 0.0	- 36.7	- 33.4	- 37.5	+ 4.1	- 1.6	- 1.7	- 0.1	- 27.1	- 20.7	- 18.9	- 1.9	+ 0.8	- 7.2
2016 Jan	- 0.0	+ 16.1	+ 16.8	+ 15.6	+ 1.2	+ 0.7	- 1.4	+ 0.0	+ 18.2	+ 18.2	+ 18.6	- 0.4	+ 1.3	- 1.3
Feb	+ 0.0	+ 14.9	+ 9.6	+ 10.3	- 0.7	+ 1.1	+ 4.2	+ 0.0	- 0.2	+ 5.8	+ 2.1	+ 3.7	+ 1.1	- 7.1
Mar	- 0.0	- 26.3	- 26.5	- 22.8	- 3.7	- 0.1	+ 0.3	+ 0.0	- 3.8	- 12.2	- 13.6	+ 1.3	- 0.9	+ 9.3
Apr	- 0.0	+ 6.6	+ 7.0	+ 7.6	- 0.5	+ 0.3	- 0.8	+ 0.0	+ 7.5	+ 12.7	+ 11.9	+ 0.7	+ 0.1	- 5.3
May	+ 0.0	- 5.7	- 3.3	- 7.9	+ 4.6	+ 0.2	- 2.6	+ 0.0	+ 0.8	- 2.7	- 4.6	+ 1.9	- 0.4	+ 3.9
June	+ 0.0	+ 28.8	+ 26.7	+ 26.9	- 0.3	+ 0.1	+ 2.0	- 0.0	- 5.5	- 2.8	- 4.3	+ 1.4	- 2.8	+ 0.1
July	- 0.0	- 1.0	+ 4.4	+ 6.2	- 1.9	- 1.0	- 4.5	+ 0.0	+ 8.0	+ 13.6	+ 10.9	+ 2.7	- 2.3	- 3.3
Aug	+ 0.0	- 6.7	- 5.0	- 8.1	+ 3.0	- 0.2	- 1.5	+ 0.0	- 0.2	+ 2.2	- 0.1	+ 2.3	+ 1.0	- 3.3
Sep	- 0.0	- 44.3	- 42.2	- 42.1	- 0.1	- 0.0	- 2.1	+ 0.0	- 3.2	- 5.3	- 6.1	+ 0.8	- 0.4	+ 2.5
Oct	- 0.0	+ 38.4	+ 40.6	+ 34.1	+ 6.5	- 0.3	- 1.8	- 0.0	+ 5.4	+ 9.0	+ 9.1	- 0.1	- 0.5	- 3.1
Nov	+ 0.0	- 25.6	- 22.6	- 35.0	+ 12.3	- 0.5	- 2.5	+ 0.0	+ 0.9	- 0.4	- 0.5	+ 0.1	+ 1.2	+ 0.1

\* See Table IV.2, footnote\*; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent revisions, which appear in the following Monthly Report, are not specially marked.

IV Banks

Memo item Fiduciary loans	Participating interests in foreign banks and enter- prises	Deposits of foreign banks (MFIs)						Deposits of foreign non-banks (non-MFIs)						Memo item Fiduciary loans	Period
		Total	Sight deposits	Time deposits (including bank savings bonds)			Memo item Fiduciary loans	Total	Sight deposits	Time deposits (including savings deposits and bank savings bonds)			Memo item Fiduciary loans		
				Total	Short- term	Medium and long- term				Total	Short- term	Medium and long- term			
<b>End of year or month *</b>															
5.8	50.4	689.7	168.1	521.6	397.3	124.3	0.4	310.1	82.1	228.0	111.5	116.5	1.5	2006	
5.7	48.3	738.9	164.7	574.1	461.2	113.0	0.2	303.1	76.0	227.1	122.3	104.8	3.1	2007	
25.5	45.1	703.3	218.1	485.1	362.3	122.9	0.3	286.1	92.2	193.9	95.1	98.8	2.5	2008	
32.1	45.4	652.6	213.6	439.0	307.4	131.6	0.2	216.3	78.1	138.2	73.7	64.5	1.9	2009	
15.6	48.8	741.7	258.7	483.0	349.3	133.6	0.1	227.6	84.8	142.7	76.7	66.0	1.5	2010	
32.9	45.0	655.7	242.6	413.1	289.4	123.7	0.1	225.9	92.3	133.6	66.9	66.6	1.3	2011	
32.6	46.4	691.1	289.4	401.7	284.6	117.0	0.1	237.6	107.2	130.3	69.1	61.2	1.2	2012	
30.8	39.0	515.7	222.6	293.2	196.0	97.2	0.1	257.8	118.1	139.7	76.8	62.9	1.0	2013	
14.0	35.6	609.2	277.1	332.1	242.7	89.4	0.1	221.0	113.0	107.9	47.8	60.1	0.7	2014	
13.1	30.5	611.9	323.4	288.5	203.8	84.7	0.1	201.1	102.6	98.5	49.3	49.2	0.7	2015	
13.6	36.4	671.4	331.2	340.2	256.3	83.9	0.1	240.5	127.7	112.8	61.6	51.2	0.9	2015 June	
13.6	35.3	690.6	342.8	347.7	266.7	81.0	0.1	244.4	131.9	112.5	62.0	50.5	0.9	July	
13.7	35.2	681.5	334.5	347.0	264.5	82.5	0.1	253.6	135.3	118.3	65.9	52.4	0.9	Aug	
13.7	35.2	672.0	346.4	325.5	244.3	81.2	0.1	234.5	128.3	106.3	53.2	53.1	0.9	Sep	
13.5	35.2	656.9	362.9	294.0	212.7	81.3	0.1	243.4	134.6	108.8	56.6	52.3	0.8	Oct	
13.6	34.8	649.0	373.8	275.2	190.5	84.6	0.1	243.2	136.3	106.9	55.7	51.2	0.8	Nov	
13.1	30.5	611.9	323.4	288.5	203.8	84.7	0.1	201.1	102.6	98.5	49.3	49.2	0.7	Dec	
13.2	29.6	637.8	352.2	285.7	201.3	84.3	0.1	237.7	129.1	108.6	60.5	48.2	0.8	2016 Jan	
13.2	29.0	644.4	357.8	286.6	201.8	84.8	0.1	246.4	137.2	109.2	61.8	47.5	0.8	Feb	
13.3	28.9	623.4	349.6	273.8	192.0	81.8	0.0	218.8	119.8	99.0	52.9	46.1	0.8	Mar	
13.3	28.9	658.0	344.2	313.8	234.1	79.6	0.0	233.6	126.9	106.7	62.0	44.8	0.8	Apr	
13.3	28.9	664.6	389.5	275.1	195.6	79.5	0.0	239.7	130.6	109.0	64.2	44.8	0.7	May	
13.1	29.2	679.1	397.7	281.4	203.4	77.9	0.0	235.5	132.8	102.7	57.2	45.5	0.7	June	
13.1	29.4	706.1	408.3	297.8	217.9	80.0	0.0	244.0	129.1	114.9	68.2	46.6	0.7	July	
13.1	29.4	701.3	398.5	302.8	220.1	82.7	0.0	248.3	127.3	121.0	74.9	46.1	0.7	Aug	
13.1	29.4	679.5	366.0	313.5	231.3	82.2	0.0	233.3	124.6	108.7	62.0	46.7	0.7	Sep	
13.2	28.8	692.7	398.6	294.1	211.9	82.2	0.0	266.3	146.2	120.1	72.0	48.1	0.7	Oct	
13.2	28.9	703.9	416.7	287.2	203.2	84.0	0.0	266.2	138.3	128.0	79.1	48.9	0.7	Nov	
<b>Changes *</b>															
- 0.1	- 0.8	+ 67.3	+ 1.5	+ 65.8	+ 74.0	- 8.3	- 0.1	+ 4.6	- 5.5	+ 10.2	+ 16.6	- 6.4	+ 1.6	2007	
+ 0.7	- 3.1	- 50.1	+ 52.2	- 102.3	- 120.7	+ 18.5	+ 0.1	- 12.4	+ 16.1	- 28.5	- 19.4	- 9.1	- 0.6	2008	
- 3.2	+ 0.1	- 81.4	- 2.1	- 79.3	- 57.5	- 21.7	- 0.2	- 33.5	- 13.3	- 20.1	- 17.0	- 3.1	- 0.6	2009	
+ 0.2	+ 1.4	+ 895.4	+ 42.0	+ 542.4	+ 38.1	+ 136.8	- 0.1	- 1.6	+ 6.0	- 7.6	- 3.3	- 4.4	- 0.4	2010	
- 0.1	- 3.9	- 88.8	- 13.8	- 75.0	- 61.8	- 13.1	- 0.0	- 9.3	+ 6.4	- 15.7	- 10.4	- 5.3	- 0.2	2011	
- 0.3	+ 1.5	+ 38.2	+ 51.7	- 13.5	- 7.5	- 6.0	- 0.0	+ 12.6	+ 15.2	- 2.6	+ 2.5	- 5.1	- 0.1	2012	
- 1.8	- 7.2	- 174.0	- 75.6	- 98.4	- 83.1	- 15.4	- 0.0	+ 13.5	+ 9.6	+ 3.9	+ 6.9	- 3.0	- 0.2	2013	
+ 0.1	- 3.8	+ 76.3	+ 47.8	+ 28.5	+ 39.0	- 10.5	- 0.0	- 43.6	- 8.3	- 35.3	- 30.7	- 4.6	+ 0.2	2014	
- 0.6	- 6.1	- 15.4	+ 40.6	- 56.0	- 48.6	- 7.4	- 0.0	- 26.5	- 13.9	- 12.6	+ 0.3	- 13.0	- 0.0	2015	
- 0.2	- 0.3	- 39.2	- 25.0	- 14.1	- 12.8	- 1.3	- 0.0	- 23.9	- 14.5	- 9.3	- 8.9	- 0.5	+ 0.0	2015 June	
+ 0.0	- 1.2	+ 16.0	+ 10.6	+ 5.4	+ 8.7	- 3.3	- 0.0	+ 3.0	+ 3.8	- 0.8	+ 0.1	- 0.9	+ 0.0	July	
+ 0.0	+ 0.0	- 4.6	- 6.7	+ 2.1	+ 0.0	+ 2.0	-	+ 10.5	+ 4.0	+ 6.5	+ 4.3	+ 2.2	- 0.0	Aug	
+ 0.1	+ 0.0	- 9.5	+ 12.0	- 21.5	- 20.1	- 1.4	- 0.0	- 18.9	- 7.0	- 11.9	- 12.6	+ 0.7	+ 0.0	Sep	
- 0.2	- 0.1	- 18.2	+ 15.2	- 33.4	- 33.1	- 0.3	- 0.0	+ 7.9	+ 5.8	+ 2.0	+ 3.1	- 1.1	- 0.2	Oct	
+ 0.1	- 0.5	- 14.3	+ 8.4	- 22.7	- 25.2	+ 2.5	-	- 2.3	+ 0.6	- 2.9	- 1.3	- 1.6	+ 0.1	Nov	
- 0.2	- 4.3	- 32.0	- 48.3	+ 16.4	+ 15.5	+ 0.8	- 0.0	- 40.4	- 32.6	- 7.9	- 6.0	- 1.9	- 0.1	Dec	
+ 0.1	- 0.9	+ 27.6	+ 29.5	- 1.9	- 1.6	- 0.2	-	+ 36.9	+ 26.4	+ 10.6	+ 11.2	- 0.6	+ 0.1	2016 Jan	
+ 0.0	- 0.4	+ 6.2	+ 5.1	+ 1.1	+ 0.8	+ 0.3	-	+ 8.9	+ 8.3	+ 0.6	+ 1.3	- 0.7	- 0.0	Feb	
+ 0.0	- 0.0	- 14.0	- 5.4	- 8.6	- 6.7	- 2.0	- 0.0	- 25.6	- 16.5	- 9.1	- 7.9	- 1.2	+ 0.0	Mar	
+ 0.0	- 0.0	+ 34.2	- 5.7	+ 39.9	+ 40.6	- 0.7	-	+ 14.7	+ 7.1	+ 7.6	+ 9.1	- 1.4	- 0.0	Apr	
+ 0.0	+ 0.0	+ 2.8	+ 44.1	- 41.3	- 40.6	- 0.7	+ 0.0	+ 5.0	+ 3.3	+ 1.7	+ 1.9	- 0.2	- 0.1	May	
- 0.2	+ 0.3	+ 16.8	+ 9.4	+ 7.4	+ 7.8	- 0.4	- 0.0	- 4.5	+ 2.2	- 6.8	- 7.3	+ 0.5	+ 0.0	June	
+ 0.0	+ 0.4	+ 27.8	+ 11.0	+ 16.8	+ 14.7	+ 2.1	- 0.0	+ 8.5	- 3.8	+ 12.3	+ 11.5	+ 0.8	- 0.0	July	
+ 0.0	+ 0.0	- 4.3	- 9.5	+ 5.2	+ 2.4	+ 2.8	-	+ 4.5	- 1.7	+ 6.2	+ 6.7	- 0.5	- 0.1	Aug	
+ 0.0	- 0.0	- 21.2	- 32.3	+ 11.1	+ 11.6	- 0.5	- 0.0	- 14.8	- 2.7	- 12.1	- 12.7	+ 0.7	- 0.0	Sep	
+ 0.1	- 0.6	+ 11.1	+ 31.7	- 20.5	- 20.1	- 0.4	- 0.0	+ 32.5	+ 21.4	+ 11.2	+ 9.8	+ 1.3	+ 0.1	Oct	
+ 0.0	+ 0.0	+ 4.9	+ 15.8	- 10.9	- 12.0	+ 1.1	- 0.0	- 2.2	- 9.0	+ 6.9	+ 6.4	+ 0.4	+ 0.0	Nov	

#### IV Banks

#### 5 Lending by banks (MFIs) in Germany to domestic non-banks (non-MFIs) \*

€ billion

Period	Lending to domestic non-banks, total		Short-term lending						Medium and long-term		
	including negotiable money market paper, securities, equalisation claims	excluding negotiable money market paper, securities, equalisation claims	Total	to enterprises and households			to general government			Total	to enter-
				Total	Loans and bills	Negotiable money market paper	Total	Loans	Treasury bills		
<b>End of year or month *</b>											
2006	3,000.7	2,632.2	303.1	269.8	269.3	0.6	33.3	31.9	1.4	2,697.6	2,181.8
2007	2,975.7	2,649.5	331.2	301.8	301.5	0.3	29.4	28.2	1.2	2,644.6	2,168.3
2008	3,071.1	2,700.1	373.0	337.5	335.3	2.2	35.5	34.5	1.0	2,698.1	2,257.8
2009	3,100.1	2,692.6	347.3	306.3	306.2	0.1	41.0	37.1	3.9	2,752.8	2,299.7
2010	3,220.9	2,771.3	428.0	283.0	282.8	0.2	145.0	117.2	27.7	2,793.0	2,305.6
2011	3,197.8	2,775.4	383.3	316.5	316.1	0.4	66.8	60.7	6.0	2,814.5	2,321.9
2012	3,220.4	2,786.1	376.1	316.8	316.3	0.5	59.3	57.6	1.7	2,844.3	2,310.9
2013	3,131.6	2,693.2	269.1	217.7	217.0	0.6	51.4	50.8	0.6	2,862.6	2,328.6
2014	3,167.3	2,712.6	257.5	212.7	212.1	0.6	44.8	44.7	0.1	2,909.8	2,376.8
2015	3,233.9	2,764.4	255.5	207.8	207.6	0.2	47.8	47.5	0.2	2,978.3	2,451.4
2015 June	3,200.4	2,745.5	279.2	223.8	222.5	1.3	55.4	54.3	1.1	2,921.2	2,397.0
July	3,228.7	2,748.7	273.0	215.4	214.0	1.3	57.6	56.5	1.1	2,955.7	2,430.2
Aug	3,230.9	2,751.4	269.4	214.0	212.9	1.1	55.5	54.6	0.9	2,961.4	2,432.5
Sep	3,230.8	2,756.4	271.8	218.5	217.6	0.9	53.3	52.5	0.8	2,959.0	2,428.4
Oct	3,232.0	2,764.9	268.0	212.4	211.7	0.7	55.6	54.8	0.8	2,964.0	2,433.8
Nov	3,249.0	2,775.5	264.2	212.9	212.3	0.6	51.3	50.9	0.4	2,984.8	2,451.1
Dec	3,233.9	2,764.4	255.5	207.8	207.6	0.2	47.8	47.5	0.2	2,978.3	2,451.4
2016 Jan	3,238.7	2,771.4	259.0	208.1	207.7	0.4	50.9	50.5	0.3	2,979.7	2,452.5
Feb	3,248.0	2,781.8	266.3	214.3	213.6	0.7	52.0	51.2	0.8	2,981.7	2,456.1
Mar	3,247.2	2,786.3	271.4	218.7	217.9	0.8	52.6	52.2	0.4	2,975.9	2,454.1
Apr	3,260.6	2,798.7	273.9	217.9	217.2	0.8	56.0	55.5	0.5	2,986.6	2,466.5
May	3,264.8	2,805.6	276.1	221.2	220.4	0.8	55.0	54.4	0.6	2,988.7	2,472.7
June	3,252.1	2,797.5	268.8	217.8	216.8	1.1	51.0	50.3	0.7	2,983.3	2,472.8
July	3,264.5	2,806.6	268.8	213.8	212.9	1.0	55.0	54.2	0.7	2,995.6	2,483.9
Aug	3,265.9	2,811.2	262.2	208.1	207.5	0.6	54.1	53.4	0.7	3,003.8	2,497.1
Sep	3,274.2	2,820.2	268.7	214.2	213.7	0.5	54.5	53.4	1.1	3,005.4	2,502.7
Oct	3,281.0	2,828.8	269.7	212.6	212.0	0.6	57.1	56.1	1.0	3,011.3	2,512.3
Nov	3,293.1	2,840.2	268.0	216.3	215.8	0.5	51.7	51.0	0.8	3,025.0	2,525.5
<b>Changes *</b>											
2007	- 15.9	+ 11.8	+ 27.6	+ 31.5	+ 31.7	- 0.2	- 3.9	- 3.7	- 0.3	- 43.5	- 7.1
2008	+ 92.0	+ 46.9	+ 43.1	+ 36.8	+ 34.9	+ 1.8	+ 6.3	+ 6.3	- 0.0	+ 48.9	+ 83.4
2009	+ 25.7	- 11.6	- 26.1	- 31.5	- 30.0	- 1.5	+ 5.5	+ 2.5	+ 2.9	+ 51.8	+ 36.6
2010	+ 130.5	+ 78.7	+ 80.4	- 23.4	- 23.5	+ 0.1	+ 103.8	+ 80.1	+ 23.7	+ 50.1	+ 14.9
2011	- 30.6	- 3.2	- 45.2	+ 33.6	+ 33.3	+ 0.2	- 78.7	- 57.0	- 21.7	+ 14.6	+ 9.4
2012	+ 21.0	+ 9.6	- 9.7	- 1.6	- 1.7	+ 0.1	- 8.2	- 3.8	- 4.3	+ 30.7	+ 10.9
2013	+ 4.4	+ 0.1	- 13.8	- 5.8	- 6.3	+ 0.5	- 8.0	- 7.0	- 1.1	+ 18.2	+ 17.6
2014	+ 36.7	+ 20.5	- 11.6	- 4.5	- 4.5	- 0.0	- 7.1	- 6.5	- 0.6	+ 48.3	+ 52.5
2015	+ 68.9	+ 54.1	+ 1.6	- 1.3	- 0.9	- 0.4	+ 2.9	+ 2.8	+ 0.1	+ 67.2	+ 73.9
2015 June	- 7.5	+ 1.9	+ 6.8	+ 8.0	+ 7.8	+ 0.2	- 1.2	- 1.6	+ 0.4	- 14.3	- 10.1
July	+ 28.3	+ 3.1	- 6.2	- 8.4	- 8.4	+ 0.0	+ 2.2	+ 2.2	- 0.0	+ 34.4	+ 31.9
Aug	+ 2.3	+ 2.9	- 3.4	- 1.2	- 1.0	- 0.3	- 2.2	- 2.0	- 0.2	+ 5.7	+ 2.6
Sep	- 0.1	+ 4.9	+ 2.4	+ 4.5	+ 4.7	- 0.2	- 2.1	- 2.1	- 0.1	- 2.4	- 3.4
Oct	+ 1.2	+ 8.6	- 3.8	- 6.0	- 5.9	- 0.1	+ 2.2	+ 2.2	- 0.0	+ 5.1	+ 5.7
Nov	+ 16.7	+ 10.3	- 0.9	+ 3.4	+ 3.5	- 0.1	+ 4.3	- 3.9	- 0.4	+ 17.6	+ 14.1
Dec	- 15.1	- 11.0	- 8.6	- 5.1	- 4.7	- 0.4	- 3.5	- 3.3	- 0.2	- 6.5	+ 0.3
2016 Jan	+ 4.5	+ 6.7	+ 3.1	+ 0.0	- 0.1	+ 0.2	+ 3.1	+ 3.0	+ 0.1	+ 1.4	+ 1.1
Feb	+ 9.6	+ 10.5	+ 7.6	+ 6.4	+ 6.1	+ 0.3	+ 1.2	+ 0.7	+ 0.4	+ 2.0	+ 3.6
Mar	- 0.8	+ 4.5	+ 5.3	+ 4.7	+ 4.6	+ 0.1	+ 0.6	+ 1.0	- 0.4	- 6.0	- 2.2
Apr	+ 13.3	+ 12.4	+ 2.6	- 0.8	- 0.8	- 0.0	+ 3.4	+ 3.3	+ 0.1	+ 10.7	+ 12.3
May	+ 5.7	+ 8.3	+ 2.2	+ 3.2	+ 3.2	+ 0.0	- 1.0	- 1.1	+ 0.1	+ 3.5	+ 7.7
June	- 11.9	- 7.3	- 6.5	- 2.5	- 2.8	+ 0.3	- 4.0	- 4.1	+ 0.1	- 5.4	+ 0.2
July	+ 13.3	+ 10.2	+ 0.1	- 3.9	- 3.8	- 0.1	+ 4.0	+ 3.9	+ 0.1	+ 13.3	+ 12.0
Aug	+ 1.5	+ 4.6	- 6.7	- 5.8	- 5.4	- 0.4	- 0.9	- 0.8	- 0.1	+ 8.2	+ 13.2
Sep	+ 8.2	+ 9.0	+ 6.6	+ 6.2	+ 6.3	- 0.1	+ 0.4	- 0.0	+ 0.4	+ 1.6	+ 5.5
Oct	+ 7.0	+ 8.6	+ 1.1	- 1.5	- 1.6	+ 0.1	+ 2.6	+ 2.7	- 0.1	+ 5.8	+ 9.4
Nov	+ 12.1	+ 11.4	- 1.7	+ 3.7	+ 3.8	- 0.1	- 5.4	- 5.2	- 0.2	+ 13.7	+ 13.0

\* See Table IV.2, footnote\*; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent revisions, which appear in the following Monthly Report, are not specially

marked. **1** Excluding debt securities arising from the exchange of equalisation claims (see also footnote 2). **2** Including debt securities arising from the exchange of equalisation claims.



IV Banks

lending												Period
prises and households					to general government							
Loans			Securities	Memo item Fiduciary loans	Total	Loans			Secur- ities 1	Equal- isation claims 2	Memo item Fiduciary loans	
Total	Medium- term	Long- term				Total	Medium- term	Long- term				
<b>End of year or month *</b>												
1,972.7	194.5	1,778.1	209.1	48.2	515.8	358.4	31.7	326.6	157.4	–	4.8	2006
1,987.3	207.7	1,779.6	181.1	46.5	476.2	332.5	31.9	300.6	143.7	–	4.7	2007
2,022.0	222.0	1,800.0	235.8	42.8	440.3	308.2	29.7	278.5	132.1	–	4.5	2008
2,051.3	242.7	1,808.6	248.4	39.6	453.1	298.0	32.2	265.8	155.1	–	4.3	2009
2,070.0	238.1	1,831.8	235.7	30.7	487.3	301.2	36.1	265.1	186.1	–	3.1	2010
2,099.5	247.9	1,851.7	222.4	32.7	492.6	299.1	41.1	258.0	193.5	–	3.6	2011
2,119.5	249.7	1,869.8	191.4	31.4	533.4	292.7	39.4	253.3	240.7	–	3.5	2012
2,136.9	248.0	1,888.9	191.7	28.9	534.0	288.4	38.8	249.7	245.6	–	2.7	2013
2,172.7	251.7	1,921.0	204.2	24.4	532.9	283.1	33.5	249.6	249.8	–	2.1	2014
2,232.4	256.0	1,976.3	219.0	18.3	527.0	277.0	27.9	249.0	250.0	–	2.1	2015
2,190.5	251.5	1,939.0	206.5	23.3	524.2	278.3	28.7	249.5	246.0	–	2.0	2015 June
2,201.5	250.8	1,950.6	228.7	23.0	525.5	276.6	28.5	248.2	248.9	–	2.0	July
2,208.2	251.0	1,957.2	224.4	22.9	528.9	275.7	28.2	247.6	253.1	–	2.0	Aug
2,208.7	251.2	1,957.4	219.7	22.9	530.6	277.5	29.3	248.2	253.1	–	2.0	Sep
2,220.0	253.2	1,966.8	213.8	22.7	530.2	278.5	29.3	249.2	251.8	–	2.0	Oct
2,233.7	256.1	1,977.6	217.4	22.5	533.8	278.6	28.1	250.5	255.1	–	2.0	Nov
2,232.4	256.0	1,976.3	219.0	18.3	527.0	277.0	27.9	249.0	250.0	–	2.1	Dec
2,235.3	257.1	1,978.3	217.2	18.2	527.2	277.8	27.7	250.1	249.4	–	2.1	2016 Jan
2,240.2	257.4	1,982.8	215.9	18.0	525.6	276.8	27.7	249.1	248.8	–	2.1	Feb
2,240.5	257.3	1,983.2	213.5	17.9	521.8	275.6	27.5	248.1	246.2	–	2.0	Mar
2,249.9	258.6	1,991.3	216.6	17.8	520.1	276.1	27.5	248.7	244.0	–	2.0	Apr
2,255.8	258.0	1,997.8	216.9	17.7	516.0	275.1	27.1	247.9	240.9	–	2.0	May
2,256.9	258.7	1,998.2	216.0	17.8	510.4	273.5	26.9	246.6	236.9	–	1.8	June
2,266.8	258.5	2,008.2	217.1	17.7	511.7	272.7	25.9	246.8	239.0	–	1.8	July
2,278.8	260.6	2,018.1	218.4	17.6	506.6	271.5	25.9	245.6	235.1	–	1.8	Aug
2,283.5	261.0	2,022.5	219.3	17.5	502.7	269.6	25.4	244.2	233.1	–	1.8	Sep
2,290.5	261.5	2,029.0	221.8	17.3	498.9	270.2	24.4	245.7	228.8	–	1.8	Oct
2,302.5	264.0	2,038.5	223.0	17.3	499.5	270.9	24.3	246.6	228.6	–	1.8	Nov
<b>Changes *</b>												
+ 9.6	+ 10.1	– 0.6	– 16.7	– 2.2	– 36.3	– 25.8	+ 0.1	– 26.0	– 10.5	–	– 0.1	2007
+ 28.8	+ 12.0	+ 16.8	+ 54.7	– 5.3	– 34.5	– 23.2	– 2.3	– 20.8	– 11.4	–	– 0.1	2008
+ 23.5	+ 17.3	+ 6.3	+ 13.1	– 3.9	+ 15.2	– 7.6	+ 2.5	– 10.2	+ 22.8	–	– 0.2	2009
+ 18.6	– 4.0	+ 22.6	– 3.8	– 1.7	+ 35.2	+ 3.5	+ 3.5	– 0.0	+ 31.7	–	– 0.3	2010
+ 22.6	+ 2.2	+ 20.4	– 13.2	– 1.0	+ 5.2	– 2.1	+ 4.9	– 7.0	+ 7.3	–	– 0.2	2011
+ 21.6	+ 1.5	+ 20.1	– 10.7	– 1.1	+ 19.8	– 6.6	– 1.9	– 4.7	+ 26.4	–	– 0.2	2012
+ 17.7	– 0.1	+ 17.8	– 0.1	– 2.5	+ 0.6	– 4.3	– 0.7	– 3.6	+ 4.9	–	– 0.8	2013
+ 39.9	+ 5.6	+ 34.3	+ 12.5	– 1.8	– 4.1	– 8.5	– 5.1	– 3.4	+ 4.3	–	– 0.2	2014
+ 59.0	+ 4.5	+ 54.6	+ 14.8	– 2.1	– 6.6	– 6.9	– 4.8	– 2.0	+ 0.2	–	+ 0.0	2015
– 2.1	– 1.7	– 0.4	– 8.0	– 0.3	– 4.2	– 2.1	– 0.7	– 1.4	– 2.0	–	– 0.1	2015 June
+ 9.7	– 0.7	+ 10.4	+ 22.2	– 0.3	+ 2.5	– 0.4	– 0.2	– 0.2	+ 2.9	–	– 0.0	July
+ 6.9	+ 0.1	+ 6.8	– 4.3	– 0.1	+ 3.1	– 1.1	– 0.3	– 0.8	+ 4.3	–	– 0.0	Aug
+ 1.3	+ 0.6	+ 0.7	– 4.7	– 0.1	+ 1.0	+ 1.0	+ 0.9	+ 0.2	– 0.1	–	– 0.0	Sep
+ 11.6	+ 1.9	+ 9.7	– 5.9	– 0.1	– 0.7	+ 0.6	– 0.1	+ 0.7	– 1.3	–	– 0.0	Oct
+ 10.5	+ 2.0	+ 8.6	+ 3.6	– 0.2	+ 3.5	+ 0.2	– 1.1	+ 1.3	+ 3.4	–	–	Nov
– 1.3	– 0.1	– 1.2	+ 1.6	– 0.2	– 6.8	– 1.7	– 0.2	– 1.5	– 5.1	–	+ 0.1	Dec
+ 3.0	+ 0.4	+ 2.5	– 1.8	– 0.1	+ 0.2	+ 0.9	– 0.2	+ 1.1	– 0.6	–	+ 0.0	2016 Jan
+ 4.8	+ 1.0	+ 3.7	– 1.1	– 0.1	– 1.7	– 1.1	– 0.0	– 1.0	– 0.6	–	+ 0.0	Feb
+ 0.2	– 0.1	+ 0.2	– 2.4	– 0.2	– 3.8	– 1.2	– 0.2	– 1.0	– 2.6	–	– 0.1	Mar
+ 9.2	+ 1.2	+ 8.0	+ 3.0	– 0.0	– 1.6	+ 0.6	– 0.0	+ 0.6	– 2.2	–	– 0.0	Apr
+ 7.4	+ 0.8	+ 6.6	+ 0.3	– 0.1	– 4.2	– 1.1	– 0.4	– 0.8	– 3.1	–	– 0.0	May
+ 1.2	+ 0.7	+ 0.5	– 0.9	+ 0.1	– 5.6	– 1.6	– 0.2	– 1.4	– 4.0	–	– 0.2	June
+ 10.8	+ 0.8	+ 10.1	+ 1.1	– 0.1	+ 1.3	– 0.8	– 1.0	+ 0.2	+ 2.1	–	– 0.0	July
+ 12.0	+ 2.1	+ 9.9	+ 1.3	– 0.1	– 5.1	– 1.2	– 0.0	– 1.2	– 3.9	–	– 0.0	Aug
+ 4.6	+ 0.3	+ 4.2	+ 0.9	– 0.1	– 3.8	– 1.8	– 0.5	– 1.3	– 2.0	–	– 0.0	Sep
+ 6.8	+ 0.5	+ 6.2	+ 2.7	– 0.2	– 3.6	+ 0.7	– 0.9	+ 1.7	– 4.3	–	– 0.0	Oct
+ 11.9	+ 2.4	+ 9.4	+ 1.1	– 0.1	+ 0.7	+ 0.9	– 0.1	+ 1.0	– 0.1	–	+ 0.0	Nov

#### IV Banks

### 6 Lending by banks (MFIs) in Germany to domestic enterprises and households, housing loans, sectors of economic activity \*

€ billion

Lending to domestic enterprises and households (excluding holdings of negotiable money market paper and excluding securities portfolios) <sup>1</sup>														
Period	of which		Lending to enterprises and self-employed persons											
	Mortgage loans, total	Housing loans			Total	of which Housing loans	Manufacturing	Electricity, gas and water supply; refuse disposal, mining and quarrying	Construction	Wholesale and retail trade; repair of motor vehicles and motorcycles	Agriculture, forestry, fishing and aquaculture	Transportation and storage; post and telecommunications	Financial intermediation (excluding MFIs) and insurance companies	
		Total	Mortgage loans secured by residential real estate	Other housing loans										
<b>Lending, total</b>														
2014	2,384.8	1,225.7	1,188.7	984.3	204.4	1,291.6	328.3	122.9	100.1	59.8	123.7	47.8	68.4	124.8
2015 Sep	2,426.3	1,244.5	1,218.5	1,001.2	217.3	1,309.0	336.5	127.5	100.6	61.7	125.3	50.0	65.6	129.5
2015 Dec	2,440.0	1,253.3	1,230.2	1,010.4	219.8	1,314.2	339.6	127.4	100.9	60.5	125.2	50.0	65.3	130.5
2016 Mar	2,458.5	1,227.2	1,235.2	987.0	248.2	1,328.6	342.5	133.3	101.9	62.2	126.6	50.1	62.6	131.6
2016 Jun	2,473.6	1,235.1	1,248.0	996.2	251.8	1,332.0	345.8	131.5	101.7	62.7	125.4	50.9	59.0	133.7
2016 Sep	2,497.2	1,248.2	1,264.5	1,007.6	256.9	1,341.1	350.5	130.3	103.0	63.2	126.9	51.2	57.4	136.4
<b>Short-term lending</b>														
2014	212.1	-	7.6	-	7.6	177.2	3.9	32.5	6.0	11.8	41.2	3.6	5.9	23.2
2015 Sep	217.6	-	8.5	-	8.5	183.3	4.3	34.6	5.3	12.8	43.5	4.4	5.2	26.6
2015 Dec	207.6	-	8.5	-	8.5	173.8	4.3	33.7	4.7	11.5	42.0	3.9	5.3	24.1
2016 Mar	218.0	-	7.7	-	7.7	185.1	4.1	39.4	4.9	13.0	43.6	4.0	5.3	24.6
2016 Jun	216.8	-	7.9	-	7.9	184.7	4.3	37.0	4.7	13.1	42.1	4.2	5.1	27.2
2016 Sep	213.8	-	7.6	-	7.6	181.6	4.1	34.3	4.6	13.0	42.6	4.1	4.7	28.5
<b>Medium-term lending</b>														
2014	251.7	-	35.8	-	35.8	178.4	13.4	23.5	5.4	9.9	16.6	4.2	11.4	39.2
2015 Sep	251.2	-	35.5	-	35.5	176.8	13.4	24.0	5.1	10.3	15.8	4.4	11.3	39.3
2015 Dec	256.0	-	35.2	-	35.2	181.3	13.3	23.8	5.1	10.4	16.4	4.4	11.7	41.1
2016 Mar	257.3	-	34.8	-	34.8	181.8	13.2	23.9	5.1	10.4	16.2	4.5	11.5	41.2
2016 Jun	258.7	-	34.7	-	34.7	182.1	13.2	23.7	5.1	10.5	16.6	4.5	11.1	40.4
2016 Sep	261.0	-	34.8	-	34.8	183.4	13.4	24.3	5.7	10.5	16.5	4.6	11.0	41.1
<b>Long-term lending</b>														
2014	1,921.0	1,225.7	1,145.2	984.3	160.9	936.1	310.9	66.9	88.8	38.1	65.8	39.9	51.2	62.3
2015 Sep	1,957.4	1,244.5	1,174.5	1,001.2	173.3	948.9	318.8	68.8	90.2	38.5	66.0	41.2	49.0	63.6
2015 Dec	1,976.3	1,253.3	1,186.4	1,010.4	176.0	959.1	322.0	70.0	91.2	38.5	66.9	41.7	48.3	65.3
2016 Mar	1,983.2	1,227.2	1,192.7	987.0	205.7	961.7	325.3	70.1	91.9	38.8	66.8	41.7	45.8	65.8
2016 Jun	1,998.2	1,235.1	1,205.5	996.2	209.3	965.3	328.3	70.7	91.9	39.1	66.8	42.1	42.8	66.0
2016 Sep	2,022.5	1,248.2	1,222.1	1,007.6	214.5	976.1	332.9	71.7	92.7	39.7	67.8	42.4	41.6	66.9
<b>Lending, total</b>														
<b>Change during quarter *</b>														
2015 Q3	+ 13.2	+ 9.8	+ 13.6	+ 9.3	+ 4.3	- 0.6	+ 2.0	- 0.5	- 0.1	+ 0.1	+ 2.1	+ 0.9	- 1.4	- 0.6
2015 Q4	+ 13.7	+ 9.0	+ 11.4	+ 9.0	+ 2.4	+ 5.0	+ 3.1	- 0.4	+ 0.7	- 1.1	- 0.1	+ 0.0	- 0.0	+ 1.2
2016 Q1	+ 18.5	+ 3.5	+ 5.5	+ 5.4	+ 0.2	+ 14.1	+ 2.9	+ 5.9	+ 1.0	+ 1.8	+ 1.0	+ 0.1	- 2.8	+ 1.0
2016 Q2	+ 17.4	+ 7.0	+ 12.9	+ 8.9	+ 4.0	+ 5.7	+ 3.4	- 1.1	- 0.1	+ 0.5	- 1.0	+ 0.6	- 3.7	+ 3.3
2016 Q3	+ 24.5	+ 12.4	+ 16.0	+ 10.9	+ 5.1	+ 10.2	+ 4.2	- 1.1	+ 1.2	+ 0.6	+ 1.6	+ 0.3	- 1.6	+ 2.7
<b>Short-term lending</b>														
2015 Q3	- 4.7	-	+ 0.1	-	+ 0.1	- 4.8	+ 0.0	- 0.8	- 0.2	- 0.2	+ 2.0	+ 0.0	- 0.7	- 1.2
2015 Q4	- 7.1	-	+ 0.1	-	+ 0.1	- 7.1	+ 0.0	- 0.7	- 0.1	- 1.3	- 1.1	- 0.5	+ 0.3	- 2.2
2016 Q1	+ 10.6	-	- 0.2	-	- 0.2	+ 11.4	- 0.0	+ 5.7	+ 0.2	+ 1.5	+ 1.4	+ 0.1	+ 0.1	+ 0.4
2016 Q2	- 0.4	-	+ 0.1	-	+ 0.1	+ 0.3	+ 0.2	- 1.8	- 0.2	+ 0.1	- 1.3	+ 0.3	- 0.3	+ 2.6
2016 Q3	- 2.9	-	- 0.3	-	- 0.3	- 2.9	- 0.2	- 2.8	- 0.1	- 0.1	+ 0.6	- 0.1	- 0.3	+ 1.3
<b>Medium-term lending</b>														
2015 Q3	- 0.0	-	- 0.2	-	- 0.2	- 0.8	- 0.2	- 0.2	- 0.1	+ 0.1	- 0.3	+ 0.1	- 0.1	+ 0.1
2015 Q4	+ 3.8	-	- 0.3	-	- 0.3	+ 3.4	- 0.1	- 0.4	- 0.0	+ 0.1	+ 0.5	+ 0.0	+ 0.4	+ 1.6
2016 Q1	+ 1.4	-	- 0.4	-	- 0.4	+ 0.5	- 0.1	+ 0.1	+ 0.1	+ 0.0	- 0.2	+ 0.0	- 0.3	+ 0.1
2016 Q2	+ 2.7	-	- 0.2	-	- 0.2	+ 1.7	- 0.1	- 0.0	+ 0.0	+ 0.1	+ 0.4	- 0.0	- 0.3	+ 0.3
2016 Q3	+ 3.2	-	+ 0.1	-	+ 0.1	+ 2.4	+ 0.2	+ 0.7	+ 0.6	+ 0.1	+ 0.0	+ 0.1	- 0.1	+ 0.6
<b>Long-term lending</b>														
2015 Q3	+ 17.9	+ 9.8	+ 13.7	+ 9.3	+ 4.4	+ 5.0	+ 2.2	+ 0.5	+ 0.2	+ 0.2	+ 0.3	+ 0.7	- 0.5	+ 0.6
2015 Q4	+ 17.0	+ 9.0	+ 11.7	+ 9.0	+ 2.7	+ 8.6	+ 3.2	+ 0.7	+ 0.7	+ 0.1	+ 0.5	+ 0.5	- 0.7	+ 1.8
2016 Q1	+ 6.5	+ 3.5	+ 6.1	+ 5.4	+ 0.8	+ 2.1	+ 3.1	+ 0.1	+ 0.7	+ 0.2	- 0.2	+ 0.0	- 2.6	+ 0.6
2016 Q2	+ 15.1	+ 7.0	+ 12.9	+ 8.9	+ 4.1	+ 3.7	+ 3.2	+ 0.7	+ 0.0	+ 0.2	- 0.1	+ 0.4	- 3.1	+ 0.4
2016 Q3	+ 24.2	+ 12.4	+ 16.2	+ 10.9	+ 5.3	+ 10.7	+ 4.2	+ 1.0	+ 0.7	+ 0.6	+ 1.0	+ 0.3	- 1.2	+ 0.8

\* Excluding lending by foreign branches. Breakdown of lending by building and loan associations by areas and sectors estimated. Statistical alterations have been eliminated

from the changes. The figures for the latest date are always to be regarded as provisional; subsequent alterations, which will appear in the following Monthly Report,

IV Banks

						Lending to employees and other individuals					Lending to non-profit institutions			
Services sector (including the professions)				Memo items		Total	Housing loans	Other lending			Total	of which Housing loans	Period	
Total	of which			Lending to self-employed persons <sup>2</sup>	Lending to craft enterprises			Total	of which					Debit balances on wage, salary and pension accounts
	Housing enterprises	Holding companies	Other real estate activities						Instalment loans <sup>3</sup>					
<b>End of year or quarter *</b>													<b>Lending, total</b>	
644.1	188.1	33.9	173.8	389.8	47.9	1,078.6	856.6	222.0	150.0	10.7	14.5	3.8	2014	
649.0	191.5	32.0	175.9	394.7	47.7	1,103.0	878.4	224.6	153.6	11.0	14.2	3.6	2015 Sep	
654.3	193.4	32.4	176.5	395.6	46.8	1,111.6	887.1	224.6	154.4	10.1	14.2	3.5	Dec	
660.2	194.8	34.4	177.4	397.2	47.1	1,115.9	889.2	226.6	156.8	10.3	14.1	3.4	2016 Mar	
667.2	198.4	34.6	178.1	399.4	46.9	1,127.6	898.7	228.9	159.6	9.8	14.0	3.5	June	
672.7	201.4	34.8	180.8	401.1	46.8	1,142.0	910.5	231.5	162.3	9.8	14.2	3.5	Sep	
													Short-term lending	
52.9	8.5	6.1	11.8	26.6	6.2	34.2	3.7	30.5	1.9	10.7	0.7	0.0	2014	
51.0	8.6	6.2	10.4	26.1	6.3	33.8	4.2	29.6	1.7	11.0	0.6	0.0	2015 Sep	
48.7	8.7	4.9	10.7	25.4	5.6	33.2	4.2	29.0	1.7	10.1	0.5	0.0	Dec	
50.3	8.1	6.5	10.5	25.6	6.2	32.4	3.7	28.7	1.8	10.3	0.5	0.0	2016 Mar	
51.2	8.6	6.1	10.7	25.5	5.9	31.6	3.6	28.1	1.8	9.8	0.5	0.0	June	
49.9	8.5	5.9	11.1	24.7	5.7	31.6	3.4	28.2	1.7	9.8	0.5	0.0	Sep	
													Medium-term lending	
68.2	9.4	7.0	19.8	32.0	3.5	72.8	22.4	50.4	45.2	-	0.5	0.0	2014	
66.5	9.9	7.0	19.5	32.3	3.5	73.9	22.1	51.9	46.9	-	0.5	0.0	2015 Sep	
68.4	10.1	7.3	19.3	32.4	3.5	74.2	21.9	52.3	47.4	-	0.6	0.0	Dec	
69.1	10.1	7.2	19.4	32.7	3.5	74.9	21.5	53.3	48.1	-	0.6	0.0	2016 Mar	
70.1	10.6	7.3	19.0	33.0	3.6	76.0	21.4	54.6	49.3	-	0.6	0.0	June	
69.7	10.7	7.3	18.9	33.0	3.7	77.1	21.4	55.7	50.3	-	0.5	0.0	Sep	
													Long-term lending	
523.0	170.2	20.9	142.2	331.2	38.2	971.6	830.5	141.1	102.8	-	13.4	3.7	2014	
531.5	173.0	18.8	146.0	336.3	37.9	995.3	852.1	143.2	105.0	-	13.2	3.6	2015 Sep	
537.3	174.6	20.2	146.5	337.8	37.7	1,004.2	861.0	143.3	105.3	-	13.0	3.5	Dec	
540.8	176.7	20.7	147.6	338.9	37.4	1,008.6	864.0	144.6	106.9	-	13.0	3.4	2016 Mar	
545.8	179.2	21.2	148.5	340.9	37.4	1,019.9	873.7	146.2	108.6	-	13.0	3.4	June	
553.1	182.1	21.6	150.8	343.4	37.4	1,033.3	885.7	147.6	110.2	-	13.1	3.5	Sep	
<b>Change during quarter *</b>													<b>Lending, total</b>	
- 1.1	+ 0.6	- 1.1	+ 1.4	+ 1.9	- 0.3	+ 13.5	+ 11.5	+ 2.0	+ 1.9	+ 0.0	+ 0.3	+ 0.1	2015 Q3	
+ 4.6	+ 2.0	+ 0.3	+ 0.6	+ 0.8	- 0.9	+ 9.0	+ 8.5	+ 0.6	+ 1.0	- 0.9	- 0.3	- 0.1	Q4	
+ 6.1	+ 1.8	+ 1.8	+ 0.9	+ 1.1	+ 0.6	+ 4.4	+ 2.6	+ 1.7	+ 1.9	+ 0.2	- 0.0	- 0.0	2016 Q1	
+ 7.3	+ 3.1	+ 0.1	+ 1.3	+ 2.1	- 0.1	+ 11.8	+ 9.5	+ 2.3	+ 2.9	- 0.5	- 0.0	+ 0.0	Q2	
+ 6.4	+ 2.7	+ 0.3	+ 3.1	+ 1.7	- 0.1	+ 14.1	+ 11.8	+ 2.3	+ 2.4	+ 0.0	+ 0.2	+ 0.1	Q3	
													Short-term lending	
- 3.7	+ 0.1	- 0.7	- 0.4	- 1.0	- 0.2	+ 0.1	+ 0.1	+ 0.0	- 0.1	+ 0.0	- 0.0	+ 0.0	2015 Q3	
- 1.6	+ 0.1	- 1.1	+ 0.4	- 0.9	- 0.8	+ 0.0	+ 0.0	- 0.0	+ 0.1	- 0.9	- 0.0	+ 0.0	Q4	
+ 2.1	- 0.4	+ 1.7	- 0.2	+ 0.2	+ 0.6	- 0.8	- 0.2	- 0.7	+ 0.1	+ 0.2	- 0.0	+ 0.0	2016 Q1	
+ 1.0	+ 0.5	- 0.4	+ 0.3	- 0.2	- 0.3	- 0.7	- 0.1	- 0.6	- 0.1	- 0.5	- 0.0	-	Q2	
- 1.4	- 0.1	- 0.1	+ 0.3	- 0.8	- 0.2	- 0.0	- 0.1	+ 0.1	- 0.1	+ 0.0	+ 0.1	+ 0.0	Q3	
													Medium-term lending	
- 0.3	- 0.0	+ 0.1	+ 0.1	+ 0.1	- 0.1	+ 0.7	+ 0.1	+ 0.7	+ 0.7	-	+ 0.0	+ 0.0	2015 Q3	
+ 1.3	+ 0.1	+ 0.3	- 0.2	+ 0.1	- 0.0	+ 0.4	- 0.2	+ 0.6	+ 0.5	-	-	- 0.0	Q4	
+ 0.8	- 0.0	- 0.2	+ 0.1	+ 0.1	+ 0.1	+ 0.8	- 0.3	+ 1.1	+ 0.7	-	+ 0.0	+ 0.0	2016 Q1	
+ 1.2	+ 0.5	+ 0.0	- 0.2	+ 0.4	+ 0.1	+ 1.1	- 0.1	+ 1.2	+ 1.2	-	- 0.0	+ 0.0	Q2	
+ 0.4	+ 0.2	+ 0.1	- 0.1	+ 0.0	+ 0.0	+ 0.8	- 0.1	+ 0.9	+ 0.9	-	- 0.1	+ 0.0	Q3	
													Long-term lending	
+ 2.9	+ 0.5	- 0.5	+ 1.7	+ 2.8	- 0.0	+ 12.7	+ 11.4	+ 1.3	+ 1.4	-	+ 0.3	+ 0.1	2015 Q3	
+ 5.0	+ 1.7	+ 1.0	+ 0.5	+ 1.5	- 0.2	+ 8.6	+ 8.6	+ 0.0	+ 0.4	-	- 0.2	- 0.1	Q4	
+ 3.2	+ 2.2	+ 0.3	+ 1.0	+ 0.8	- 0.1	+ 4.4	+ 3.1	+ 1.3	+ 1.1	-	+ 0.0	- 0.0	2016 Q1	
+ 5.2	+ 2.1	+ 0.5	+ 1.3	+ 1.9	+ 0.1	+ 11.4	+ 9.7	+ 1.7	+ 1.7	-	- 0.0	+ 0.0	Q2	
+ 7.4	+ 2.5	+ 0.4	+ 2.8	+ 2.5	+ 0.1	+ 13.3	+ 12.0	+ 1.3	+ 1.6	-	+ 0.2	+ 0.1	Q3	

are not specially marked. <sup>1</sup> Excluding fiduciary loans. <sup>2</sup> Including sole proprietors.  
<sup>3</sup> Excluding mortgage loans and housing loans, even in the form of instalment credit.

#### IV Banks

#### 7 Deposits of domestic non-banks (non-MFIs) at banks (MFIs) in Germany\*

€ billion

Period	Deposits, total	Sight deposits	Time deposits 1,2					Savings deposits 3	Bank savings bonds 4	Memo item				
			Total	for up to and including 1 year	for more than 1 year 2					Fiduciary loans	Subordinated liabilities (excluding negotiable debt securities)	Liabilities arising from repos		
					Total	for up to and including 2 years	for more than 2 years							
<b>Domestic non-banks, total</b>													<b>End of year or month*</b>	
2013	3,048.7	1,409.9	952.0	254.8	697.2	29.7	667.5	610.1	76.6	32.9	29.0	5.4		
2014	3,118.2	1,517.8	926.7	257.0	669.7	29.4	640.3	607.8	66.0	30.9	26.2	1.7		
2015	3,224.7	1,673.7	898.4	243.0	655.4	37.3	618.1	596.5	56.1	29.3	20.5	0.5		
2015 Dec	3,224.7	1,673.7	898.4	243.0	655.4	37.3	618.1	596.5	56.1	29.3	20.5	0.5		
2016 Jan	3,233.8	1,689.6	893.3	236.2	657.1	39.0	618.1	596.1	54.8	29.3	20.1	0.5		
Feb	3,236.2	1,697.4	887.8	232.0	655.9	39.5	616.4	596.4	54.6	29.3	19.9	0.8		
Mar	3,231.2	1,687.4	894.9	236.4	658.5	41.4	617.1	594.5	54.4	29.1	19.8	1.6		
Apr	3,249.8	1,709.6	893.5	235.9	657.7	42.2	615.5	592.7	54.0	29.0	19.7	1.7		
May	3,262.7	1,721.8	896.1	237.7	658.3	41.9	616.5	591.2	53.7	29.0	19.6	1.5		
June	3,259.9	1,722.6	894.1	235.9	658.2	42.8	615.4	590.0	53.1	28.7	19.5	1.5		
July	3,275.7	1,737.1	896.8	238.0	658.8	44.5	614.3	589.1	52.7	28.6	19.3	1.0		
Aug	3,282.1	1,748.5	893.1	234.7	658.3	45.0	613.3	588.4	52.2	28.7	19.0	0.7		
Sep	3,283.7	1,748.1	896.6	239.5	657.2	45.5	611.7	587.2	51.8	28.6	18.8	1.3		
Oct	3,294.7	1,768.0	888.8	229.9	658.8	45.8	613.1	586.6	51.3	28.6	18.7	1.1		
Nov	3,328.9	1,800.3	891.5	233.6	657.9	46.4	611.5	586.2	50.9	28.6	18.6	0.8		
<b>Changes*</b>														
2014	+ 69.7	+ 107.9	- 25.3	+ 2.5	- 27.8	- 0.5	- 27.3	- 2.4	- 10.6	- 2.0	- 2.8	- 3.7		
2015	+ 106.5	+ 156.2	- 28.3	- 13.6	- 14.7	+ 7.6	- 22.3	- 11.3	- 10.1	- 1.6	- 5.7	- 1.2		
2015 Dec	- 0.0	- 3.2	+ 1.7	+ 3.4	- 1.7	+ 2.2	- 3.8	+ 2.2	- 0.7	- 0.2	- 2.0	- 1.5		
2016 Jan	+ 9.1	+ 15.8	- 5.8	- 7.2	+ 1.4	+ 1.7	- 0.3	- 0.4	- 0.6	+ 0.0	- 0.4	- 0.1		
Feb	+ 4.8	+ 7.9	- 3.1	- 2.8	- 0.4	+ 1.0	- 1.4	+ 0.3	- 0.2	- 0.0	- 0.1	+ 0.4		
Mar	- 5.0	- 10.0	+ 7.0	+ 4.4	+ 2.6	+ 1.9	+ 0.7	- 1.9	- 0.2	- 0.2	- 0.1	+ 0.8		
Apr	+ 18.6	+ 22.2	- 1.3	- 0.5	- 0.9	+ 0.8	- 1.7	- 1.8	- 0.5	- 0.1	- 0.1	+ 0.1		
May	+ 12.9	+ 12.2	+ 2.5	+ 1.9	+ 0.7	- 0.3	+ 1.0	- 1.5	- 0.3	- 0.0	- 0.1	- 0.2		
June	- 2.5	+ 0.9	- 1.7	- 1.6	- 0.1	+ 0.9	- 1.0	- 1.1	- 0.5	- 0.3	- 0.1	- 0.0		
July	+ 15.8	+ 14.5	+ 2.7	+ 2.1	+ 0.6	+ 1.7	- 1.1	- 0.9	- 0.5	- 0.0	- 0.2	- 0.5		
Aug	+ 6.4	+ 11.4	- 3.8	- 3.3	- 0.5	+ 0.5	- 1.0	- 0.7	- 0.5	+ 0.0	- 0.3	- 0.3		
Sep	+ 1.6	- 0.4	+ 3.6	+ 4.7	- 1.2	+ 0.5	- 1.6	- 1.2	- 0.3	- 0.0	- 0.2	+ 0.7		
Oct	+ 11.0	+ 20.0	- 7.9	- 9.5	+ 1.7	+ 0.2	+ 1.4	- 0.6	- 0.5	- 0.0	- 0.1	- 0.2		
Nov	+ 34.2	+ 32.3	+ 2.7	+ 3.6	- 0.9	+ 0.7	- 1.6	- 0.4	- 0.4	-	- 0.2	- 0.3		
<b>Domestic government</b>													<b>End of year or month*</b>	
2013	183.0	48.2	129.6	81.1	48.5	5.7	42.8	3.6	1.6	30.7	4.8	4.7		
2014	186.7	52.4	128.2	84.5	43.7	7.5	36.2	3.8	2.3	29.1	4.8	0.5		
2015	197.4	57.6	132.6	87.7	44.9	10.2	34.7	3.7	3.5	27.9	2.7	0.5		
2015 Dec	197.4	57.6	132.6	87.7	44.9	10.2	34.7	3.7	3.5	27.9	2.7	0.5		
2016 Jan	193.0	56.6	129.2	83.9	45.3	10.6	34.7	3.7	3.6	27.9	2.7	0.1		
Feb	194.5	61.4	125.9	80.4	45.6	10.6	34.9	3.6	3.6	27.9	2.7	0.5		
Mar	198.3	60.5	130.5	84.1	46.4	10.9	35.5	3.6	3.7	27.7	2.7	1.2		
Apr	196.0	60.8	127.7	79.9	47.8	11.0	36.9	3.7	3.7	27.6	2.6	1.3		
May	204.3	63.5	133.0	84.4	48.6	11.2	37.4	3.8	4.0	27.6	2.6	1.1		
June	204.0	62.1	134.0	84.6	49.4	11.6	37.8	3.9	4.0	27.3	2.6	0.2		
July	203.8	60.1	135.8	84.5	51.3	13.3	38.0	3.9	4.1	27.2	2.6	0.2		
Aug	206.1	62.4	135.6	83.6	52.1	13.7	38.4	4.0	4.1	27.3	2.6	0.0		
Sep	202.6	59.6	134.8	82.4	52.4	14.1	38.3	3.9	4.3	27.2	2.7	0.2		
Oct	199.1	58.8	132.1	78.9	53.2	14.9	38.3	3.9	4.3	27.2	2.7	-		
Nov	207.0	61.7	137.0	82.6	54.4	16.2	38.3	3.9	4.4	27.2	2.6	-		
<b>Changes*</b>														
2014	- 1.2	+ 1.9	- 3.9	+ 2.5	- 6.4	+ 1.0	- 7.4	+ 0.1	+ 0.7	- 1.6	- 0.1	- 4.2		
2015	+ 10.1	+ 5.2	+ 3.7	+ 2.9	+ 0.8	+ 2.5	- 1.7	- 0.0	+ 1.2	- 1.2	- 2.1	+ 0.1		
2015 Dec	- 3.0	- 0.9	- 2.1	- 2.9	+ 0.8	+ 0.7	+ 0.2	- 0.0	+ 0.0	- 0.2	- 0.1	- 1.0		
2016 Jan	- 4.5	- 1.0	- 3.5	- 3.9	+ 0.4	+ 0.4	+ 0.0	- 0.1	+ 0.0	+ 0.0	- 0.0	- 0.4		
Feb	+ 3.0	+ 4.8	- 1.8	- 2.4	+ 0.6	+ 0.3	+ 0.3	- 0.0	+ 0.0	- 0.0	- 0.0	+ 0.4		
Mar	+ 3.8	- 0.9	+ 4.6	+ 3.8	+ 0.8	+ 0.2	+ 0.6	+ 0.0	+ 0.1	- 0.2	- 0.0	+ 0.8		
Apr	- 2.3	+ 0.4	- 2.8	- 4.3	+ 1.5	+ 0.1	+ 1.4	+ 0.1	-	- 0.1	- 0.0	+ 0.1		
May	+ 8.2	+ 2.6	+ 5.2	+ 4.5	+ 0.8	+ 0.2	+ 0.6	+ 0.1	+ 0.2	- 0.0	- 0.0	- 0.2		
June	- 0.2	- 1.4	+ 1.1	+ 0.2	+ 0.9	+ 0.4	+ 0.4	+ 0.1	+ 0.0	- 0.3	- 0.0	- 0.9		
July	- 0.2	- 2.0	+ 1.7	- 0.2	+ 1.9	+ 1.7	+ 0.1	+ 0.0	+ 0.1	- 0.1	+ 0.0	- 0.1		
Aug	+ 2.1	+ 2.3	- 0.3	- 0.9	+ 0.6	+ 0.3	+ 0.3	+ 0.1	+ 0.0	+ 0.0	+ 0.0	- 0.1		
Sep	- 3.8	- 2.7	- 1.0	- 1.2	+ 0.2	+ 0.4	- 0.2	- 0.0	- 0.0	- 0.1	+ 0.0	+ 0.1		
Oct	- 3.5	- 0.8	- 2.7	- 3.6	+ 0.8	+ 0.8	- 0.0	- 0.0	+ 0.1	- 0.0	+ 0.0	- 0.2		
Nov	+ 7.8	+ 2.9	+ 5.0	+ 3.7	+ 1.3	+ 1.3	- 0.0	- 0.1	+ 0.0	- 0.0	- 0.1	- 0.2		

\* See Table IV.2, footnote \*; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent revisions, which appear in the following Monthly Report, are not

specially marked. 1 Including subordinated liabilities and liabilities arising from registered debt securities. 2 Including deposits under savings and loan contracts (see

IV Banks

7 Deposits of domestic non-banks (non-MFIs) at banks (MFIs) in Germany \* (cont'd)

€ billion

Period	Deposits, total	Sight deposits	Time deposits 1,2					Savings deposits 3	Bank savings bonds 4	Memo item				
			Total	for up to and including 1 year	for more than 1 year 2					Fiduciary loans	Subordinated liabilities (excluding negotiable debt securities)	Liabilities arising from repos		
					Total	for up to and including 2 years	for more than 2 years							
<b>Domestic enterprises and households</b>													<b>End of year or month*</b>	
2013	2,865.7	1,361.7	822.4	173.7	648.7	24.0	624.7	606.5	75.0	2.2	24.2	0.7		
2014	2,931.5	1,465.4	798.4	172.5	625.9	21.8	604.1	604.0	63.7	1.8	21.5	1.2		
2015	3,027.3	1,616.1	765.8	155.3	610.5	27.1	583.5	592.7	52.6	1.4	17.8	-		
2015 Dec	3,027.3	1,616.1	765.8	155.3	610.5	27.1	583.5	592.7	52.6	1.4	17.8	-		
2016 Jan	3,040.8	1,633.0	764.1	152.3	611.8	28.4	583.5	592.4	51.3	1.4	17.4	0.4		
Feb	3,041.7	1,636.1	761.9	151.6	610.3	28.8	581.5	592.7	51.0	1.4	17.2	0.3		
Mar	3,032.9	1,626.9	764.4	152.2	612.2	30.5	581.6	590.9	50.7	1.4	17.2	0.3		
Apr	3,053.8	1,648.8	765.8	156.0	609.8	31.2	578.6	589.0	50.3	1.4	17.1	0.3		
May	3,058.5	1,658.3	763.1	153.3	609.7	30.7	579.0	587.4	49.7	1.4	17.0	0.4		
June	3,055.9	1,660.5	760.1	151.3	608.8	31.2	577.6	586.2	49.1	1.4	16.9	1.2		
July	3,071.8	1,677.0	761.1	153.6	607.5	31.2	576.3	585.2	48.6	1.4	16.7	0.8		
Aug	3,076.0	1,686.1	757.4	151.1	606.3	31.4	574.9	584.4	48.1	1.4	16.4	0.6		
Sep	3,081.1	1,688.4	761.8	157.0	604.8	31.4	573.3	583.2	47.6	1.4	16.1	1.2		
Oct	3,095.6	1,709.2	756.7	151.1	605.6	30.9	574.8	582.7	47.0	1.4	16.0	1.1		
Nov	3,121.9	1,738.6	754.5	151.0	603.5	30.3	573.2	582.3	46.5	1.5	15.9	0.8		
													<b>Changes*</b>	
2014	+ 70.8	+ 106.0	- 21.4	- 0.0	- 21.4	- 1.5	- 19.9	- 2.5	- 11.2	- 0.4	- 2.7	+ 0.5		
2015	+ 96.4	+ 151.0	- 32.0	- 16.5	- 15.4	+ 5.1	- 20.6	- 11.3	- 11.3	- 0.4	- 3.7	- 1.2		
2015 Dec	+ 3.0	- 2.3	+ 3.9	+ 6.4	- 2.5	+ 1.5	- 4.0	+ 2.2	- 0.7	+ 0.0	- 1.9	- 0.4		
2016 Jan	+ 13.6	+ 16.8	- 2.2	- 3.3	+ 1.0	+ 1.3	- 0.3	- 0.3	- 0.6	- 0.0	- 0.4	+ 0.4		
Feb	+ 1.8	+ 3.1	- 1.3	- 0.4	- 0.9	+ 0.7	- 1.7	+ 0.3	- 0.2	+ 0.0	- 0.1	- 0.0		
Mar	- 8.8	- 9.1	+ 2.5	+ 0.6	+ 1.8	+ 1.7	+ 0.2	- 1.9	- 0.3	+ 0.0	- 0.1	-		
Apr	+ 20.9	+ 21.8	+ 1.4	+ 3.8	- 2.3	+ 0.7	- 3.0	- 1.9	- 0.5	+ 0.0	- 0.1	-		
May	+ 4.8	+ 9.6	- 2.7	- 2.6	- 0.1	- 0.5	+ 0.4	- 1.6	- 0.6	+ 0.0	- 0.1	+ 0.0		
June	- 2.2	+ 2.3	- 2.8	- 1.8	- 1.0	+ 0.5	- 1.5	- 1.2	- 0.6	- 0.0	- 0.1	+ 0.9		
July	+ 15.9	+ 16.4	+ 1.0	+ 2.3	- 1.3	- 0.0	- 1.3	- 1.0	- 0.5	+ 0.0	- 0.2	- 0.4		
Aug	+ 4.3	+ 9.1	- 3.5	- 2.4	- 1.1	+ 0.2	- 1.3	- 0.8	- 0.5	- 0.0	- 0.4	- 0.2		
Sep	+ 5.4	+ 2.3	+ 4.6	+ 5.9	- 1.3	+ 0.1	- 1.4	- 1.2	- 0.3	+ 0.0	- 0.2	+ 0.5		
Oct	+ 14.5	+ 20.8	- 5.1	- 6.0	+ 0.8	+ 0.6	+ 1.4	- 0.5	- 0.6	+ 0.0	- 0.1	- 0.1		
Nov	+ 26.4	+ 29.4	- 2.3	- 0.1	- 2.2	- 0.6	- 1.6	- 0.3	- 0.5	+ 0.0	- 0.1	- 0.3		
<b>of which: Domestic enterprises</b>													<b>End of year or month*</b>	
2013	1,011.3	429.1	559.7	105.6	454.0	10.1	444.0	7.2	15.3	2.2	17.2	0.7		
2014	1,007.9	457.1	529.1	104.1	425.0	10.4	414.6	6.9	14.9	1.8	16.4	1.2		
2015	1,029.8	502.8	506.5	99.8	406.7	14.4	392.3	7.1	13.3	1.3	14.0	-		
2015 Dec	1,029.8	502.8	506.5	99.8	406.7	14.4	392.3	7.1	13.3	1.3	14.0	-		
2016 Jan	1,037.6	512.8	504.2	97.4	406.9	15.3	391.6	7.2	13.3	1.3	13.7	0.4		
Feb	1,033.9	510.7	502.8	97.4	405.3	15.7	389.6	7.2	13.3	1.3	13.7	0.3		
Mar	1,029.9	504.8	504.6	98.0	406.7	17.2	389.5	7.2	13.2	1.3	13.7	0.3		
Apr	1,032.3	506.7	505.1	101.3	403.8	17.5	386.4	7.2	13.2	1.3	13.7	0.3		
May	1,035.5	513.4	501.5	98.2	403.3	17.0	386.3	7.3	13.3	1.3	13.7	0.4		
June	1,027.4	508.9	498.0	95.7	402.2	17.6	384.7	7.3	13.3	1.3	13.7	1.2		
July	1,027.0	506.7	499.6	98.2	401.4	17.5	384.0	7.4	13.4	1.3	13.6	0.8		
Aug	1,030.7	512.7	497.2	96.9	400.2	17.7	382.5	7.4	13.4	1.3	13.3	0.6		
Sep	1,035.0	512.9	501.4	103.0	398.4	17.8	380.7	7.3	13.4	1.3	13.1	1.2		
Oct	1,040.1	523.5	496.0	96.5	399.5	17.2	382.2	7.3	13.3	1.3	13.1	1.1		
Nov	1,043.0	528.1	494.6	96.6	398.1	16.9	381.2	6.9	13.3	1.3	13.0	0.8		
													<b>Changes*</b>	
2014	- 1.4	+ 28.8	- 29.5	- 1.0	- 28.5	+ 0.4	- 28.9	- 0.4	- 0.3	- 0.4	- 0.8	+ 0.5		
2015	+ 22.7	+ 46.0	- 22.1	- 3.8	- 18.3	+ 3.7	- 22.0	+ 0.3	- 1.5	- 0.5	- 2.5	- 1.2		
2015 Dec	- 4.1	- 5.9	+ 2.2	+ 7.2	- 4.9	+ 1.0	- 5.9	+ 0.1	- 0.5	+ 0.0	- 1.8	- 0.4		
2016 Jan	+ 7.9	+ 10.0	- 2.2	- 2.6	+ 0.4	+ 0.9	- 0.5	+ 0.1	- 0.0	- 0.0	- 0.3	+ 0.4		
Feb	- 2.9	- 2.1	- 0.8	+ 0.4	- 1.1	+ 0.5	- 1.6	- 0.0	- 0.0	- 0.0	+ 0.1	- 0.0		
Mar	- 4.1	- 5.9	+ 1.9	+ 0.5	+ 1.3	+ 1.5	- 0.1	+ 0.0	- 0.1	- 0.0	- 0.0	-		
Apr	+ 2.4	+ 1.9	+ 0.5	+ 3.3	- 2.8	+ 0.3	- 3.1	+ 0.0	+ 0.0	- 0.0	- 0.0	-		
May	+ 3.3	+ 6.8	- 3.6	- 3.1	- 0.5	- 0.4	- 0.1	+ 0.0	+ 0.1	- 0.0	+ 0.0	+ 0.0		
June	- 7.8	- 4.4	- 3.4	- 2.3	- 1.1	+ 0.5	- 1.6	+ 0.0	- 0.0	- 0.0	+ 0.0	+ 0.9		
July	- 0.1	- 2.0	+ 1.6	+ 2.4	- 0.8	- 0.1	- 0.7	+ 0.1	+ 0.2	- 0.0	- 0.1	- 0.4		
Aug	+ 3.8	+ 6.0	- 2.3	- 1.2	- 1.1	+ 0.3	- 1.4	+ 0.0	+ 0.0	- 0.0	- 0.3	- 0.2		
Sep	+ 4.7	+ 0.2	+ 4.4	+ 6.1	- 1.7	+ 0.1	- 1.7	- 0.1	+ 0.1	+ 0.0	- 0.2	+ 0.5		
Oct	+ 5.0	+ 10.6	- 5.4	- 6.5	+ 1.0	- 0.5	+ 1.6	- 0.1	- 0.1	+ 0.0	+ 0.0	- 0.1		
Nov	+ 3.0	+ 4.6	- 1.5	- 0.0	- 1.4	- 0.3	- 1.1	- 0.2	+ 0.1	+ 0.0	- 0.1	- 0.3		

Table IV.12). 3 Excluding deposits under savings and loan contracts (see also footnote 2). 4 Including liabilities arising from non-negotiable bearer debt securities.

#### IV Banks

#### 8 Deposits of domestic households and non-profit institutions at banks (MFIs) in Germany\*

€ billion

Period	Sight deposits						Time deposits 1,2					
	Total	by creditor group					Total	by creditor group				
		Domestic households						Domestic non-profit institutions				
		Total	Self-employed persons	Employees	Other individuals	Domestic non-profit institutions		Total	Self-employed persons	Employees	Other individuals	
<b>End of year or month*</b>												
2013	1,854.4	932.5	906.3	161.3	613.0	132.0	26.2	262.8	247.2	16.5	215.1	15.6
2014	1,923.6	1,008.3	980.1	173.3	673.0	133.8	28.2	269.3	254.7	27.8	185.0	41.8
2015	1,997.5	1,113.3	1,081.2	188.9	748.6	143.7	32.1	259.3	246.2	24.9	179.8	41.6
2016 June	2,028.5	1,151.7	1,116.7	191.3	779.9	145.5	34.9	262.1	248.8	25.5	181.3	42.0
July	2,044.8	1,170.3	1,135.8	198.4	791.4	146.0	34.5	261.5	247.9	25.7	180.7	41.5
Aug	2,045.3	1,173.3	1,138.1	201.5	790.3	146.4	35.2	260.2	246.7	24.7	180.7	41.4
Sep	2,046.0	1,175.5	1,140.3	198.3	795.2	146.8	35.2	260.4	246.8	24.8	180.8	41.1
Oct	2,055.5	1,185.7	1,150.8	202.8	800.4	147.6	34.9	260.7	247.0	24.9	181.0	41.0
Nov	2,078.9	1,210.5	1,175.6	203.9	821.4	150.3	34.9	259.9	246.7	24.8	180.7	41.2
<b>Changes*</b>												
2014	+ 72.3	+ 77.2	+ 74.0	+ 11.7	+ 57.1	+ 5.3	+ 3.2	+ 8.1	+ 7.6	+ 1.9	+ 6.4	- 0.6
2015	+ 73.7	+ 105.0	+ 101.1	+ 15.6	+ 75.4	+ 10.1	+ 3.9	- 9.9	- 8.1	- 3.0	- 4.5	- 0.7
2016 June	+ 5.6	+ 6.7	+ 6.5	- 2.4	+ 8.3	+ 0.6	+ 0.3	+ 0.6	+ 0.3	+ 0.2	+ 0.1	- 0.0
July	+ 16.1	+ 18.4	+ 18.8	+ 7.1	+ 10.4	+ 1.4	- 0.4	- 0.6	- 0.9	+ 0.2	- 0.8	- 0.3
Aug	+ 0.5	+ 3.1	+ 2.3	+ 3.2	- 1.1	+ 0.3	+ 0.7	- 1.2	- 1.2	- 1.0	- 0.0	- 0.2
Sep	+ 0.7	+ 2.2	+ 2.2	- 3.2	+ 4.9	+ 0.5	- 0.1	+ 0.2	+ 0.0	+ 0.1	+ 0.2	- 0.2
Oct	+ 9.5	+ 10.2	+ 10.5	+ 4.4	+ 5.3	+ 0.8	- 0.3	+ 0.3	+ 0.2	+ 0.1	+ 0.2	- 0.1
Nov	+ 23.4	+ 24.8	+ 24.8	+ 1.7	+ 20.9	+ 2.2	+ 0.0	- 0.8	- 0.3	- 0.1	- 0.0	- 0.1

\* See Table IV.2, footnote\*; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent

revisions, which appear in the following Monthly Report, are not specially marked. 1 Including subordinated liabilities and liabilities arising from registered debt

#### 9 Deposits of domestic government at banks (MFIs) in Germany, by creditor group\*

€ billion

Period	Deposits												
	Domestic government, total	Federal Government and its special funds 1						State governments					
		Total	Sight deposits	Time deposits		Savings deposits and bank savings bonds 2	Memo item Fiduciary loans	Total	Sight deposits	Time deposits		Savings deposits and bank savings bonds 2	Memo item Fiduciary loans
				for up to and including 1 year	for more than 1 year					for up to and including 1 year	for more than 1 year		
<b>End of year or month*</b>													
2013	183.0	16.0	2.9	7.7	5.3	0.1	15.7	43.6	10.2	10.1	23.0	0.2	14.6
2014	186.7	10.5	2.6	2.4	5.5	0.1	14.6	40.2	13.4	10.4	15.8	0.7	14.1
2015	197.4	9.6	3.1	3.9	2.6	0.1	14.1	44.3	13.2	13.7	16.5	0.9	13.5
2016 June	204.0	8.8	3.9	2.2	2.6	0.1	13.8	51.7	14.7	19.0	17.1	0.9	13.1
July	203.8	8.1	3.6	1.8	2.6	0.1	13.8	53.9	15.1	20.4	17.5	0.8	13.1
Aug	206.1	7.9	3.6	1.6	2.6	0.1	13.8	51.9	14.4	19.2	17.4	0.9	13.1
Sep	202.6	8.1	3.7	1.8	2.5	0.1	13.8	53.0	14.8	19.8	17.5	0.9	13.0
Oct	199.1	7.6	3.6	1.4	2.5	0.1	13.8	49.9	14.4	17.1	17.4	1.0	13.0
Nov	207.0	8.2	4.5	1.3	2.3	0.1	13.8	46.8	13.2	14.9	17.5	1.1	13.0
<b>Changes*</b>													
2014	- 1.2	- 3.3	- 0.3	- 2.9	- 0.1	+ 0.0	- 1.0	- 3.7	+ 2.8	+ 0.4	- 7.2	+ 0.4	- 0.5
2015	+ 10.1	- 1.9	+ 0.5	+ 0.4	- 2.9	+ 0.0	- 0.6	+ 4.0	- 0.3	+ 3.4	+ 0.7	+ 0.2	- 0.6
2016 June	- 0.2	+ 0.7	+ 0.6	+ 0.1	- 0.1	+ 0.0	- 0.3	+ 2.4	+ 1.1	+ 1.4	+ 0.0	- 0.0	- 0.0
July	- 0.2	- 0.7	- 0.3	- 0.3	- 0.0	- 0.0	+ 0.0	+ 2.2	+ 0.5	+ 1.4	+ 0.4	- 0.0	- 0.1
Aug	+ 2.1	- 0.2	+ 0.0	- 0.2	+ 0.0	-	+ 0.0	- 1.9	- 0.7	- 1.2	- 0.1	+ 0.0	+ 0.0
Sep	+ 3.8	+ 0.1	+ 0.1	+ 0.1	- 0.1	-	+ 0.0	+ 1.0	+ 0.3	+ 0.5	+ 0.1	+ 0.0	+ 0.1
Oct	- 3.5	- 0.5	- 0.1	- 0.4	- 0.0	-	- 0.0	- 3.1	- 0.4	- 2.7	- 0.1	+ 0.1	- 0.0
Nov	+ 7.8	+ 0.6	+ 0.9	- 0.1	- 0.2	+ 0.0	-	- 3.3	- 1.2	- 2.2	+ 0.0	+ 0.0	- 0.0

\* See Table IV.2, footnote\*; excluding deposits of the Treuhand agency and its successor organisations, of the Federal Railways, east German Railways and Federal Post Office, and, from 1995, of Deutsche Bahn AG, Deutsche Post AG and Deutsche

Telekom AG, and of publicly owned enterprises, which are included in "Enterprises". Statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent revisions, which appear in

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					Savings deposits <sup>3</sup>				Memo item				Period
by maturity					Total	Domestic households	Domestic non-profit institutions	Bank savings bonds <sup>4</sup>	Fiduciary loans	Subordinated liabilities (excluding negotiable debt securities) <sup>5</sup>	Liabilities arising from repos		
Domestic non-profit institutions	up to and including 1 year	more than 1 year <sup>2</sup>											
		Total	of which										
		up to and including 2 years	more than 2 years										
<b>End of year or month*</b>													
15.6	68.1	194.7	14.0	180.7	599.3	589.6	9.7	59.8	0.0	7.0	–	2013	
14.6	68.4	200.9	11.4	189.5	597.2	587.7	9.4	48.8	0.0	5.0	–	2014	
13.1	55.5	203.9	12.7	191.1	585.6	576.6	9.0	39.2	0.0	3.8	–	2015	
13.3	55.6	206.5	13.6	192.9	578.9	569.9	9.0	35.9	0.1	3.2	–	2016 June	
13.6	55.4	206.1	13.7	192.3	577.8	568.9	9.0	35.2	0.1	3.1	–	July	
13.5	54.2	206.0	13.7	192.4	577.0	568.0	9.0	34.7	0.1	3.1	–	Aug	
13.6	54.0	206.3	13.7	192.6	575.9	567.0	8.9	34.2	0.1	3.0	–	Sep	
13.7	54.5	206.1	13.6	192.5	575.4	566.7	8.8	33.7	0.1	2.9	–	Oct	
13.2	54.5	205.4	13.3	192.1	575.4	566.8	8.5	33.2	0.1	2.9	–	Nov	
<b>Changes*</b>													
+ 0.5	+ 1.0	+ 7.1	– 2.0	+ 9.0	– 2.1	– 1.9	– 0.3	– 10.9	+ 0.0	– 1.9	–	2014	
– 1.8	– 12.8	+ 2.9	+ 1.4	+ 1.4	– 11.5	– 11.1	– 0.5	– 9.8	+ 0.0	– 1.2	–	2015	
+ 0.3	+ 0.5	+ 0.1	– 0.0	+ 0.2	– 1.2	– 1.3	+ 0.1	– 0.6	+ 0.0	– 0.1	–	2016 June	
+ 0.3	– 0.2	– 0.5	+ 0.1	– 0.6	– 1.0	– 1.0	– 0.0	– 0.7	+ 0.0	– 0.1	–	July	
– 0.0	– 1.2	+ 0.0	– 0.1	+ 0.1	– 0.8	– 0.8	+ 0.0	– 0.5	+ 0.0	– 0.1	–	Aug	
+ 0.1	– 0.2	+ 0.3	+ 0.0	+ 0.3	– 1.1	– 1.1	– 0.1	– 0.4	+ 0.0	– 0.0	–	Sep	
+ 0.1	+ 0.5	– 0.2	– 0.1	– 0.1	– 0.5	– 0.3	– 0.1	– 0.5	+ 0.0	– 0.1	–	Oct	
– 0.5	– 0.1	– 0.7	– 0.3	– 0.5	– 0.1	+ 0.2	– 0.2	– 0.5	+ 0.0	– 0.0	–	Nov	

securities. <sup>2</sup> Including deposits under savings and loan contracts (see Table IV.12). <sup>3</sup> Excluding deposits under savings and loan contracts (see also foot-note

2). <sup>4</sup> Including liabilities arising from non-negotiable bearer debt securities. <sup>5</sup> Included in time deposits.

Local government and local government associations (including municipal special-purpose associations)						Social security funds						Period
Total	Sight deposits	Time deposits <sup>3</sup>		Savings deposits and bank savings bonds <sup>2,4</sup>	Memo item Fiduciary loans	Total	Sight deposits	Time deposits		Savings deposits and bank savings bonds <sup>2</sup>	Memo item Fiduciary loans	
		for up to and including 1 year	for more than 1 year					for up to and including 1 year	for more than 1 year			
<b>End of year or month*</b>												
44.9	23.5	10.7	6.6	4.1	0.4	78.7	11.6	52.7	13.5	0.9	0.0	2013
48.0	25.3	11.2	7.0	4.5	0.4	88.0	11.1	60.6	15.4	0.9	–	2014
52.4	29.2	9.6	8.3	5.2	0.4	91.2	12.1	60.5	17.5	1.1	–	2015
50.7	27.7	8.6	9.0	5.5	0.4	92.7	15.8	54.8	20.8	1.4	–	2016 June
48.3	25.4	8.0	9.4	5.5	0.4	93.5	16.0	54.2	21.9	1.5	–	July
54.2	30.3	8.7	9.6	5.6	0.4	92.0	14.1	54.0	22.4	1.5	–	Aug
51.3	27.5	8.5	9.8	5.6	0.4	90.2	13.6	52.4	22.6	1.6	–	Sep
49.3	25.8	8.2	9.8	5.5	0.4	92.3	15.1	52.1	23.5	1.6	–	Oct
53.1	29.0	8.7	9.9	5.6	0.4	98.9	15.0	57.7	24.8	1.5	–	Nov
<b>Changes*</b>												
+ 2.9	+ 1.8	+ 0.4	+ 0.3	+ 0.4	– 0.0	+ 2.9	– 2.4	+ 4.6	+ 0.6	– 0.0	– 0.0	2014
+ 4.1	+ 3.8	– 1.5	+ 1.1	+ 0.7	+ 0.0	+ 4.0	+ 1.2	+ 0.6	+ 1.9	+ 0.2	–	2015
– 2.9	– 2.4	– 0.7	+ 0.1	+ 0.1	–	– 0.4	– 0.7	– 0.5	+ 0.8	+ 0.0	–	2016 June
– 2.5	– 2.3	– 0.6	+ 0.4	+ 0.0	– 0.0	+ 0.8	+ 0.2	– 0.6	+ 1.1	+ 0.1	–	July
+ 5.9	+ 4.9	+ 0.7	+ 0.2	+ 0.0	–	– 1.7	– 1.9	– 0.2	+ 0.5	+ 0.0	–	Aug
– 2.9	– 2.7	– 0.2	+ 0.0	– 0.0	– 0.0	– 2.0	– 0.5	– 1.7	+ 0.2	– 0.0	–	Sep
– 2.0	– 1.7	– 0.2	+ 0.0	– 0.0	–	+ 2.1	+ 1.5	– 0.3	+ 0.9	+ 0.0	–	Oct
+ 3.9	+ 3.3	+ 0.5	+ 0.1	+ 0.0	–	+ 6.6	– 0.1	+ 5.6	+ 1.3	– 0.2	–	Nov

the following Monthly Report, are not specially marked. <sup>1</sup> Federal Railways Fund, Indemnification Fund, Redemption Fund for Inherited Liabilities, ERP Special Fund, German Unity Fund, Equalisation of Burdens Fund. <sup>2</sup> Including liabilities arising from

non-negotiable bearer debt securities. <sup>3</sup> Including deposits under savings and loan contracts. <sup>4</sup> Excluding deposits under savings and loan contracts (see also footnote 3).

#### IV Banks

#### 10 Savings deposits and bank savings bonds of banks (MFIs) in Germany sold to non-banks (non-MFIs)\*

€ billion

Period	Savings deposits <sup>1</sup>								Memo item Interest credited on savings deposits	Bank savings bonds <sup>3</sup> , sold to			
	of residents				of non-residents					non-banks, total	domestic non-banks		foreign non-banks
	Total	Total	at three months' notice		at more than three months' notice		Total	of which At three months' notice			Total	of which With maturities of more than 2 years	
			Total	of which Special savings facilities <sup>2</sup>	Total	of which Special savings facilities <sup>2</sup>							
<b>End of year or month*</b>													
2013	620.0	610.1	532.4	413.5	77.8	65.2	9.9	7.9	7.5	92.2	76.6	59.3	15.6
2014	617.0	607.8	531.3	401.4	76.4	63.3	9.2	7.4	6.1	79.8	66.0	51.4	13.8
2015	605.4	596.5	534.6	379.7	61.9	48.0	8.9	7.4	4.4	64.9	56.1	41.0	8.7
2016 July	597.6	589.1	534.5	367.6	54.6	40.8	8.4	7.2	0.2	61.3	52.7	37.7	8.6
Aug	596.8	588.4	534.6	365.4	53.8	40.0	8.4	7.2	0.1	60.7	52.2	37.3	8.6
Sep	595.4	587.2	534.1	363.6	53.1	39.2	8.3	7.1	0.1	60.4	51.8	37.0	8.5
Oct	594.8	586.6	534.3	362.7	52.3	38.5	8.2	7.0	0.2	60.0	51.3	36.5	8.6
Nov	594.3	586.2	534.4	361.4	51.8	38.0	8.1	6.9	0.2	59.7	50.9	36.1	8.8
<b>Changes*</b>													
2014	- 3.0	- 2.4	- 2.4	- 13.0	+ 0.0	- 1.0	- 0.6	- 0.5	.	- 12.3	- 10.6	- 7.8	- 1.8
2015	- 11.6	- 11.3	+ 4.3	- 20.6	- 15.6	- 16.3	- 0.3	+ 0.0	.	- 15.1	- 10.1	- 6.6	- 5.1
2016 July	- 1.0	- 0.9	- 0.1	- 1.7	- 0.8	- 0.8	- 0.1	- 0.0	.	- 0.4	- 0.5	- 0.3	+ 0.1
Aug	- 0.8	- 0.7	+ 0.1	- 2.1	- 0.8	- 0.8	- 0.1	- 0.0	.	- 0.5	- 0.5	- 0.4	- 0.1
Sep	- 1.3	- 1.2	- 0.5	- 1.9	- 0.7	- 0.7	- 0.1	- 0.1	.	- 0.3	- 0.3	- 0.2	- 0.0
Oct	- 0.7	- 0.6	+ 0.2	- 0.8	- 0.8	- 0.8	- 0.1	- 0.1	.	- 0.4	- 0.5	- 0.5	+ 0.1
Nov	- 0.5	- 0.4	+ 0.1	- 1.3	- 0.5	- 0.5	- 0.1	- 0.0	.	- 0.3	- 0.4	- 0.4	+ 0.2

\* See Table IV.2, footnote\*; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent revisions, which appear in the following Monthly Report, are not specially marked. <sup>1</sup> Excluding deposits under savings and loan contracts, which are classified

as time deposits. <sup>2</sup> Savings deposits bearing interest at a rate which exceeds the minimum or basic rate of interest. <sup>3</sup> Including liabilities arising from non-negotiable bearer debt securities.

#### 11 Debt securities and money market paper outstanding of banks (MFIs) in Germany\*

€ billion

Period	Negotiable bearer debt securities and money market paper										Non-negotiable bearer debt securities and money market paper <sup>6</sup>		Subordinated	
	Total	of which				with maturities of				Total	of which with maturities of more than 2 years	negotiable debt securities	non-negotiable debt securities	
		Floating rate bonds <sup>1</sup>	Zero coupon bonds <sup>1,2</sup>	Foreign currency bonds <sup>3,4</sup>	Certificates of deposit	up to and including 1 year		more than 1 year up to and including 2 years						
						Total	of which without a nominal guarantee <sup>5</sup>	Total	of which without a nominal guarantee <sup>5</sup>					
<b>End of year or month*</b>														
2013	1,142.7	315.9	26.3	321.2	54.8	69.0	2.5	34.7	4.4	1,039.0	0.6	0.2	37.0	1.1
2014	1,114.2	286.4	26.3	354.0	69.2	83.6	1.8	26.3	5.0	1,004.3	1.0	0.2	33.7	1.2
2015	1,075.7	189.2	30.2	384.1	88.7	109.8	2.1	28.4	5.7	937.5	0.3	0.2	31.9	0.5
2016 July	1,079.0	174.5	30.6	387.9	92.6	114.1	4.0	33.8	6.2	931.1	0.4	0.2	34.0	0.5
Aug	1,083.2	173.3	29.7	393.3	94.4	115.7	4.1	33.7	6.3	933.7	0.4	0.2	33.6	0.5
Sep	1,086.5	169.5	32.5	398.2	100.1	125.2	5.0	35.5	5.9	925.7	0.3	0.2	33.4	0.5
Oct	1,093.1	171.2	29.7	404.1	97.2	121.0	5.0	36.6	6.0	935.5	0.2	0.2	33.3	0.5
Nov	1,104.5	178.2	28.0	407.8	91.3	113.7	5.0	37.7	6.3	953.2	0.4	0.2	33.5	0.5
<b>Changes*</b>														
2014	- 28.7	- 29.5	+ 0.0	+ 32.7	+ 14.4	+ 14.6	- 0.7	- 8.4	+ 0.6	- 35.0	+ 0.4	- 0.0	+ 0.2	+ 0.2
2015	- 38.5	- 97.2	+ 3.9	+ 30.1	+ 19.5	+ 26.2	+ 0.3	+ 2.1	+ 0.7	- 66.8	- 0.8	+ 0.0	- 1.8	- 0.7
2016 July	- 12.5	- 1.2	- 1.7	- 8.9	- 5.4	- 5.6	+ 1.5	+ 1.7	+ 0.3	- 8.6	+ 0.2	+ 0.0	- 0.1	- 0.0
Aug	+ 4.2	- 1.2	- 1.0	+ 5.4	+ 1.8	+ 1.7	+ 0.1	- 0.0	+ 0.1	+ 2.6	+ 0.0	- 0.0	- 0.4	-
Sep	+ 3.3	- 3.7	+ 2.8	+ 4.9	+ 5.7	+ 9.5	+ 0.8	+ 1.8	- 0.3	- 8.0	- 0.0	- 0.0	- 0.2	+ 0.0
Oct	+ 6.6	+ 1.3	- 2.8	+ 5.9	- 2.9	- 4.2	+ 0.0	+ 1.0	+ 0.1	+ 9.8	- 0.2	- 0.0	- 0.1	-
Nov	+ 11.4	+ 7.0	- 1.7	+ 3.7	- 5.8	- 7.3	+ 0.1	+ 1.1	+ 0.3	+ 17.7	+ 0.2	- 0.0	+ 0.2	-

\* See Table IV.2, footnote\*; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent revisions, which appear in the following Monthly Report, are not specially marked. <sup>1</sup> Including debt securities denominated in foreign currencies. <sup>2</sup> Issue value when floated. <sup>3</sup> Including floating rate notes and zero

coupon bonds denominated in foreign currencies. <sup>4</sup> Bonds denominated in non-euro-area currencies. <sup>5</sup> Negotiable bearer debt securities respectively money market paper with a nominal guarantee of less than 100%. <sup>6</sup> Non-negotiable bearer debt securities are classified among bank savings bonds (see also Table IV.10, footnote 2).



#### IV Banks

##### 12 Building and loan associations (MFIs) in Germany \*) Interim statements

€ billion

End of year/month	Number of associations	Balance sheet total <b>13</b>	Lending to banks (MFIs)			Lending to non-banks (non-MFIs)				Deposits of banks (MFIs) <b>5</b>		Deposits of non-banks (non-MFIs)		Bearer debt securities outstanding	Capital (including published reserves) <b>7</b>	Memo item New contracts entered into in year or month <b>8</b>
			Credit balances and loans (excluding building loans) <b>1</b>	Building loans <b>2</b>	Bank debt securities <b>3</b>	Building loans			Securities (including Treasury bills and Treasury discount paper) <b>4</b>	Deposits under savings and loan contracts	Sight and time deposits	Deposits under savings and loan contracts	Sight and time deposits <b>6</b>			
						Loans under savings and loan contracts	Interim and bridging loans	Other building loans								
<b>All building and loan associations</b>																
2014	21	211.6	45.6	0.0	16.6	18.7	87.2	17.3	20.6	1.9	21.3	156.8	5.2	2.8	9.2	94.6
2015	21	213.6	43.1	0.0	17.5	15.8	93.4	17.5	21.4	2.0	21.3	159.2	5.3	2.4	9.9	98.5
2016 Sep	20	215.1	41.1	0.0	17.0	14.3	97.1	17.9	22.8	2.2	19.0	160.9	5.6	2.6	10.2	7.0
Oct	20	215.5	41.5	0.0	16.9	14.2	97.2	18.1	22.9	2.3	19.2	161.0	5.6	2.6	10.2	7.0
Nov	20	217.8	43.1	0.0	16.8	14.0	97.5	18.2	23.4	2.5	19.0	161.4	5.6	2.0	10.2	7.3
<b>Private building and loan associations</b>																
2016 Sep	12	148.9	25.4	–	8.6	10.6	75.5	15.3	9.8	1.5	16.4	105.7	5.2	2.6	6.6	4.4
Oct	12	149.2	25.9	–	8.4	10.6	75.5	15.4	9.8	1.5	16.7	105.6	5.2	2.6	6.6	4.4
Nov	12	151.2	27.4	–	8.2	10.5	75.6	15.5	10.2	1.7	16.5	105.8	5.3	2.0	6.6	4.7
<b>Public building and loan associations</b>																
2016 Sep	8	66.2	15.7	0.0	8.5	3.7	21.7	2.6	13.1	0.8	2.6	55.3	0.4	–	3.6	2.5
Oct	8	66.3	15.6	0.0	8.5	3.6	21.8	2.7	13.1	0.8	2.5	55.4	0.4	–	3.6	2.6
Nov	8	66.6	15.7	0.0	8.6	3.5	21.9	2.7	13.2	0.8	2.6	55.6	0.3	–	3.6	2.5

##### Trends in building and loan association business

€ billion

Period	Changes in deposits under savings and loan contracts			Capital promised		Capital disbursed					Disbursement commitments outstanding at end of period		Interest and repayments received on building loans <b>10</b>		Memo item Housing bonuses received <b>12</b>	
	Amounts paid into savings and loan accounts <b>9</b>	Interest credited on deposits under savings and loan contracts	Repayments of deposits under cancelled savings and loan contracts	Total	of which Net allocations <b>11</b>	Total	Allocations				Total	of which Under allocated contracts	Total	of which Repayments during quarter		
							Deposits under savings and loan contracts		Loans under savings and loan contracts <b>9</b>							Newly granted interim and bridging loans and other building loans
							Total	of which Applied to settlement of interim and bridging loans	Total	of which Applied to settlement of interim and bridging loans						
<b>All building and loan associations</b>																
2014	29.5	2.5	6.5	45.7	27.9	39.9	16.7	4.2	6.1	3.6	17.1	14.5	8.0	10.1	8.4	0.4
2015	28.1	2.5	8.2	51.5	31.2	44.4	19.9	4.2	5.3	3.6	19.2	15.6	8.1	9.5	8.3	0.4
2016 Sep	2.3	0.0	0.6	3.4	1.9	3.3	1.3	0.3	0.3	0.2	1.7	15.7	8.1	0.6	1.8	0.0
Oct	2.0	0.0	0.6	3.9	2.3	3.3	1.4	0.4	0.4	0.3	1.5	15.9	8.2	0.6	1.8	0.0
Nov	2.3	0.0	0.6	4.0	2.0	3.2	1.3	0.4	0.4	0.3	1.5	16.3	8.1	0.6	1.8	0.0
<b>Private building and loan associations</b>																
2016 Sep	1.5	0.0	0.3	2.5	1.3	2.5	0.9	0.2	0.2	0.2	1.3	11.3	5.0	0.5	1.3	0.0
Oct	1.3	0.0	0.3	3.0	1.7	2.6	1.1	0.3	0.3	0.3	1.2	11.4	5.1	0.5	1.3	0.0
Nov	1.5	0.0	0.3	3.0	1.4	2.5	1.0	0.3	0.3	0.3	1.2	11.8	5.0	0.4	1.3	0.0
<b>Public building and loan associations</b>																
2016 Sep	0.8	0.0	0.3	0.9	0.6	0.8	0.4	0.1	0.1	0.1	0.3	4.5	3.1	0.2	0.5	0.0
Oct	0.8	0.0	0.3	0.9	0.6	0.7	0.3	0.1	0.1	0.1	0.3	4.5	3.1	0.2	0.5	0.0
Nov	0.8	0.0	0.3	1.0	0.6	0.7	0.3	0.1	0.1	0.1	0.3	4.5	3.1	0.2	0.5	0.0

\* Excluding assets and liabilities and/or transactions of foreign branches. The figures for the latest date are always to be regarded as provisional. Subsequent revisions, which appear in the following Monthly Report, are not specially marked. **1** Including claims on building and loan associations, claims arising from registered debt securities and central bank credit balances. **2** Loans under savings and loan contracts and interim and bridging loans. **3** Including money market paper and small amounts of other securities issued by banks. **4** Including equalisation claims. **5** Including liabilities to building and loan associations. **6** Including small amounts of savings deposits. **7** Including participation rights capital and fund for general banking risks.

**8** Total amount covered by the contracts; only contracts newly entered into, for which the contract fee has been fully paid. Increases in the sum contracted count as new contracts. **9** For disbursements of deposits under savings and loan contracts arising from the allocation of contracts see "Capital disbursed". **10** Including housing bonuses credited. **11** Only allocations accepted by the beneficiaries; including allocations applied to settlement of interim and bridging loans. **12** The amounts already credited to the accounts of savers or borrowers are also included in "Amounts paid into savings and loan accounts" and "Interest and repayments received on building loans". **13** See Table IV.2, footnote 1.

#### IV Banks

#### 13 Assets and liabilities of the foreign branches and foreign subsidiaries of German banks (MFIs) \*

€ billion

Period	Number of		Lending to banks (MFIs)						Lending to non-banks (non-MFIs)				Other assets <sup>7</sup>			
	German banks (MFIs) with foreign branches and/or foreign subsidiaries	foreign branches and/or foreign subsidiaries <sup>1</sup>	Balance sheet total <sup>7</sup>	Credit balances and loans				Money market paper, securities <sup>2,3</sup>	Loans			Money market paper, securities <sup>2</sup>	Total	of which Derivative financial instruments in the trading portfolio		
				Total	German banks	Foreign banks	Total		Total	to German non-banks	to foreign non-banks					
<b>Foreign branches</b>															<b>End of year or month *</b>	
2013	56	209	1,726.4	435.6	421.9	141.6	280.3	13.7	519.6	411.3	11.0	400.3	108.3	771.1	485.6	
2014	56	205	1,926.2	548.8	532.2	201.2	331.0	16.5	593.5	473.1	14.0	459.1	120.5	783.8	551.9	
2015	51	198	1,842.9	526.0	508.7	161.3	347.5	17.3	635.1	511.6	14.0	497.6	123.6	681.8	499.0	
2016 Jan	50	196	1,960.5	540.7	523.3	169.1	354.2	17.4	652.2	529.7	14.2	515.5	122.6	767.5	568.7	
Feb	49	192	2,022.6	555.3	538.2	173.5	364.7	17.2	658.4	538.2	14.3	523.9	120.2	808.8	607.9	
Mar	49	192	1,943.8	558.9	543.2	172.4	370.8	15.7	642.2	529.2	14.6	514.6	113.1	742.6	557.5	
Apr	49	192	1,933.2	545.0	529.1	177.2	351.8	15.9	659.8	545.1	14.7	530.4	114.7	728.4	539.0	
May	48	187	1,930.1	563.9	548.9	176.4	372.5	15.0	642.5	529.8	13.6	516.3	112.7	723.7	519.2	
June	49	188	2,036.5	569.2	553.5	182.3	371.2	15.6	674.8	556.9	14.1	542.8	117.9	792.5	593.8	
July	50	187	2,060.2	587.5	572.6	183.1	389.6	14.9	668.3	551.7	13.6	538.1	116.5	804.5	590.3	
Aug	50	187	1,959.7	569.3	553.9	187.9	366.0	15.4	643.3	528.5	13.9	514.6	114.7	747.1	544.6	
Sep	50	187	1,916.6	595.9	581.3	200.4	380.9	14.6	629.3	524.9	14.3	510.6	104.4	691.4	511.1	
Oct	50	186	1,942.2	626.9	613.0	212.4	400.6	13.9	599.9	496.1	13.3	482.8	103.7	715.4	497.2	
<b>Changes *</b>																
2014	-	- 4	+ 119.6	+ 74.4	+ 72.2	+ 59.6	+ 12.6	+ 2.2	+ 38.0	+ 31.4	+ 3.0	+ 28.4	+ 6.6	+ 7.5	+ 66.4	
2015	- 5	- 7	- 145.0	- 56.3	- 56.0	- 40.0	- 16.0	- 0.3	+ 4.5	+ 7.0	+ 0.0	+ 7.0	- 2.6	- 109.0	- 58.2	
2016 Feb	- 1	- 4	+ 61.6	+ 13.6	+ 13.8	+ 4.4	+ 9.5	- 0.3	+ 5.1	+ 7.4	+ 0.1	+ 7.3	- 2.3	+ 40.7	+ 38.8	
Mar	-	-	- 75.2	+ 14.9	+ 16.0	- 1.0	+ 17.0	- 1.1	- 1.0	+ 4.0	+ 0.3	+ 3.7	- 5.0	- 62.5	- 39.6	
Apr	-	-	- 10.9	- 14.2	- 14.4	+ 4.8	- 19.2	+ 0.2	+ 15.9	+ 14.4	+ 0.2	+ 14.3	+ 1.4	- 14.5	- 18.8	
May	- 1	- 5	- 4.7	+ 13.3	+ 14.4	- 0.9	+ 15.3	- 1.1	- 25.5	- 22.3	- 1.2	- 21.1	- 3.2	- 6.4	- 24.9	
June	+ 1	+ 1	+ 105.9	+ 4.4	+ 3.8	+ 5.9	- 2.2	+ 0.6	+ 33.6	+ 27.7	+ 0.5	+ 27.2	+ 5.9	+ 68.4	+ 75.4	
July	+ 1	- 1	+ 24.0	+ 18.7	+ 19.4	+ 0.7	+ 18.7	- 0.7	- 4.5	- 3.5	- 0.4	- 3.1	- 1.0	+ 12.2	- 2.6	
Aug	-	-	- 100.4	- 17.6	- 18.2	+ 4.9	- 23.0	+ 0.5	- 24.1	- 22.5	+ 0.3	- 22.7	- 1.7	- 57.2	- 45.2	
Sep	-	-	- 42.9	+ 27.4	+ 28.1	+ 12.5	+ 15.6	- 0.7	- 12.8	- 2.7	+ 0.4	- 3.1	- 10.1	- 55.6	- 32.4	
Oct	-	- 1	+ 24.9	+ 26.9	+ 27.7	+ 11.9	+ 15.8	- 0.8	- 32.2	- 31.4	- 0.9	- 30.5	- 0.8	+ 23.3	- 16.4	
<b>Foreign subsidiaries</b>															<b>End of year or month *</b>	
2013	33	75	425.2	187.9	158.7	91.4	67.3	29.2	185.4	148.3	26.1	122.3	37.1	52.0	-	
2014	28	63	389.4	154.5	137.9	83.4	54.5	16.7	172.7	141.2	21.6	119.5	31.5	62.2	-	
2015	24	58	376.0	126.5	113.5	50.1	63.4	13.0	184.3	152.5	22.2	130.3	31.8	65.1	-	
2016 Jan	24	58	375.6	129.1	116.5	53.7	62.7	12.7	185.1	152.9	21.7	131.1	32.3	61.3	-	
Feb	24	58	359.4	120.7	108.5	50.7	57.9	12.2	174.1	141.8	22.3	119.6	32.3	64.6	-	
Mar	24	58	352.2	113.6	102.1	47.9	54.2	11.5	173.4	140.6	22.6	118.1	32.8	65.2	-	
Apr	24	58	349.7	116.3	104.9	48.9	56.0	11.4	169.8	137.4	23.0	114.4	32.4	63.7	-	
May	24	57	350.4	115.3	103.9	49.0	54.9	11.4	170.6	138.2	22.9	115.3	32.4	64.5	-	
June	24	57	356.9	117.7	107.5	52.9	54.6	10.2	170.5	138.0	22.9	115.1	32.5	68.7	-	
July	19	56	355.3	116.3	106.2	51.8	54.5	10.1	170.3	137.4	23.7	113.7	32.9	68.7	-	
Aug	19	55	352.7	112.4	102.3	48.0	54.3	10.0	167.7	135.4	23.0	112.3	32.3	72.6	-	
Sep	19	53	320.9	84.2	74.1	20.9	53.2	10.0	168.0	135.7	23.2	112.6	32.3	68.7	-	
Oct	19	53	316.6	81.4	71.3	20.5	50.8	10.1	157.9	126.3	22.9	103.4	31.5	77.3	-	
<b>Changes *</b>																
2014	- 5	- 12	- 46.7	- 39.9	- 26.3	- 8.0	- 18.2	- 13.6	- 17.0	- 11.4	- 4.4	- 7.0	- 5.6	+ 10.1	-	
2015	- 4	- 5	- 23.9	- 33.3	- 28.7	- 33.3	+ 4.6	- 4.6	+ 6.5	+ 6.2	+ 0.6	+ 5.6	+ 0.3	+ 2.9	-	
2016 Feb	-	-	- 16.4	- 8.5	- 8.0	- 3.1	- 5.0	- 0.5	- 11.2	- 11.2	+ 0.5	- 11.7	+ 0.0	+ 3.3	-	
Mar	-	-	- 3.7	- 5.2	- 4.8	- 2.7	- 2.1	- 0.4	+ 0.9	+ 0.4	+ 0.3	+ 0.1	+ 0.5	+ 0.6	-	
Apr	-	-	- 2.5	+ 2.7	+ 2.8	+ 1.0	+ 1.8	- 0.1	- 3.7	- 3.3	+ 0.4	- 3.7	- 0.4	- 1.5	-	
May	-	- 1	- 1.1	- 2.0	- 1.8	+ 0.1	- 1.9	- 0.2	+ 0.0	+ 0.0	- 0.1	+ 0.1	- 0.0	+ 0.8	-	
June	-	-	+ 6.7	+ 2.4	+ 3.6	+ 3.9	- 0.3	- 1.3	+ 0.1	- 0.1	- 0.0	- 0.1	+ 0.2	+ 4.2	-	
July	- 5	- 1	- 1.4	- 1.2	- 1.2	- 1.2	- 0.0	- 0.1	- 0.2	- 0.5	+ 0.8	- 1.3	+ 0.4	- 0.0	-	
Aug	-	- 1	- 2.3	- 3.8	- 3.8	+ 3.8	+ 0.0	- 0.0	- 2.4	- 1.9	- 0.7	- 1.2	- 0.6	+ 4.0	-	
Sep	-	- 2	- 31.5	- 28.0	- 28.0	- 27.0	- 1.0	- 0.0	+ 0.4	+ 0.4	+ 0.1	+ 0.3	- 0.0	- 3.9	-	
Oct	-	-	- 5.6	- 3.6	- 3.5	- 0.5	- 3.0	- 0.1	- 10.6	- 9.8	- 0.3	- 9.6	- 0.8	+ 8.6	-	

\* In this table "foreign" also includes the country of domicile of the foreign branches and foreign subsidiaries. Statistical revisions have been eliminated from the changes. (Breaks owing to changes in the reporting population have not been eliminated from

the flow figures for the foreign subsidiaries.) The figures for the latest date are always to be regarded as provisional; subsequent revisions, which appear in the following Monthly Report, are not specially marked. <sup>1</sup> Several branches in a given

IV Banks

Deposits											Other liabilities <sup>6,7</sup>		Period	
Total	of banks (MFIs)			of non-banks (non-MFIs)					Money market paper and debt securities outstanding <sup>5</sup>	Working capital and own funds	Total	of which Derivative financial instruments in the trading portfolio		
	Total	German banks	Foreign banks	Total	German non-banks <sup>4</sup>			Foreign non-banks						
					Total	Short-term	Medium and long-term							
<b>End of year or month *</b>													<b>Foreign branches</b>	
890.9	596.4	327.0	269.4	294.5	24.2	19.1	5.1	270.3	125.4	41.2	668.9	484.1	2013	
1,046.7	739.9	416.2	323.7	306.8	20.6	16.1	4.4	286.2	128.4	45.2	705.8	557.5	2014	
1,060.9	715.3	359.3	356.0	345.6	21.1	16.2	4.9	324.6	128.9	49.9	603.1	497.4	2015	
1,101.8	733.9	357.8	376.1	367.9	21.3	16.6	4.8	346.5	129.4	50.0	679.3	566.3	2016 Jan	
1,105.0	734.8	368.7	366.1	370.3	22.1	17.4	4.7	348.2	127.7	49.7	740.1	605.7	Feb	
1,083.8	714.8	344.5	370.3	369.0	23.6	19.5	4.1	345.4	121.3	49.4	689.3	559.2	Mar	
1,108.9	719.0	348.0	371.0	389.9	21.5	17.4	4.1	368.5	117.7	49.4	657.2	541.5	Apr	
1,130.1	746.9	358.9	388.0	383.2	20.7	17.2	3.6	362.5	111.0	49.7	639.4	523.0	May	
1,154.9	762.2	386.5	375.6	392.8	21.3	17.8	3.5	371.5	104.9	49.8	726.9	596.8	June	
1,163.1	772.6	388.8	383.8	390.5	21.3	17.5	3.8	369.2	108.5	49.8	738.9	593.8	July	
1,128.2	760.8	382.8	378.1	367.4	21.6	17.7	3.8	345.8	114.7	49.8	667.0	548.8	Aug	
1,117.2	763.1	380.6	382.5	354.1	21.5	17.7	3.8	332.6	113.7	49.7	636.1	513.9	Sep	
1,186.7	833.2	422.0	411.2	353.4	21.6	17.8	3.8	331.9	108.9	49.6	597.0	491.1	Oct	
<b>Changes *</b>													<b>Foreign subsidiaries</b>	
+ 101.5	+112.9	+ 89.2	+ 23.6	- 11.4	- 3.7	- 3.0	- 0.7	- 7.7	+ 3.0	+ 4.0	+ 11.1	+ 73.4	2014	
- 30.8	- 53.8	- 57.0	+ 3.2	+ 23.0	+ 0.5	+ 0.0	+ 0.4	+ 22.5	- 2.1	+ 4.7	- 124.1	- 65.8	2015	
+ 2.0	- 0.4	+ 10.9	- 11.3	+ 2.4	+ 0.8	+ 0.8	- 0.0	+ 1.6	- 2.2	- 0.3	+ 60.9	+ 39.1	2016 Feb	
- 9.5	- 8.6	- 24.2	+ 15.5	- 0.9	+ 1.5	+ 2.1	- 0.7	- 2.3	- 2.7	- 0.3	- 50.9	- 34.9	Mar	
+ 24.6	+ 3.7	+ 3.5	+ 0.2	+ 20.9	- 2.1	- 2.1	- 0.0	+ 23.0	- 4.0	- 0.0	- 32.0	- 18.0	Apr	
+ 15.1	+ 22.0	+ 10.9	+ 11.1	- 6.9	- 0.7	- 0.2	- 0.5	- 6.2	- 8.3	+ 0.3	- 17.9	- 23.8	May	
+ 24.0	+ 14.3	+ 27.6	- 13.2	+ 9.6	+ 0.6	+ 0.7	- 0.1	+ 9.1	- 6.5	+ 0.0	+ 87.5	+ 74.4	June	
+ 9.0	+ 11.2	+ 2.2	+ 8.9	- 2.2	+ 0.0	- 0.3	+ 0.4	- 2.2	+ 3.8	+ 0.0	+ 12.0	- 2.1	July	
- 34.3	- 11.2	- 6.0	- 5.2	- 23.2	+ 0.2	+ 0.2	+ 0.0	- 23.4	+ 6.4	+ 0.1	- 71.9	- 44.4	Aug	
- 10.3	+ 3.0	- 2.1	+ 5.1	- 13.2	- 0.1	- 0.0	- 0.0	- 13.2	- 0.9	- 0.2	- 30.9	- 33.9	Sep	
+ 65.3	+ 66.1	+ 41.4	+ 24.7	- 0.7	+ 0.1	+ 0.1	- 0.1	- 0.8	- 5.5	- 0.0	- 39.1	- 25.5	Oct	
<b>End of year or month *</b>													<b>Foreign subsidiaries</b>	
334.2	201.1	113.4	87.7	133.0	18.5	16.4	2.0	114.6	21.3	30.0	39.8	-	2013	
297.1	173.6	101.1	72.5	123.5	20.3	14.5	5.8	103.2	18.4	25.9	48.0	-	2014	
292.3	166.7	99.6	67.1	125.7	13.1	10.5	2.6	112.6	14.4	26.3	42.9	-	2015	
294.1	170.0	101.9	68.1	124.1	11.9	9.4	2.6	112.2	14.5	26.4	40.6	-	2016 Jan	
282.1	157.1	99.1	58.0	125.0	13.2	10.5	2.8	111.8	12.9	24.3	40.1	-	Feb	
275.0	160.5	100.5	59.9	114.5	13.4	10.5	2.9	101.1	13.3	24.2	39.6	-	Mar	
274.5	161.1	102.8	58.3	113.4	13.8	10.9	2.9	99.6	13.5	24.2	37.5	-	Apr	
275.9	164.2	103.6	60.6	111.8	12.7	9.9	2.8	99.1	13.3	24.3	36.8	-	May	
284.5	163.7	101.1	62.6	120.8	12.1	9.3	2.7	108.7	12.3	24.0	36.1	-	June	
282.4	162.9	98.9	64.1	119.4	11.5	8.7	2.7	108.0	12.5	24.4	36.0	-	July	
281.4	167.7	99.9	67.8	113.7	11.0	6.3	4.8	102.7	12.4	24.4	34.5	-	Aug	
248.4	136.3	72.9	63.3	112.2	11.2	6.4	4.7	101.0	12.5	23.8	36.2	-	Sep	
243.7	140.6	76.3	64.3	103.1	10.8	6.3	4.5	92.3	12.7	23.9	36.3	-	Oct	
<b>Changes *</b>													<b>Foreign subsidiaries</b>	
- 45.5	- 32.4	- 12.3	- 20.1	- 13.1	+ 1.8	- 1.9	+ 3.8	- 14.9	- 3.0	- 4.0	+ 5.8	-	2014	
- 12.3	- 11.2	- 1.5	- 9.7	- 1.1	- 7.2	- 4.0	- 3.2	+ 6.1	- 4.0	+ 0.4	- 7.9	-	2015	
- 12.1	- 12.9	- 2.8	- 10.1	+ 0.9	+ 1.3	+ 1.1	+ 0.2	- 0.5	- 1.6	- 2.1	- 0.7	-	2016 Feb	
- 4.2	+ 4.8	+ 1.4	+ 3.4	- 9.0	+ 0.2	- 0.0	+ 0.2	- 9.2	+ 0.4	- 0.1	+ 0.2	-	Mar	
- 0.5	+ 0.6	+ 2.3	- 1.7	- 1.1	+ 0.4	+ 0.4	+ 0.0	- 1.5	+ 0.2	- 0.1	- 2.1	-	Apr	
- 0.1	+ 2.2	+ 0.8	+ 1.4	- 2.3	- 1.1	- 1.0	- 0.1	- 1.1	- 0.2	+ 0.1	- 1.0	-	May	
+ 8.8	- 0.4	- 2.5	+ 2.1	+ 9.2	- 0.6	- 0.6	- 0.1	+ 9.8	- 1.0	- 0.3	- 0.7	-	June	
- 2.0	- 0.7	- 2.2	+ 1.5	- 1.2	- 0.6	- 0.6	+ 0.0	- 0.6	+ 0.2	+ 0.4	- 0.1	-	July	
- 0.8	+ 4.9	+ 1.0	+ 3.8	- 5.7	- 0.4	- 2.4	+ 2.0	- 5.2	- 0.1	- 0.0	- 1.3	-	Aug	
- 32.7	- 31.3	- 27.0	- 4.3	- 1.4	+ 0.2	+ 0.2	- 0.0	- 1.6	+ 0.2	- 0.6	+ 1.6	-	Sep	
- 5.8	+ 3.7	+ 3.4	+ 0.3	- 9.4	- 0.4	- 0.1	- 0.3	- 9.0	+ 0.2	+ 0.1	- 0.2	-	Oct	

country of domicile are regarded as a single branch. **2** Treasury bills, Treasury discount paper and other money market paper, debt securities. **3** Including own debt securities. **4** Excluding subordinated liabilities and non-negotiable debt

securities. **5** Issues of negotiable and non-negotiable debt securities and money market paper. **6** Including subordinated liabilities. **7** See also Table IV.2, footnote 1.

## V Minimum reserves

### 1 Reserve maintenance in the euro area

€ billion

Maintenance period beginning in <sup>1</sup>	Reserve base <sup>2</sup>	Required reserves before deduction of lump-sum allowance <sup>3</sup>	Required reserves after deduction of lump-sum allowance <sup>4</sup>	Current accounts <sup>5</sup>	Excess reserves <sup>6</sup>	Deficiencies <sup>7</sup>
2010	10,559.5	211.2	210.7	212.4	1.7	0.0
2011	10,376.3	207.5	207.0	212.3	5.3	0.0
2012	10,648.6	106.5	106.0	489.0	383.0	0.0
2013	10,385.9	103.9	103.4	248.1	144.8	0.0
2014	10,677.3	106.8	106.3	236.3	130.1	0.0
2015	11,375.0	113.8	113.3	557.1	443.8	0.0
2016 Sep	11,821.2	118.2	117.8	777.4	659.6	0.0
Oct	11,783.5	117.8	117.4	823.9	706.5	0.0
Nov	.	.	.	...	...	...
Dec <sup>P</sup>	11,918.5	119.2	118.8	.	.	.

### 2 Reserve maintenance in Germany

€ million

Maintenance period beginning in <sup>1</sup>	Reserve base <sup>2</sup>	German share of euro-area reserve base in per cent	Required reserves before deduction of lump-sum allowance <sup>3</sup>	Required reserves after deduction of lump-sum allowance <sup>4</sup>	Current accounts <sup>5</sup>	Excess reserves <sup>6</sup>	Deficiencies <sup>7</sup>
2010	2,530,997	24.0	50,620	50,435	51,336	901	0
2011	2,666,422	25.7	53,328	53,145	54,460	1,315	1
2012	2,874,716	27.0	28,747	28,567	158,174	129,607	1
2013	2,743,933	26.4	27,439	27,262	75,062	47,800	2
2014	2,876,931	26.9	28,769	28,595	75,339	46,744	4
2015	3,137,353	27.6	31,374	31,202	174,361	143,159	0
2016 Sep	3,280,948	27.8	32,809	32,643	243,561	210,918	0
Oct	3,293,872	28.0	32,939	32,773	270,048	237,275	0
Nov	.	.	.	.	.	.	.
Dec <sup>P</sup>	3,371,095	28.3	33,711	33,546	...	...	...

### (a) Required reserves of individual categories of banks

€ million

Maintenance period beginning in <sup>1</sup>	Big banks	Regional banks and other commercial banks	Branches of foreign banks	Landesbanken and savings banks	Credit cooperatives	Mortgage banks	Banks with special, development and other central support tasks
2010	10,633	7,949	1,845	18,128	9,153	556	2,170
2011	10,459	8,992	3,078	18,253	9,437	601	2,324
2012 <sup>3</sup>	5,388	4,696	2,477	9,626	4,886	248	1,247
2013	5,189	4,705	1,437	9,306	5,123	239	1,263
2014	5,593	4,966	1,507	9,626	5,375	216	1,312
2015	6,105	5,199	2,012	10,432	5,649	226	1,578
2016 Sep	6,076	5,556	2,483	10,847	5,897	236	1,548
Oct	6,078	5,447	2,665	10,869	5,924	233	1,558
Nov	.	.	.	.	.	.	.
Dec	6,384	5,390	2,812	10,905	5,960	236	1,859

### (b) Reserve base by subcategories of liabilities

€ million

Maintenance period beginning in <sup>1</sup>	Liabilities (excluding savings deposits, deposits with building and loan associations and repos) to non-MFIs with agreed maturities of up to 2 years	Liabilities (excluding repos and deposits with building and loan associations) with agreed maturities of up to 2 years to MFIs that are resident in euro-area countries but not subject to minimum reserve requirements	Liabilities (excluding repos and deposits with building and loan associations) with agreed maturities of up to 2 years to banks in non-euro-area countries	Savings deposits with agreed periods of notice of up to 2 years	Liabilities arising from bearer debt securities issued with agreed maturities of up to 2 years and bearer money market paper after deduction of a standard amount for bearer debt certificates or deduction of such paper held by the reporting institution
2010	1,484,334	2,376	344,440	594,119	105,728
2011	1,609,904	3,298	354,235	596,833	102,153
2012	1,734,716	2,451	440,306	602,834	94,453
2013	1,795,844	2,213	255,006	600,702	90,159
2014	1,904,200	1,795	282,843	601,390	86,740
2015	2,063,317	1,879	375,891	592,110	104,146
2016 Sep	2,168,562	2,072	418,510	587,510	104,297
Oct	2,177,643	3,232	420,700	586,867	105,447
Nov	.	.	.	.	.
Dec	2,203,100	1,595	447,524	585,099	133,776

<sup>1</sup> The reserve maintenance period starts on the settlement day of the main refinancing operation immediately following the meeting of the Governing Council of the ECB for which the discussion on the monetary policy stance is scheduled. <sup>2</sup> Article 3 of the Regulation of the European Central Bank on the application of minimum reserves (excluding liabilities to which a reserve ratio of 0% applies, pursuant to Article 4 (1)). <sup>3</sup> Amount after applying the reserve ratio to the reserve base. The reserve ratio for liabilities with agreed maturities of up to two years was

2% between 1 January 1999 and 17 January 2012. Since 18 January 2012, it was stood at 1%. <sup>4</sup> Article 5 (2) of the Regulation of the European Central Bank on the application of minimum reserves. <sup>5</sup> Average credit balances of credit institutions at national central banks. <sup>6</sup> Average credit balances less required reserves after deduction of the lump-sum allowance. <sup>7</sup> Required reserves after deduction of the lump-sum allowance.

## VI Interest rates

### 1 ECB interest rates

% per annum

Applicable from	Deposit facility	Main refinancing operations		Marginal lending facility	Applicable from	Deposit facility	Main refinancing operations		Marginal lending facility
		Fixed rate	Minimum bid rate				Fixed rate	Minimum bid rate	
2005 Dec 6	1.25	–	2.25	3.25	2011 Apr 13	0.50	1.25	–	2.00
2006 Mar 8	1.50	–	2.50	3.50	July 13	0.75	1.50	–	2.25
June 15	1.75	–	2.75	3.75	Nov 9	0.50	1.25	–	2.00
Aug 9	2.00	–	3.00	4.00	Dez 14	0.25	1.00	–	1.75
Oct 11	2.25	–	3.25	4.25	2012 July 11	0.00	0.75	–	1.50
Dec 13	2.50	–	3.50	4.50	2013 May 8	0.00	0.50	–	1.00
2007 Mar 14	2.75	–	3.75	4.75	Nov 13	0.00	0.25	–	0.75
June 13	3.00	–	4.00	5.00	2014 June 11	–0.10	0.15	–	0.40
2008 July 9	3.25	–	4.25	5.25	Sep 10	–0.20	0.05	–	0.30
Oct 8	2.75	–	3.75	4.75	2015 Dec 9	–0.30	0.05	–	0.30
Oct 9	3.25	3.75	–	4.25	2016 Mar 16	–0.40	0.00	–	0.25
Nov 12	2.75	3.25	–	3.75					
Dec 10	2.00	2.50	–	3.00					
2009 Jan 21	1.00	2.00	–	3.00					
Mar 11	0.50	1.50	–	2.50					
Apr 8	0.25	1.25	–	2.25					
May 13	0.25	1.00	–	1.75					

### 2 Base rates

% per annum

Applicable from	Base rate as per Civil Code <sup>1</sup>	Applicable from	Base rate as per Civil Code <sup>1</sup>
2002 Jan 1	2.57	2009 Jan 1	1.62
July 1	2.47	July 1	0.12
2003 Jan 1	1.97	2011 July 1	0.37
July 1	1.22	2012 Jan 1	0.12
2004 Jan 1	1.14	2013 Jan 1	–0.13
July 1	1.13	July 1	–0.38
2005 Jan 1	1.21	2014 Jan 1	–0.63
July 1	1.17	July 1	–0.73
2006 Jan 1	1.37	2015 Jan 1	–0.83
July 1	1.95	2016 July 1	–0.88
2007 Jan 1	2.70		
July 1	3.19		
2008 Jan 1	3.32		
July 1	3.19		

<sup>1</sup> Pursuant to section 247 of the Civil Code.

### 3 Eurosystem monetary policy operations allotted through tenders \*

Date of settlement	Bid amount	Allotment amount	Fixed rate tenders		Variable rate tenders			Running for ... days
			Fixed rate	Minimum bid rate	Marginal rate <sup>1</sup>	Weighted average rate		
							% per annum	
<b>Main refinancing operations</b>								
2016 Dec 14	36,822	36,822	0.00	–	–	–	7	
Dec 21	32,877	32,877	0.00	–	–	–	7	
Dec 28	39,131	39,131	0.00	–	–	–	7	
2017 Jan 4	34,006	34,006	0.00	–	–	–	7	
Jan 11	32,319	32,319	0.00	–	–	–	7	
Jan 18	32,330	32,330	0.00	–	–	–	7	
<b>Long-term refinancing operations</b>								
2016 Sep 29	4,570	4,570	2 0,00	–	–	–	84	
Oct 27	5,427	5,427	2 ...	–	–	–	91	
Dec 1	3,270	3,270	2 ...	–	–	–	84	
Dec 21	62,161	62,161	0,00	–	–	–	1,456	
Dec 22	2,671	2,671	2 ...	–	–	–	98	

\* Source: ECB. <sup>1</sup> Lowest or highest interest rate at which funds were allotted or collected. <sup>2</sup> Interest payment on the maturity date; the rate will be fixed at the

average minimum bid rate of the main refinancing operations over the life of this operation.

### 4 Money market rates, by month \*

% per annum

Monthly average	EONIA <sup>1</sup>	EURIBOR <sup>2</sup>					
		One-week funds	One-month funds	Three-month funds	Six-month funds	Nine-month funds	Twelve-month funds
2016 June	– 0.33	– 0.37	– 0.36	– 0.27	– 0.16	– 0.10	– 0.03
July	– 0.33	– 0.38	– 0.37	– 0.29	– 0.19	– 0.12	– 0.06
Aug	– 0.34	– 0.38	– 0.37	– 0.30	– 0.19	– 0.12	– 0.05
Sep	– 0.34	– 0.38	– 0.37	– 0.30	– 0.20	– 0.13	– 0.06
Oct	– 0.35	– 0.38	– 0.37	– 0.31	– 0.21	– 0.13	– 0.07
Nov	– 0.35	– 0.38	– 0.37	– 0.31	– 0.21	– 0.13	– 0.07
Dec	– 0.35	– 0.38	– 0.37	– 0.32	– 0.22	– 0.14	– 0.08

\* Averages are Bundesbank calculations. Neither the Deutsche Bundesbank nor anyone else can be held liable for any irregularity or inaccuracy of the EONIA rate and the EURIBOR rate. <sup>1</sup> Euro OverNight Index Average: weighted average overnight rate for interbank operations calculated by the European Central Bank since

4 January 1999 on the basis of real turnover according to the act/360 method and published via Reuters. <sup>2</sup> Euro Interbank Offered Rate: unweighted average rate calculated by Reuters since 30 December 1998 according to the act/360 method.

## VI Interest rates

### 5 Interest rates and volumes for outstanding amounts and new business of German banks (MFIs) \*

#### (a) Outstanding amounts <sup>o</sup>

End of month	Households' deposits				Non-financial corporations' deposits			
	with an agreed maturity of							
	up to 2 years		over 2 years		up to 2 years		over 2 years	
	Effective interest rate <sup>1</sup> % pa	Volume <sup>2</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>2</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>2</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>2</sup> € million
2015 Nov	0.48	77,788	1.67	219,914	0.24	76,639	2.09	17,194
Dec	0.46	77,515	1.66	221,625	0.22	79,591	2.04	17,364
2016 Jan	0.45	76,746	1.64	221,432	0.22	79,489	2.00	17,335
Feb	0.44	75,932	1.62	221,154	0.21	80,142	2.00	17,271
Mar	0.44	76,809	1.61	221,229	0.20	82,706	1.95	17,573
Apr	0.44	77,166	1.59	220,954	0.19	83,708	1.92	17,490
May	0.43	77,295	1.58	220,985	0.19	80,922	1.86	18,025
June	0.42	77,303	1.56	220,707	0.16	78,910	1.80	18,063
July	0.41	77,112	1.55	219,660	0.14	80,553	1.76	18,143
Aug	0.41	75,607	1.53	219,332	0.14	79,332	1.72	18,124
Sep	0.40	75,235	1.52	219,354	0.12	83,015	1.65	18,371
Oct	0.40	75,245	1.51	218,836	0.13	80,349	1.60	18,507
Nov	0.39	74,620	1.49	218,016	0.10	83,090	1.56	19,037

End of month	Housing loans to households <sup>3</sup>						Loans for consumption and other purposes to households <sup>4, 5</sup>					
	with a maturity of											
	up to 1 year <sup>6</sup>		over 1 year and up to 5 years		over 5 years		up to 1 year <sup>6</sup>		over 1 year and up to 5 years		over 5 years	
	Effective interest rate <sup>1</sup> % pa	Volume <sup>2</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>2</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>2</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>2</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>2</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>2</sup> € million
2015 Nov	2.61	5,139	2.38	27,838	3.36	1,044,861	7.39	53,821	4.42	79,222	4.49	308,002
Dec	2.62	5,029	2.36	27,692	3.33	1,047,658	7.38	54,838	4.39	79,345	4.46	306,514
2016 Jan	2.61	5,011	2.34	27,438	3.30	1,047,865	7.44	52,884	4.35	79,779	4.43	307,381
Feb	2.60	5,022	2.36	27,364	3.27	1,049,663	7.45	53,249	4.31	80,351	4.41	307,866
Mar	2.63	5,014	2.34	27,371	3.24	1,052,498	7.49	54,287	4.29	80,695	4.38	307,355
Apr	2.56	4,928	2.31	27,215	3.21	1,057,019	7.33	52,229	4.27	81,376	4.35	308,474
May	2.57	4,959	2.29	27,187	3.19	1,059,863	7.36	52,678	4.24	81,793	4.33	309,250
June	2.57	4,863	2.28	27,272	3.16	1,064,491	7.39	53,521	4.22	82,252	4.31	309,025
July	2.50	4,836	2.25	27,233	3.13	1,069,851	7.26	51,406	4.20	82,844	4.29	310,390
Aug	2.50	4,772	2.23	27,198	3.10	1,074,183	7.27	51,516	4.17	83,206	4.27	310,914
Sep	2.49	4,645	2.22	27,195	3.07	1,079,270	7.29	52,985	4.15	83,297	4.24	310,507
Oct	2.49	4,711	2.19	27,068	3.04	1,083,120	7.26	52,115	4.12	83,574	4.21	310,941
Nov	2.42	4,538	2.13	27,004	3.02	1,087,318	7.17	51,035	4.09	83,826	4.19	311,454

End of month	Loans to non-financial corporations with a maturity of					
	up to 1 year <sup>6</sup>		over 1 year and up to 5 years		over 5 years	
	Effective interest rate <sup>1</sup> % pa	Volume <sup>2</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>2</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>2</sup> € million
2015 Nov	2.82	128,922	2.33	129,015	2.78	594,272
Dec	2.77	125,750	2.29	129,455	2.74	593,021
2016 Jan	2.68	130,505	2.26	129,655	2.72	595,850
Feb	2.67	134,107	2.23	130,842	2.70	598,794
Mar	2.65	137,421	2.20	130,530	2.67	597,332
Apr	2.66	136,364	2.18	131,883	2.64	601,069
May	2.60	136,538	2.15	132,698	2.62	605,918
June	2.62	135,941	2.13	133,455	2.60	604,497
July	2.59	133,112	2.09	133,334	2.57	608,349
Aug	2.60	129,449	2.08	134,293	2.55	613,121
Sep	2.58	132,381	2.06	134,447	2.52	612,812
Oct	2.53	132,273	2.04	134,868	2.50	615,105
Nov	2.53	133,947	2.02	136,307	2.48	620,153

\* The interest rate statistics gathered on a harmonised basis in the euro area from January 2003 are collected in Germany on a sample basis. The grossing-up procedure was changed according to the ECB (Guideline ECB/2014/15). The data published hitherto from June 2010 to May 2015 were grossed-up again with the new method. The MFI interest rate statistics are based on the interest rates applied by MFIs and the related volumes of euro-denominated deposits and loans to households and non-financial corporations domiciled in the euro area. The household sector comprises individuals (including sole proprietors) and non-profit institutions serving households. Non-financial corporations include all enterprises other than insurance companies, banks and other financial institutions. The most recent figures are in all cases to be regarded as provisional. Subsequent revisions appearing in the following Monthly Report are not specially marked. Further information on the MFI interest rate statistics can be found on the Bundesbank's website (Statistics / Reporting system / Banking statistics / MFI interest rate statistics). <sup>o</sup> The statistics on outstanding amounts are

collected at the end of the month. <sup>1</sup> The effective interest rates are calculated either as annualised agreed interest rates or as narrowly defined effective rates. Both calculation methods cover all interest payments on deposits and loans but not any other related charges which may occur for enquiries, administration, preparation of the documents, guarantees and credit insurance. <sup>2</sup> Data based on monthly balance sheet statistics. <sup>3</sup> Secured and unsecured loans for home purchase, including building and home improvements; including loans granted by building and loan associations and interim credits as well as transmitted loans granted by the reporting agents in their own name and for their own account. <sup>4</sup> Loans for consumption are defined as loans granted for the purpose of personal use in the consumption of goods and services. <sup>5</sup> For the purpose of these statistics, other loans are loans granted for other purposes such as business, debt consolidation, education etc. <sup>6</sup> Including overdrafts (see also footnotes 13 to 15 p 47\*).

## VI Interest rates

### 5 Interest rates and volumes for outstanding amounts and new business of German banks (MFIs) \* (cont'd) (b) New business +

Households' deposits												
Overnight		with an agreed maturity of						redeemable at notice of <sup>8</sup>				
		up to 1 year		over 1 year and up to 2 years		over 2 years		up to 3 months		over 3 months		
Reporting period	Effective interest rate <sup>1</sup> % pa	Volume <sup>2</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>2</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>2</sup> € million
2015 Nov	0.14	1,107,307	0.34	5,900	0.69	840	0.89	1,196	0.40	530,810	0.47	62,774
2015 Dec	0.13	1,111,065	0.28	6,140	0.50	1,161	0.97	1,379	0.39	533,865	0.45	61,900
2016 Jan	0.12	1,117,856	0.35	7,184	0.62	1,024	1.00	1,360	0.37	534,775	0.43	60,627
2016 Feb	0.12	1,123,332	0.34	6,226	0.71	914	1.03	1,493	0.36	536,409	0.40	59,334
2016 Mar	0.11	1,120,146	0.34	6,804	0.82	1,137	0.93	1,721	0.34	535,575	0.39	58,239
2016 Apr	0.10	1,140,220	0.35	5,852	0.69	994	0.94	1,130	0.32	534,792	0.38	57,125
2016 May	0.10	1,142,947	0.34	5,430	0.69	747	0.89	901	0.31	534,122	0.37	56,154
2016 June	0.08	1,149,604	0.27	6,027	0.73	759	0.83	935	0.30	533,649	0.36	55,415
2016 July	0.08	1,168,427	0.27	5,846	0.57	856	0.80	903	0.28	533,501	0.35	54,560
2016 Aug	0.08	1,171,644	0.33	5,081	0.61	1,148	0.86	961	0.27	533,503	0.34	53,749
2016 Sep	0.08	1,173,762	0.32	5,240	0.50	671	0.77	885	0.26	532,980	0.33	53,031
2016 Oct	0.07	1,184,012	0.30	6,402	0.44	716	0.75	933	0.25	533,209	0.32	52,223
2016 Nov	0.07	1,208,967	0.30	5,075	0.58	523	0.77	907	0.24	533,406	0.32	51,649

Non-financial corporations' deposits								
Overnight		with an agreed maturity of						
		up to 1 year		over 1 year and up to 2 years		over 2 years		
Reporting period	Effective interest rate <sup>1</sup> % pa	Volume <sup>2</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>7</sup> € million
2015 Nov	0.05	377,900	0.11	10,676	0.39	574	0.56	326
2015 Dec	0.04	375,456	0.07	14,914	0.36	1,338	0.57	872
2016 Jan	0.03	370,533	0.10	9,780	0.32	1,283	0.42	489
2016 Feb	0.03	369,125	0.08	10,334	0.48	890	0.50	244
2016 Mar	0.05	369,344	- 0.03	14,907	0.20	931	1.34	1,057
2016 Apr	0.05	377,546	- 0.01	10,820	0.13	851	0.40	439
2016 May	0.01	380,942	- 0.02	9,700	0.18	694	0.52	1,123
2016 June	0.01	376,365	- 0.02	10,619	0.16	689	0.46	858
2016 July	0.01	378,718	- 0.02	9,596	0.14	569	0.25	476
2016 Aug	0.01	388,519	- 0.06	9,727	0.19	451	0.39	286
2016 Sep	0.01	389,701	- 0.08	15,158	0.14	598	0.30	792
2016 Oct	0.00	399,216	- 0.03	10,736	0.14	577	0.36	521
2016 Nov	- 0.00	400,902	- 0.11	13,017	0.24	951	0.39	1,490

Loans to households																
Loans for other purposes to households with an initial rate fixation of <sup>5</sup>																
Total		of which renegotiated loans <sup>9, 10</sup>				floating rate or up to 1 year <sup>9</sup>		over 1 year and up to 5 years		over 5 years		of which loans to sole proprietors				
		floating rate or up to 1 year <sup>9</sup>		over 1 year and up to 5 years		over 5 years		floating rate or up to 1 year <sup>9</sup>		over 1 year and up to 5 years		over 5 years				
Reporting period	Effective interest rate <sup>1</sup> % pa	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % pa	Volume <sup>7</sup> € million		
2015 Nov	2.03	6,561	1.97	2,146	1.75	3,295	2.74	872	2.17	2,394	2.07	1,872	2.81	694	2.13	1,556
2015 Dec	2.05	8,344	2.03	2,796	1.81	4,005	2.75	1,136	2.11	3,203	2.06	2,469	2.80	886	2.06	2,163
2016 Jan	1.96	7,252	2.01	2,816	1.68	3,753	2.63	1,054	2.11	2,445	2.04	2,153	2.70	823	2.03	1,617
2016 Feb	2.05	6,669	2.10	2,300	1.87	3,388	2.64	904	2.08	2,377	2.15	2,032	2.76	690	2.05	1,528
2016 Mar	2.02	7,255	1.87	2,578	1.77	3,549	2.70	996	2.09	2,710	1.96	2,167	2.81	756	2.03	1,796
2016 Apr	2.03	6,381	1.89	2,492	1.81	3,375	2.68	981	2.09	2,025	2.02	2,079	2.87	757	2.01	1,420
2016 May	2.00	5,898	1.92	1,926	1.77	2,921	2.71	876	2.03	2,101	2.01	1,859	2.97	647	1.97	1,372
2016 June	2.02	6,820	1.93	2,359	1.84	3,200	2.58	1,134	1.98	2,486	2.09	1,953	2.67	898	1.89	1,769
2016 July	1.89	6,818	1.73	2,543	1.69	3,394	2.66	936	1.89	2,488	1.88	2,323	2.82	724	1.85	1,614
2016 Aug	2.02	5,949	1.95	1,989	1.94	2,699	2.80	793	1.85	2,457	1.99	1,789	2.96	589	1.89	1,569
2016 Sep	1.89	6,462	1.76	2,153	1.76	3,266	2.69	807	1.81	2,389	1.88	2,013	2.89	610	1.78	1,638
2016 Oct	1.89	6,445	1.72	2,522	1.70	3,408	2.63	928	1.87	2,109	1.86	2,096	2.78	728	1.82	1,403
2016 Nov	1.92	6,299	1.89	2,064	1.79	3,046	2.71	837	1.81	2,416	2.00	1,920	2.78	647	1.76	1,572

For footnotes \* and 1 to 6, see p 44\*. + In the case of deposits with an agreed maturity and all loans excluding revolving loans and overdrafts, credit card debt, new business covers all new agreements between households or non-financial corporations and the bank. The interest rates are calculated as volume-weighted average rates of all new agreements concluded during the reporting month. In the case of overnight deposits, deposits redeemable at notice, revolving loans and overdrafts, credit card debt, new business is collected in the same way as outstanding amounts

for the sake of simplicity. This means that all outstanding deposit and lending business at the end of the month has to be incorporated in the calculation of average rates of interest. <sup>7</sup> Estimated. The volume of new business is extrapolated to form the underlying total using a grossing-up procedure. <sup>8</sup> Including non-financial corporations' deposits; including fidelity and growth premia. <sup>9</sup> Excluding overdrafts. <sup>10</sup> Collected from December 2014.

## VI Interest rates

### 5 Interest rates and volumes for outstanding amounts and new business of German banks (MFIs) \* (cont'd)

#### (b) New business +

Loans to households (cont'd)											
Loans for consumption with an initial rate fixation of 4											
Reporting period	Total (including charges)	Total		of which renegotiated loans 9, 10		floating rate or up to 1 year 9		over 1 year and up to 5 years		over 5 years	
	Annual percentage rate of charge 11 % pa	Effective interest rate 1 % pa	Volume 7 € million	Effective interest rate 1 % pa	Volume 7 € million	Effective interest rate 1 % pa	Volume 7 € million	Effective interest rate 1 % pa	Volume 7 € million	Effective interest rate 1 % pa	Volume 7 € million
<b>Total loans</b>											
2015 Nov	6.21	6.15	6,657	7.58	1,055	5.24	276	4.90	2,993	7.32	3,388
Dec	6.03	5.97	6,067	7.30	934	5.67	316	4.78	2,867	7.19	2,884
2016 Jan	6.44	6.37	7,338	7.52	1,426	5.59	309	4.99	2,938	7.41	4,091
Feb	6.25	6.20	7,862	7.44	1,444	5.55	322	4.94	3,260	7.22	4,280
Mar	6.06	6.04	8,415	7.33	1,833	5.49	341	4.79	3,577	7.07	4,497
Apr	6.21	6.19	8,734	7.33	1,814	5.89	310	4.88	3,548	7.16	4,876
May	6.22	6.20	8,244	7.47	1,715	5.89	306	4.90	3,329	7.16	4,609
June	6.20	6.18	8,940	7.47	1,864	5.73	314	4.87	3,616	7.15	5,010
July	6.20	6.18	8,468	7.50	1,764	5.97	298	4.77	3,405	7.20	4,765
Aug	6.09	6.06	8,301	7.36	1,643	5.89	328	4.70	3,402	7.09	4,571
Sep	5.94	5.92	7,802	7.11	1,560	6.04	296	4.56	3,257	6.95	4,249
Oct	5.95	5.93	7,579	7.10	1,482	6.04	300	4.52	3,127	6.99	4,152
Nov	5.85	5.83	7,600	7.12	1,674	5.98	321	4.51	3,312	6.91	3,967
<b>of which: collateralised loans 12</b>											
2015 Nov	-	3.58	218	-	-	2.84	23	3.90	136	3.14	59
Dec	-	3.39	219	-	-	2.72	22	3.89	128	2.66	69
2016 Jan	-	3.32	191	-	-	2.50	21	3.72	111	2.85	59
Feb	-	3.51	220	-	-	2.85	33	3.84	135	3.08	52
Mar	-	3.29	260	-	-	2.58	25	3.71	158	2.65	77
Apr	-	3.49	206	-	-	2.75	13	3.80	145	2.77	48
May	-	3.56	202	-	-	2.69	18	3.95	135	2.79	49
June	-	3.62	213	-	-	2.95	17	3.96	141	2.94	55
July	-	3.53	193	-	-	2.85	18	3.82	135	2.86	40
Aug	-	3.52	216	-	-	3.00	16	3.83	149	2.80	51
Sep	-	3.56	201	-	-	2.86	17	3.87	134	2.97	50
Oct	-	3.51	189	-	-	2.63	17	3.91	129	2.65	43
Nov	-	3.55	198	-	-	2.48	15	3.93	140	2.66	43

Loans to households (cont'd)													
Housing loans with an initial rate fixation of 3													
Reporting period	Total (including charges)	Total		of which renegotiated loans 9,10		floating rate or up to 1 year 9		over 1 year and up to 5 years		over 5 years and up to 10 years		over 10 years	
	Annual percentage rate of charge 11 % pa	Effective interest rate 1 % pa	Volume 7 € million	Effective interest rate 1 % pa	Volume 7 € million	Effective interest rate 1 % pa	Volume 7 € million	Effective interest rate 1 % pa	Volume 7 € million	Effective interest rate 1 % pa	Volume 7 € million	Effective interest rate 1 % pa	Volume 7 € million
<b>Total loans</b>													
2015 Nov	2.04	2.02	18,426	2.11	4,212	2.27	2,190	1.94	1,874	1.89	7,319	2.09	7,043
Dec	1.98	1.95	19,521	2.02	4,769	2.16	2,713	1.88	2,045	1.83	7,385	2.01	7,378
2016 Jan	2.00	1.97	18,507	2.05	5,833	2.22	2,413	1.87	2,054	1.84	6,800	2.05	7,240
Feb	1.97	1.96	18,778	2.16	4,870	2.45	2,584	1.86	1,994	1.79	6,837	1.97	7,363
Mar	1.85	1.82	22,396	1.94	4,799	2.10	2,618	1.82	2,256	1.70	8,246	1.86	9,276
Apr	1.93	1.88	17,859	1.94	4,981	2.16	2,206	1.82	1,820	1.67	6,054	1.97	7,779
May	1.86	1.79	17,968	2.03	3,654	2.19	2,133	1.83	1,698	1.62	6,635	1.83	7,502
June	1.82	1.76	21,409	1.94	4,079	2.04	2,567	1.85	1,931	1.60	7,424	1.79	9,487
July	1.78	1.73	20,287	1.83	4,970	2.01	2,464	1.79	1,866	1.59	7,230	1.75	8,727
Aug	1.74	1.68	19,903	1.86	4,075	2.18	2,185	1.76	1,745	1.49	7,197	1.69	8,776
Sep	1.70	1.64	18,636	1.79	3,854	2.01	2,062	1.75	1,658	1.48	6,555	1.66	8,361
Oct	1.68	1.62	17,913	1.72	4,542	1.99	2,093	1.62	1,584	1.45	6,317	1.66	7,919
Nov	1.67	1.62	20,224	1.72	4,687	1.88	2,611	1.66	1,614	1.43	7,008	1.68	8,991
<b>of which: collateralised loans 12</b>													
2015 Nov	-	1.94	8,245	-	-	2.21	812	1.69	888	1.83	3,378	2.05	3,167
Dec	-	1.86	8,294	-	-	2.06	969	1.63	915	1.77	3,272	1.95	3,138
2016 Jan	-	1.92	8,349	-	-	2.30	916	1.62	1,003	1.80	3,276	2.04	3,154
Feb	-	1.89	7,875	-	-	2.47	987	1.62	875	1.73	3,048	1.95	2,965
Mar	-	1.74	9,786	-	-	2.01	1,002	1.63	1,075	1.63	3,807	1.81	3,902
Apr	-	1.89	7,980	-	-	2.17	848	1.53	843	1.62	2,827	2.14	3,462
May	-	1.71	7,343	-	-	2.08	783	1.53	752	1.54	2,804	1.81	3,004
June	-	1.67	9,111	-	-	1.96	956	1.55	849	1.53	3,475	1.75	3,831
July	-	1.65	8,675	-	-	1.86	927	1.51	833	1.53	3,887	1.75	3,528
Aug	-	1.58	8,476	-	-	1.97	770	1.46	770	1.41	3,410	1.67	3,526
Sep	-	1.55	7,930	-	-	1.98	728	1.46	708	1.39	3,109	1.61	3,385
Oct	-	1.55	7,854	-	-	1.89	764	1.43	768	1.39	3,023	1.65	3,299
Nov	-	1.51	9,115	-	-	1.54	1,225	1.48	763	1.36	3,407	1.65	3,720

For footnotes \* and 1 to 6, see p 44\*. For footnotes +, 7 to 10, see p 45\*. For footnote 12, see p 47\*. 11 Annual percentage rate of charge, which contains other

related charges which may occur for enquiries, administration, preparation of the documents, guarantees and credit insurance.



## VI Interest rates

### 5 Interest rates and volumes for outstanding amounts and new business of German banks (MFIs) \* (cont'd) (b) New business +

Reporting period	Loans to households (cont'd)						Loans to non-financial corporations					
	Revolving loans <b>13</b> and overdrafts <b>14</b> credit card debt <b>15</b>		<i>of which</i>				Revolving loans <b>13</b> and overdrafts <b>14</b> credit card debt <b>15</b>		<i>of which</i>			
			Revolving loans <b>13</b> and overdrafts <b>14</b>		Extended credit card debt				Revolving loans <b>13</b> and overdrafts <b>14</b>		Extended credit card debt	
	Effective interest rate <b>1</b> % pa	Volume <b>2</b> € million	Effective interest rate <b>1</b> % pa	Volume <b>2</b> € million	Effective interest rate <b>1</b> % pa	Volume <b>2</b> € million	Effective interest rate <b>1</b> % pa	Volume <b>2</b> € million	Effective interest rate <b>1</b> % pa	Volume <b>2</b> € million	Effective interest rate <b>1</b> % pa	Volume <b>2</b> € million
2015 Nov	8.82	40,622	8.82	33,577	15.32	4,064	3.92	65,212	3.94	64,959	3.96	61,270
Dec	8.69	41,921	8.80	34,544	15.31	3,938	3.94	61,493	3.96	61,270	3.96	61,270
2016 Jan	8.83	40,469	8.78	33,630	15.36	4,043	3.82	65,219	3.84	65,010	3.80	66,930
Feb	8.82	41,049	8.81	34,005	15.36	4,071	3.79	67,167	3.80	66,930	3.80	66,930
Mar	8.81	42,187	8.80	35,211	15.42	3,982	3.84	68,638	3.85	68,394	3.85	68,394
Apr	8.70	40,129	8.67	33,142	15.24	4,067	3.83	66,708	3.85	66,461	3.85	66,461
May	8.72	40,781	8.75	33,466	15.21	4,135	3.70	67,212	3.71	66,974	3.71	66,974
June	8.75	41,709	8.77	34,494	15.23	4,093	3.74	67,687	3.75	67,430	3.75	67,430
July	8.61	39,874	8.62	32,504	15.22	4,152	3.66	65,412	3.67	65,180	3.67	65,180
Aug	8.61	40,210	8.63	32,811	15.22	4,137	3.73	63,560	3.74	63,322	3.74	63,322
Sep	8.62	41,559	8.66	33,900	15.13	4,269	3.70	66,057	3.71	65,773	3.71	65,773
Oct	8.59	40,657	8.60	32,988	15.13	4,328	3.67	64,202	3.68	63,931	3.68	63,931
Nov	8.50	39,342	8.51	31,782	15.13	4,222	3.61	65,030	3.63	64,752	3.63	64,752

Reporting period	Loans to non-financial corporations (cont'd)															
	Total		<i>of which</i>				Loans up to €1 million with an initial rate fixation of <b>16</b>				Loans over €1 million with an initial rate fixation of <b>16</b>					
			renegotiated loans <b>9, 10</b>		floating rate or up to 1 year <b>9</b>		over 1 year and up to 5 years		over 5 years		floating rate or up to 1 year <b>9</b>		over 1 year and up to 5 years		over 5 years	
	Effective interest rate <b>1</b> % pa	Volume <b>7</b> € million	Effective interest rate <b>1</b> % pa	Volume <b>7</b> € million	Effective interest rate <b>1</b> % pa	Volume <b>7</b> € million	Effective interest rate <b>1</b> % pa	Volume <b>7</b> € million	Effective interest rate <b>1</b> % pa	Volume <b>7</b> € million	Effective interest rate <b>1</b> % pa	Volume <b>7</b> € million	Effective interest rate <b>1</b> % pa	Volume <b>7</b> € million		
<b>Total loans</b>																
2015 Nov	1.67	51,840	1.63	16,651	2.71	7,599	2.91	1,381	2.09	1,254	1.30	32,330	1.98	2,249	1.81	7,027
Dec	1.68	71,770	1.68	21,964	2.63	8,367	2.90	1,688	1.98	1,765	1.42	46,829	1.79	3,286	1.82	9,835
2016 Jan	1.60	56,798	1.62	19,979	2.58	7,835	2.87	1,331	2.02	1,328	1.26	38,673	2.16	2,309	1.90	5,322
Feb	1.54	52,765	1.61	15,300	2.71	7,805	2.78	1,310	1.93	1,160	1.20	34,426	1.42	2,142	1.67	5,922
Mar	1.64	62,713	1.70	19,300	2.67	8,680	2.73	1,524	1.88	1,394	1.35	41,099	1.76	2,294	1.68	7,722
Apr	1.55	57,589	1.60	19,803	2.60	8,290	2.74	1,645	1.82	1,410	1.23	38,162	1.56	1,933	1.68	6,149
May	1.47	53,170	1.55	15,321	2.59	7,987	2.73	1,363	1.85	1,338	1.11	34,259	1.55	1,651	1.64	6,572
June	1.52	66,550	1.68	19,903	2.61	8,992	2.79	1,600	1.76	1,526	1.23	43,829	1.57	2,249	1.55	8,354
July	1.46	62,584	1.55	21,116	2.44	8,339	2.67	1,484	1.72	1,554	1.16	41,120	1.88	2,329	1.53	7,758
Aug	1.43	54,015	1.58	14,307	2.44	7,384	2.62	1,340	1.68	1,416	1.14	33,033	1.48	2,112	1.40	8,730
Sep	1.51	62,170	1.66	19,929	2.54	8,312	2.63	1,431	1.70	1,312	1.24	41,393	1.67	1,986	1.54	7,736
Oct	1.43	59,422	1.50	20,936	2.44	8,219	2.63	1,417	1.65	1,258	1.16	40,159	1.69	1,960	1.44	6,409
Nov	1.45	58,861	1.52	15,959	2.48	8,095	2.64	1,497	1.69	1,361	1.16	36,793	1.32	2,628	1.49	8,487
<i>of which: collateralised loans <b>12</b></i>																
2015 Nov	1.76	7,680	.	.	2.04	503	2.62	130	1.92	395	1.48	4,036	2.31	1,162	1.87	1,454
Dec	1.61	13,483	.	.	1.98	636	2.57	150	1.76	539	1.47	7,249	1.84	1,438	1.67	3,471
2016 Jan	1.65	9,419	.	.	2.01	674	2.55	125	1.89	463	1.33	6,286	3.51	656	1.93	1,215
Feb	1.60	8,658	.	.	2.07	554	2.29	149	1.84	382	1.45	4,958	1.69	627	1.71	1,988
Mar	1.62	10,561	.	.	1.94	611	2.60	154	1.73	406	1.50	5,407	1.79	1,089	1.66	2,894
Apr	1.59	9,251	.	.	1.95	660	2.39	153	1.67	438	1.49	5,471	1.92	530	1.57	1,999
May	1.58	5,951	.	.	2.03	479	2.60	134	1.65	406	1.47	2,864	1.57	364	1.55	1,704
June	1.58	10,056	.	.	1.91	601	2.51	159	1.64	468	1.56	4,885	1.72	1,003	1.46	2,940
July	1.53	10,322	.	.	1.87	681	2.38	161	1.53	544	1.35	5,526	1.95	929	1.61	2,481
Aug	1.54	7,519	.	.	2.01	523	2.54	119	1.51	410	1.40	3,645	1.71	452	1.57	2,370
Sep	1.59	9,002	.	.	1.93	550	2.49	104	1.46	379	1.53	5,125	2.18	614	1.45	2,230
Oct	1.49	8,746	.	.	1.85	652	2.40	149	1.48	401	1.40	5,352	1.90	560	1.44	1,632
Nov	1.49	8,480	.	.	2.00	494	2.41	159	1.57	401	1.29	4,031	2.04	610	1.50	2,785

For footnotes \* and 1 to 6, see p 44\*. For footnotes + and 7 to 10, see p 45\*. For footnote 11, see p 46\*. **12** Collected from June 2010. For the purposes of the interest rate statistics, a loan is considered to be secured if collateral (among others financial collateral, real estate collateral, debt securities) in at least the same value as the loan amount has been posted, pledged or assigned. **13** From June 2010 including revolving loans which have all the following features: (a) the borrower may use or withdraw the funds to a pre-approved credit limit without giving prior notice to the lender; (b) the amount of available credit can increase and decrease as funds are borrowed and repaid; (c) the loan may be used repeatedly; (d) there is no

obligation of regular repayment of funds. **14** Overdrafts are defined as debit balances on current accounts. They include all bank overdrafts regardless of whether they are within or beyond the limits agreed between customers and the bank. **15** From June 2010 including convenience and extended credit card debt. Convenience credit is defined as the credit granted at an interest rate of 0% in the period between payment transactions effected with the card during one billing cycle and the date at which the debt balances from this specific billing cycle become due. **16** The amount category refers to the single loan transaction considered as new business.

## VII Insurance corporations and pension funds

### 1 Assets \*

€ billion

End of year/quarter	Assets									
	Total	Financial assets								Non-financial assets
		Total	Cash and deposits with banks (MFIs) <sup>1</sup>	Debt securities (including financial derivatives)	Loans granted <sup>2</sup>	Shares and other equity <sup>3</sup>	Investment fund shares/units	Ceded share of insurance technical reserves	Other financial assets	
<b>Insurance corporations and pension funds <sup>4</sup></b>										
2006	1,771.5	1,709.2	524.1	149.9	244.8	261.5	385.6	74.5	68.7	62.3
2007	1,838.3	1,779.8	558.3	155.1	248.2	275.3	409.6	70.2	63.1	58.5
2008	1,770.6	1,714.8	574.5	159.4	243.3	228.9	379.7	65.8	63.4	55.8
2009	1,836.8	1,779.6	588.9	173.9	259.8	210.5	426.9	58.6	61.2	57.1
2010	1,961.9	1,900.5	570.9	210.4	267.2	223.5	501.4	59.9	67.2	61.4
2011	2,011.2	1,947.8	576.3	226.2	271.9	221.9	522.1	62.2	67.1	63.4
2012	2,162.8	2,095.7	560.1	287.2	277.9	223.8	619.5	63.1	64.2	67.1
2013	2,236.7	2,165.2	540.6	310.5	284.7	224.1	678.5	64.2	62.7	71.5
2014	2,444.5	2,367.3	523.2	384.5	300.5	232.5	790.1	68.8	67.6	77.2
2015	2,536.5	2,454.1	488.7	421.6	309.2	246.9	841.7	77.0	69.0	82.4
2014 Q4	2,444.5	2,367.3	523.2	384.5	300.5	232.5	790.1	68.8	67.6	77.2
2015 Q1	2,539.4	2,461.4	517.4	414.0	305.1	242.1	843.7	70.6	68.4	78.1
Q2	2,489.5	2,410.8	509.4	396.7	304.8	238.9	819.2	72.6	69.2	78.6
Q3	2,507.3	2,427.5	498.0	412.5	308.0	241.6	823.8	74.7	68.9	79.8
Q4	2,536.5	2,454.1	488.7	421.6	309.2	246.9	841.7	77.0	69.0	82.4
2016 Q1	2,598.2	2,514.1	486.8	456.3	310.8	248.3	863.1	78.9	70.0	84.1
Q2	2,637.2	2,552.5	478.6	480.8	312.6	248.5	882.7	78.7	70.6	84.7
Q3	2,686.9	2,602.5	470.9	482.4	315.5	261.0	922.4	78.8	71.5	84.4
<b>Insurance corporations</b>										
2006	1,489.2	1,444.6	410.4	127.6	224.7	254.2	292.7	73.1	62.0	44.6
2007	1,526.2	1,485.5	432.5	130.7	226.4	267.1	304.0	68.2	56.6	40.7
2008	1,454.7	1,416.5	436.7	133.7	221.7	221.4	284.3	63.4	55.2	38.2
2009	1,490.3	1,452.2	440.4	146.2	236.4	202.7	317.6	55.6	53.2	38.1
2010	1,553.3	1,513.1	420.0	170.9	243.2	210.7	356.5	56.5	55.4	40.3
2011	1,584.6	1,542.9	419.8	191.3	246.0	210.4	361.4	58.4	55.5	41.7
2012	1,694.4	1,651.1	405.1	246.2	251.7	211.4	425.1	59.0	52.7	43.3
2013	1,742.1	1,695.7	386.3	268.0	257.1	211.1	462.3	59.8	51.0	46.4
2014	1,892.0	1,842.7	371.6	327.4	271.4	215.9	542.3	63.9	50.2	49.3
2015	1,953.4	1,901.7	336.3	357.3	278.7	228.7	578.3	71.6	50.7	51.8
2014 Q4	1,892.0	1,842.7	371.6	327.4	271.4	215.9	542.3	63.9	50.2	49.3
2015 Q1	1,967.9	1,918.2	365.3	352.8	275.7	224.9	583.1	65.6	50.8	49.7
Q2	1,925.8	1,875.9	357.5	337.9	275.3	221.6	564.6	67.5	51.5	49.9
Q3	1,938.2	1,887.7	347.5	350.0	278.1	224.0	567.7	69.5	51.0	50.5
Q4	1,953.4	1,901.7	336.3	357.3	278.7	228.7	578.3	71.6	50.7	51.8
2016 Q1	2,007.2	1,954.1	336.2	386.6	280.0	230.0	596.3	73.4	51.6	53.1
Q2	2,034.0	1,980.7	328.6	408.0	281.7	229.6	607.7	73.1	51.9	53.2
Q3	2,074.6	2,022.2	318.9	410.1	284.5	242.0	640.8	73.2	52.7	52.3
<b>Pension funds <sup>4</sup></b>										
2006	282.3	264.6	113.8	22.4	20.1	7.3	92.8	1.5	6.7	17.7
2007	312.1	294.3	125.8	24.4	21.9	8.2	105.6	1.9	6.6	17.8
2008	315.9	298.3	137.8	25.6	21.6	7.4	95.3	2.4	8.2	17.5
2009	346.5	327.4	148.4	27.7	23.3	7.7	109.3	3.0	8.0	19.1
2010	408.5	387.4	150.9	39.5	24.0	12.8	144.9	3.5	11.8	21.1
2011	426.6	404.9	156.5	34.9	25.9	11.5	160.8	3.8	11.6	21.7
2012	468.4	444.6	155.1	40.9	26.2	12.4	194.4	4.1	11.5	23.8
2013	494.6	469.6	154.3	42.5	27.6	13.0	216.2	4.4	11.7	25.1
2014	552.5	524.6	151.7	57.1	29.1	16.7	247.8	4.9	17.4	27.8
2015	583.0	552.4	152.4	64.3	30.4	18.2	263.3	5.4	18.3	30.6
2014 Q4	552.5	524.6	151.7	57.1	29.1	16.7	247.8	4.9	17.4	27.8
2015 Q1	571.5	543.2	152.1	61.2	29.4	17.3	260.6	5.0	17.6	28.3
Q2	563.7	534.9	151.8	58.8	29.6	17.3	254.7	5.1	17.7	28.8
Q3	569.2	539.9	150.6	62.5	29.9	17.7	256.0	5.3	17.9	29.3
Q4	583.0	552.4	152.4	64.3	30.4	18.2	263.3	5.4	18.3	30.6
2016 Q1	591.1	560.0	150.6	69.7	30.7	18.3	266.8	5.5	18.4	31.0
Q2	603.2	571.7	150.0	72.8	30.9	18.8	275.0	5.5	18.6	31.5
Q3	612.3	580.2	152.0	72.4	31.0	18.9	281.6	5.6	18.7	32.1

Source: Bundesbank calculations based on supervisory data of the Federal Financial Supervisory Authority (BaFin). \* Valuation of securities based on current market values; valuation of other items based on book values. Figures from 2016 Q2 on have been revised. <sup>1</sup> Including registered bonds, borrower's note loans and Pfandbriefe of monetary financial institutions. <sup>2</sup> Including deposits retained on assumed reinsurance. <sup>3</sup> Including participation certificates ("Genuss-Scheine"). <sup>4</sup> The term "pension

funds" refers to the institutional sector "insurance corporations and pension funds" of the European System of Accounts. Pension funds thus comprise company pension schemes ("Pensionskassen", pension funds supervised by BaFin, Contractual Trust Arrangements (CTAs; included as from 2010) and public, church and municipal supplementary pension funds) and occupational pension schemes for the self-employed. Social security funds are not included.

## VII Insurance corporations and pension funds

### 2 Liabilities \*

€ billion

End of year/quarter	Liabilities								
	Total	Debt securities (including financial derivatives)	Loans received <sup>1</sup>	Shares and other equity <sup>2</sup>	Insurance technical reserves			Other liabilities	Net worth <sup>4</sup>
					Total	Net equity of households in life insurance and pension fund reserves <sup>3</sup>	Unearned premiums and reserves for outstanding claims		
<b>Insurance corporations and pension funds <sup>5</sup></b>									
2006	1,771.5	8.4	91.6	210.0	1,318.8	1,049.1	269.6	81.3	61.5
2007	1,838.3	11.7	88.9	214.8	1,377.9	1,119.2	258.7	78.2	66.9
2008	1,770.6	14.7	77.0	136.0	1,396.3	1,141.5	254.8	74.7	71.8
2009	1,836.8	16.2	71.6	136.2	1,460.5	1,211.6	249.0	73.1	79.2
2010	1,961.9	17.8	72.3	137.6	1,573.3	1,318.9	254.4	71.5	89.3
2011	2,011.2	17.0	72.1	111.8	1,625.0	1,360.3	264.7	71.5	113.8
2012	2,162.8	22.4	77.1	158.9	1,708.3	1,437.1	271.2	71.3	124.8
2013	2,236.7	16.9	81.8	197.7	1,794.1	1,514.4	279.7	71.7	74.5
2014	2,444.5	17.3	89.0	202.7	1,903.8	1,605.5	298.3	72.3	159.4
2015	2,536.5	18.3	96.6	226.0	1,995.9	1,683.2	312.8	71.9	127.8
2014 Q4	2,444.5	17.3	89.0	202.7	1,903.8	1,605.5	298.3	72.3	159.4
2015 Q1	2,539.4	19.0	90.4	223.1	1,942.6	1,635.6	307.0	73.0	191.4
Q2	2,489.5	17.9	91.9	206.2	1,958.3	1,649.6	308.7	72.5	142.7
Q3	2,507.3	17.5	94.3	208.4	1,976.5	1,665.6	311.0	72.2	138.4
Q4	2,536.5	18.3	96.6	226.0	1,995.9	1,683.2	312.8	71.9	127.8
2016 Q1	2,598.2	17.7	97.8	231.7	2,027.1	1,707.3	319.9	73.2	150.6
Q2	2,637.2	17.6	97.9	201.1	2,041.1	1,722.3	318.8	73.3	206.2
Q3	2,686.9	19.0	98.5	208.0	2,067.5	1,749.5	318.0	73.8	220.1
<b>Insurance corporations</b>									
2006	1,489.2	8.4	89.8	202.0	1,061.3	792.0	269.2	79.1	48.6
2007	1,526.2	11.7	86.4	206.7	1,090.1	831.7	258.3	75.7	55.6
2008	1,454.7	14.7	74.2	130.6	1,095.7	841.3	254.4	72.3	67.2
2009	1,490.3	16.2	68.3	130.8	1,136.4	887.8	248.5	71.1	67.5
2010	1,553.3	17.8	68.7	131.8	1,191.3	937.3	254.0	69.4	74.4
2011	1,584.6	17.0	68.3	107.0	1,224.3	960.1	264.2	69.6	98.3
2012	1,694.4	22.4	73.1	152.0	1,280.0	1,009.2	270.8	69.5	97.4
2013	1,742.1	16.9	77.7	188.7	1,340.7	1,061.4	279.3	68.8	49.2
2014	1,892.0	17.3	84.3	193.0	1,411.6	1,113.8	297.8	70.5	115.3
2015	1,953.4	18.3	91.6	215.1	1,472.9	1,160.6	312.3	70.2	85.4
2014 Q4	1,892.0	17.3	84.3	193.0	1,411.6	1,113.8	297.8	70.5	115.3
2015 Q1	1,967.9	19.0	85.6	212.5	1,443.0	1,136.4	306.6	71.2	136.6
Q2	1,925.8	17.9	87.2	196.4	1,453.2	1,145.0	308.3	70.7	100.3
Q3	1,938.2	17.5	89.5	198.5	1,464.5	1,154.0	310.5	70.5	97.6
Q4	1,953.4	18.3	91.6	215.1	1,472.9	1,160.6	312.3	70.2	85.4
2016 Q1	2,007.2	17.7	92.8	220.6	1,499.3	1,179.8	319.4	71.4	105.4
Q2	2,034.0	17.6	92.9	191.3	1,506.7	1,188.4	318.3	71.5	154.0
Q3	2,074.6	19.0	93.4	197.8	1,528.4	1,210.8	317.5	72.0	164.0
<b>Pension funds <sup>5</sup></b>									
2006	282.3	–	1.8	8.0	257.5	257.1	0.4	2.1	12.9
2007	312.1	–	2.4	8.1	287.8	287.5	0.3	2.5	11.2
2008	315.9	–	2.8	5.4	300.6	300.2	0.4	2.4	4.7
2009	346.5	–	3.2	5.4	324.2	323.7	0.4	1.9	11.7
2010	408.5	–	3.6	5.8	382.1	381.7	0.4	2.1	15.0
2011	426.6	–	3.8	4.8	400.6	400.2	0.5	1.9	15.5
2012	468.4	–	4.1	6.9	428.3	427.9	0.4	1.8	27.3
2013	494.6	–	4.2	8.9	453.4	452.9	0.5	2.9	25.3
2014	552.5	–	4.7	9.7	492.1	491.6	0.5	1.8	44.2
2015	583.0	–	4.9	11.0	523.0	522.6	0.5	1.7	42.4
2014 Q4	552.5	–	4.7	9.7	492.1	491.6	0.5	1.8	44.2
2015 Q1	571.5	–	4.7	10.5	499.7	499.2	0.5	1.8	54.8
Q2	563.7	–	4.8	9.8	505.1	504.6	0.5	1.7	42.4
Q3	569.2	–	4.8	9.9	512.0	511.6	0.5	1.7	40.7
Q4	583.0	–	4.9	11.0	523.0	522.6	0.5	1.7	42.4
2016 Q1	591.1	–	5.0	11.2	527.9	527.4	0.5	1.7	45.3
Q2	603.2	–	5.0	9.8	534.4	533.9	0.5	1.8	52.3
Q3	612.3	–	5.1	10.2	539.1	538.6	0.5	1.8	56.2

Source: Bundesbank calculations based on supervisory data of the Federal Financial Supervisory Authority (BaFin). \* Valuation of securities based on current market values; valuation of other items based on book values. Quarterly data and data as from 2015 are partially estimated. Figures from 2016 Q2 on have been revised. <sup>1</sup> Including deposits retained on ceded business. <sup>2</sup> Including participation certificates ("Genuss-Scheine"). <sup>3</sup> Including ageing provisions of health insurance schemes and premium reserves of accident insurance schemes with guaranteed premium refund. <sup>4</sup> As defined in the European System of Accounts (ESA 1995), net worth is the difference

between total assets and the remaining liability items. Own funds are the sum of net worth and "shares and other equity". <sup>5</sup> The term "pension funds" refers to the institutional sector "insurance corporations and pension funds" of the ESA. Pension funds thus comprise company pension schemes ("Pensionskassen", pension funds supervised by BaFin, Contractual Trust Arrangements (CTAs; included as from 2010) and public, church and municipal supplementary pension funds) and occupational pension schemes for the self-employed. Social security funds are not included.

## VIII Capital market

### 1 Sales and purchases of debt securities and shares in Germany

€ million

Period	Debt securities																					
	Sales = total purchases	Sales					Purchases															
		Domestic debt securities <sup>1</sup>					Residents															
		Total	Bank debt securities	Corporate bonds (non-MFIs) <sup>2</sup>	Public debt securities <sup>3</sup>	Foreign debt securities <sup>4</sup>	Total <sup>5</sup>	Credit institutions including building and loan associations <sup>6</sup>	Deutsche Bundesbank	Other sectors <sup>7</sup>	Non-residents <sup>8</sup>											
2004	233,890	133,711	64,231	10,778	58,703	100,179	108,119	121,841	.	-	13,723	125,772										
2005	252,658	110,542	39,898	2,682	67,965	142,116	94,718	61,740	.	.	32,978	157,940										
2006	242,006	102,379	40,995	8,943	52,446	139,627	125,423	68,893	.	.	56,530	116,583										
2007	217,798	90,270	42,034	20,123	28,111	127,528	-	26,762	96,476	.	-	123,238	244,560									
2008	76,490	66,139	-	45,712	86,527	25,322	10,351	18,236	68,049	.	-	49,813	58,254									
2009	70,208	-	538	-	114,902	22,709	91,655	70,747	90,154	12,973	8,645	77,181	-	19,945								
2010	146,620	-	1,212	-	7,621	24,044	-	17,635	147,831	92,682	-	103,271	22,967	172,986	53,938							
2011	33,649	-	13,575	-	46,796	850	59,521	20,075	-	23,876	-	94,793	36,805	34,112	57,525							
2012	51,813	-	21,419	-	98,820	-	8,701	86,103	73,231	-	3,767	-	42,017	-	3,573	41,823	55,580					
2013	-	12,603	-	101,616	-	117,187	-	153	89,013	18,583	-	25,778	-	12,708	57,069	-	31,185					
2014	63,381	-	31,962	-	47,404	-	1,330	16,776	95,341	51,779	-	12,124	-	11,951	75,854	-	11,601					
2015	32,891	-	36,010	-	65,778	26,762	3,006	68,902	123,662	-	66,330	121,164	68,828	-	90,773	-	-					
2016 Jan	8,853	-	1,881	-	7,474	2,924	-	12,279	10,733	6,823	2,236	12,023	-	7,436	2,029	-	-					
Feb	31,114	-	19,483	-	14,851	1,224	-	3,407	11,631	20,916	2,002	12,911	-	6,003	10,198	-	-					
Mar	26,539	-	12,729	-	1,330	4,510	-	6,889	13,810	26,890	1,261	13,401	-	12,228	-	-	351					
Apr	12,556	-	3,469	-	7,238	1,970	-	12,677	16,025	34,517	-	5,143	15,821	23,839	-	-	21,961					
May	32,838	-	29,686	-	8,729	3,993	-	16,964	3,152	15,400	-	6,052	18,093	3,359	-	-	17,438					
June	-	5,007	-	7,553	-	2,177	-	740	2,545	15,220	-	8,528	16,907	6,841	-	-	20,227					
July	-	30,730	-	26,603	-	16,263	-	1,055	-	11,394	-	4,127	-	9,959	18,064	-	-	9,682	-	29,152		
Aug	-	19,614	-	18,041	-	7,011	-	942	-	11,972	-	1,573	-	10,241	13,001	-	-	9,491	-	7,362		
Sep	-	17,786	-	12,468	-	6,106	-	3,712	-	2,650	-	5,319	-	23,933	-	-	4,025	17,786	-	10,172	-	6,147
Oct	-	9,049	-	6,357	-	640	-	3,347	-	10,344	-	2,692	-	10,705	-	-	7,635	17,287	-	1,053	-	19,754
Nov	-	107	-	2,417	-	5,172	-	377	-	7,966	-	2,311	-	14,354	-	-	2,468	18,652	-	1,830	-	14,247

€ million

Period	Shares													
	Sales = total purchases	Sales			Purchases									
		Domestic shares <sup>9</sup>		Foreign shares <sup>10</sup>	Residents									
		Total	Foreign shares <sup>10</sup>	Foreign shares <sup>10</sup>	Total <sup>11</sup>	Credit institutions <sup>6</sup>	Other sectors <sup>12</sup>	Non-residents <sup>13</sup>						
2004	-	3,317	-	10,157	-	13,474	7,432	5,045	-	2,387	-	10,748		
2005	-	32,364	-	13,766	-	18,597	1,036	10,208	-	9,172	-	31,329		
2006	-	26,276	-	9,061	-	17,214	7,528	11,323	-	3,795	-	18,748		
2007	-	5,009	-	10,053	-	15,062	-	62,308	-	6,702	-	57,299		
2008	-	29,452	-	11,326	-	40,778	2,743	-	23,079	-	25,822	-	32,194	
2009	-	35,980	-	23,962	-	12,018	30,496	-	8,335	-	38,831	-	5,484	
2010	-	37,767	-	20,049	-	17,719	36,406	-	7,340	-	29,066	-	1,361	
2011	-	25,833	-	21,713	-	4,120	40,804	-	670	-	40,134	-	14,971	
2012	-	15,061	-	5,120	-	9,941	14,405	-	10,259	-	4,146	-	656	
2013	-	21,553	-	10,106	-	11,447	18,344	-	11,991	-	6,353	-	3,209	
2014	-	47,506	-	18,778	-	28,728	39,661	-	17,203	-	22,458	-	7,845	
2015	-	38,855	-	7,668	-	31,187	24,017	-	5,421	-	29,438	-	14,838	
2016 Jan	-	1,294	-	120	-	1,414	367	-	5,901	-	6,268	-	1,661	
Feb	-	611	-	66	-	677	1,539	-	5,401	-	6,940	-	2,150	
Mar	-	8,290	-	59	-	8,231	5,935	-	1,861	-	4,074	-	2,355	
Apr	-	949	-	39	-	988	472	-	639	-	1,111	-	1,421	
May	-	5,585	-	288	-	5,297	6,964	-	2,838	-	4,126	-	1,379	
June	-	1,068	-	335	-	733	3,576	-	330	-	3,906	-	2,508	
July	-	2,930	-	464	-	2,466	2,672	-	2,128	-	4,800	-	258	
Aug	-	4,811	-	1,063	-	3,748	3,180	-	2,256	-	924	-	1,631	
Sep	-	5,554	-	229	-	5,325	6,207	-	503	-	5,704	-	653	
Oct	-	1,989	-	204	-	1,785	-	1,461	-	221	-	1,240	-	3,450
Nov	-	3,852	-	681	-	3,171	3,976	-	728	-	3,248	-	124	

**1** Net sales at market values plus/minus changes in issuers' portfolios of their own debt securities. **2** Including cross-border financing within groups from January 2011. **3** Including Federal Railways Fund, Federal Post Office and Treuhand agency. **4** Net purchases or net sales (-) of foreign debt securities by residents; transaction values. **5** Domestic and foreign debt securities. **6** Book values; statistically adjusted. **7** Residual; also including purchases of domestic and foreign securities by domestic mutual funds. Up to end-2008, data comprise Deutsche Bundesbank. **8** Net purchases or net sales (-) of domestic debt securities by non-residents; transaction

values. **9** Excluding shares of public limited investment companies; at issue prices. **10** Net purchases or net sales (-) of foreign shares (including direct investment) by residents; transaction values. **11** Domestic and foreign shares. **12** Residual; also including purchases of domestic and foreign securities by domestic mutual funds. **13** Net purchases or net sales (-) of domestic shares (including direct investment) by non-residents; transaction values. — The figures for the most recent date are provisional; revisions are not specially marked.

## VIII Capital market

### 2 Sales of debt securities issued by residents \*

€ million nominal value

Period	Bank debt securities <sup>1</sup>						Corporate bonds (non-MFIs) <sup>2</sup>	Public debt securities <sup>3</sup>	Memo item Foreign DM/euro bonds issued by German-managed syndicates	
	Total	Total	Mortgage Pfandbriefe	Public Pfandbriefe	Debt securities issued by special purpose credit institutions	Other bank debt securities				
<b>Gross sales <sup>4</sup></b>										
2004	990,399	688,844	33,774	90,815	162,353	401,904	31,517	270,040	12,344	
2005	988,911	692,182	28,217	103,984	160,010	399,969	24,352	272,380	600	
2006	925,863	622,055	24,483	99,628	139,193	358,750	29,975	273,834	69	
2007	1,021,533	743,616	19,211	82,720	195,722	445,963	15,043	262,872	–	
2008	1,337,337	961,271	51,259	70,520	382,814	456,676	95,093	280,974	–	
2009	1,533,616	1,058,815	40,421	37,615	331,566	649,215	76,379	398,423	–	
2010	1,375,138	757,754	36,226	33,539	363,828	324,160	53,654	563,731	–	
2011	1,337,772	658,781	31,431	24,295	376,876	226,180	86,615	592,376	–	
2012	1,340,568	702,781	36,593	11,413	446,153	208,623	63,259	574,529	–	
2013	1,433,628	908,107	25,775	12,963	692,611	176,758	66,630	458,891	–	
2014	1,362,056	829,864	24,202	13,016	620,409	172,236	79,873	452,321	–	
2015	1,359,422	852,045	35,840	13,376	581,410	221,417	106,676	400,700	–	
2016 Apr	115,428	69,506	1,282	536	53,522	14,167	5,762	40,160	–	
May	109,656	67,125	3,518	355	48,486	14,766	7,177	35,353	–	
June	98,036	56,397	1,402	1,345	35,416	18,235	3,694	37,944	–	
July <sup>5</sup>	106,809	64,060	3,695	231	47,806	12,328	5,516	37,234	–	
Aug	84,466	47,957	3,758	952	35,486	7,762	2,439	34,070	–	
Sep	110,645	60,863	720	143	46,130	13,870	9,464	40,318	–	
Oct	93,470	58,255	1,559	785	42,270	13,642	7,593	27,621	–	
Nov	72,858	40,706	2,017	211	29,840	8,639	2,842	29,309	–	
<b>of which: Debt securities with maturities of more than four years <sup>6</sup></b>										
2004	424,769	275,808	20,060	48,249	54,075	153,423	20,286	128,676	4,320	
2005	425,523	277,686	20,862	63,851	49,842	143,129	16,360	131,479	400	
2006	337,969	190,836	17,267	47,814	47,000	78,756	14,422	132,711	69	
2007	315,418	183,660	10,183	31,331	50,563	91,586	13,100	118,659	–	
2008	387,516	190,698	13,186	31,393	54,834	91,289	84,410	112,407	–	
2009	361,999	185,575	20,235	20,490	59,809	85,043	55,240	121,185	–	
2010	381,687	169,174	15,469	15,139	72,796	65,769	34,649	177,863	–	
2011	368,039	153,309	13,142	8,500	72,985	58,684	41,299	173,431	–	
2012	421,018	177,086	23,374	6,482	74,386	72,845	44,042	199,888	–	
2013	372,805	151,797	16,482	10,007	60,662	64,646	45,244	175,765	–	
2014	420,006	157,720	17,678	8,904	61,674	69,462	56,249	206,037	–	
2015	414,593	179,150	25,337	9,199	62,237	82,379	68,704	166,742	–	
2016 Apr	30,946	11,246	1,207	511	4,680	4,848	4,481	15,219	–	
May	36,255	17,367	2,711	55	8,707	5,895	4,908	13,980	–	
June	34,458	16,553	1,291	711	6,590	7,962	2,098	15,808	–	
July <sup>5</sup>	34,008	14,977	2,759	231	9,154	2,833	3,897	15,134	–	
Aug	24,960	11,808	2,630	502	4,541	4,134	931	12,221	–	
Sep	35,483	16,330	708	118	7,420	8,084	7,291	11,862	–	
Oct	32,702	14,677	1,559	785	4,690	7,644	6,327	11,698	–	
Nov	23,848	11,083	2,004	211	5,122	3,746	1,368	11,397	–	
<b>Net sales <sup>7</sup></b>										
2004	167,233	81,860	1,039	–	52,615	50,142	83,293	18,768	66,605	22,124
2005	141,715	65,798	–	2,151	–	34,255	37,242	10,099	65,819	35,963
2006	129,423	58,336	–	12,811	–	20,150	44,890	15,605	55,482	19,208
2007	86,579	58,168	–	10,896	–	46,629	42,567	3,683	32,093	29,750
2008	119,472	8,517	–	15,052	–	65,773	25,165	82,653	28,302	31,607
2009	76,441	75,554	–	858	–	80,646	25,579	21,345	48,508	21,037
2010	21,566	87,646	–	3,754	–	63,368	28,296	48,822	23,748	10,904
2011	22,518	54,582	–	1,657	–	44,290	32,904	44,852	3,189	5,989
2012	–	85,298	–	100,198	–	4,177	–	51,099	6,401	2,605
2013	–	140,017	–	125,932	–	17,364	–	37,778	–	3,057
2014	–	34,020	–	56,899	–	6,313	–	23,856	–	2,626
2015	–	65,147	–	77,273	–	9,754	–	2,758	–	1,441
2016 Apr	–	8,359	–	7,324	–	236	–	1,468	–	159
May	–	28,473	–	9,196	–	1,402	–	660	–	590
June	–	3,182	–	4,261	–	2,543	–	3,575	–	–
July <sup>5</sup>	–	22,944	–	15,024	–	858	–	1,014	–	59
Aug	–	19,464	–	5,831	–	3,209	–	34	–	–
Sep	–	13,990	–	4,456	–	421	–	1,385	–	–
Oct	–	4,225	–	425	–	286	–	1,680	–	15
Nov	–	4,577	–	6,635	–	1,095	–	1,855	–	214

\* For definitions, see the explanatory notes in the Statistical Supplement 2 Capital market statistics on p 21 ff. <sup>1</sup> Excluding registered bank debt securities. <sup>2</sup> Including cross-border financing within groups from January 2011. <sup>3</sup> Including Federal Railways Fund, Federal Post Office and Treuhand agency. <sup>4</sup> Gross sales means only

initial sales of newly issued securities. <sup>5</sup> Sectoral reclassification of debt securities. e. <sup>6</sup> Maximum maturity according to the terms of issue. <sup>7</sup> Gross sales less redemptions.

## VIII Capital market

### 3 Amounts outstanding of debt securities issued by residents \*

€ million nominal value

End of year or month/ Maturity in years	Bank debt securities <sup>1</sup>						Corporate bonds (non-MFIs)	Public debt securities	Memo item Foreign DM/Euro bonds issued by German-managed syndicates
	Total	Total	Mortgage Pfandbriefe	Public Pfandbriefe	Debt securities issued by special purpose credit institutions	Other bank debt securities			
2004	2,773,007	1,685,766	159,360	553,927	316,745	655,734	73,844	1,013,397	170,543
2005	2,914,723	1,751,563	157,209	519,674	323,587	751,093	83,942	1,079,218	134,580
2006	3,044,145	1,809,899	144,397	499,525	368,476	797,502	99,545	1,134,701	115,373
2007	3,130,723	1,868,066	133,501	452,896	411,041	870,629	95,863	1,166,794	85,623
2008	3,250,195	1,876,583	150,302	377,091	490,641	858,550	178,515	1,195,097	54,015
2009	3,326,635	1,801,029	151,160	296,445	516,221	837,203	227,024	1,298,581	32,978
2010	3,348,201 <sup>2</sup>	1,570,490	147,529	232,954	544,517 <sup>2</sup>	645,491	250,774 <sup>2</sup>	1,526,937	22,074
2011	3,370,721	1,515,911	149,185	188,663	577,423	600,640	247,585	1,607,226	16,085
2012	3,285,422 <sup>2</sup>	1,414,349	145,007	147,070	574,163 <sup>2</sup>	548,109	220,456 <sup>2</sup>	1,650,617	13,481
2013	3,145,329	1,288,340	127,641	109,290	570,136	481,273	221,851	1,635,138	10,422
2014	3,111,308	1,231,445	121,328	85,434	569,409	455,274	232,342	1,647,520	7,797
2015	3,046,162	1,154,173	130,598	75,679	566,811	381,085	257,612	1,634,377	6,356
2016 May	3,087,195	1,191,160	132,057	72,672	595,026	391,406	269,584	1,626,451	5,389
June	3,084,013	1,186,899	129,514	69,097	596,349	391,940	265,527	1,631,587	5,389
July <sup>2</sup>	3,061,069	1,171,875	130,372	68,083	632,445	340,975	266,411	1,622,783	5,330
Aug	3,080,533	1,177,707	133,581	68,049	637,342	338,734	266,068	1,636,758	5,330
Sep	3,094,523	1,182,162	133,160	66,664	642,143	340,195	269,875	1,642,486	5,330
Oct	3,090,298	1,182,587	133,446	64,984	642,249	341,909	273,900	1,633,811	5,314
Nov	3,094,875	1,175,952	134,541	63,129	638,998	339,284	274,075	1,644,848	5,100

#### Breakdown by remaining period to maturity <sup>3</sup>

#### Position at end-November 2016

	Total	Mortgage Pfandbriefe	Public Pfandbriefe	Debt securities issued by special purpose credit institutions	Other bank debt securities	Corporate bonds (non-MFIs)	Public debt securities	Memo item Foreign DM/Euro bonds issued by German-managed syndicates	
less than 2	1,025,339	458,569	38,567	24,094	273,459	122,449	51,150	515,620	1,646
2 to less than 4	692,307	289,496	40,154	15,993	161,157	72,193	49,731	353,079	274
4 to less than 6	427,653	173,498	23,178	9,268	90,576	50,478	38,704	215,453	291
6 to less than 8	302,565	88,365	17,648	6,224	41,869	22,624	22,420	191,781	1,340
8 to less than 10	235,939	78,485	9,660	5,439	39,246	24,138	15,250	142,205	140
10 to less than 15	127,097	30,965	4,724	1,317	12,616	12,309	16,425	79,708	442
15 to less than 20	52,101	17,151	182	725	12,281	3,963	4,823	30,127	-
20 and more	231,872	39,422	428	70	7,796	31,129	75,574	116,875	967

\* Including debt securities temporarily held in the issuers' portfolios. <sup>1</sup> Excluding debt securities handed to the trustee for temporary safe custody. <sup>2</sup> Sectoral reclassification of debt securities. <sup>3</sup> Calculated from month under review until final

maturity for debt securities falling due en bloc and until mean maturity of the residual amount outstanding for debt securities not falling due en bloc.

### 4 Shares in circulation issued by residents \*

€ million nominal value

Period	Share capital = circulation at end of period under review	Net increase or net decrease (-) during period under review	Change in domestic public limited companies' capital due to						Memo item Share circulation at market values (market capitalisation) level at end of period under review <sup>2</sup>	
			cash payments and ex-change of convertible bonds <sup>1</sup>	issue of bonus shares	contribution of claims and other real assets	contribution of shares, mining shares, GmbH shares, etc	merger and transfer of assets	change of legal form		reduction of capital and liquidation
2004	164,802	2,669	3,960	1,566	276	696	220	1,760	2,286	887,217
2005	163,071	- 1,733	2,470	1,040	694	268	- 1,443	- 3,060	- 1,703	1,058,532
2006	163,764	695	2,670	3,347	604	954	- 1,868	- 1,256	- 3,761	1,279,638
2007	164,560	799	3,164	1,322	200	269	- 682	- 1,847	- 1,636	1,481,930
2008	168,701	4,142	5,006	1,319	152	0	- 428	- 608	- 1,306	830,622
2009	175,691	6,989	12,476	398	97	-	- 3,741	- 1,269	- 974	927,256
2010	174,596	- 1,096	3,265	497	178	10	- 486	- 993	- 3,569	1,091,220
2011	177,167	2,570	6,390	552	462	9	- 552	- 762	- 3,532	924,214
2012	178,617	1,449	3,046	129	570	-	- 478	- 594	- 2,411	1,150,188
2013	171,741	- 6,879	2,971	718	476	-	- 1,432	- 619	- 8,992	1,432,658
2014	177,097	5,356	5,332	1,265	1,714	-	- 465	- 1,044	- 1,446	1,478,063
2015	177,416	319	4,634	397	599	-	- 1,394	- 1,385	- 2,535	1,614,442
2016 May	175,609	- 1,097	209	14	5	-	- 4	- 378	- 942	1,529,297
June	175,694	85	213	67	228	-	- 30	- 305	- 87	1,432,091
July	176,196	502	425	148	5	-	- 83	- 49	- 40	1,527,172
Aug	176,572	376	1,061	35	19	-	- 495	- 121	- 124	1,566,154
Sep	176,583	11	49	2	0	-	- 22	- 59	- 76	1,574,835
Oct	176,733	150	196	0	45	-	- 36	- 11	- 44	1,586,968
Nov	176,793	60	120	2	-	-	-	- 5	- 56	1,571,446

\* Excluding shares of public limited investment companies. <sup>1</sup> Including shares issued out of company profits. <sup>2</sup> Enterprises listed on the Regulated Market (the introduction of which marked the end of the division of organised trading segments into an

official and a regulated market on 1 November 2007) are included as well as enterprises listed on the Open Market. Source: Bundesbank calculations based on data of the Herausgebergemeinschaft Wertpapier-Mitteilungen and the Deutsche Börse AG.

## VIII Capital market

### 5 Yields and indices on German securities

Period	Yields on debt securities outstanding issued by residents <sup>1</sup>							Price indices <sup>2,3</sup>			
	Public debt securities				Bank debt securities			Debt securities		Shares	
	Total	Total	Listed Federal securities		Total	With a residual maturity of more than 9 and including 10 years <sup>4</sup>	Corporate bonds (non-MFIs)	German bond index (REX)	iBoxx € Germany price index	CDAX share price index	German share index (DAX)
			Total	With a residual maturity of 9 and including 10 years <sup>4</sup>							
% per annum								Average daily rate	End-1998 = 100	End-1987 = 100	End-1987 = 1000
2005	3.1	3.2	3.2	3.4	3.1	3.5	3.7	120.92	101.09	335.59	5,408.26
2006	3.8	3.7	3.7	3.8	3.8	4.0	4.2	116.78	96.69	407.16	6,596.92
2007	4.3	4.3	4.2	4.2	4.4	4.5	5.0	114.85	94.62	478.65	8,067.32
2008	4.2	4.0	4.0	4.0	4.5	4.7	6.3	121.68	102.06	266.33	4,810.20
2009	3.2	3.1	3.0	3.2	3.5	4.0	5.5	123.62	100.12	320.32	5,957.43
2010	2.5	2.4	2.4	2.7	2.7	3.3	4.0	124.96	102.95	368.72	6,914.19
2011	2.6	2.4	2.4	2.6	2.9	3.5	4.3	131.48	109.53	304.60	5,898.35
2012	1.4	1.3	1.3	1.5	1.6	2.1	3.7	135.11	111.18	380.03	7,612.39
2013	1.4	1.3	1.3	1.6	1.3	2.1	3.4	132.11	105.92	466.53	9,552.16
2014	1.0	1.0	1.0	1.2	0.9	1.7	3.0	139.68	114.37	468.39	9,805.55
2015	0.5	0.4	0.4	0.5	0.5	1.2	2.4	139.52	112.42	508.80	10,743.01
2016	0.1	0.0	0.0	0.1	0.3	1.0	2.1	142.50	112.72	526.55	11,481.06
2016 July	0.1	0.2	0.2	0.2	0.2	0.7	1.7	144.06	116.16	481.02	10,337.50
Aug	0.1	0.2	0.2	0.1	0.1	0.6	1.6	144.30	115.34	491.68	10,592.69
Sep	0.1	0.2	0.2	0.1	0.1	0.6	1.6	144.47	115.53	490.14	10,511.02
Oct	0.0	0.1	0.1	0.0	0.2	0.7	1.7	142.59	113.12	494.25	10,665.01
Nov	0.2	0.1	0.0	0.2	0.4	1.0	2.0	142.37	112.33	490.37	10,640.30
Dec	0.2	0.1	0.1	0.3	0.4	1.0	2.0	142.50	112.72	526.55	11,481.06

<sup>1</sup> Bearer debt securities with maximum maturities according to the terms of issue of over 4 years if their mean residual maturities exceed 3 years. Convertible debt securities, etc. debt securities with unscheduled redemption, zero-coupon bonds, floating-rate notes and bonds not denominated in euro are not included. Group yields for the various categories of securities are weighted by the amounts outstan-

ding of the debt securities included in the calculation. Monthly figures are calculated on the basis of the yields on all the business days in a month. The annual figures are the unweighted means of the monthly figures. <sup>2</sup> End of year or month. <sup>3</sup> Source: Deutsche Börse AG. <sup>4</sup> Only debt securities eligible as underlying instruments for futures contracts; calculated as unweighted averages.

### 6 Sales and purchases of mutual fund shares in Germany

Period	€ million													
	Sales							Purchases						
	Open-end domestic mutual funds <sup>1</sup> (sales receipts)							Residents						
	Sales = total purchases	Total	Mutual funds open to the general public					Foreign funds <sup>4</sup>	Total	Credit institutions including building and loan associations <sup>2</sup>		Other sectors <sup>3</sup>		Non-residents <sup>5</sup>
Total			Money market funds	Securities-based funds	Real estate funds	Specialised funds	Total			of which Foreign mutual fund shares	Total	of which Foreign mutual fund shares		
	2004	14,435						1,453	- 3,978				- 6,160	- 1,246
2005	85,268	41,718	6,400	- 124	7,001	- 3,186	35,317	43,550	79,252	21,290	7,761	57,962	35,789	6,016
2006	47,264	19,535	- 14,257	490	- 9,362	- 8,814	33,791	27,729	39,006	14,676	5,221	24,330	22,508	8,258
2007	55,778	13,436	- 7,872	- 4,839	- 12,848	6,840	21,307	42,342	51,309	- 229	4,240	51,538	38,102	4,469
2008	2,598	- 7,911	- 14,409	- 12,171	- 11,149	799	6,498	10,509	11,315	- 16,625	- 9,252	27,940	19,761	- 8,717
2009	49,929	43,747	10,966	- 5,047	11,749	2,686	32,780	6,182	38,132	- 14,995	- 8,178	53,127	14,361	11,796
2010	106,190	84,906	13,381	- 148	8,683	1,897	71,345	21,284	102,591	3,873	6,290	98,718	14,994	3,598
2011	46,511	45,221	- 1,340	- 379	- 2,037	1,562	46,561	1,291	39,474	- 7,576	- 694	47,050	1,984	7,036
2012	111,236	89,942	2,084	- 1,036	97	3,450	87,859	21,293	114,676	- 3,062	- 1,562	117,738	22,855	- 3,438
2013	123,743	91,337	9,184	- 574	5,596	3,376	82,153	32,407	117,675	771	100	116,904	32,305	6,069
2014	139,011	97,711	3,998	- 473	862	1,000	93,713	41,302	144,168	819	- 1,745	143,349	43,046	- 5,154
2015	181,632	146,136	30,420	318	22,345	3,636	115,716	35,495	176,116	7,362	494	168,754	35,001	5,515
2016 May	9,441	8,249	2,461	- 50	1,132	1,111	5,788	1,192	9,280	887	- 65	8,393	1,257	161
June	11,123	10,640	1,664	42	565	755	8,976	483	11,561	557	- 87	11,004	570	- 439
July	9,383	7,899	1,862	- 195	1,706	280	6,038	1,484	10,904	1,208	186	9,696	1,298	- 1,521
Aug	8,572	5,151	1,038	- 125	843	109	4,113	3,421	9,140	- 922	- 1,679	10,062	5,100	- 567
Sep	12,075	8,123	900	39	28	631	7,224	3,952	12,285	648	132	11,637	3,820	- 210
Oct	18,103	11,557	1,765	- 103	1,049	528	9,791	6,546	17,987	- 213	- 518	18,200	7,064	116
Nov	11,088	11,845	2,820	67	2,053	346	9,025	- 757	12,175	- 616	- 780	12,791	23	- 1,087

<sup>1</sup> Including public limited investment companies. <sup>2</sup> Book values. <sup>3</sup> Residual. <sup>4</sup> Net purchases or net sales (-) of foreign fund shares by residents; transaction values. <sup>5</sup> Net purchases or net sales (-) of domestic fund shares by non-residents;

transaction values. — The figures for the most recent date are provisional; revisions are not specially marked.

## IX Financial accounts

### 1 Acquisition of financial assets and external financing of non-financial corporations (non-consolidated)

€ billion

Item	2013	2014	2015	2015			2016		
				Q2	Q3	Q4	Q1	Q2	Q3
<b>Acquisition of financial assets</b>									
Currency and deposits	4.45	- 7.75	37.62	3.60	28.00	16.99	- 1.30	8.59	16.96
Debt securities	0.65	- 1.26	- 0.93	0.56	0.51	- 0.52	0.87	- 3.32	0.17
short-term debt securities	1.56	1.62	- 0.77	0.93	- 1.42	0.78	0.98	- 0.70	- 0.02
long-term debt securities	- 0.91	- 2.88	- 0.15	- 0.37	1.93	- 1.29	- 0.10	- 2.62	0.19
Memo item									
Debt securities of domestic sectors	- 1.27	- 1.88	0.73	0.24	0.94	- 0.38	0.51	- 2.54	- 0.04
Non-financial corporations	0.81	- 0.05	- 0.79	0.59	- 0.32	- 0.52	0.66	- 0.12	0.01
Financial corporations	- 2.14	- 1.26	1.93	- 0.27	0.87	0.58	0.31	- 1.80	- 0.53
General government	0.07	- 0.57	- 0.41	- 0.08	0.39	- 0.44	- 0.46	- 0.62	0.47
Debt securities of the rest of the world	1.91	0.62	- 1.66	0.32	- 0.42	- 0.14	0.37	- 0.78	0.21
Loans	9.29	14.41	30.53	5.87	1.37	0.20	6.50	- 5.34	4.69
short-term loans	27.76	36.06	25.14	1.64	1.13	1.97	3.21	- 0.60	3.17
long-term loans	- 18.47	- 21.66	5.39	4.23	0.25	- 1.77	3.29	- 4.74	7.87
Memo item									
to domestic sectors	2.20	10.40	12.09	- 1.12	0.52	- 5.20	0.78	- 4.39	1.65
Non-financial corporations	3.91	- 0.31	2.43	0.06	4.34	- 0.56	3.28	- 8.38	3.24
Financial corporations	- 1.81	10.65	9.68	- 1.17	- 3.81	- 4.64	- 2.50	3.99	- 1.60
General government	0.10	0.06	- 0.02	- 0.01	- 0.01	- 0.01	0.00	0.00	0.00
to the rest of the world	7.09	4.01	18.44	6.99	0.85	5.41	5.72	- 0.95	3.05
Equity and investment fund shares	39.87	9.93	47.49	8.00	14.77	20.99	10.03	3.04	15.47
Equity	32.22	20.31	31.15	5.18	10.89	19.49	9.58	3.79	11.38
Listed shares of domestic sectors	8.70	- 1.62	- 10.41	1.41	1.98	2.88	- 6.00	- 0.77	6.72
Non-financial corporations	9.65	- 5.39	- 8.04	1.07	2.12	2.86	- 6.17	- 0.94	6.83
Financial corporations	- 0.95	3.78	- 2.37	0.34	- 0.14	0.02	0.17	0.17	- 0.11
Listed shares of the rest of the world	3.37	- 4.85	12.38	- 0.15	- 4.46	3.00	0.66	- 0.60	1.37
Other equity <sup>1</sup>	20.16	26.77	29.18	3.92	13.37	13.61	14.92	5.16	3.29
Investment fund shares	7.65	- 10.38	16.35	2.82	3.87	1.50	0.45	- 0.75	4.08
Money market fund shares	- 0.15	0.23	0.21	0.17	- 0.06	0.35	- 0.30	- 0.10	- 0.03
Non-MMF investment fund shares	7.80	- 10.61	16.13	2.65	3.93	1.15	0.75	- 0.65	4.11
Insurance technical reserves	3.02	1.05	2.97	0.86	0.88	0.64	2.40	2.61	2.68
Financial derivatives	6.49	- 1.26	0.54	- 2.41	0.87	- 1.47	- 1.96	0.94	- 4.58
Other accounts receivable	173.71	- 95.11	52.19	48.50	11.47	21.77	9.03	3.04	- 17.33
<b>Total</b>	<b>237.47</b>	<b>- 80.01</b>	<b>170.41</b>	<b>64.98</b>	<b>57.86</b>	<b>58.60</b>	<b>25.57</b>	<b>9.56</b>	<b>18.07</b>
<b>External financing</b>									
Debt securities	12.78	1.26	7.78	4.91	0.46	- 1.17	10.40	4.60	2.88
short-term securities	- 1.12	- 11.63	1.96	- 0.04	1.01	- 0.27	2.04	0.18	- 0.57
long-term securities	13.90	12.89	5.82	4.95	- 0.55	- 0.89	8.36	4.43	3.45
Memo item									
Debt securities of domestic sectors	5.10	4.27	1.76	2.73	- 0.72	- 1.19	4.97	1.27	1.51
Non-financial corporations	0.81	- 0.05	- 0.79	0.59	- 0.32	- 0.52	0.66	- 0.12	0.01
Financial corporations	2.85	4.12	2.07	1.85	- 0.44	- 0.60	3.59	1.96	1.48
General government	- 0.05	0.00	0.02	- 0.00	0.01	0.01	- 0.00	0.00	0.01
Households	1.50	0.20	0.46	0.29	0.03	- 0.07	0.73	- 0.57	0.01
Debt securities of the rest of the world	7.67	- 3.01	6.02	2.19	1.18	0.03	5.43	3.33	1.37
Loans	26.84	- 13.42	42.52	16.70	- 1.39	- 1.26	34.89	5.38	22.11
short-term loans	24.45	1.81	24.57	14.91	- 2.82	4.01	18.51	- 3.38	4.29
long-term loans	2.40	- 15.23	17.94	1.79	1.43	- 5.27	16.38	8.77	17.82
Memo item									
from domestic sectors	- 4.95	4.59	17.91	6.29	0.00	- 10.19	23.36	- 10.13	14.93
Non-financial corporations	3.91	- 0.31	2.43	0.06	4.34	- 0.56	3.28	- 8.38	3.24
Financial corporations	12.46	16.45	22.70	7.26	- 1.53	1.39	13.89	- 2.37	14.37
General government	- 21.31	- 11.55	- 7.23	- 1.03	- 2.81	- 11.02	6.20	0.62	- 2.68
from the rest of the world	31.74	- 18.01	24.60	10.41	- 1.39	8.93	11.53	15.51	7.18
Equity	12.04	27.88	15.04	5.40	5.89	3.69	3.25	2.13	2.42
Listed shares of domestic sectors	- 4.47	- 0.34	7.36	- 3.65	0.73	11.39	- 2.68	3.28	4.34
Non-financial corporations	9.65	- 5.39	- 8.04	1.07	2.12	2.86	- 6.17	- 0.94	6.83
Financial corporations	- 5.02	2.22	11.75	- 5.34	- 6.36	5.09	- 1.14	3.22	- 2.25
General government	- 0.88	0.03	0.11	0.01	0.02	0.01	0.03	0.03	0.02
Households	- 8.21	2.80	3.55	0.61	4.95	3.43	4.61	0.98	- 0.26
Quoted shares of the rest of the world	7.80	9.09	- 1.34	5.36	1.97	- 10.04	2.72	- 2.87	- 4.11
Other equity <sup>1</sup>	8.70	19.13	9.02	3.70	3.20	2.34	3.21	1.71	2.19
Insurance technical reserves	6.34	6.41	5.06	1.27	1.27	1.27	1.27	1.27	1.27
Financial derivatives and employee stock options	3.72	1.93	- 12.97	- 16.16	- 3.46	- 4.25	5.65	- 5.74	1.48
Other accounts payable	19.83	- 10.06	58.33	18.93	0.49	10.01	8.40	1.27	- 8.10
<b>Total</b>	<b>81.54</b>	<b>13.98</b>	<b>115.75</b>	<b>31.05</b>	<b>3.26</b>	<b>8.29</b>	<b>63.85</b>	<b>8.91</b>	<b>22.05</b>

<sup>1</sup> Including unlisted shares.



## IX Financial accounts

### 2 Financial assets and liabilities of non-financial corporations (non-consolidated)

End-of-year level, end-of-quarter level; € billion

Item	2013	2014	2015	2015			2016		
				Q2	Q3	Q4	Q1	Q2	Q3
<b>Financial assets</b>									
Currency and deposits	411.3	405.8	462.6	396.3	431.0	462.6	454.1	464.8	500.9
Debt securities	45.0	49.6	47.8	48.4	48.4	47.8	48.8	45.7	46.0
short-term debt securities	5.1	6.8	6.0	6.7	5.2	6.0	7.0	6.3	6.3
long-term debt securities	39.9	42.9	41.7	41.7	43.2	41.7	41.7	39.3	39.6
Memo item									
Debt securities of domestic sectors	24.6	22.9	23.3	23.0	23.8	23.3	23.8	21.4	21.4
Non-financial corporations	4.7	4.6	3.6	4.5	4.2	3.6	4.3	4.2	4.3
Financial corporations	13.8	12.7	14.5	13.2	14.0	14.5	14.8	13.0	12.5
General government	6.1	5.7	5.2	5.3	5.6	5.2	4.8	4.2	4.6
Debt securities of the rest of the world	20.5	26.7	24.4	25.4	24.7	24.4	24.9	24.3	24.5
Loans	446.5	465.6	496.0	498.0	497.3	496.0	500.1	495.1	497.3
short-term loans	340.0	375.8	399.8	399.5	399.7	399.8	401.8	401.6	396.8
long-term loans	106.5	89.8	96.2	98.4	97.7	96.2	98.4	93.5	100.5
Memo item									
to domestic sectors	304.7	315.1	327.2	331.9	332.4	327.2	328.0	323.6	325.2
Non-financial corporations	216.5	216.2	218.7	214.9	219.2	218.7	221.9	213.6	216.8
Financial corporations	82.1	92.8	102.4	110.9	107.1	102.4	100.0	104.0	102.4
General government	6.0	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
to the rest of the world	141.8	150.5	168.8	166.1	165.0	168.8	172.1	171.5	172.0
Equity and investment fund shares	1,658.3	1,726.5	1,905.6	1,888.8	1,781.0	1,905.6	1,839.6	1,808.3	1,853.7
Equity	1,520.2	1,591.0	1,753.6	1,738.8	1,631.2	1,753.6	1,688.5	1,656.6	1,695.5
Listed shares of domestic sectors	275.4	262.2	273.0	274.6	239.0	273.0	248.1	239.4	265.1
Non-financial corporations	269.8	252.2	266.6	267.4	233.2	266.6	242.0	233.7	259.3
Financial corporations	5.7	10.0	6.3	7.2	5.9	6.3	6.1	5.7	5.8
Listed shares of the rest of the world	54.2	50.0	62.5	63.5	58.7	62.5	62.8	62.1	64.5
Other equity <sup>1</sup>	1,190.6	1,278.8	1,418.2	1,400.7	1,333.5	1,418.2	1,377.6	1,355.1	1,365.9
Investment fund shares	138.1	135.5	151.9	150.0	149.8	151.9	151.1	151.7	158.2
Money market fund shares	1.1	1.2	1.4	1.1	1.0	1.4	1.0	1.1	1.0
Non-MMF investment fund shares	137.0	134.4	150.6	149.0	148.8	150.6	150.1	150.6	157.2
Insurance technical reserves	46.1	47.3	50.0	48.6	49.3	50.0	52.6	55.2	57.8
Financial derivatives	16.8	22.7	24.0	23.0	24.6	24.0	23.3	25.5	22.3
Other accounts receivable	891.1	857.8	927.7	926.7	921.7	927.7	921.3	921.5	914.0
<b>Total</b>	<b>3,515.1</b>	<b>3,575.4</b>	<b>3,913.6</b>	<b>3,829.8</b>	<b>3,753.4</b>	<b>3,913.6</b>	<b>3,839.8</b>	<b>3,816.0</b>	<b>3,891.9</b>
<b>Liabilities</b>									
Debt securities	138.9	150.9	156.8	157.2	158.1	156.8	173.1	179.0	183.0
short-term securities	13.4	1.8	3.0	2.3	3.3	3.0	5.1	5.3	4.7
long-term securities	125.4	149.1	153.7	154.9	154.8	153.7	168.0	173.7	178.3
Memo item									
Debt securities of domestic sectors	51.1	60.2	58.7	62.7	60.7	58.7	65.9	68.2	71.2
Non-financial corporations	4.7	4.6	3.6	4.5	4.2	3.6	4.3	4.2	4.3
Financial corporations	30.8	39.8	40.0	42.8	41.3	40.0	46.0	49.1	50.9
General government	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Households	15.6	15.8	15.0	15.3	15.2	15.0	15.6	14.9	15.9
Debt securities of the rest of the world	87.8	90.7	98.1	94.5	97.4	98.1	107.2	110.8	111.8
Loans	1,411.2	1,383.6	1,427.3	1,433.1	1,431.3	1,427.3	1,459.4	1,462.6	1,480.8
short-term loans	494.2	496.0	521.0	522.3	518.2	521.0	537.7	534.0	539.0
long-term loans	917.0	887.6	906.3	910.8	913.1	906.3	921.7	928.5	941.9
Memo item									
from domestic sectors	1,091.5	1,078.1	1,092.6	1,106.2	1,107.0	1,092.6	1,116.1	1,101.9	1,116.9
Non-financial corporations	216.5	216.2	218.7	214.9	219.2	218.7	221.9	213.6	216.8
Financial corporations	809.3	805.6	825.4	829.5	828.1	825.4	836.0	829.3	842.3
General government	65.6	56.3	48.6	61.8	59.8	48.6	58.2	59.1	57.8
from the rest of the world	319.8	305.5	334.6	326.9	324.3	334.6	343.3	360.7	363.9
Equity	2,436.6	2,542.2	2,670.9	2,715.7	2,484.8	2,670.9	2,567.4	2,487.3	2,662.4
Listed shares of domestic sectors	571.9	570.8	626.4	625.1	551.6	626.4	585.2	569.6	616.9
Non-financial corporations	269.8	252.2	266.6	267.4	233.2	266.6	242.0	233.7	259.3
Financial corporations	120.3	134.7	150.1	159.4	130.8	150.1	140.3	139.2	147.8
General government	35.2	35.2	43.4	39.5	41.1	43.4	41.5	40.4	40.8
Households	146.6	148.7	166.2	158.8	146.5	166.2	161.5	156.3	168.9
Quoted shares of the rest of the world	670.8	719.1	756.3	789.6	693.2	756.3	724.7	684.7	782.2
Other equity <sup>1</sup>	1,194.0	1,252.3	1,288.3	1,301.0	1,240.0	1,288.3	1,257.5	1,233.0	1,263.4
Insurance technical reserves	243.9	250.3	255.4	252.8	254.1	255.4	256.6	257.9	259.2
Financial derivatives and employee stock options	37.3	54.0	42.0	46.6	44.7	42.0	49.8	46.7	50.7
Other accounts payable	962.4	988.9	1,057.3	1,024.0	1,026.3	1,057.3	1,042.2	1,046.1	1,044.5
<b>Total</b>	<b>5,230.3</b>	<b>5,369.9</b>	<b>5,609.6</b>	<b>5,629.4</b>	<b>5,399.3</b>	<b>5,609.6</b>	<b>5,548.5</b>	<b>5,479.6</b>	<b>5,680.6</b>

<sup>1</sup> Including unlisted shares.

## IX Financial accounts

### 3 Acquisition of financial assets and external financing of households (non-consolidated)

€ billion

Item	2013	2014	2015	2015			2016		
				Q2	Q3	Q4	Q1	Q2	Q3
<b>Acquisition of financial assets</b>									
Currency and deposits	63.87	85.82	96.61	30.79	11.86	38.99	8.69	25.30	19.88
Currency	8.08	15.64	25.45	6.84	6.39	7.75	2.99	1.04	2.25
Deposits	55.79	70.18	71.16	23.96	5.48	31.24	5.70	24.26	17.63
Transferable deposits	89.41	73.84	100.96	34.43	15.01	32.22	7.24	28.09	23.41
Time deposits	- 9.78	8.74	- 9.22	- 3.12	- 4.21	0.44	0.83	2.16	- 1.73
Savings deposits (including savings certificates)	- 23.85	- 12.41	- 20.58	- 7.35	- 5.32	- 1.43	- 2.37	- 5.99	- 4.05
Debt securities	- 17.81	- 18.00	- 17.40	- 5.09	- 1.87	- 3.07	- 1.76	- 4.10	- 3.16
short-term debt securities	- 0.36	- 0.67	0.75	0.31	0.28	- 0.13	0.10	- 0.62	0.10
long-term debt securities	- 17.45	- 17.33	- 18.16	- 5.40	- 2.14	- 2.95	- 1.86	- 3.48	- 3.26
Memo item									
Debt securities of domestic sectors	- 14.86	- 15.08	- 9.34	- 2.98	- 0.16	- 1.45	1.08	- 1.57	- 1.74
Non-financial corporations	1.24	0.02	0.39	0.23	0.02	- 0.07	0.67	- 0.59	0.03
Financial corporations	- 12.46	- 12.52	- 6.80	- 2.40	0.44	- 0.78	0.74	- 0.36	- 1.29
General government	- 3.64	- 2.58	- 2.93	- 0.81	- 0.61	- 0.60	- 0.33	- 0.63	- 0.48
Debt securities of the rest of the world	- 2.94	- 2.93	- 8.06	- 2.11	- 1.71	- 1.62	- 2.84	- 2.53	- 1.42
Equity and investment fund shares	9.63	36.87	46.39	10.53	16.85	14.48	15.67	11.57	10.20
Equity	- 0.41	12.17	15.03	2.87	11.73	6.69	10.26	5.22	3.35
Listed Shares of domestic sectors	- 5.63	4.61	4.06	1.13	6.67	2.79	6.59	2.69	0.25
Non-financial corporations	- 5.29	2.69	3.77	0.49	6.03	2.76	4.52	0.69	- 0.30
Financial corporations	- 0.35	1.93	0.28	0.64	0.64	0.03	2.07	2.00	0.55
Quoted shares of the rest of the world	2.99	3.70	6.75	0.80	3.00	2.30	1.65	1.21	2.08
Other equity <sup>1</sup>	2.24	3.86	4.22	0.95	2.07	1.60	2.02	1.32	1.02
Investment fund shares	10.04	24.70	31.36	7.66	5.12	7.79	5.41	6.35	6.86
Money market fund shares	- 0.30	- 0.34	- 0.57	- 0.02	- 0.10	- 0.30	- 0.30	- 0.15	0.10
Non-MMF investment fund shares	10.34	25.04	31.93	7.68	5.22	8.09	5.71	6.50	6.76
Non-life insurance technical reserves and provision for calls under standardised guarantees	26.02	24.47	20.08	4.89	4.78	5.12	5.83	5.86	5.88
Life insurance and annuity entitlements	31.69	30.40	31.36	6.89	6.19	7.14	17.63	6.35	7.70
Pension entitlement, claims of pension funds on pension managers, entitlements to non-pension benefits	19.39	35.34	31.30	6.71	5.81	6.96	5.28	6.58	5.71
Financial derivatives and employee stock options	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other accounts receivable <sup>2</sup>	14.16	- 33.07	- 24.36	- 9.93	- 1.80	- 25.38	9.40	- 4.06	- 3.86
<b>Total</b>	<b>146.96</b>	<b>161.82</b>	<b>183.97</b>	<b>44.79</b>	<b>41.83</b>	<b>44.23</b>	<b>60.74</b>	<b>47.51</b>	<b>42.36</b>
<b>External financing</b>									
Loans	11.96	20.59	39.12	11.39	14.88	9.40	6.01	15.84	16.00
short-term loans	- 3.31	- 1.98	- 3.17	- 1.26	- 1.51	- 1.40	- 0.42	- 0.91	- 0.93
long-term loans	15.27	22.57	42.29	12.64	16.39	10.80	6.43	16.76	16.94
Memo item									
Mortgage loans	18.89	24.87	36.56	9.85	14.08	10.46	4.29	12.16	14.32
Consumer loans	- 0.30	1.21	5.44	2.15	1.40	0.32	2.11	3.93	2.86
Entrepreneurial loans	- 6.64	- 5.49	- 2.88	- 0.61	- 0.60	- 1.38	- 0.38	- 0.24	- 1.17
Memo item									
Loans from monetary financial institutions	12.60	18.87	39.35	11.60	15.09	9.38	5.24	13.81	15.74
Loans from other financial institutions	- 0.60	1.72	- 0.23	- 0.22	- 0.22	0.02	0.77	2.04	0.27
Loans from general government and rest of the world	- 0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Financial derivatives	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other accounts payable	- 0.01	0.78	- 1.26	- 0.30	- 0.37	- 0.37	0.15	0.03	0.10
<b>Total</b>	<b>11.94</b>	<b>21.37</b>	<b>37.87</b>	<b>11.09</b>	<b>14.51</b>	<b>9.04</b>	<b>6.15</b>	<b>15.88</b>	<b>16.11</b>

<sup>1</sup> Including unlisted shares. <sup>2</sup> Including accumulated interest-bearing surplus shares with insurance corporations.

## IX Financial accounts

### 4 Financial assets and liabilities of households (non-consolidated)

End-of-year level, end-of-quarter level; € billion

Item	2013	2014	2015	2015			2016		
				Q2	Q3	Q4	Q1	Q2	Q3
<b>Financial assets</b>									
Currency and deposits	1,910.8	1,998.1	2,094.8	2,043.8	2,055.7	2,094.8	2,103.5	2,128.8	2,148.9
Currency	112.0	127.7	153.1	139.0	145.4	153.1	156.1	157.2	159.4
Deposits	1,798.8	1,870.4	1,941.6	1,904.8	1,910.3	1,941.6	1,947.4	1,971.6	1,989.5
Transferable deposits	907.8	981.4	1,082.4	1,035.1	1,050.1	1,082.4	1,089.8	1,117.9	1,141.5
Time deposits	245.9	256.4	246.8	250.9	246.4	246.8	248.3	250.4	248.7
Savings deposits (including savings certificates)	645.1	632.7	612.4	618.9	613.8	612.4	609.3	603.4	599.3
Debt securities	179.0	162.2	139.8	149.2	144.0	139.8	137.1	133.5	130.6
short-term debt securities	2.7	2.1	2.9	2.7	3.0	2.9	2.9	2.3	2.4
long-term debt securities	176.3	160.1	136.9	146.5	141.0	136.9	134.2	131.2	128.3
Memo item									
Debt securities of domestic sectors	116.9	102.4	89.4	94.3	92.2	89.4	89.6	87.8	87.1
Non-financial corporations	14.2	14.1	13.4	13.7	13.5	13.4	13.9	13.1	14.1
Financial corporations	90.7	78.7	69.5	72.9	71.5	69.5	69.4	69.0	67.8
General government	12.0	9.6	6.5	7.8	7.1	6.5	6.3	5.7	5.2
Debt securities of the rest of the world	62.0	59.8	50.3	54.9	51.8	50.3	47.6	45.7	43.5
Equity and investment fund shares	885.9	951.4	1,040.7	1,018.4	982.1	1,040.7	1,024.3	1,028.5	1,068.1
Equity	487.6	508.9	555.9	537.0	518.3	555.9	544.9	540.7	562.9
Listed Shares of domestic sectors	167.4	169.7	188.9	179.6	168.4	188.9	181.8	174.6	187.9
Non-financial corporations	140.4	142.1	158.7	151.1	140.2	158.7	154.1	148.6	160.6
Financial corporations	26.9	27.6	30.3	28.5	28.2	30.3	27.6	26.0	27.3
Quoted shares of the rest of the world	55.8	64.0	74.8	71.7	67.9	74.8	73.1	76.8	80.7
Other equity <sup>1</sup>	264.4	275.3	292.2	285.7	282.0	292.2	290.1	289.2	294.3
Investment fund shares	398.3	442.5	484.8	481.3	463.8	484.8	479.3	487.8	505.1
Money market fund shares	4.4	4.0	3.4	3.8	3.7	3.4	3.1	3.0	3.0
Non-MMF investment fund shares	393.8	438.5	481.4	477.5	460.1	481.4	476.3	484.7	502.1
Non-life insurance technical reserves and provision for calls under standardised guarantees	291.3	307.3	324.4	315.8	320.0	324.4	330.2	336.1	342.0
Life insurance and annuity entitlements	847.3	885.6	919.5	905.1	911.8	919.5	937.1	943.3	951.0
Pension entitlement, claims of pension funds on pension managers, entitlements to non-pension benefits	708.3	752.1	786.4	764.0	770.6	786.4	791.7	798.3	804.0
Financial derivatives and employee stock options	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other accounts receivable <sup>2</sup>	36.7	35.8	34.1	35.2	34.8	34.1	33.8	33.5	33.0
<b>Total</b>	<b>4,859.4</b>	<b>5,092.6</b>	<b>5,339.7</b>	<b>5,231.6</b>	<b>5,219.0</b>	<b>5,339.7</b>	<b>5,357.7</b>	<b>5,402.0</b>	<b>5,477.5</b>
<b>Liabilities</b>									
Loans	1,549.6	1,570.5	1,607.6	1,583.9	1,598.4	1,607.6	1,614.0	1,629.8	1,646.0
short-term loans	66.4	64.6	60.9	64.1	62.6	60.9	60.5	59.6	58.6
long-term loans	1,483.2	1,505.9	1,546.7	1,519.8	1,535.8	1,546.7	1,553.5	1,570.2	1,587.3
Memo item									
Mortgage loans	1,092.9	1,118.0	1,154.7	1,130.2	1,144.0	1,154.7	1,159.1	1,171.3	1,185.6
Consumer loans	188.7	188.9	191.9	191.2	192.2	191.9	194.0	197.8	200.9
Entrepreneurial loans	268.0	263.6	260.9	262.5	262.1	260.9	260.9	260.7	259.5
Memo item									
Loans from monetary financial institutions	1,458.4	1,477.6	1,514.9	1,491.0	1,505.7	1,514.9	1,520.5	1,534.3	1,550.2
Loans from other financial institutions	91.2	92.9	92.7	92.9	92.7	92.7	93.5	95.5	95.8
Loans from general government and rest of the world	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial derivatives	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other accounts payable	15.6	16.4	14.8	16.4	16.3	14.8	15.6	15.6	15.9
<b>Total</b>	<b>1,565.2</b>	<b>1,586.9</b>	<b>1,622.4</b>	<b>1,600.3</b>	<b>1,614.7</b>	<b>1,622.4</b>	<b>1,629.6</b>	<b>1,645.4</b>	<b>1,661.9</b>

<sup>1</sup> Including unlisted shares. <sup>2</sup> Including accumulated interest-bearing surplus shares with insurance corporations.

## X Public finances in Germany

### 1 General government: deficit/surplus and debt level as defined in the Maastricht Treaty

Period	General government	Central government	State government	Local government	Social security funds	General government	Central government	State government	Local government	Social security funds
	€ billion					as a percentage of GDP				
<b>Deficit/surplus<sup>1</sup></b>										
2010	-108.9	-84.1	-20.6	-8.1	+3.8	-4.2	-3.3	-0.8	-0.3	+0.1
2011	-25.9	-29.4	-11.4	-0.3	+15.3	-1.0	-1.1	-0.4	-0.0	+0.6
2012	-0.9	-16.1	-5.5	+2.2	+18.4	-0.0	-0.6	-0.2	+0.1	+0.7
2013 P	-5.4	-8.1	-2.7	+0.2	+5.3	-0.2	-0.3	-0.1	+0.0	+0.2
2014 P	+8.6	+8.6	-0.5	-2.5	+3.0	+0.3	+0.3	-0.0	+0.1	+0.1
2015 P	+20.9	+10.0	+4.6	+4.2	+2.1	+0.7	+0.3	+0.2	+0.1	+0.1
2016 pe	+19.2	+10.4	+2.2	-0.2	+6.8	+0.6	+0.3	+0.1	-0.0	+0.2
2014 H1 P	+11.1	+1.4	-0.5	+3.8	+6.5	+0.8	+0.1	-0.0	+0.3	+0.5
H2 P	-2.6	+7.2	+0.0	-6.3	-3.5	-0.2	+0.5	+0.0	-0.4	-0.2
2015 H1 P	+14.4	+2.4	+3.7	+5.6	+2.6	+1.0	+0.2	+0.2	+0.4	+0.2
H2 P	+6.6	+7.7	+0.9	-1.4	-0.5	+0.4	+0.5	+0.1	-0.1	-0.0
2016 H1 pe	+18.3	+8.3	+0.6	+2.9	+6.5	+1.2	+0.5	+0.0	+0.2	+0.4
<b>Debt level<sup>2</sup></b>										
										<b>End of year or quarter</b>
2010	2,088.7	1,334.0	629.7	143.0	1.3	81.0	51.7	24.4	5.5	0.1
2011	2,128.1	1,344.0	657.0	143.4	1.3	78.7	49.7	24.3	5.3	0.0
2012	2,204.5	1,387.7	685.4	148.0	1.2	79.9	50.3	24.8	5.4	0.0
2013 P	2,189.2	1,390.3	663.9	151.1	1.3	77.5	49.2	23.5	5.3	0.0
2014 P	2,188.7	1,396.3	656.7	152.2	1.4	74.9	47.8	22.5	5.2	0.0
2015 P	2,157.9	1,372.5	652.6	152.3	1.4	71.2	45.3	21.5	5.0	0.0
2015 Q1 P	2,194.6	1,397.6	665.2	152.6	1.4	74.5	47.4	22.6	5.2	0.0
Q2 P	2,160.6	1,380.4	644.8	152.4	1.4	72.6	46.4	21.7	5.1	0.0
Q3 P	2,162.3	1,374.6	652.3	153.2	1.5	72.0	45.8	21.7	5.1	0.0
Q4 P	2,157.9	1,372.5	652.6	152.3	1.4	71.2	45.3	21.5	5.0	0.0
2016 Q1 P	2,165.7	1,382.3	645.5	154.7	1.2	70.9	45.2	21.1	5.1	0.0
Q2 P	2,168.5	1,390.8	641.9	154.2	1.1	70.2	45.0	20.8	5.0	0.0
Q3 P	2,161.3	1,380.7	642.1	154.9	1.0	69.4	44.3	20.6	5.0	0.0

Sources: Federal Statistical Office and Bundesbank calculations. **1** The deficit/surplus in accordance with ESA 2010 corresponds to the Maastricht definition. In connection with the publication of the 2016 annual figures, no revised figures were released for

the first half of the year. Therefore, the 2016 half-year figures are not directly comparable with the annual figures. **2** Quarterly GDP ratios are based on the national output of the four preceding quarters.

### 2 General government: revenue, expenditure and deficit/surplus as shown in the national accounts\*

Period	Revenue			Expenditure						Deficit/surplus	Memo item Total tax burden <sup>1</sup>	
	Total	of which Taxes	Social contributions	Total	of which Social benefits	Compensation of employees	Interest	Gross capital formation	Other			
<b>€ billion</b>												
2010	1,110.3	556.2	426.2	127.9	1,219.2	634.5	203.5	63.9	59.4	258.0	-108.9	986.5
2011	1,182.7	598.8	442.3	141.7	1,208.6	633.9	208.6	67.5	61.4	237.2	-25.9	1,045.6
2012	1,220.9	624.9	454.3	141.7	1,221.8	645.5	212.3	63.1	61.5	239.3	-0.9	1,083.7
2013 P	1,258.4	650.6	465.0	142.8	1,263.7	666.5	217.9	56.0	60.7	262.5	-5.4	1,119.9
2014 P	1,306.8	674.0	482.0	150.7	1,298.2	692.5	224.1	52.0	60.9	268.7	+8.6	1,160.7
2015 P	1,354.8	706.3	500.8	147.8	1,333.9	723.4	228.6	47.3	64.3	270.3	+20.9	1,212.5
2016 pe	1,407.9	734.6	523.0	150.2	1,388.7	757.8	236.1	43.2	68.5	283.1	+19.2	1,263.0
<b>as a percentage of GDP</b>												
2010	43.0	21.6	16.5	5.0	47.3	24.6	7.9	2.5	2.3	10.0	-4.2	38.2
2011	43.8	22.2	16.4	5.2	44.7	23.4	7.7	2.5	2.3	8.8	-1.0	38.7
2012	44.3	22.7	16.5	5.1	44.3	23.4	7.7	2.3	2.2	8.7	-0.0	39.3
2013 P	44.5	23.0	16.5	5.1	44.7	23.6	7.7	2.0	2.1	9.3	-0.2	39.6
2014 P	44.7	23.1	16.5	5.2	44.4	23.7	7.7	1.8	2.1	9.2	+0.3	39.7
2015 P	44.7	23.3	16.5	4.9	44.0	23.9	7.5	1.6	2.1	8.9	+0.7	40.0
2016 pe	44.9	23.4	16.7	4.8	44.3	24.2	7.5	1.4	2.2	9.0	+0.6	40.3
<b>Percentage growth rates</b>												
2010	+1.8	+0.3	+2.5	+6.1	+4.2	+1.5	+2.9	-1.7	+1.9	+14.8	.	+1.3
2011	+6.5	+7.7	+3.8	+10.7	-0.9	-0.1	+2.5	+5.7	+3.3	-8.1	.	+6.0
2012	+3.2	+4.4	+2.7	+0.0	+1.1	+1.8	+1.8	-6.5	+0.2	+0.9	.	+3.6
2013 P	+3.1	+4.1	+2.4	+0.8	+3.4	+3.3	+2.6	-11.2	-1.3	+9.7	.	+3.3
2014 P	+3.8	+3.6	+3.7	+5.5	+2.7	+3.9	+2.8	-7.2	+0.4	+2.3	.	+3.6
2015 P	+3.7	+4.8	+3.9	-1.9	+2.7	+4.5	+2.0	-9.1	+5.4	+0.6	.	+4.5
2016 pe	+3.9	+4.0	+4.4	+1.7	+4.1	+4.8	+3.2	-8.6	+6.7	+4.7	.	+4.2

Source: Federal Statistical Office. \* Figures in accordance with ESA 2010. **1** Taxes and social contributions plus customs duties.

## X Public finances in Germany

### 3 General government: budgetary development (as per government's financial statistics)

€ billion

Period	Central, state and local government <sup>1</sup>									Social security funds <sup>2</sup>			General government, total			
	Revenue			Expenditure						Deficit / surplus	Revenue <sup>6</sup>	Expenditure	Deficit / surplus	Revenue	Expenditure	Deficit / surplus
	Total <sup>4</sup>	of which		Total <sup>4</sup>	of which <sup>3</sup>											
		Taxes	Financial transactions <sup>5</sup>		Personnel expenditure	Current grants	Interest	Fixed asset formation	Financial transactions <sup>5</sup>							
2009	623.0	524.0	7.1	713.1	187.1	286.6	63.4	38.6	34.8	- 90.1	492.1	506.0	- 14.0	1,013.4	1,117.5	- 104.0
2010	634.7	530.6	7.9	713.6	190.7	308.5	57.7	39.7	11.4	- 78.9	516.5	512.9	+ 3.7	1,033.7	1,108.9	- 75.2
2011	689.6	573.4	22.8	711.6	194.3	301.3	56.8	38.5	13.7	- 22.0	526.3	511.3	+ 15.0	1,104.2	1,111.2	- 7.0
2012 P	745.0	600.0	14.7	770.2	218.8	285.2	69.9	42.6	25.5	- 25.2	536.2	518.9	+ 17.3	1,171.1	1,179.0	- 7.9
2013 P	761.8	619.7	14.7	773.6	225.3	286.9	65.7	42.8	23.5	- 11.8	536.7	532.0	+ 4.7	1,198.1	1,205.2	- 7.0
2014 P	791.8	643.6	11.3	786.7	236.0	292.9	57.1	45.9	17.6	+ 5.1	554.4	551.1	+ 3.2	1,245.1	1,236.8	+ 8.4
2015 P	832.4	673.3	10.4	802.8	243.6	302.2	49.7	46.4	12.5	+ 29.7	574.2	572.5	+ 1.7	1,303.2	1,271.9	+ 31.3
2014 Q1 P	188.2	153.6	2.0	193.9	56.7	77.9	20.0	7.8	2.3	- 5.7	132.8	136.1	- 3.3	296.0	305.0	- 9.0
Q2 P	193.1	157.4	2.2	188.1	56.9	71.8	9.8	9.8	8.2	+ 5.0	136.4	135.8	+ 0.6	304.5	299.0	+ 5.6
Q3 P	192.2	157.5	3.4	193.5	57.1	71.2	17.7	11.3	4.0	- 1.4	136.3	137.4	- 1.1	303.1	305.5	- 2.4
Q4 P	219.0	174.9	3.5	211.8	65.4	73.5	9.5	16.5	3.1	+ 7.2	148.3	141.5	+ 6.8	341.6	327.6	+ 14.0
2015 Q1 P	196.0	160.9	2.4	198.8	58.5	80.5	18.4	7.7	2.5	- 2.8	137.3	142.8	- 5.4	307.6	315.8	- 8.2
Q2 P	208.4	167.7	1.5	185.2	59.5	72.8	7.2	9.1	3.0	+ 23.1	142.4	142.3	+ 0.1	325.0	301.8	+ 23.2
Q3 P	202.8	166.5	3.8	198.0	62.3	71.3	16.6	11.6	3.4	+ 4.7	141.2	143.4	- 2.1	318.1	315.5	+ 2.6
Q4 P	221.5	178.1	2.6	219.3	63.4	77.4	7.3	17.3	3.5	+ 2.2	152.7	145.3	+ 7.4	348.4	338.8	+ 9.6
2016 Q1 P	204.8	169.9	1.4	205.7	60.2	81.5	17.7	8.4	2.2	- 0.8	143.0	146.6	- 3.6	320.9	325.4	- 4.5
Q2 P	217.5	176.6	2.4	194.8	60.7	77.7	5.4	10.4	2.4	+ 22.7	148.7	147.0	+ 1.7	339.2	314.9	+ 24.3

Source: Bundesbank calculations based on Federal Statistical Office data. **1** Annual figures based on the calculations of the Federal Statistical Office. Bundesbank supplementary estimations for the reporting years after 2011 that are not yet available. The quarterly figures do not contain the special purpose associations included in the annual calculations, but they do not contain numerous other off-budget entities which are assigned to the general government sector as defined in the national accounts. From 2012, also including the bad bank FMSW. **2** Furthermore, the annual figures do not tally with the sum of the quarterly figures, as the latter are all provisional.

The quarterly figures for some insurance sectors are estimated. **3** The development of the types of expenditure recorded here is influenced in part by statistical changes. **4** Including discrepancies in clearing transactions between central, state and local government. **5** On the revenue side, this contains proceeds booked as disposals of equity interests and as loan repayments. On the expenditure side, this contains the acquisition of equity interests and loans granted. **6** Including central government liquidity assistance to the Federal Employment Agency.

### 4 Central, state and local government: budgetary development (as per government's financial statistics)

€ billion

Period	Central government			State government <sup>2,3</sup>			Local government <sup>3</sup>		
	Revenue <sup>1</sup>	Expenditure	Deficit / surplus	Revenue	Expenditure	Deficit / surplus	Revenue	Expenditure	Deficit / surplus
2009	282.6	317.1	- 34.5	260.1	287.1	- 26.9	170.8	178.3	- 7.5
2010	288.7	333.1	- 44.4	266.8	287.3	- 20.5	175.4	182.3	- 6.9
2011	307.1	324.9	- 17.7	286.5	295.9	- 9.4	183.9	184.9	- 1.0
2012 P	312.5	335.3	- 22.8	311.0	316.1	- 5.1	200.0	198.5	+ 1.5
2013 P	313.2	335.6	- 22.4	324.3	323.9	+ 0.4	207.6	206.3	+ 1.3
2014 P	322.9	323.3	- 0.3	338.3	336.1	+ 2.1	218.7	218.7	- 0.1
2015 P	338.2	326.4	+ 11.8	355.1	350.6	+ 4.5	232.7	229.1	+ 3.6
2014 Q1 P	69.8	80.4	- 10.6	80.3	81.0	- 0.7	45.1	50.0	- 4.8
Q2 P	77.7	76.7	+ 0.9	82.3	80.4	+ 1.9	54.8	52.0	+ 2.8
Q3 P	82.5	85.3	- 2.9	82.7	80.4	+ 2.3	53.9	54.4	- 0.5
Q4 P	92.9	80.8	+ 12.2	92.0	94.0	- 2.0	63.0	61.0	+ 2.0
2015 Q1 P	74.4	81.6	- 7.1	84.2	84.5	- 0.3	46.3	52.1	- 5.8
Q2 P	86.5	72.6	+ 13.9	87.0	83.6	+ 3.4	58.1	53.4	+ 4.7
Q3 P	85.9	89.0	- 3.2	87.8	84.2	+ 3.6	57.5	56.3	+ 1.2
Q4 P	91.4	83.3	+ 8.1	94.1	96.8	- 2.8	69.0	65.9	+ 3.0
2016 Q1 P	81.1	83.6	- 2.5	90.5	88.2	+ 2.4	49.0	55.1	- 6.1
Q2 P	87.5	73.6	+ 13.8	92.7	88.2	+ 4.4	61.1	57.9	+ 3.2
Q3 P	85.2	88.6	- 3.5	91.5	90.0	+ 1.5	60.7	60.7	+ 0.1

Source: Bundesbank calculations based on Federal Statistical Office data. **1** Any amounts of the Bundesbank's profit distribution exceeding the reference value that were used to repay parts of the debt of central government's special funds are not included here. **2** Including the local authority level of the city-states Berlin, Bremen and Hamburg. **3** For state government from 2011, for local government from 2012: quarterly data of core budgets and off-budget entities which are assigned to the general

government sector, up to and including 2013: excluding special purpose associations. Annual figures up to and including 2011: excluding off-budget entities, but including special accounts and special purpose associations based on the calculations of the Federal Statistical Office. For the following years, Bundesbank supplementary estimations.

## X Public finances in Germany

### 5 Central, state and local government: tax revenue

€ million

Period	Central and state government and European Union							Balance of untransferred tax shares <sup>4</sup>	Memo item Amounts deducted in the federal budget <sup>5</sup>
	Total	Total	Central government <sup>1</sup>	State government <sup>1</sup>	European Union <sup>2</sup>	Local government <sup>3</sup>			
2009	524,000	455,615	252,842	182,273	20,501	68,419	-	34	24,846
2010	530,587	460,230	254,537	181,326	24,367	70,385	-	28	28,726
2011	573,352	496,738	276,598	195,676	24,464	76,570	+	43	28,615
2012	600,046	518,963	284,801	207,846	26,316	81,184	-	101	28,498
2013	619,708	535,173	287,641	216,430	31,101	84,274	+	262	27,775
2014	643,624	556,008	298,518	226,504	30,986	87,418	+	198	27,772
2015	673,276	580,485	308,849	240,698	30,938	93,003	-	212	27,241
2014 Q1	153,971	130,986	64,962	54,529	11,495	15,287	+	7,698	6,638
Q2	158,118	135,358	72,082	56,178	7,098	23,160	-	400	6,803
Q3	156,886	135,698	75,711	55,194	4,794	21,380	-	192	7,577
Q4	174,650	153,966	85,763	60,603	7,599	27,592	-	6,908	6,754
2015 Q1	161,068	137,183	68,215	57,237	11,731	15,722	+	8,163	6,433
Q2	167,763	143,248	76,762	59,298	7,188	24,814	-	299	6,633
Q3	166,468	143,854	79,783	59,551	4,520	23,006	-	392	7,558
Q4	177,978	156,200	84,089	64,613	7,499	29,461	-	7,684	6,618
2016 Q1	170,358	144,841	74,113	61,972	8,755	17,121	+	8,396	6,488
Q2	176,879	152,042	82,184	64,684	5,175	25,205	-	368	6,512
Q3	169,374	145,700	76,638	61,573	7,489	23,839	-	165	7,584
2015 Oct	.	38,703	20,575	15,894	2,234	.	.	.	2,169
Nov	.	40,461	20,832	17,344	2,285	.	.	.	2,169
2016 Oct	.	41,809	21,680	17,511	2,618	.	.	.	2,154
Nov	.	41,489	21,848	17,042	2,599	.	.	.	2,154

Sources: Federal Ministry of Finance, Federal Statistical Office and Bundesbank calculations. <sup>1</sup> Before deducting or adding supplementary central government grants, shares in energy tax revenue, compensation for the transfer of motor vehicle tax to central government and consolidation aid, which central government remits to state government. See the last column for the volume of these amounts which are deducted from tax revenue in the federal budget. <sup>2</sup> Custom duties and shares in VAT

and gross national income accruing to the EU from central government tax revenue. <sup>3</sup> Including local government taxes in the city-states Berlin, Bremen and Hamburg. Including revenue from offshore wind farms. <sup>4</sup> Difference between local government's share in the joint taxes received by the state government cash offices in the period in question (see Table X. 6) and the amounts passed on to local government in the same period. <sup>5</sup> Volume of the positions mentioned under footnote 1.

### 6 Central and state government and European Union: tax revenue, by type

€ million

Period	Total <sup>1</sup>	Joint taxes							Local business tax transfers <sup>6</sup>	Central government taxes <sup>7</sup>	State government taxes <sup>7</sup>	EU customs duties	Memo item Local government share in joint taxes			
		Income taxes <sup>2</sup>					Turnover taxes <sup>5</sup>									
		Total	Wage tax <sup>3</sup>	Assessed income tax	Corporation tax	Investment income tax <sup>4</sup>	Total	Turnover tax						Turnover tax on imports		
2009	484,880	193,684	135,165	26,430	7,173	24,916	176,991	141,907	35,084	4,908	89,318	16,375	3,604	29,265		
2010	488,731	192,816	127,904	31,179	12,041	21,691	180,042	136,459	43,582	5,925	93,426	12,146	4,378	28,501		
2011	527,255	213,534	139,749	31,996	15,634	26,155	190,033	138,957	51,076	6,888	99,133	13,095	4,571	30,517		
2012	551,785	231,555	149,065	37,262	16,934	28,294	194,635	142,439	52,196	7,137	99,794	14,201	4,462	32,822		
2013	570,213	245,909	158,198	42,280	19,508	25,923	196,843	148,315	48,528	7,053	100,454	15,723	4,231	35,040		
2014	593,039	258,875	167,983	45,613	20,044	25,236	203,110	154,228	48,883	7,142	101,804	17,556	4,552	37,031		
2015	620,287	273,258	178,891	48,580	19,583	26,204	209,921	159,015	50,905	7,407	104,204	20,339	5,159	39,802		
2014 Q1	140,035	62,941	39,035	11,808	5,610	6,487	50,533	38,904	11,629	134	20,893	4,481	1,053	9,049		
Q2	144,418	65,233	40,767	11,963	5,068	7,435	49,166	37,194	11,972	1,785	22,874	4,318	1,042	9,059		
Q3	144,482	60,838	40,538	10,022	4,314	5,965	51,148	38,733	12,415	1,911	24,945	4,395	1,244	8,783		
Q4	164,104	69,863	47,642	11,820	5,052	5,349	52,264	39,397	12,867	3,312	33,091	4,361	1,214	10,139		
2015 Q1	146,924	66,225	41,557	13,134	5,438	6,097	51,852	40,050	11,803	143	22,268	5,207	1,228	9,741		
Q2	153,155	69,728	44,267	12,323	5,851	7,287	50,754	38,063	12,691	1,760	24,892	4,838	1,183	9,907		
Q3	153,307	66,010	43,251	10,666	4,452	7,640	53,203	40,029	13,174	2,019	25,637	5,029	1,409	9,453		
Q4	166,901	71,295	49,816	12,457	3,842	5,180	54,111	40,873	13,238	3,484	31,407	5,265	1,339	10,701		
2016 Q1	154,892	70,790	42,583	14,569	8,433	5,204	54,408	42,268	12,141	173	22,553	5,673	1,294	10,051		
Q2	162,096	74,489	45,311	12,943	7,329	8,905	52,705	40,195	12,510	1,957	25,783	5,952	1,210	10,054		
Q3	155,524	68,137	44,656	11,898	5,546	6,037	53,906	40,877	13,029	2,046	24,857	5,263	1,316	9,824		
2015 Oct	41,021	12,711	13,060	-	342	-	1,366	1,359	16,776	12,422	4,354	1,555	7,750	1,755	474	2,317
Nov	42,915	13,453	13,770	-	519	-	805	1,007	18,906	14,394	4,513	269	8,223	1,617	447	2,454
2016 Oct	44,388	14,497	14,235	-	90	-	904	1,255	18,316	14,016	4,300	1,485	7,952	1,699	439	2,578
Nov	44,033	14,233	14,117	-	303	-	445	864	19,273	14,681	4,593	425	7,931	1,750	421	2,544

Source: Federal Ministry of Finance and Bundesbank calculations. <sup>1</sup> This total, unlike that in Table X. 5, does not include the receipts from the equalisation of burdens levies, local business tax (less local business tax transfers to central and state government), real property taxes and other local government taxes, or the balance of untransferred tax shares. <sup>2</sup> Respective percentage share of central, state and local government in revenue: wage tax and assessed income tax 42.5:42.5:15, corporation tax and non-assessed taxes on earnings 50:50:-, final withholding tax on interest income and capital gains, non-assessed taxes on earnings 44:44:12. <sup>3</sup> After

deducting child benefit and subsidies for supplementary private pension plans. <sup>4</sup> Final withholding tax on interest income and capital gains, non-assessed taxes on earnings. <sup>5</sup> The allocation of revenue to central, state and local government, which is adjusted at more regular intervals, is regulated in section 1 of the Revenue Adjustment Act. Respective percentage share of central, state and local government in revenue for 2015: 52.3:45.5:2.2. The EU share is deducted from central government's share. <sup>6</sup> Respective percentage share of central and state government for 2015: 22.4:77.6. <sup>7</sup> For the breakdown, see Table X. 7.

## X Public finances in Germany

### 7 Central, state and local government: individual taxes

€ million

Period	Central government taxes <sup>1</sup>								State government taxes <sup>1</sup>				Local government taxes		
	Energy tax	Tobacco tax	Solidarity surcharge	Insurance tax	Motor vehicle tax <sup>2</sup>	Electricity tax	Spirits tax	Other	Motor vehicle tax <sup>2</sup>	Tax on the acquisition of land and buildings	Inheritance tax	Other <sup>3</sup>	Total	of which	
														Local business tax <sup>4</sup>	Real property taxes
2009	39,822	13,366	11,927	10,548	3,803	6,278	2,101	1,473	4,398	4,857	4,550	2,571	44,028	32,421	10,936
2010	39,838	13,492	11,713	10,284	8,488	6,171	1,990	1,449	.	5,290	4,404	2,452	47,780	35,712	11,315
2011	40,036	14,414	12,781	10,755	8,422	7,247	2,149	3,329	.	6,366	4,246	2,484	52,984	40,424	11,674
2012	39,305	14,143	13,624	11,138	8,443	6,973	2,121	4,047	.	7,389	4,305	2,508	55,398	42,345	12,017
2013	39,364	13,820	14,378	11,553	8,490	7,009	2,102	3,737	.	8,394	4,633	2,696	56,549	43,027	12,377
2014	39,758	14,612	15,047	12,046	8,501	6,638	2,060	3,143	.	9,339	5,452	2,764	57,728	43,763	12,691
2015	39,594	14,921	15,930	12,419	8,805	6,593	2,070	3,872	.	11,249	6,290	2,801	60,396	45,752	13,215
2014 Q1	4,675	2,477	3,577	5,642	1,861	1,550	556	555	.	2,385	1,314	782	14,070	10,829	2,880
Q2	9,868	3,708	3,955	2,096	2,517	1,718	470	-1,458	.	2,149	1,501	668	15,485	11,684	3,495
Q3	10,029	3,735	3,498	2,423	2,265	1,716	499	779	.	2,387	1,331	677	14,316	10,458	3,529
Q4	15,185	4,691	4,016	1,886	1,859	1,653	535	3,266	.	2,418	1,306	638	13,858	10,792	2,786
2015 Q1	4,704	2,223	3,783	5,825	2,454	1,806	570	904	.	2,760	1,668	779	14,288	10,912	2,982
Q2	9,512	3,683	4,278	2,187	2,361	1,465	470	937	.	2,561	1,617	660	16,368	12,383	3,636
Q3	10,159	3,981	3,714	2,436	2,108	1,643	496	1,102	.	3,021	1,335	672	15,180	11,118	3,697
Q4	15,220	5,034	4,155	1,972	1,883	1,678	534	930	.	2,906	1,670	689	14,561	11,339	2,899
2016 Q1	4,620	2,722	3,979	5,946	2,489	1,685	565	547	.	3,217	1,668	787	15,639	12,090	3,121
Q2	9,860	4,139	4,470	2,269	2,366	1,515	473	691	.	2,952	2,283	717	16,740	12,635	3,715
Q3	10,149	3,010	3,938	2,510	2,198	1,641	499	911	.	3,050	1,501	713	15,896	11,699	3,794
2015 Oct	3,341	1,368	851	561	673	552	153	251	.	949	569	237	.	.	.
Nov	3,425	1,425	801	849	607	527	175	415	.	979	421	216	.	.	.
2016 Oct	3,576	1,238	903	578	619	573	171	295	.	978	492	229	.	.	.
Nov	3,501	1,156	830	851	680	531	163	219	.	1,040	472	239	.	.	.

Sources: Federal Ministry of Finance, Federal Statistical Office and Bundesbank calculations. <sup>1</sup> For the sum total, see Table X. 6. <sup>2</sup> As of 1 July 2009, motor vehicle tax revenue is attributable to central government. Postings to state government shown there-

after relate to the booking of cash flows. <sup>3</sup> Notably betting, lottery and beer tax. <sup>4</sup> Including revenue from offshore wind farms.

### 8 German pension insurance scheme: budgetary development and assets\*

€ million

Period	Revenue <sup>1,2</sup>			Expenditure <sup>1,2</sup>				Deficit/ surplus	Assets <sup>1,4</sup>					Memo item Adminis- trative assets
	Total	of which		Total	of which		Total		Deposits <sup>5</sup>	Securities	Equity interests, mortgages and other loans <sup>6</sup>	Real estate		
		Contributions <sup>3</sup>	Payments from central government		Pension payments	Pen- sioners' health insurance								
2009	244,689	169,183	74,313	244,478	208,475	14,431	+ 211	16,821	16,614	23	64	120	4,525	
2010	250,133	172,767	76,173	248,076	211,852	14,343	+ 2,057	19,375	18,077	1,120	73	105	4,464	
2011	254,968	177,424	76,200	250,241	212,602	15,015	+ 4,727	24,965	22,241	2,519	88	117	4,379	
2012	259,700	181,262	77,193	254,604	216,450	15,283	+ 5,096	30,481	28,519	1,756	104	102	4,315	
2013	260,166	181,991	77,067	258,268	219,560	15,528	+ 1,898	33,114	29,193	3,701	119	100	4,250	
2014	269,115	189,080	78,940	265,949	226,204	15,978	+ 3,166	36,462	32,905	3,317	146	94	4,263	
2015	276,129	194,486	80,464	277,717	236,634	16,705	- 1,588	35,556	32,795	2,506	167	88	4,228	
2014 Q1	64,138	44,355	19,534	64,615	55,266	3,897	- 477	32,669	28,668	3,781	121	99	4,251	
Q2	66,857	47,145	19,453	64,697	55,085	3,891	+ 2,160	35,181	31,167	3,791	126	97	4,260	
Q3	66,129	45,992	19,865	66,801	56,909	3,991	- 672	33,678	30,264	3,191	129	94	4,256	
Q4	71,927	51,577	20,096	69,548	59,225	4,192	+ 2,379	36,442	32,901	3,317	129	94	4,275	
2015 Q1	65,923	45,653	20,025	68,435	58,671	4,125	- 2,512	34,084	31,583	2,262	148	92	4,255	
Q2	68,700	48,483	19,945	68,443	58,390	4,113	+ 257	34,319	31,797	2,276	152	93	4,254	
Q3	67,538	47,280	20,006	70,165	59,931	4,228	- 2,627	32,246	29,722	2,276	156	92	4,259	
Q4	73,393	53,096	19,971	70,326	59,963	4,233	+ 3,067	35,574	32,794	2,506	158	117	4,242	
2016 Q1	68,182	47,397	20,665	70,076	60,143	4,239	- 1,894	33,865	31,194	2,406	179	86	4,223	
Q2	71,291	50,372	20,548	70,418	60,097	4,238	+ 873	34,427	31,892	2,265	183	87	4,220	
Q3	70,218	49,333	20,670	73,782	63,081	4,453	- 3,564	31,412	28,776	2,365	187	84	4,213	

Sources: Federal Ministry of Labour and Social Affairs and German pension insurance scheme. \* Excluding the German pension insurance scheme for the mining, railway and maritime industries. <sup>1</sup> The final annual figures do not tally with the quarterly figures, as the latter are all provisional. <sup>2</sup> Including financial compensation payments. Ex-

cluding investment spending and proceeds. <sup>3</sup> Including contributions for recipients of government cash benefits. <sup>4</sup> Largely corresponds to the sustainability reserves. End of year or quarter. <sup>5</sup> Including cash. <sup>6</sup> Excluding loans to other social security funds.

## X Public finances in Germany

### 9 Federal Employment Agency: budgetary development\*

€ million

Period	Revenue				Expenditure							Deficit/ surplus	Deficit offsetting grant or loan from central govern- ment
	Total <sup>1</sup>	of which			Total	of which							
		Contri- butions	Insolvency compen- sation levy	Central government subscriptions		Unemploy- ment benefit <sup>2</sup>	Short-time working benefits <sup>3</sup>	Job promotion <sup>4</sup>	Re- integration payment <sup>5</sup>	Insolvency benefit payment	Adminis- trative expendi- ture <sup>6</sup>		
2009	34,254	22,046	711	7,777	48,057	17,291	5,322	9,849	4,866	1,617	5,398	- 13,804	-
2010	37,070	22,614	2,929	7,927	45,213	16,602	4,125	9,297	5,256	740	5,322	- 8,143	5,207
2011	37,563	25,433	37	8,046	37,524	13,776	1,324	8,369	4,510	683	5,090	+ 40	-
2012	37,429	26,570	314	7,238	34,842	13,823	828	6,699	3,822	982	5,117	+ 2,587	-
2013	32,636	27,594	1,224	245	32,574	15,411	1,082	6,040	.	912	5,349	+ 61	-
2014	33,725	28,714	1,296	-	32,147	15,368	710	6,264	.	694	5,493	+ 1,578	-
2015	35,159	29,941	1,333	-	31,439	14,846	771	6,295	.	654	5,597	+ 3,720	-
2014 Q1	7,844	6,696	299	-	8,693	4,379	311	1,605	.	199	1,239	- 849	-
Q2	8,352	7,143	331	-	8,036	3,902	197	1,593	.	211	1,259	+ 316	-
Q3	8,249	6,991	318	-	7,551	3,641	123	1,458	.	163	1,313	+ 698	-
Q4	9,280	7,884	347	-	7,868	3,446	79	1,609	.	122	1,682	+ 1,412	-
2015 Q1	8,209	6,969	310	-	8,599	4,267	387	1,586	.	165	1,287	- 390	-
Q2	8,758	7,467	326	-	7,856	3,758	214	1,591	.	172	1,318	+ 902	-
Q3	8,573	7,285	329	-	7,319	3,501	82	1,455	.	164	1,368	+ 1,254	-
Q4	9,619	8,220	367	-	7,665	3,320	87	1,662	.	152	1,624	+ 1,954	-
2016 Q1	8,376	7,271	261	-	7,984	4,083	395	1,739	.	150	984	+ 393	-
Q2	8,991	7,737	278	-	7,807	3,648	203	1,847	.	147	1,288	+ 1,184	-
Q3	8,877	7,609	276	-	7,349	3,428	74	1,608	.	165	1,399	+ 1,529	-

Source: Federal Employment Agency. \* Including transfers to the civil servants' pension fund. <sup>1</sup> Excluding central government deficit offsetting grant or loan. <sup>2</sup> Unemployment benefit in case of unemployment. <sup>3</sup> Including seasonal short-time working benefits and restructuring short-time working benefits, restructuring measures and refunds of social security contributions. <sup>4</sup> Vocational training, measures to

encourage job take-up, rehabilitation, compensation top-up payments and promotion of business start-ups. <sup>5</sup> Until 2012. From 2005 to 2007: compensatory amount. <sup>6</sup> Including collection charges to other statutory social security funds, excluding administrative expenditure within the framework of the basic allowance for job seekers.

### 10 Statutory health insurance scheme: budgetary development

€ million

Period	Revenue <sup>1</sup>			Expenditure <sup>1</sup>								Deficit/ surplus
	Total	of which		Total	of which							
		Contri- butions <sup>2</sup>	Central government funds <sup>3</sup>		Hospital treatment	Pharma- ceuticals	Medical treatment	Dental treatment <sup>4</sup>	Thera- peutical treatment and aids	Sickness benefits	Adminis- trative expendi- ture <sup>5</sup>	
2009	169,837	158,662	7,200	170,825	55,977	30,696	27,635	11,219	9,578	7,258	8,949	- 988
2010 <sup>6</sup>	179,529	160,797	15,700	175,804	56,697	30,147	28,432	11,419	10,609	7,797	9,554	+ 3,725
2011	189,049	170,875	15,300	179,599	58,501	28,939	29,056	11,651	11,193	8,529	9,488	+ 9,450
2012	193,314	176,388	14,000	184,289	60,157	29,156	29,682	11,749	11,477	9,171	9,711	+ 9,025
2013	196,405	182,179	11,500	194,537	62,886	30,052	32,799	12,619	12,087	9,758	9,979	+ 1,867
2014	203,143	189,089	10,500	205,589	65,711	33,093	34,202	13,028	13,083	10,619	10,063	- 2,445
2015	210,147	195,774	11,500	213,727	67,979	34,576	35,712	13,488	13,674	11,227	10,482	- 3,580
2014 Q1	49,164	45,113	3,500	50,990	16,868	8,097	8,582	3,262	3,029	2,693	2,313	- 1,827
Q2	49,290	46,757	1,769	51,332	16,463	8,234	8,600	3,304	3,282	2,651	2,404	- 2,042
Q3	49,992	46,637	2,634	51,035	16,335	8,266	8,392	3,152	3,313	2,607	2,391	- 1,043
Q4	54,604	50,593	2,597	52,017	15,997	8,496	8,642	3,347	3,444	2,665	2,907	+ 2,588
2015 Q1	50,407	46,846	2,875	53,255	17,532	8,554	8,961	3,379	3,216	2,935	2,360	- 2,848
Q2	51,850	48,371	2,875	53,351	17,157	8,661	8,976	3,385	3,376	2,730	2,433	- 1,501
Q3	51,888	48,472	2,875	52,884	16,899	8,621	8,808	3,262	3,398	2,732	2,508	- 996
Q4	55,872	52,085	2,875	54,124	16,553	8,773	8,998	3,449	3,618	2,834	3,102	+ 1,747
2016 Q1	53,320	49,292	3,500	55,424	18,044	8,879	9,374	3,470	3,419	2,955	2,458	- 2,104
Q2	54,988	51,009	3,500	55,603	17,686	9,005	9,362	3,478	3,528	2,963	2,599	- 615
Q3	55,632	51,377	3,500	55,114	17,421	8,929	9,166	3,399	3,585	2,842	2,628	+ 517

Source: Federal Ministry of Health. <sup>1</sup> The final annual figures do not tally with the sum of the quarterly figures, as the latter are all provisional. Excluding revenue and expenditure as part of the risk structure compensation scheme. <sup>2</sup> Including contributions from subsidised low-paid part-time employment. <sup>3</sup> Federal grant and liquidity assistance. <sup>4</sup> Including dentures. <sup>5</sup> Net, ie after deducting reimbursements for ex-

penses for levying contributions incurred by other social insurance funds. Including administrative expenditure on disease management programmes. <sup>6</sup> Data on individual expenditure categories for 2010 only partly comparable with prior-year figures owing to a change in the statistical definition.



## X Public finances in Germany

### 11 Statutory long-term care insurance scheme: budgetary development\*

€ million

Period	Revenue <sup>1</sup>		Expenditure <sup>1</sup>					Deficit/ surplus		
	Total	of which Contributions <sup>2</sup>	Total	of which						
				Non-cash care benefits	In-patient care	Nursing benefit	Contributions to pension insur- ance scheme <sup>3</sup>		Administrative expenditure	
2009	21,300	21,137	20,314	2,742	9,274	4,443	878	984	+	986
2010	21,864	21,659	21,539	2,933	9,567	4,673	869	1,028	+	325
2011	22,294	22,145	21,962	3,002	9,700	4,735	881	1,034	+	331
2012	23,082	22,953	22,988	3,135	9,961	5,073	881	1,083	+	95
2013	24,972	24,891	24,405	3,389	10,058	5,674	896	1,155	+	567
2014	25,974	25,893	25,457	3,570	10,263	5,893	946	1,216	+	517
2015	30,825	30,751	29,101	3,717	10,745	6,410	960	1,273	+	1,723
2014 Q1	6,168	6,141	6,290	871	2,542	1,463	229	315	-	123
Q2	6,404	6,386	6,260	848	2,554	1,466	236	309	+	144
Q3	6,405	6,386	6,442	932	2,577	1,481	237	299	-	37
Q4	6,933	6,918	6,462	907	2,590	1,529	238	288	+	471
2015 Q1	7,252	7,228	6,906	906	2,655	1,571	236	333	+	346
Q2	7,611	7,592	7,139	902	2,666	1,591	239	311	+	472
Q3	7,626	7,609	7,390	930	2,701	1,613	239	326	+	236
Q4	8,198	8,180	7,571	966	2,722	1,682	240	295	+	626
2016 Q1	7,600	7,578	7,587	941	2,703	1,613	238	389	+	13
Q2	7,918	7,901	7,659	949	2,724	1,665	244	331	+	259
Q3	7,958	7,942	7,810	961	2,746	1,682	247	373	+	147

Source: Federal Ministry of Health. \* Including transfers to the long-term care provident fund. <sup>1</sup> The final annual figures do not tally with the sum of the quarterly figures, as the latter are all provisional. <sup>2</sup> Since 2005 including special contributions for

childless persons (0.25% of income subject to insurance contributions). <sup>3</sup> For non-professional carers.

### 12 Central government: borrowing in the market

€ million

Period	Total new borrowing <sup>1</sup>		of which Change in money market loans	of which Change in money market deposits <sup>3</sup>
	Gross <sup>2</sup>	Net		
2009	+ 312,729	+ 66,821	- 8,184	+ 106
2010	+ 302,694	+ 42,397	- 5,041	+ 1,607
2011	+ 264,572	+ 5,890	- 4,876	- 9,036
2012	+ 263,334	+ 31,728	+ 6,183	+ 13,375
2013	+ 246,781	+ 19,473	+ 7,292	- 4,601
2014	+ 192,540	- 2,378	- 3,190	+ 891
2015	+ 167,655	- 16,386	- 5,884	- 1,916
2014 Q1	+ 43,862	- 3,551	- 9,267	- 9,556
Q2	+ 58,444	+ 9,500	+ 6,281	+ 10,589
Q3	+ 47,215	- 8,035	- 2,111	- 10,817
Q4	+ 43,018	- 292	+ 1,907	+ 10,675
2015 Q1	+ 52,024	- 3,086	+ 4,710	- 7,612
Q2	+ 36,214	- 5,404	- 12,133	+ 6,930
Q3	+ 46,877	- 1,967	- 806	- 1,091
Q4	+ 32,541	- 5,929	+ 2,344	- 142
2016 Q1	+ 61,598	+ 10,650	+ 8,501	- 19,345
Q2	+ 60,691	+ 4,204	+ 3,694	+ 4,084
Q3	+ 33,307	- 13,887	- 18,398	- 4,864

Source: Federal Republic of Germany – Finance Agency. <sup>1</sup> Including the Financial Market Stabilisation Fund, the Investment and Repayment Fund and the Restructuring Fund for Credit Institutions. <sup>2</sup> After deducting repurchases. <sup>3</sup> Excluding the central account balance with the Deutsche Bundesbank.

### 13 General government: debt by creditor\*

€ million

Period (End of year or quarter)	Total	Banking system		Domestic non-banks		Foreign creditors <sup>pe</sup>
		Bundes- bank	Domestic MFIs <sup>pe</sup>	Other do- mestic fi- nancial cor- porations <sup>pe</sup>	Other domestic creditors <sup>1</sup>	
2009	1,785,468	4,440	556,048	188,858	138,591	897,531
2010	2,088,726	4,440	691,572	208,244	131,939	1,052,532
2011	2,128,123	4,440	642,358	208,075	120,745	1,152,505
2012	2,204,507	4,440	646,022	200,458	139,984	1,213,603
2013	2,189,153	4,440	636,617	190,956	144,524	1,212,616
2014 P	2,188,671	4,440	623,661	190,364	130,527	1,239,679
2015 P	2,157,880	77,220	610,429	186,682	146,173	1,137,375
2014 Q1 P	2,178,434	4,440	633,639	190,651	129,784	1,219,920
Q2 P	2,184,835	4,440	631,114	189,890	129,978	1,229,413
Q3 P	2,185,986	4,440	632,943	189,142	126,665	1,232,797
Q4 P	2,188,671	4,440	623,661	190,364	130,527	1,239,679
2015 Q1 P	2,194,643	12,335	630,965	189,258	135,350	1,226,734
Q2 P	2,160,596	34,310	617,084	187,360	137,228	1,184,615
Q3 P	2,162,331	54,990	620,916	188,234	138,627	1,159,565
Q4 P	2,157,880	77,220	610,429	186,682	146,173	1,137,375
2016 Q1 P	2,165,669	100,051	611,809	183,192	143,490	1,127,127
Q2 P	2,168,530	133,297	598,394	181,394	159,274	1,096,171
Q3 P	2,161,260	163,636	593,919	179,376	156,735	1,067,594

Source: Bundesbank calculations based on data from the Federal Statistical Office. \* As defined in the Maastricht Treaty. <sup>1</sup> Calculated as a residual.

## X Public finances in Germany

### 14 Central, state and local government: debt by category\*

€ million

Period (End of year or quarter)	Total	Treasury discount paper (Bubills) 1	Treasury notes 2,3	Five-year Federal notes (Bobls) 2	Federal savings notes	Federal bonds (Bunds) 2	Day-bond	Direct lending by credit institu- tions 4	Loans from non-banks		Old debt	
									Social security funds	Other 4	Equal- isation claims 5	Other 5,6
<b>Central, state and local government</b>												
2010	1,732,851	87,042	391,851	195,534	8,704	628,957	1,975	302,716	21	111,609	4,440	2
2011	1,752,903	60,272	414,250	214,211	8,208	644,894	2,154	292,606	102	111,765	4,440	2
2012	1,791,254	57,172	417,469	234,355	6,818	667,198	1,725	288,806	70	113,198	4,440	2
2013	1,816,017	50,128	423,441	245,372	4,488	684,951	1,397	291,429	46	110,323	4,440	2
2014 Q1	1,809,286	41,870	417,260	259,344	4,130	688,047	1,314	282,383	21	110,476	4,440	2
Q2	1,821,829	39,049	419,662	253,524	3,773	703,513	1,262	285,729	16	110,859	4,440	2
Q3	1,818,450	34,149	427,125	265,789	3,068	691,607	1,219	280,889	16	110,147	4,440	2
Q4	1,817,015	27,951	429,633	259,186	2,375	703,812	1,187	276,723	42	111,664	4,440	2
2015 Q1	1,821,890	28,317	425,257	250,432	2,271	707,905	1,155	290,509	42	111,561	4,440	2
Q2	1,807,271	29,575	421,582	243,299	2,031	722,562	1,133	271,661	42	110,944	4,440	2
Q3	1,811,599	26,213	424,534	256,613	1,677	715,763	1,106	270,467	42	110,741	4,440	2
Q4	1,804,625	19,431	429,818	246,940	1,305	725,285	1,070	263,303	59	112,972	4,440	2
2016 Q1 P	1,813,920	21,804	427,090	240,281	1,205	730,533	1,051	278,432	59	109,023	4,440	2
Q2 P	1,812,052	29,543	427,813	235,389	1,108	727,922	1,033	276,974	59	107,769	4,440	2
Q3 P	1,803,768	31,237	433,493	245,945	922	717,357	1,021	262,098	59	107,194	4,440	2
<b>Central government<sup>7,8</sup></b>												
2010	1,075,415	85,867	126,220	195,534	8,704	628,582	1,975	13,349	-	10,743	4,440	2
2011	1,081,304	58,297	130,648	214,211	8,208	644,513	2,154	9,382	-	9,450	4,440	2
2012	1,113,032	56,222	117,719	234,355	6,818	666,775	1,725	16,193	-	8,784	4,440	2
2013	1,132,505	50,004	110,029	245,372	4,488	684,305	1,397	23,817	-	8,652	4,440	2
2014 Q1	1,128,954	41,608	107,914	259,344	4,130	687,001	1,314	14,551	-	8,651	4,440	2
Q2	1,138,455	37,951	105,639	253,524	3,773	702,467	1,262	20,781	-	8,616	4,440	2
Q3	1,130,420	33,293	104,763	265,789	3,068	690,561	1,219	18,745	-	8,541	4,440	2
Q4	1,130,128	27,951	103,445	259,186	2,375	702,515	1,187	20,509	-	8,518	4,440	2
2015 Q1	1,127,042	26,495	102,203	250,432	2,271	706,308	1,155	25,289	-	8,448	4,440	2
Q2	1,121,637	27,535	101,090	243,299	2,031	720,715	1,133	13,021	-	8,373	4,440	2
Q3	1,119,670	24,157	98,087	256,613	1,677	713,766	1,106	11,776	-	8,046	4,440	2
Q4	1,113,741	18,536	96,389	246,940	1,305	723,238	1,070	13,825	-	7,996	4,440	2
2016 Q1	1,124,391	20,526	98,232	240,281	1,205	728,457	1,051	22,533	-	7,664	4,440	2
Q2	1,128,595	28,369	99,417	235,389	1,108	725,469	1,033	26,236	-	7,133	4,440	2
Q3	1,114,708	30,626	102,053	245,945	922	714,903	1,021	7,794	-	7,002	4,440	2
<b>State government</b>												
2010	528,696	1,176	265,631	.	.	.	.	167,429	1	94,459	.	1
2011	537,870	1,975	283,601	.	.	.	.	154,844	62	97,387	.	1
2012	540,836	950	299,750	.	.	.	.	138,698	52	101,386	.	1
2013	545,814	125	313,412	.	.	.	.	133,899	35	98,343	.	1
2014 Q1	540,134	261	309,346	.	.	.	.	132,020	10	98,495	.	1
Q2	542,656	1,098	314,024	.	.	.	.	128,616	5	98,913	.	1
Q3	546,756	856	322,362	.	.	.	.	125,257	5	98,276	.	1
Q4	544,419	0	326,188	.	.	.	.	119,529	5	98,697	.	1
2015 Q1	547,487	1,821	323,055	.	.	.	.	123,943	5	98,662	.	1
Q2	538,594	2,040	320,492	.	.	.	.	117,935	5	98,121	.	1
Q3	544,260	2,056	326,447	.	.	.	.	117,506	5	98,245	.	1
Q4	543,311	895	333,429	.	.	.	.	109,985	5	98,996	.	1
2016 Q1 P	542,063	1,278	328,858	.	.	.	.	116,542	5	95,379	.	1
Q2 P	536,186	1,173	328,397	.	.	.	.	111,953	6	94,657	.	1
Q3 P	541,067	611	331,441	.	.	.	.	114,798	6	94,212	.	1
<b>Local government<sup>9</sup></b>												
2010	128,740	.	-	.	.	375	.	121,938	20	6,407	.	.
2011	133,730	.	-	.	.	381	.	128,380	40	4,929	.	.
2012	137,386	.	-	.	.	423	.	133,916	18	3,029	.	.
2013	137,697	.	-	.	.	646	.	133,713	11	3,328	.	.
2014 Q1	140,198	.	-	.	.	1,046	.	135,811	11	3,330	.	.
Q2	140,719	.	-	.	.	1,046	.	136,332	11	3,330	.	.
Q3	141,274	.	-	.	.	1,046	.	136,888	11	3,330	.	.
Q4	142,468	.	-	.	.	1,297	.	136,686	37	4,448	.	.
2015 Q1	147,362	.	-	.	.	1,597	.	141,278	37	4,450	.	.
Q2	147,039	.	-	.	.	1,847	.	140,705	37	4,450	.	.
Q3	147,669	.	-	.	.	1,997	.	141,185	37	4,450	.	.
Q4	147,573	.	-	.	.	2,047	.	139,493	54	5,980	.	.
2016 Q1 P	147,466	.	-	.	.	2,076	.	139,356	54	5,980	.	.
Q2 P	147,271	.	-	.	.	2,453	.	138,785	54	5,980	.	.
Q3 P	147,993	.	-	.	.	2,454	.	139,506	54	5,980	.	.

Source: Bundesbank calculations based on data from the Federal Statistical Office. \* Excluding direct intergovernmental borrowing. 1 Including Treasury financing paper. 2 Excluding issuers' holdings of their own securities. 3 Treasury notes issued by state government include long-term notes. 4 Mainly loans against borrowers' notes and cash advances. Including loans raised abroad. Other loans from non-banks, including loans from public supplementary pension funds and liabilities arising from the investment assistance levy. 5 Excluding offsets against outstanding claims. 6 Old debt mainly denominated in foreign currency, in accordance with the London Debts Agreement, old liabilities arising from housing construction and liabil-

ities arising from housing construction by the former GDR's armed forces and from housing construction in connection with the return of the troops of the former USSR stationed in eastern Germany to their home country; excluding debt securities in own portfolios. 7 In contrast to the capital market statistics, the debt incurred through the joint issuance of Federal securities is recorded here under central government and its special funds in accordance with the agreed allocation ratios. 8 From January 2011, including debt of the Restructuring Fund for Credit Institutions. 9 Including debt of municipal special purpose associations. Data other than year-end figures have been estimated.

## XI Economic conditions in Germany

### 1 Origin and use of domestic product, distribution of national income

Item	2015			2016			2015			2016			
	2014	2015	2016	2014	2015	2016	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	Index 2010=100			Annual percentage change									
<b>At constant prices, chained</b>													
<b>I Origin of domestic product</b>													
Production sector (excluding construction)	110.0	111.8	113.6	5.0	1.6	1.6	0.8	1.9	1.7	1.9	1.0	4.1	0.7
Construction	101.6	101.4	104.3	1.4	- 0.2	2.8	- 2.2	- 0.8	- 0.8	2.4	1.3	5.2	2.4
Wholesale/retail trade, transport and storage, hotel and restaurant services	106.6	108.6	111.0	0.4	1.9	2.3	2.2	1.8	1.6	1.9	1.3	4.3	2.0
Information and communication	125.9	129.1	132.9	4.8	2.5	3.0	1.7	2.8	2.5	3.0	2.9	3.9	2.9
Financial and insurance activities	105.8	106.5	109.2	- 4.8	0.7	2.5	- 0.6	2.2	1.6	- 0.4	2.2	1.3	2.5
Real estate activities	101.8	102.6	103.4	- 1.5	0.9	0.8	0.5	0.8	0.9	1.2	0.7	1.1	0.6
Business services <sup>1</sup>	106.6	109.0	111.2	2.4	2.3	2.0	1.6	2.6	2.1	3.0	1.7	3.7	1.8
Public services, education and health	103.1	105.2	107.0	0.7	2.0	1.7	2.1	2.3	2.1	1.6	1.3	1.8	1.6
Other services	97.3	97.6	98.8	- 0.5	0.3	1.2	- 0.2	0.3	0.2	0.9	0.2	2.2	1.4
Gross value added	106.3	107.9	109.9	1.5	1.6	1.8	1.1	1.7	1.6	1.8	1.2	3.2	1.5
Gross domestic product <sup>2</sup>	106.4	108.2	110.2	1.6	1.7	1.9	1.3	1.8	1.8	2.1	1.5	3.1	1.5
<b>II Use of domestic product</b>													
Private consumption <sup>3</sup>	104.4	106.5	108.6	0.9	2.0	2.0	2.1	1.7	2.2	2.1	2.0	2.7	1.5
Government consumption	104.5	107.4	111.9	1.2	2.7	4.2	2.2	2.8	2.6	3.4	4.2	4.3	4.5
Machinery and equipment	106.8	110.7	112.6	5.5	3.7	1.7	1.5	1.8	4.4	6.4	3.9	4.5	- 0.6
Premises	109.5	109.8	113.3	1.9	0.3	3.1	- 2.0	- 0.0	0.1	3.1	2.5	4.8	2.0
Other investment <sup>4</sup>	111.4	113.5	116.5	4.0	1.9	2.6	2.0	1.6	1.8	2.1	2.4	2.7	2.7
Changes in inventories <sup>5, 6</sup>	.	.	.	- 0.1	- 0.5	- 0.4	- 0.4	- 1.0	- 0.2	- 0.3	- 0.2	- 0.3	- 0.1
Domestic demand	104.5	106.2	108.5	1.4	1.6	2.2	1.2	0.7	2.0	2.5	2.4	3.1	2.0
Net exports <sup>6</sup>	.	.	.	0.3	0.2	- 0.1	0.1	1.2	- 0.1	- 0.3	- 0.7	0.3	- 0.3
Exports	118.0	124.1	127.3	4.1	5.2	2.5	5.5	6.7	4.9	3.6	1.3	4.6	1.2
Imports	114.8	121.0	125.1	4.0	5.5	3.4	6.0	4.9	6.0	5.0	3.3	4.9	2.2
Gross domestic product <sup>2</sup>	106.4	108.2	110.2	1.6	1.7	1.9	1.3	1.8	1.8	2.1	1.5	3.1	1.5
<b>At current prices (€ billion)</b>													
<b>III Use of domestic product</b>													
Private consumption <sup>3</sup>	1,594.4	1,636.0	1,677.9	1.8	2.6	2.6	2.4	2.5	2.7	2.8	2.5	3.1	2.1
Government consumption	561.1	583.7	617.5	3.5	4.0	5.8	3.3	4.1	3.8	4.9	6.1	6.0	6.1
Machinery and equipment	191.5	200.2	205.3	6.1	4.6	2.6	2.4	2.6	5.3	7.4	5.0	5.4	0.1
Premises	288.7	295.0	309.6	4.2	2.2	4.9	- 0.0	1.9	1.9	4.9	4.1	6.7	4.0
Other investment <sup>4</sup>	105.0	108.6	112.9	5.5	3.5	3.9	3.7	3.2	3.3	3.7	3.8	4.0	4.0
Changes in inventories <sup>5</sup>	- 7.4	- 20.2	- 31.3	.	.	.	.	.	.	.	.	.	.
Domestic use	2,733.2	2,803.3	2,891.9	2.8	2.6	3.2	2.0	1.8	2.9	3.6	3.2	3.9	2.9
Net exports	190.7	229.5	241.9	.	.	.	.	.	.	.	.	.	.
Exports	1,334.8	1,418.8	1,440.0	3.9	6.3	1.5	6.2	8.6	6.2	4.2	0.7	2.7	- 0.1
Imports	1,144.1	1,189.3	1,198.0	2.5	3.9	0.7	3.7	4.5	4.7	2.8	0.2	0.7	- 0.5
Gross domestic product <sup>2</sup>	2,923.9	3,032.8	3,133.9	3.5	3.7	3.3	3.2	3.8	3.7	4.2	3.2	4.6	2.9
<b>IV Prices (2010=100)</b>													
Private consumption	105.6	106.2	106.9	1.0	0.6	0.6	0.3	0.8	0.5	0.6	0.5	0.4	0.5
Gross domestic product	106.6	108.7	110.2	1.8	2.0	1.4	1.9	2.0	1.9	2.1	1.7	1.4	1.4
Terms of trade	99.5	102.0	103.6	1.3	2.6	1.6	3.0	2.1	2.5	2.6	2.4	2.3	1.4
<b>V Distribution of national income</b>													
Compensation of employees	1,485.5	1,539.9	1,594.6	3.9	3.7	3.6	3.2	3.8	3.8	3.9	4.2	3.4	3.4
Entrepreneurial and property income	694.1	723.4	746.1	2.4	4.2	3.1	4.0	3.6	4.1	5.3	1.8	9.8	1.1
National income	2,179.5	2,263.2	2,340.7	3.4	3.8	3.4	3.4	3.8	3.9	4.3	3.3	5.3	2.6
<i>Memo item:</i> Gross national income	2,988.9	3,098.8	3,199.9	3.3	3.7	3.3	3.3	3.4	3.7	4.2	3.4	4.7	2.6

Source: Federal Statistical Office; figures computed in November 2016. Initial annual results for 2016; figures computed in January 2017. <sup>1</sup> Professional, scientific, technical, administration and support service activities. <sup>2</sup> Gross value added plus taxes on products (netted with subsidies on products). <sup>3</sup> Including non-profit institutions serv-

ing households. <sup>4</sup> Intellectual property rights (inter alia, computer software and entertainment, literary or artistic originals) and cultivated assets. <sup>5</sup> Including net increase in valuables. <sup>6</sup> Contribution of growth to GDP.

## XI Economic conditions in Germany

### 2 Output in the production sector\*

Adjusted for working-day variations ◦

Production sector, total	of which:											
	Construc-tion	Energy	Industry									
			Total	of which: by main industrial grouping				of which: by economic sector				
			Inter-mediate goods	Capital goods	Durable goods	Non-durable goods	Manu-facture of basic metals and fabricated metal products	Manu-facture of computers, electronic and optical products and electrical equipment	Machinery and equipment	Motor vehicles, trailers and semi-trailers		
<b>2010=100</b>												
% of total <sup>1</sup>	100.00	11.24	10.14	78.62	31.02	33.31	2.49	11.80	10.41	10.37	12.17	11.62
Period												
2012	106.2	105.9	97.4	107.4	104.6	113.3	100.5	99.8	107.3	107.8	115.2	112.7
2013	106.4	105.6	96.4	107.8	104.4	114.0	100.1	100.6	108.3	106.0	113.8	114.8
2014	107.9	108.4	92.7	109.8	106.3	116.6	100.5	102.2	111.3	108.7	115.1	119.5
2015	108.5	106.0	97.5	110.3	106.2	117.6	102.8	101.9	111.4	109.5	114.8	119.3
2015 Q3	109.0	113.8	93.1	110.4	107.4	116.6	100.2	103.2	112.2	111.0	113.5	117.5
Q4	111.3	117.9	100.7	111.7	103.3	122.6	105.4	104.4	109.7	111.3	122.5	116.5
2016 Q1	106.8	86.4	101.9	110.3	107.6	116.6	106.7	100.7	112.9	108.9	109.1	124.9
Q2	108.9	108.0	89.1	111.6	108.3	119.0	104.4	101.1	114.4	109.3	113.0	124.2
Q3 <sup>r</sup>	109.9	114.8	91.8	111.5	108.2	117.9	103.2	103.8	112.6	113.8	114.1	119.5
2015 Nov	115.7	120.6	101.3	116.9	109.5	127.0	113.4	108.7	117.1	115.8	121.3	129.5
Dec	104.2	114.2	101.7	103.1	90.2	117.7	93.4	97.7	94.3	105.5	130.1	89.7
2016 Jan	100.3	71.5	106.5	103.6	103.2	105.7	100.1	99.6	107.6	102.2	96.1	114.8
Feb	104.1	84.7	96.9	107.9	105.1	114.9	105.4	96.1	110.0	106.6	106.3	125.4
Mar	115.9	103.1	102.4	119.5	114.6	129.1	114.5	106.4	121.2	117.9	125.0	134.5
Apr	108.3	104.8	91.3	110.9	108.0	118.0	105.1	99.8	114.1	107.4	110.1	127.9
May	106.4	106.7	89.8	108.5	107.2	113.1	97.9	101.0	112.2	105.6	107.8	116.0
June	112.1	112.5	86.1	115.4	109.6	125.8	110.1	102.4	116.9	114.9	121.0	128.6
July <sup>2,r</sup>	110.3	117.6	91.7	111.7	109.4	118.0	100.0	102.5	113.9	112.5	112.2	122.0
Aug <sup>2,r</sup>	104.4	110.5	90.6	105.3	104.1	108.2	94.6	102.3	107.1	108.4	107.0	104.7
Sep <sup>r</sup>	115.0	116.2	93.1	111.2	111.2	127.6	115.0	106.7	116.9	120.5	123.0	131.9
Oct <sup>x</sup>	115.7	120.0	99.5	117.2	112.3	124.6	114.2	109.9	118.4	117.3	115.6	132.7
Nov <sup>x,p</sup>	118.3	122.0	100.4	120.0	111.9	131.3	113.3	111.0	121.1	120.3	126.8	131.8
<b>Annual percentage change</b>												
2012	- 0.5	- 1.0	+ 1.9	- 0.6	- 2.2	+ 1.3	- 3.6	- 1.5	- 1.7	- 2.2	+ 1.8	+ 0.1
2013	+ 0.2	- 0.3	- 1.0	+ 0.4	- 0.2	+ 0.6	- 0.4	+ 0.8	+ 0.9	- 1.7	- 1.2	+ 1.9
2014	+ 1.4	+ 2.7	- 3.8	+ 1.9	+ 1.8	+ 2.3	+ 0.4	+ 1.6	+ 2.8	+ 2.5	+ 1.1	+ 4.1
2015	+ 0.6	- 2.2	+ 5.2	+ 0.5	- 0.1	+ 0.9	+ 2.3	- 0.3	+ 0.1	+ 0.7	- 0.3	- 0.2
2015 Q3	+ 1.0	- 2.3	+ 7.5	+ 0.9	+ 0.2	+ 1.6	+ 3.3	+ 0.4	+ 1.0	+ 0.3	- 1.3	+ 2.6
Q4	- 0.3	- 0.8	+ 1.1	- 0.4	- 0.3	- 0.2	+ 0.7	- 1.6	- 1.0	+ 0.1	- 2.2	- 2.0
2016 Q1	+ 1.5	+ 2.8	- 2.6	+ 1.9	+ 1.3	+ 2.5	+ 2.5	+ 1.4	+ 2.3	+ 1.2	+ 1.7	+ 1.8
Q2	+ 0.5	- 0.2	- 2.5	+ 0.9	+ 0.6	+ 1.2	+ 2.9	+ 0.4	+ 0.9	+ 1.2	- 2.5	+ 3.2
Q3 <sup>r</sup>	+ 0.8	+ 0.9	- 1.4	+ 1.0	+ 0.7	+ 1.1	+ 3.0	+ 0.6	+ 0.4	+ 2.6	+ 0.5	+ 1.7
2015 Nov	± 0.0	± 0.0	+ 2.9	- 0.3	± 0.0	- 0.9	+ 1.3	+ 0.2	- 1.6	- 0.3	- 1.7	- 3.6
Dec	- 1.0	- 1.5	- 0.2	- 1.2	- 0.1	- 1.7	- 0.5	- 2.3	- 2.1	+ 2.7	- 4.4	- 7.0
2016 Jan	+ 2.6	+ 1.0	+ 0.1	+ 3.1	+ 1.4	+ 4.8	+ 5.1	+ 2.4	+ 3.0	+ 1.7	+ 1.6	+ 6.3
Feb	+ 1.8	+ 7.9	- 4.2	+ 2.0	+ 2.0	+ 2.0	+ 1.6	+ 1.7	+ 2.0	+ 1.3	+ 2.2	+ 0.1
Mar	+ 0.3	+ 0.2	- 3.9	+ 0.8	+ 0.7	+ 1.0	+ 1.1	+ 0.4	+ 2.0	+ 0.8	+ 1.5	- 0.2
Apr	+ 0.8	- 0.9	- 4.2	+ 1.6	+ 1.1	+ 2.0	+ 2.9	+ 1.1	+ 1.0	+ 2.9	- 1.9	+ 5.9
May	- 0.3	- 0.8	+ 0.4	- 0.3	+ 0.8	- 1.7	- 1.8	+ 1.2	+ 0.3	- 0.5	- 3.8	- 3.3
June	+ 1.0	+ 1.0	- 3.6	+ 1.5	- 0.2	+ 3.2	+ 7.3	- 1.1	+ 1.5	+ 1.2	- 1.9	+ 7.0
July <sup>2,r</sup>	- 1.3	+ 1.4	- 2.7	- 1.5	- 0.5	- 2.5	+ 2.9	- 2.2	- 0.8	+ 0.7	- 3.4	- 3.7
Aug <sup>2,r</sup>	+ 2.3	+ 0.3	- 0.1	+ 2.8	+ 1.6	+ 4.2	+ 4.2	+ 1.5	+ 1.2	+ 3.2	+ 1.3	+ 8.0
Sep <sup>r</sup>	+ 1.5	+ 1.0	- 1.5	+ 1.8	+ 1.2	+ 2.0	+ 2.0	+ 2.7	+ 0.8	+ 3.7	+ 3.4	+ 2.3
Oct <sup>x</sup>	+ 1.6	+ 0.8	+ 0.5	+ 1.7	+ 1.9	+ 1.1	+ 4.3	+ 3.0	+ 0.7	+ 4.2	- 0.4	+ 1.8
Nov <sup>x,p</sup>	+ 2.2	+ 1.2	- 0.9	+ 2.7	+ 2.2	+ 3.4	- 0.1	+ 2.1	+ 3.4	+ 3.9	+ 4.5	+ 1.8

Source of the unadjusted figures: Federal Statistical Office. \* For explanatory notes, see Statistical Supplement Seasonally adjusted business statistics, Tables II.10 to II.12. ◦ Using the Census X-12-ARIMA method, version 0.2.8. <sup>1</sup> Share of gross value added at factor cost of the production sector in the base year 2010. <sup>2</sup> Influenced by

a change in holiday dates. <sup>x</sup> Provisional; adjusted in advance by the Federal Statistical Office, by way of estimates, to the results of the Quarterly Production Survey or the Quarterly Survey in the specialised construction industry, respectively.

## XI Economic conditions in Germany

### 3 Orders received by industry \*

Adjusted for working-day variations ◦

Period	Industry		of which:									
			Intermediate goods		Capital goods		Consumer goods		of which:			
	2010=100	Annual percent-age change	2010=100	Annual percent-age change	2010=100	Annual percent-age change	2010=100	Annual percent-age change	2010=100	Annual percent-age change	2010=100	Annual percent-age change
<b>Total</b>												
2011	109.9	+ 10.5	109.1	+ 9.6	111.2	+ 11.8	103.8	+ 4.2	105.3	+ 5.8	103.3	+ 3.7
2012	106.9	- 2.7	104.2	- 4.5	109.2	- 1.8	103.8	± 0.0	99.4	- 5.6	105.3	+ 1.9
2013	109.4	+ 2.3	103.3	- 0.9	114.3	+ 4.7	105.9	+ 2.0	101.8	+ 2.4	107.4	+ 2.0
2014	112.4	+ 2.7	103.9	+ 0.6	118.6	+ 3.8	110.8	+ 4.6	102.4	+ 0.6	113.7	+ 5.9
2015	114.8	+ 2.1	103.0	- 0.9	123.2	+ 3.9	114.3	+ 3.2	106.7	+ 4.2	116.9	+ 2.8
2015 Nov	116.6	+ 1.7	105.3	+ 1.1	124.9	+ 2.1	115.4	+ 1.9	109.6	+ 4.6	117.4	+ 1.0
2015 Dec	110.6	- 1.9	90.3	- 2.5	125.5	- 2.6	106.3	+ 8.8	98.7	+ 6.2	109.0	+ 9.7
2016 Jan	114.1	+ 0.2	102.8	- 5.2	120.3	+ 2.0	126.6	+ 11.6	116.1	+ 10.6	130.3	+ 12.0
2016 Feb	112.4	+ 0.1	100.6	- 1.8	120.0	+ 1.4	119.2	- 0.7	104.1	+ 2.8	124.4	- 1.8
2016 Mar	127.3	+ 1.4	108.8	- 3.9	141.1	+ 4.3	123.1	+ 4.9	118.0	+ 3.6	124.9	+ 5.2
2016 Apr	113.8	- 1.9	105.0	+ 1.1	120.4	- 4.0	111.6	+ 0.8	117.1	+ 12.8	109.6	- 3.1
2016 May	112.2	- 1.3	101.1	- 3.3	120.1	- 0.3	111.9	+ 0.9	100.3	- 1.5	115.9	+ 1.6
2016 June	118.6	- 3.9	102.5	- 3.9	130.7	- 4.2	113.9	- 0.3	110.8	+ 2.6	114.9	- 1.4
2016 July	114.9	- 1.5	103.0	- 1.9	123.1	- 1.0	117.1	- 1.3	109.9	+ 1.9	119.6	- 2.4
2016 Aug	104.2	+ 1.5	93.9	+ 0.5	110.3	+ 1.8	112.6	+ 2.6	102.5	+ 3.0	116.0	+ 2.4
2016 Sep	114.6	+ 2.3	101.6	+ 1.6	123.7	+ 3.0	116.0	+ 1.6	118.9	+ 2.1	115.0	+ 1.3
2016 Oct	120.8	+ 6.2	106.4	+ 3.4	131.2	+ 8.8	119.6	- 0.5	130.3	+ 13.5	115.8	- 5.2
2016 Nov	120.9	+ 3.7	108.5	+ 3.0	129.9	+ 4.0	118.8	+ 2.9	121.1	+ 10.5	118.0	+ 0.5
<b>From the domestic market</b>												
2011	109.7	+ 10.3	109.7	+ 10.3	110.8	+ 11.4	103.5	+ 3.9	110.2	+ 10.9	101.1	+ 1.5
2012	104.0	- 5.2	103.3	- 5.8	105.4	- 4.9	99.2	- 4.2	101.9	- 7.5	98.2	- 2.9
2013	104.4	+ 0.4	101.9	- 1.4	107.6	+ 2.1	100.4	+ 1.2	102.9	+ 1.0	99.5	+ 1.3
2014	105.6	+ 1.1	100.8	- 1.1	110.9	+ 3.1	102.4	+ 2.0	102.9	± 0.0	102.2	+ 2.7
2015	107.4	+ 1.7	99.0	- 1.8	116.3	+ 4.9	105.2	+ 2.7	102.1	- 0.8	106.3	+ 4.0
2015 Nov	110.4	+ 4.2	102.0	+ 1.8	119.2	+ 6.3	108.3	+ 5.6	108.4	+ 2.0	108.2	+ 6.8
2015 Dec	97.9	+ 0.7	84.1	- 4.2	112.8	+ 4.4	90.8	+ 2.7	83.6	- 1.4	93.4	+ 4.1
2016 Jan	105.6	- 2.3	98.3	- 5.7	112.6	+ 0.3	107.1	+ 0.8	105.2	+ 3.4	107.8	- 0.1
2016 Feb	105.6	+ 0.6	95.0	- 2.4	115.5	+ 3.3	110.1	- 0.7	99.4	+ 0.5	113.9	- 1.1
2016 Mar	117.2	- 4.2	102.9	- 5.1	132.3	- 4.2	113.1	+ 2.0	114.7	+ 5.7	112.6	+ 0.7
2016 Apr	108.7	+ 0.6	102.2	+ 1.7	116.4	- 0.8	101.8	+ 2.7	105.1	+ 5.3	100.6	+ 1.8
2016 May	105.1	- 0.7	95.6	- 5.4	114.5	+ 2.9	105.5	+ 4.7	94.6	+ 2.6	109.4	+ 5.4
2016 June	108.5	+ 1.2	96.7	- 4.0	121.7	+ 6.3	100.6	- 1.4	101.2	+ 1.2	100.4	- 2.2
2016 July	106.5	- 5.2	98.9	- 2.6	114.5	- 7.3	104.6	- 5.5	102.3	- 2.2	105.4	- 6.6
2016 Aug	99.8	+ 0.9	91.4	- 1.8	107.7	+ 4.1	103.4	- 3.0	102.7	+ 3.0	103.6	- 5.0
2016 Sep	104.8	- 0.6	94.0	- 2.3	115.6	+ 1.1	105.1	- 2.5	115.5	+ 0.4	101.4	- 3.7
2016 Oct	112.1	+ 4.0	101.8	+ 3.0	123.2	+ 5.5	107.6	- 0.6	121.1	+ 7.2	102.8	- 3.7
2016 Nov	111.5	+ 1.0	102.4	+ 0.4	121.2	+ 1.7	108.6	+ 0.3	118.2	+ 9.0	105.2	- 2.8
<b>From abroad</b>												
2011	110.0	+ 10.4	108.4	+ 8.8	111.4	+ 11.8	104.1	+ 4.5	101.0	+ 1.4	105.2	+ 5.6
2012	109.3	- 0.6	105.2	- 3.0	111.6	+ 0.2	107.7	+ 3.5	97.3	- 3.7	111.3	+ 5.8
2013	113.5	+ 3.8	104.8	- 0.4	118.5	+ 6.2	110.7	+ 2.8	100.8	+ 3.6	114.1	+ 2.5
2014	117.9	+ 3.9	107.4	+ 2.5	123.4	+ 4.1	118.0	+ 6.6	102.1	+ 1.3	123.5	+ 8.2
2015	120.7	+ 2.4	107.8	+ 0.4	127.4	+ 3.2	122.1	+ 3.5	110.7	+ 8.4	126.0	+ 2.0
2015 Nov	121.7	- 0.2	109.2	+ 0.2	128.4	- 0.2	121.5	- 0.7	110.7	+ 7.0	125.2	- 2.9
2015 Dec	121.0	- 3.4	97.7	- 0.6	133.3	- 6.0	119.6	+ 13.2	111.8	+ 11.8	122.3	+ 13.7
2016 Jan	121.0	+ 1.9	108.2	- 4.6	125.0	+ 3.0	143.3	+ 19.9	125.6	+ 16.5	149.4	+ 21.0
2016 Feb	118.0	- 0.3	107.1	- 1.1	122.7	+ 0.2	126.9	- 0.8	108.2	+ 4.7	133.3	- 2.3
2016 Mar	135.5	+ 5.8	115.8	- 2.6	146.5	+ 9.7	131.6	+ 7.0	120.9	+ 1.9	135.3	+ 8.7
2016 Apr	118.0	- 3.7	108.3	+ 0.4	122.9	- 5.8	119.9	- 0.6	127.6	+ 18.9	117.3	- 6.3
2016 May	118.0	- 1.8	107.5	- 1.0	123.6	- 2.1	117.3	- 1.9	105.2	- 4.5	121.5	- 1.1
2016 June	126.9	- 7.1	109.4	- 3.9	136.2	- 9.3	125.2	+ 0.2	119.2	+ 3.7	127.2	- 0.9
2016 July	121.8	+ 1.5	107.8	- 1.3	128.4	+ 2.7	127.7	+ 1.7	116.6	+ 5.5	131.6	+ 0.6
2016 Aug	107.8	+ 1.9	96.9	+ 3.3	111.9	+ 0.4	120.4	+ 7.1	102.4	+ 3.1	126.6	+ 8.3
2016 Sep	122.6	+ 4.5	110.6	+ 5.8	128.7	+ 4.1	125.4	+ 4.8	121.9	+ 3.7	126.6	+ 5.1
2016 Oct	127.9	+ 7.8	111.9	+ 3.9	136.1	+ 10.7	129.8	- 0.5	138.4	+ 19.0	126.9	- 6.1
2016 Nov	128.5	+ 5.6	115.6	+ 5.9	135.3	+ 5.4	127.5	+ 4.9	123.7	+ 11.7	128.8	+ 2.9

Source of the unadjusted figures: Federal Statistical Office. \* At current prices; for explanatory notes, see Statistical Supplement Seasonally adjusted business statistics,

Tables II.14 to II.16. ◦ Using the Census X-12-ARIMA method, version 0.2.8.

## XI Economic conditions in Germany

### 4 Orders received by construction \*

Adjusted for working-day variations ◦

Period	Breakdown by type of construction										Breakdown by client <sup>1</sup>					
	Building										Civil engineering					
	Total		Housing construction		Industrial construction		Public sector construction		Industry						Public sector <sup>2</sup>	
2010 = 100	Annual percentage change	2010 = 100	Annual percentage change	2010 = 100	Annual percentage change	2010 = 100	Annual percentage change	2010 = 100	Annual percentage change	2010 = 100	Annual percentage change	2010 = 100	Annual percentage change	2010 = 100	Annual percentage change	
2011	107.1	+ 7.5	112.1	+ 12.4	120.5	+ 21.0	113.6	+ 13.8	91.5	- 8.1	102.0	+ 2.5	112.7	+ 13.2	95.9	- 3.7
2012	114.7	+ 7.1	121.4	+ 8.3	132.4	+ 9.9	124.2	+ 9.3	91.8	+ 0.3	107.9	+ 5.8	118.8	+ 5.4	103.4	+ 7.8
2013	119.2	+ 3.9	126.5	+ 4.2	140.6	+ 6.2	128.1	+ 3.1	93.9	+ 2.3	111.9	+ 3.7	121.9	+ 2.6	107.7	+ 4.2
2014	118.5	- 0.6	127.2	+ 0.6	146.6	+ 4.3	126.8	- 1.0	90.6	- 3.5	109.9	- 1.8	121.8	- 0.1	104.0	- 3.4
2015	124.2	+ 4.8	133.6	+ 5.0	165.4	+ 12.8	124.3	- 2.0	98.5	+ 8.7	114.8	+ 4.5	122.6	+ 0.7	109.3	+ 5.1
2015 Oct	117.7	+ 3.5	128.0	- 1.0	158.4	+ 4.2	116.4	- 10.0	102.8	+ 21.7	107.4	+ 9.6	120.5	+ 1.1	98.6	+ 6.4
2015 Nov	118.8	+ 19.6	137.1	+ 21.3	152.4	+ 17.1	144.6	+ 24.0	84.9	+ 24.3	100.5	+ 17.3	140.4	+ 28.9	83.2	+ 7.8
2015 Dec	123.3	+ 21.0	135.0	+ 10.6	166.7	+ 8.0	125.4	+ 8.9	101.2	+ 27.6	111.6	+ 36.4	114.8	+ 4.6	114.6	+ 57.2
2016 Jan	108.5	+ 13.9	117.7	+ 15.5	147.4	+ 20.5	106.6	+ 6.1	92.0	+ 40.0	99.3	+ 11.8	111.5	+ 7.0	89.7	+ 19.0
2016 Feb	120.6	+ 15.0	126.0	+ 11.0	157.8	+ 15.4	115.4	+ 9.2	94.7	+ 4.2	115.3	+ 19.7	109.5	+ 5.7	117.1	+ 25.4
2016 Mar	164.7	+ 15.5	168.4	+ 12.3	227.3	+ 19.9	146.7	+ 9.9	117.0	- 2.9	161.0	+ 19.0	150.0	+ 9.6	154.6	+ 19.2
2016 Apr	150.9	+ 18.8	155.3	+ 16.7	195.8	+ 14.2	142.3	+ 20.0	114.0	+ 13.0	146.6	+ 21.3	140.3	+ 18.8	143.8	+ 21.7
2016 May	157.4	+ 18.5	176.1	+ 27.4	209.6	+ 24.8	173.7	+ 32.6	117.6	+ 16.1	138.7	+ 8.9	156.0	+ 19.4	137.9	+ 14.0
2016 June	165.1	+ 19.9	181.0	+ 24.4	223.4	+ 27.7	174.6	+ 25.5	116.8	+ 9.5	149.1	+ 14.7	161.3	+ 20.3	145.5	+ 15.0
2016 July	152.7	+ 15.7	163.7	+ 17.4	194.8	+ 5.6	158.6	+ 31.8	117.4	+ 9.5	141.8	+ 13.8	144.2	+ 19.5	144.5	+ 18.1
2016 Aug	138.9	+ 12.1	148.6	+ 14.2	184.2	+ 16.9	141.5	+ 14.9	99.6	+ 2.9	129.1	+ 9.8	132.3	+ 10.9	127.4	+ 10.8
2016 Sep	144.4	+ 7.5	161.5	+ 6.7	225.5	+ 11.5	133.1	- 0.5	120.2	+ 16.6	127.4	+ 8.6	129.6	+ 1.0	127.0	+ 12.3
2016 Oct	145.5	+ 23.6	157.1	+ 22.7	194.3	+ 22.7	148.2	+ 27.3	110.4	+ 7.4	133.8	+ 24.6	145.0	+ 20.3	126.3	+ 28.1

Source of the unadjusted figures: Federal Statistical Office. \* At current prices; values exclusive of value-added tax; for explanatory notes, see Statistical Supplement Seasonally adjusted business statistics, Table II.21. ◦ Using the Census X-12-ARIMA

method, version 0.2.8. <sup>1</sup> Excluding housing construction orders. <sup>2</sup> Including road construction.

### 5 Retail trade turnover, sales of motor vehicles \*

Adjusted for calendar variations ◦

Period	Retail trade															
	of which: by enterprises main product range <sup>1</sup>										Wholesale and retail trade and repair of motor vehicles and motorcycles					
	Total		Food, beverages, tobacco <sup>2</sup>		Textiles, clothing footwear and leather goods		Information and communications equipment		Construction and flooring materials, household appliances, furniture						Retail sale of pharmaceutical and medical goods, cosmetic and toilet articles	
At current prices	Annual percentage change	At prices in year 2010	Annual percentage change	At current prices	Annual percentage change	At current prices	Annual percentage change	At current prices	Annual percentage change	At current prices	Annual percentage change	At current prices	Annual percentage change			
2010 = 100	2010 = 100	2010 = 100	2010 = 100	2010 = 100	2010 = 100	2010 = 100	2010 = 100	2010 = 100	2010 = 100	2010 = 100	2010 = 100	2010 = 100	2010 = 100			
2011	102.7	+ 2.6	101.1	+ 1.0	102.5	+ 2.3	101.6	+ 1.8	99.4	- 0.5	103.7	+ 3.7	100.3	+ 0.3	107.1	+ 7.9
2012	104.5	+ 1.8	100.8	- 0.3	105.2	+ 2.6	102.3	+ 0.7	99.0	- 0.4	104.5	+ 0.8	100.7	+ 0.4	105.8	- 1.2
2013	106.2	+ 1.6	101.3	+ 0.5	109.0	+ 3.6	103.1	+ 0.8	95.4	- 3.6	102.3	- 2.1	103.4	+ 2.7	104.5	- 1.2
2014	108.2	+ 1.9	102.8	+ 1.5	111.6	+ 2.4	104.9	+ 1.7	94.6	- 0.8	101.9	- 0.4	110.7	+ 7.1	107.1	+ 2.5
2015 <sup>3</sup>	110.9	+ 2.5	105.3	+ 2.4	114.8	+ 2.9	105.2	+ 0.3	95.6	+ 1.1	104.7	+ 2.7	116.5	+ 5.2	115.2	+ 7.6
2015 Nov <sup>3</sup>	115.5	+ 2.5	109.5	+ 2.0	116.4	+ 3.1	104.2	- 3.1	110.7	+ 1.1	114.6	+ 3.6	122.6	+ 5.9	124.1	+ 10.0
2015 Dec	131.3	+ 3.3	125.5	+ 3.0	133.9	+ 3.6	124.3	+ 0.6	148.3	+ 1.2	113.4	+ 5.6	130.6	+ 4.0	106.1	+ 4.2
2016 Jan	103.6	+ 2.5	99.5	+ 2.1	108.2	+ 3.4	92.2	+ 4.2	98.6	- 2.3	92.9	+ 2.7	116.0	+ 3.8	105.4	+ 10.0
2016 Feb	99.8	+ 2.3	95.4	+ 2.0	105.6	+ 3.4	80.4	- 1.2	85.7	+ 0.2	94.0	+ 3.6	113.3	+ 4.6	110.3	+ 8.9
2016 Mar	113.5	+ 0.9	107.4	+ 0.8	117.1	+ 1.2	98.0	- 7.5	91.3	+ 1.7	112.5	+ 0.4	123.6	+ 4.2	134.2	+ 4.7
2016 Apr	112.7	+ 0.8	106.0	+ 0.8	117.1	+ 0.2	113.3	+ 4.0	81.9	+ 0.5	111.2	+ 1.9	118.6	+ 2.5	130.1	+ 6.0
2016 May	113.1	+ 1.5	106.3	+ 1.3	118.6	+ 0.9	109.4	+ 1.5	79.5	- 1.9	109.4	+ 1.2	118.1	+ 4.9	125.2	+ 4.2
2016 June	110.2	+ 1.8	104.2	+ 1.7	116.1	+ 1.7	103.8	- 1.4	85.1	+ 4.2	103.4	+ 1.2	117.1	+ 3.4	128.1	+ 5.9
2016 July	113.4	+ 1.9	107.7	+ 1.5	119.0	+ 2.9	108.5	+ 0.6	89.7	- 1.1	106.4	+ 2.9	124.0	+ 3.7	122.1	+ 3.2
2016 Aug	109.1	+ 1.4	103.7	+ 1.3	115.6	+ 0.3	97.9	+ 1.9	84.3	- 2.1	101.2	+ 2.2	117.7	+ 5.6	114.2	+ 8.2
2016 Sep	108.7	+ 0.5	102.4	- 0.1	112.2	+ 2.0	101.9	- 9.1	88.0	- 5.4	101.1	- 1.0	119.3	+ 5.0	124.3	+ 8.8
2016 Oct	118.0	+ 3.4	110.8	+ 2.9	118.6	+ 2.7	129.6	+ 7.6	100.3	+ 2.5	112.8	+ 1.9	124.0	+ 3.9	132.4	+ 6.4
2016 Nov	117.5	+ 1.7	110.3	+ 0.7	118.8	+ 2.1	110.4	+ 6.0	108.8	- 1.7	111.2	- 3.0	124.4	+ 1.5	...	...

Source of the unadjusted figures: Federal Statistical Office. \* Excluding value-added tax; for explanatory notes, see Statistical Supplement Seasonally adjusted business statistics, Table II.24. ◦ Using the Census X-12-ARIMA method, version 0.2.8. <sup>1</sup> In

stores. <sup>2</sup> Including stalls and markets. <sup>3</sup> Figures from January 2015 are provisional, in some cases revised, and particularly uncertain in recent months owing to estimates for missing reports.

XI Economic conditions in Germany

6 Labour market \*

Period	Employment 1		Employment subject to social contributions 2,3						Short time workers 4		Unemployment 5		Unem- plov- ment rate 5,6 in %	Vacan- cies, 5,7 thous- ands
	Thou- sands	Annual percentage change	Total		of which:			Total	of which: Cyclically induced	Total	of which: Recipients of insured unem- plov- ment benefits			
			Thou- sands	Annual percentage change	Produc- tion sector	Services excluding temporary employ- ment	Tempo- rary employ- ment					Solely jobs exempt from social contri- butions 2		
2012	42,062	+ 1.2	29,341	+ 2.3	8,739	19,604	773	4,981	112	67	2,897	902	6.8	478
2013	42,327	+ 0.6	29,713	+ 1.3	8,783	19,958	743	5,017	124	77	2,950	970	6.9	457
2014	42,662	+ 0.8	30,197	+ 1.6	8,860	20,332	770	5,029	94	49	2,898	933	6.7	490
2015	43,057	+ 0.9	30,822	+ 2.1	8,937	20,839	806	4,856	88	44	2,795	859	6.4	569
2016	...	...	...	...	...	...	...	...	...	...	2,691	822	6.1	655
2013 Q4	42,644	+ 0.5	30,118	+ 1.2	8,878	20,234	774	5,028	92	61	2,827	891	6.6	455
2014 Q1	42,214	+ 0.8	29,809	+ 1.4	8,760	20,103	730	4,991	178	58	3,109	1,078	7.2	452
Q2	42,626	+ 0.9	30,080	+ 1.7	8,829	20,255	753	5,043	72	56	2,886	900	6.6	487
Q3	42,849	+ 0.8	30,284	+ 1.7	8,896	20,344	800	5,065	50	37	2,860	909	6.6	512
Q4	42,958	+ 0.7	30,614	+ 1.6	8,956	20,625	796	5,018	77	46	2,738	846	6.3	510
2015 Q1	42,512	+ 0.7	30,360	+ 1.8	8,833	20,551	756	4,863	169	51	2,993	1,011	6.9	515
Q2	42,985	+ 0.8	30,671	+ 2.0	8,895	20,740	792	4,863	61	47	2,772	822	6.3	560
Q3	43,272	+ 1.0	30,927	+ 2.1	8,974	20,864	840	4,868	47	33	2,759	827	6.3	595
Q4	43,457	+ 1.2	31,329	+ 2.3	9,049	21,201	837	4,828	77	46	2,655	775	6.0	604
2016 Q1	r 43,060	r + 1.3	31,064	+ 2.3	8,927	21,120	793	4,786	166	50	2,892	932	6.6	610
Q2	r 43,486	r + 1.2	31,326	+ 2.1	8,983	21,279	820	4,824	59	47	2,674	782	6.1	653
Q3	r 43,641	r + 0.9	9 31,425	9 + 1.6	9 9,013	9 21,311	9 856	9 4,822	9 ...	9 31	2,651	808	6.0	682
Q4	...	...	...	...	...	...	...	...	...	...	2,547	766	5.8	677
2013 Aug	42,475	+ 0.5	29,843	+ 1.2	8,826	20,002	776	5,031	60	47	2,946	956	6.8	471
Sep	42,635	+ 0.6	30,165	+ 1.4	8,906	20,228	786	5,003	70	56	2,849	904	6.6	473
Oct	42,731	+ 0.6	30,181	+ 1.2	8,900	20,255	785	5,011	83	70	2,801	870	6.5	466
Nov	42,710	+ 0.5	30,149	+ 1.1	8,889	20,252	779	5,048	80	67	2,806	881	6.5	458
Dec	42,490	+ 0.5	29,884	+ 1.2	8,783	20,161	731	5,048	114	45	2,874	923	6.7	440
2014 Jan	42,164	+ 0.7	29,736	+ 1.4	8,739	20,060	726	4,977	189	63	3,136	1,104	7.3	425
Feb	42,183	+ 0.8	29,784	+ 1.5	8,750	20,088	729	4,976	193	57	3,138	1,105	7.3	456
Mar	42,296	+ 0.9	29,932	+ 1.7	8,797	20,162	742	4,990	152	55	3,055	1,026	7.1	476
Apr	42,486	+ 0.9	30,060	+ 1.7	8,826	20,244	749	5,030	77	60	2,943	938	6.8	485
May	42,643	+ 0.8	30,125	+ 1.6	8,836	20,292	751	5,060	72	56	2,882	893	6.6	481
June	42,748	+ 0.8	30,175	+ 1.9	8,854	20,295	779	5,087	66	52	2,833	869	6.5	495
July	42,780	+ 0.8	30,121	+ 1.8	8,860	20,219	800	5,100	54	40	2,871	909	6.6	502
Aug	42,804	+ 0.8	30,312	+ 1.6	8,904	20,362	802	5,046	44	32	2,902	934	6.7	515
Sep	42,964	+ 0.8	30,663	+ 1.7	8,992	20,608	813	5,013	51	39	2,808	885	6.5	518
Oct	43,053	+ 0.8	30,676	+ 1.6	8,980	20,645	808	5,021	61	49	2,733	836	6.3	517
Nov	43,010	+ 0.7	30,636	+ 1.6	8,960	20,645	798	5,020	63	52	2,717	834	6.3	515
Dec	42,810	+ 0.8	30,398	+ 1.7	8,864	20,565	753	5,012	107	39	2,764	867	6.4	498
2015 Jan	42,443	+ 0.7	30,276	+ 1.8	8,815	20,498	747	4,846	169	50	3,032	1,043	7.0	485
Feb	42,464	+ 0.7	30,342	+ 1.9	8,819	20,546	756	4,821	183	52	3,017	1,034	6.9	519
Mar	42,630	+ 0.8	30,528	+ 2.0	8,865	20,651	777	4,829	154	50	2,932	955	6.8	542
Apr	42,820	+ 0.8	30,645	+ 1.9	8,895	20,723	784	4,850	67	54	2,843	868	6.5	552
May	43,002	+ 0.8	30,718	+ 2.0	8,901	20,776	815	4,875	57	44	2,762	815	6.3	557
June	43,134	+ 0.9	30,771	+ 2.0	8,915	20,788	819	4,902	59	45	2,711	782	6.2	572
July	43,177	+ 0.9	30,744	+ 2.1	8,934	20,724	840	4,908	49	35	2,773	830	6.3	589
Aug	43,232	+ 1.0	30,986	+ 2.2	8,993	20,899	846	4,841	40	26	2,796	851	6.4	597
Sep	43,408	+ 1.0	31,330	+ 2.2	9,076	21,150	850	4,810	51	39	2,708	799	6.2	600
Oct	43,492	+ 1.0	31,365	+ 2.2	9,067	21,203	846	4,813	61	47	2,649	764	6.0	612
Nov	43,526	+ 1.2	31,384	+ 2.4	9,059	21,243	842	4,845	66	52	2,633	764	6.0	610
Dec	43,353	+ 1.3	31,145	+ 2.5	8,963	21,163	798	4,843	105	39	2,681	798	6.1	591
2016 Jan	r 42,978	r + 1.3	30,967	+ 2.3	8,904	21,060	784	4,775	169	48	2,920	961	6.7	581
Feb	r 43,021	r + 1.3	31,055	+ 2.3	8,921	21,116	793	4,771	177	50	2,911	947	6.6	614
Mar	r 43,180	r + 1.3	31,195	+ 2.2	8,951	21,205	804	4,783	152	52	2,845	888	6.5	635
Apr	r 43,327	r + 1.2	31,299	+ 2.1	8,980	21,267	809	4,808	67	55	2,744	817	6.3	640
May	r 43,515	r + 1.2	31,395	+ 2.2	8,997	21,324	826	4,839	57	45	2,664	774	6.0	655
June	r 43,615	r + 1.1	31,374	+ 2.0	8,991	21,289	846	4,864	54	42	2,614	754	5.9	665
July	r 43,578	r + 0.9	9 31,238	9 + 1.6	9 8,973	9 21,172	9 851	9 4,859	9 ...	9 31	2,661	805	6.0	674
Aug	r 43,594	r + 0.8	9 31,472	9 + 1.6	9 9,024	9 21,341	9 863	9 4,795	9 ...	9 31	2,684	830	6.1	685
Sep	r 43,752	r + 0.8	9 31,757	9 + 1.4	9 9,090	9 21,552	9 866	9 4,763	9 ...	9 31	2,608	787	5.9	687
Oct	r 43,818	r + 0.7	9 31,728	9 + 1.2	9 9,068	9 21,551	9 867	9 4,766	9 ...	9 35	2,540	756	5.8	691
Nov	10 43,823	10 + 0.7	...	...	...	...	...	...	...	...	2,532	756	5.7	681
Dec	...	...	...	...	...	...	...	...	...	...	2,568	785	5.8	658

Sources: Federal Statistical Office; Federal Employment Agency. \* Annual and quarterly figures; averages; calculated by the Bundesbank; deviations from the official figures are due to rounding. 1 Workplace concept; averages. 2 Monthly figures; end of month. 3 From January 2012, excluding all persons taking up federal voluntary service or a year of social or ecological work. 4 Number within a given month. 5 Mid-month level. 6 Relative to the total civilian labour force. 7 Excluding government-assisted forms of employment and seasonal jobs, including jobs located

abroad. 8 From May 2016 calculated on the basis of new labour force figures. 9 Unadjusted figures estimated by the Federal Employment Agency. In 2014 and 2015, the estimated values for Germany deviated from the final data by a maximum of 0.3 % for employees subject to social contributions, by a maximum of 1.4 % for persons solely in jobs exempt from social contributions, and by a maximum of 31.2 % for cyclically induced short-time work. 10 Initial preliminary estimate by the Federal Statistical Office.

## XI Economic conditions in Germany

### 7 Prices

Period	Consumer price index											Indices of foreign trade prices		HWWI Index of World Market Prices of Raw Materials 4	
	Total	of which					Construction price index	Index of producer prices of industrial products sold on the domestic market 3	Index of producer prices of agricultural products 3	Exports	Imports	Energy 5	Other raw materials 6		
		Food	Other durable and non-durable consumer goods excluding energy 1	Energy 1	Services excluding house rents 2	House rents 2									
	2010 = 100											2015 = 100			
	<b>Index level</b>														
2012	7	104.1	105.7	102.0	116.4	102.4	102.5	105.7	107.0	119.4	104.9	108.7	166.8	128.7	
2013		105.7	110.4	103.0	118.0	103.8	103.8	107.9	106.9	120.7	104.3	105.9	160.2	117.6	
2014		106.6	111.5	103.9	115.5	105.5	105.4	109.7	105.8	111.1	104.0	103.6	142.8	108.3	
2015		106.9	112.4	105.1	107.4	106.9	106.7	111.3	103.9	107.0	104.9	100.9	100.0	100.0	
2016		107.4	113.3	106.4	101.6	108.3	108.0	113.4	...	...	...	...	83.2	98.4	
2015 Feb		106.5	112.3	104.0	107.8	106.9	106.2	110.8	104.3	104.8	104.7	101.6	108.0	105.9	
Mar		107.0	112.2	105.1	109.3	106.8	106.3	110.8	104.4	105.1	105.3	102.6	109.0	107.1	
Apr		107.0	113.2	105.3	109.8	106.0	106.5	110.8	104.5	106.0	105.6	103.2	115.5	105.6	
May		107.1	113.2	105.1	110.9	106.2	106.5	111.1	104.5	104.8	105.4	103.0	116.8	104.7	
June		107.0	112.6	104.9	110.4	106.3	106.6	111.1	104.4	105.3	105.3	102.5	113.3	103.4	
July		107.2	111.8	104.4	109.8	107.8	106.7	111.5	104.4	104.5	105.4	101.8	106.0	101.6	
Aug		107.2	111.5	104.9	107.5	108.1	106.8	111.5	103.9	102.1	104.9	100.3	91.5	96.0	
Sep		107.0	112.1	105.9	105.7	107.0	106.9	111.5	103.5	107.4	104.6	99.6	90.8	94.1	
Oct		107.0	112.7	106.1	104.9	106.9	107.0	111.8	103.1	108.9	104.4	99.3	91.6	93.4	
Nov		107.1	112.9	106.0	105.0	107.1	107.1	111.8	102.9	107.6	104.5	99.1	89.6	92.7	
Dec		107.0	112.4	105.6	102.0	108.4	107.1	111.8	102.4	107.3	104.1	97.9	77.5	89.4	
2016 Jan		106.1	112.4	105.0	99.5	106.8	107.3	112.5	101.7	106.8	103.9	96.4	64.5	88.2	
Feb		106.5	113.2	105.1	98.6	107.7	107.4	112.5	101.2	106.0	103.4	95.8	64.0	88.6	
Mar		107.3	113.7	106.1	99.6	108.8	107.5	112.5	101.2	106.6	103.6	96.5	72.3	93.6	
Apr		106.9	113.8	106.8	100.5	106.6	107.6	113.1	101.3	105.9	103.5	96.4	75.1	95.5	
May		107.2	113.2	106.7	102.1	107.5	107.7	113.1	101.7	106.0	103.7	97.3	82.6	97.2	
June		107.3	112.7	106.1	103.3	108.0	107.8	113.1	102.1	106.4	103.9	97.8	87.9	98.9	
July		107.6	113.0	105.6	102.1	109.5	107.9	113.7	102.3	110.0	104.1	97.9	84.4	100.2	
Aug		107.6	112.5	105.9	101.2	109.6	108.1	113.7	102.2	106.7	104.0	97.7	83.9	98.6	
Sep		107.7	112.6	107.0	101.9	108.5	108.3	113.7	102.0	104.7	104.0	97.8	83.9	97.0	
Oct		107.9	112.7	107.4	103.4	108.2	108.5	114.1	102.7	108.8	104.3	98.7	96.2	99.8	
Nov		108.0	114.2	107.5	102.2	108.1	108.6	114.1	103.0	111.2	104.8	99.4	95.4	108.5	
Dec		108.8	115.2	107.0	104.5	110.1	108.7	114.1	...	...	...	...	106.6	114.0	
		<b>Annual percentage change</b>													
2012	7	+ 2.0	+ 3.4	+ 1.2	+ 5.7	+ 1.4	+ 1.2	+ 2.7	+ 1.6	+ 5.3	+ 1.5	+ 2.2	+ 7.5	- 5.3	
2013		+ 1.5	+ 4.4	+ 1.0	+ 1.4	+ 1.4	+ 1.3	+ 2.1	- 0.1	+ 1.1	- 0.6	- 2.6	- 4.0	- 8.6	
2014		+ 0.9	+ 1.0	+ 0.9	- 2.1	+ 1.6	+ 1.5	+ 1.7	- 1.0	- 8.0	- 0.3	- 2.2	- 10.9	- 7.9	
2015		+ 0.3	+ 0.8	+ 1.2	- 7.0	+ 1.3	+ 1.2	+ 1.5	- 1.8	- 3.7	+ 0.9	- 2.6	- 30.0	- 7.7	
2016		+ 0.5	+ 0.8	+ 1.2	- 5.4	+ 1.3	+ 1.2	+ 1.9	...	...	...	...	- 16.8	- 1.6	
2015 Feb		+ 0.1	- 0.4	+ 0.8	- 7.3	+ 1.7	+ 1.3	+ 1.5	- 2.1	- 12.2	+ 0.7	- 3.0	- 30.1	- 4.6	
Mar		+ 0.3	- 0.1	+ 0.9	- 5.7	+ 1.3	+ 1.3	+ 1.5	- 1.7	- 12.7	+ 1.4	- 1.4	- 27.3	- 2.9	
Apr		+ 0.5	+ 1.1	+ 1.1	- 5.9	+ 1.2	+ 1.3	+ 1.5	- 1.5	- 12.5	+ 1.6	- 0.6	- 21.6	- 6.4	
May		+ 0.7	+ 1.4	+ 1.2	- 5.0	+ 1.8	+ 1.2	+ 1.5	- 1.3	- 11.8	+ 1.4	- 0.8	- 21.5	- 5.8	
June		+ 0.3	+ 1.0	+ 1.4	- 5.9	+ 0.9	+ 1.2	+ 1.5	- 1.4	- 10.5	+ 1.3	- 1.4	- 25.0	- 4.6	
July		+ 0.2	+ 0.4	+ 1.2	- 6.2	+ 1.0	+ 1.2	+ 1.5	- 1.3	- 8.3	+ 1.2	- 1.7	- 26.5	- 5.1	
Aug		+ 0.2	+ 0.8	+ 1.4	- 7.6	+ 1.1	+ 1.1	+ 1.4	- 1.7	- 8.4	+ 0.8	- 3.1	- 35.5	- 10.4	
Sep		± 0.0	+ 1.1	+ 1.3	- 9.3	+ 1.1	+ 1.2	+ 1.4	- 2.1	- 0.5	+ 0.3	- 4.0	- 37.2	- 10.4	
Oct		+ 0.3	+ 1.6	+ 1.5	- 8.6	+ 1.4	+ 1.1	+ 1.5	- 2.3	+ 5.0	+ 0.2	- 4.1	- 32.5	- 11.6	
Nov		+ 0.4	+ 2.3	+ 1.2	- 7.5	+ 1.3	+ 1.1	+ 1.5	- 2.5	+ 3.9	+ 0.3	- 3.5	- 29.3	- 13.1	
Dec		+ 0.3	+ 1.4	+ 1.1	- 6.5	+ 1.3	+ 1.0	+ 1.5	- 2.3	+ 4.5	+ 0.2	- 3.1	- 28.4	- 14.8	
2016 Jan		+ 0.5	+ 0.9	+ 1.4	- 5.8	+ 1.4	+ 1.1	+ 1.5	- 2.4	+ 4.3	- 0.5	- 3.8	- 30.0	- 17.4	
Feb		± 0.0	+ 0.8	+ 1.1	- 8.5	+ 0.7	+ 1.1	+ 1.5	- 3.0	+ 1.1	- 1.2	- 5.7	- 40.7	- 16.3	
Mar		+ 0.3	+ 1.3	+ 1.0	- 8.9	+ 1.9	+ 1.1	+ 1.5	- 3.1	+ 1.4	- 1.6	- 5.9	- 33.7	- 12.6	
Apr		- 0.1	+ 0.5	+ 1.4	- 8.5	+ 0.6	+ 1.0	+ 1.5	- 3.1	- 0.1	- 2.0	- 6.6	- 35.0	- 9.6	
May		+ 0.1	± 0.0	+ 1.5	- 7.9	+ 1.2	+ 1.1	+ 1.8	- 2.7	+ 1.1	- 1.6	- 5.5	- 29.3	- 7.2	
June		+ 0.3	+ 0.1	+ 1.1	- 6.4	+ 1.6	+ 1.1	+ 1.8	- 2.2	+ 1.0	- 1.3	- 4.6	- 22.4	- 4.4	
July		+ 0.4	+ 1.1	+ 1.1	- 7.0	+ 1.6	+ 1.1	+ 2.0	- 2.0	+ 5.3	- 1.2	- 3.8	- 20.4	- 1.4	
Aug		+ 0.4	+ 0.9	+ 1.0	- 5.9	+ 1.4	+ 1.2	+ 2.0	- 1.6	+ 4.5	- 0.9	- 2.6	- 8.3	+ 2.7	
Sep		+ 0.7	+ 0.4	+ 1.0	- 3.6	+ 1.4	+ 1.3	+ 2.0	- 1.4	- 2.5	- 0.6	- 1.8	- 7.6	+ 3.1	
Oct		+ 0.8	± 0.0	+ 1.2	- 1.4	+ 1.2	+ 1.4	+ 2.1	- 0.4	- 0.1	- 0.1	- 0.6	+ 5.0	+ 6.9	
Nov		+ 0.8	+ 1.2	+ 1.4	- 2.7	+ 0.9	+ 1.4	+ 2.1	+ 0.1	+ 3.3	+ 0.3	+ 0.3	+ 6.5	+ 17.0	
Dec		+ 1.7	+ 2.5	+ 1.3	+ 2.5	+ 1.6	+ 1.5	+ 2.1	...	...	...	...	+ 37.5	+ 27.5	

Source: Federal Statistical Office and Bundesbank calculation based on data provided by the Federal Statistical Office; for the Index of World Market Prices of Raw Materials: HWWI. 1 Electricity, gas and other fuels. 2 Net rents. 3 Excluding value-added tax. 4 For the euro area, in euro. 5 Coal, crude oil (Brent) and natural

gas. 6 Food, beverages and tobacco as well as industrial raw materials. 7 From January 2012, increase in tobacco tax. 8 From September 2015 onwards, provisional figures.



## XI Economic conditions in Germany

### 8 Households' income \*

Period	Gross wages and salaries <sup>1</sup>		Net wages and salaries <sup>2</sup>		Monetary social benefits received <sup>3</sup>		Mass income <sup>4</sup>		Disposable income <sup>5</sup>		Saving <sup>6</sup>		Saving ratio <sup>7</sup>
	€ billion	Annual percentage change	€ billion	Annual percentage change	€ billion	Annual percentage change	€ billion	Annual percentage change	€ billion	Annual percentage change	€ billion	Annual percentage change	As percentage
2008	1,008.1	4.0	670.8	3.4	356.2	0.4	1,027.0	2.3	1,582.6	2.6	165.9	4.9	10.5
2009	1,009.5	0.1	672.6	0.3	380.7	6.9	1,053.3	2.6	1,569.2	- 0.8	156.2	- 5.9	10.0
2010	1,039.0	2.9	702.2	4.4	385.3	1.2	1,087.5	3.2	1,606.4	2.4	160.1	2.5	10.0
2011	1,088.6	4.8	729.4	3.9	380.4	- 1.3	1,109.8	2.0	1,653.7	2.9	158.2	- 1.2	9.6
2012	1,133.0	4.1	756.8	3.8	387.6	1.9	1,144.5	3.1	1,695.6	2.5	157.6	- 0.4	9.3
2013	1,167.5	3.0	778.4	2.9	389.1	0.4	1,167.5	2.0	1,719.8	1.4	154.1	- 2.2	9.0
2014	1,213.0	3.9	807.1	3.7	400.2	2.8	1,207.3	3.4	1,759.5	2.3	165.1	7.1	9.4
2015	1,260.6	3.9	836.6	3.6	415.5	3.8	1,252.0	3.7	1,811.2	2.9	175.2	6.1	9.7
2015 Q2	308.5	4.1	200.1	3.5	102.4	4.5	302.5	3.8	449.5	2.8	41.9	6.1	9.3
Q3	311.3	4.0	211.1	3.8	103.9	3.6	315.0	3.7	454.8	3.0	37.1	6.0	8.2
Q4	348.7	4.2	231.6	4.5	103.5	3.1	335.1	4.0	459.3	3.0	38.4	5.7	8.4
2016 Q1	305.3	4.5	202.2	4.4	107.7	1.8	309.9	3.5	459.0	2.6	59.5	2.8	13.0
Q2	319.4	3.5	207.4	3.6	105.3	2.8	312.7	3.4	463.7	3.2	43.7	4.3	9.4
Q3	322.2	3.5	217.6	3.1	108.2	4.2	325.8	3.4	464.1	2.0	37.7	1.5	8.1

Source: Federal Statistical Office; figures computed in November 2016. \* Households including non-profit institutions serving households. **1** Residence concept. **2** After deducting the wage tax payable on gross wages and salaries and employees' contributions to the social security funds. **3** Social security benefits in cash from the social security funds, central, state and local government and foreign countries, pension payments (net), private funded social benefits, less social contributions on social benefits, consumption-related taxes and public charges. **4** Net wages and

salaries plus monetary social benefits received. **5** Mass income plus operating surplus, mixed income, property income (net), other current transfers received, income of non-profit institutions serving households, less taxes (excluding wage tax and consumption-related taxes) and other current transfers paid. Including the increase in claims on company pension funds. **6** Including the increase in claims on company pension funds. **7** Saving as a percentage of disposable income.

### 9 Negotiated pay rates (overall economy)

Period	Index of negotiated wages <sup>1</sup>								Memo item: Wages and salaries per employee <sup>3</sup>	
	On an hourly basis		On a monthly basis							
			Total		Total excluding one-off payments		Basic pay rates <sup>2</sup>			
2010=100	Annual percentage change	2010=100	Annual percentage change	2010=100	Annual percentage change	2010=100	Annual percentage change	2010=100	Annual percentage change	
2008	96.4	2.8	96.3	2.9	96.1	3.1	95.9	3.3	97.6	2.4
2009	98.4	2.0	98.3	2.0	98.3	2.3	98.2	2.4	97.6	- 0.1
2010	100.0	1.7	100.0	1.8	100.0	1.7	100.0	1.8	100.0	2.5
2011	101.8	1.8	101.8	1.8	101.8	1.8	101.8	1.8	103.4	3.4
2012	104.5	2.7	104.5	2.7	104.8	2.9	104.7	2.9	106.2	2.7
2013	107.1	2.4	107.1	2.4	107.4	2.5	107.3	2.5	108.4	2.0
2014	110.2	2.9	110.0	2.8	110.2	2.7	110.2	2.7	111.4	2.8
2015	112.7	2.3	112.5	2.2	112.7	2.3	112.8	2.4	114.4	2.7
2015 Q2	105.6	2.3	105.4	2.2	105.7	2.3	112.6	2.3	112.2	2.9
Q3	115.0	2.3	114.7	2.3	115.1	2.2	113.4	2.4	112.6	2.7
Q4	125.9	2.3	125.6	2.3	126.0	2.3	113.6	2.4	125.1	2.7
2016 Q1	106.4	2.0	106.2	1.9	106.5	2.3	114.1	2.3	110.5	2.9
Q2	108.0	2.2	107.7	2.2	107.8	1.9	115.0	2.1	114.6	2.1
Q3	117.5	2.1	117.2	2.1	117.6	2.2	115.9	2.2	115.3	2.4
2016 May	108.0	1.9	107.8	1.9	108.0	1.8	115.1	2.3	.	.
June	108.2	2.7	108.0	2.7	107.6	2.1	115.3	2.1	.	.
July	136.1	2.1	135.8	2.1	136.2	2.2	115.8	2.2	.	.
Aug	108.1	2.2	107.9	2.2	108.2	2.2	115.9	2.1	.	.
Sep	108.2	2.1	108.0	2.1	108.3	2.2	116.1	2.2	.	.
Oct	108.7	2.1	108.5	2.1	108.9	2.2	116.2	2.3	.	.
Nov	166.6	2.1	166.2	2.1	166.7	2.1	116.2	2.3	.	.

**1** Current data are normally revised on account of additional reports. **2** Excluding one-off payments and covenants (capital formation benefits, special payments, such as annual bonuses, holiday pay, Christmas bonuses (13<sup>th</sup> monthly salary payment)

and retirement provisions). **3** Source: Federal Statistical Office; figures computed in November 2016.

## XI Economic conditions in Germany

### 10 Assets, equity and liabilities of listed non-financial groups \*

End-of-year/end-of-halfyear data

Period	Assets								Equity and liabilities							
	Total assets	Non-current assets	of which			Current assets	of which			Equity	Liabilities					
			Intangible assets	Tangible assets	Financial assets		Inventories	Trade receivables	Cash <sup>1</sup>		Total	Long-term		Short-term		
												Total	of which Financial debt	Total	of which	
								Financial debt	Trade payables							
<b>Total (€ billion)</b>																
2012	1,867.3	1,153.7	378.3	476.3	232.1	713.6	188.4	174.8	123.2	553.9	1,313.4	699.1	374.2	614.4	178.6	157.0
2013	1,902.2	1,171.1	385.0	485.2	232.4	731.1	187.5	175.8	136.5	569.6	1,332.6	706.0	377.5	626.6	191.0	163.1
2014	2,078.8	1,284.1	431.0	520.3	249.6	794.7	203.1	187.3	132.4	582.9	1,495.9	812.0	426.8	683.9	214.8	175.8
2015	2,226.6	1,394.6	470.7	565.2	273.1	832.0	215.6	190.6	136.2	633.8	1,592.8	860.8	465.4	732.0	233.1	180.3
2014 H2	2,078.8	1,284.1	431.0	520.3	249.6	794.7	203.1	187.3	132.4	582.9	1,495.9	812.0	426.8	683.9	214.8	175.8
2015 H1	2,163.8	1,346.9	453.6	539.8	270.0	816.8	217.9	197.4	127.0	622.4	1,541.4	830.0	440.6	711.4	223.0	173.2
H2	2,226.6	1,394.6	470.7	565.2	273.1	832.0	215.6	190.6	136.2	633.8	1,592.8	860.8	465.4	732.0	233.1	180.3
2016 H1	2,256.6	1,381.0	462.4	549.8	272.0	875.6	226.7	194.3	140.5	607.4	1,649.2	895.4	464.6	753.8	243.9	173.7
as a percentage of total assets																
2012	100.0	61.8	20.3	25.5	12.4	38.2	10.1	9.4	6.6	29.7	70.3	37.4	20.0	32.9	9.6	8.4
2013	100.0	61.6	20.2	25.5	12.2	38.4	9.9	9.2	7.2	29.9	70.1	37.1	19.8	32.9	10.0	8.6
2014	100.0	61.8	20.7	25.0	12.0	38.2	9.8	9.0	6.4	28.0	72.0	39.1	20.5	32.9	10.3	8.5
2015	100.0	62.6	21.1	25.4	12.3	37.4	9.7	8.6	6.1	28.5	71.5	38.7	20.9	32.9	10.5	8.1
2014 H2	100.0	61.8	20.7	25.0	12.0	38.2	9.8	9.0	6.4	28.0	72.0	39.1	20.5	32.9	10.3	8.5
2015 H1	100.0	62.3	21.0	25.0	12.5	37.8	10.1	9.1	5.9	28.8	71.2	38.4	20.4	32.9	10.3	8.0
H2	100.0	62.6	21.1	25.4	12.3	37.4	9.7	8.6	6.1	28.5	71.5	38.7	20.9	32.9	10.5	8.1
2016 H1	100.0	61.2	20.5	24.4	12.1	38.8	10.1	8.6	6.2	26.9	73.1	39.7	20.6	33.4	10.8	7.7
<b>Groups with a focus on the production sector (€ billion) <sup>2</sup></b>																
2012	1,503.5	896.3	256.8	374.0	213.6	607.3	171.0	136.2	95.4	436.2	1,067.4	561.8	280.8	505.5	159.7	112.9
2013	1,523.6	908.2	257.2	384.6	215.6	615.4	171.2	136.1	104.1	450.9	1,072.6	560.4	280.5	512.2	170.2	114.9
2014	1,655.6	989.4	276.5	411.9	236.0	666.2	185.7	140.3	98.9	451.4	1,204.2	644.0	318.6	560.2	193.3	122.4
2015	1,782.1	1,077.3	304.0	446.9	259.0	704.8	198.9	147.1	104.5	485.5	1,296.6	689.8	353.1	606.8	208.7	127.6
2014 H2	1,655.6	989.4	276.5	411.9	236.0	666.2	185.7	140.3	98.9	451.4	1,204.2	644.0	318.6	560.2	193.3	122.4
2015 H1	1,743.3	1,047.8	293.3	432.1	257.1	695.4	201.0	151.7	103.6	487.1	1,256.2	670.0	336.1	586.2	194.9	127.3
H2	1,782.1	1,077.3	304.0	446.9	259.0	704.8	198.9	147.1	104.5	485.5	1,296.6	689.8	353.1	606.8	208.7	127.6
2016 H1	1,818.4	1,059.3	296.6	432.5	254.2	759.1	210.1	149.1	112.3	466.0	1,352.3	717.9	351.0	634.4	219.2	128.8
as a percentage of total assets																
2012	100.0	59.6	17.1	24.9	14.2	40.4	11.4	9.1	6.4	29.0	71.0	37.4	18.7	33.6	10.6	7.5
2013	100.0	59.6	16.9	25.2	14.2	40.4	11.2	8.9	6.8	29.6	70.4	36.8	18.4	33.6	11.2	7.5
2014	100.0	59.8	16.7	24.9	14.3	40.2	11.2	8.5	6.0	27.3	72.7	38.9	19.2	33.8	11.7	7.4
2015	100.0	60.5	17.1	25.1	14.5	39.6	11.2	8.3	5.9	27.2	72.8	38.7	19.8	34.1	11.7	7.2
2014 H2	100.0	59.8	16.7	24.9	14.3	40.2	11.2	8.5	6.0	27.3	72.7	38.9	19.2	33.8	11.7	7.4
2015 H1	100.0	60.1	16.8	24.8	14.8	39.9	11.5	8.7	5.9	27.9	72.1	38.4	19.3	33.6	11.2	7.3
H2	100.0	60.5	17.1	25.1	14.5	39.6	11.2	8.3	5.9	27.2	72.8	38.7	19.8	34.1	11.7	7.2
2016 H1	100.0	58.3	16.3	23.8	14.0	41.8	11.6	8.2	6.2	25.6	74.4	39.5	19.3	34.9	12.1	7.1
<b>Groups with a focus on the services sector (€ billion)</b>																
2012	363.7	257.4	121.5	102.4	18.4	106.3	17.4	38.6	27.8	117.7	246.0	137.2	93.4	108.8	18.9	44.1
2013	378.6	262.9	127.8	100.6	16.8	115.7	16.3	39.7	32.3	118.6	260.0	145.6	97.0	114.4	20.8	48.2
2014	423.2	294.7	154.6	108.4	13.6	128.6	17.4	47.0	33.5	131.5	291.7	168.0	108.3	123.7	21.6	53.4
2015	444.5	317.3	166.7	118.3	14.1	127.2	16.7	43.5	31.6	148.3	296.2	171.0	112.2	125.2	24.4	52.7
2014 H2	423.2	294.7	154.6	108.4	13.6	128.6	17.4	47.0	33.5	131.5	291.7	168.0	108.3	123.7	21.6	53.4
2015 H1	420.5	299.1	160.3	107.7	12.9	121.4	17.0	45.7	23.4	135.3	285.2	160.0	104.4	125.2	28.0	45.9
H2	444.5	317.3	166.7	118.3	14.1	127.2	16.7	43.5	31.6	148.3	296.2	171.0	112.2	125.2	24.4	52.7
2016 H1	438.3	321.7	165.8	117.3	17.8	116.6	16.6	45.3	28.2	141.4	296.9	177.4	113.6	119.4	24.7	45.0
as a percentage of total assets																
2012	100.0	70.8	33.4	28.1	5.1	29.2	4.8	10.6	7.6	32.4	67.6	37.7	25.7	29.9	5.2	12.1
2013	100.0	69.5	33.8	26.6	4.5	30.6	4.3	10.5	8.5	31.3	68.7	38.5	25.6	30.2	5.5	12.7
2014	100.0	69.6	36.5	25.6	3.2	30.4	4.1	11.1	7.9	31.1	68.9	39.7	25.6	29.2	5.1	12.6
2015	100.0	71.4	37.5	26.6	3.2	28.6	3.8	9.8	7.1	33.4	66.6	38.5	25.3	28.2	5.5	11.9
2014 H2	100.0	69.6	36.5	25.6	3.2	30.4	4.1	11.1	7.9	31.1	68.9	39.7	25.6	29.2	5.1	12.6
2015 H1	100.0	71.1	38.1	25.6	3.1	28.9	4.0	10.9	5.6	32.2	67.8	38.1	24.8	29.8	6.7	10.9
H2	100.0	71.4	37.5	26.6	3.2	28.6	3.8	9.8	7.1	33.4	66.6	38.5	25.3	28.2	5.5	11.9
2016 H1	100.0	73.4	37.8	26.8	4.1	26.6	3.8	10.3	6.4	32.3	67.7	40.5	25.9	27.3	5.6	10.3

\* Non-financial groups admitted to the Prime Standard segment of the Frankfurt Stock Exchange which publish IFRS consolidated financial statements on a quarterly or half-yearly basis and make a noteworthy contribution to value added in Germany.

Excluding groups engaged in real estate activities. <sup>1</sup> Including cash equivalents. <sup>2</sup> Including groups in agriculture and forestry.

## XI Economic conditions in Germany

### 11 Revenues and operating income of listed non-financial groups \*

Period	Revenues		Operating income before depreciation and amortisation (EBITDA 1 ) as a percentage of revenues				Distribution 2			Operating income (EBIT)		Operating income (EBIT) as a percentage of revenues					
	€ billion	Annual change in % 3	Operating income before depreciation and amortisation (EBITDA 1 )		Weighted average	Distribution 2			€ billion	Annual change in % 3	Distribution 2		Weighted average	Annual change in percentage points 3	First quartile	Median	Third quartile
			€ billion	Annual change in % 3		%	Annual change in percentage points 3	%			%	%					
<b>Total</b>																	
2008	1,290.4	6.3	161.9	-5.9	12.6	-1.6	5.7	11.6	17.4	79.4	-16.7	6.2	-1.7	2.4	6.6	12.1	
2009	1,158.6	-10.7	135.6	-16.9	11.7	-0.9	3.9	9.4	15.7	55.9	-29.2	4.8	-1.3	-0.1	4.9	9.3	
2010	1,321.0	13.3	181.4	30.6	13.7	1.8	6.6	11.4	18.5	98.3	66.6	7.4	2.4	3.2	6.8	12.1	
2011	1,414.4	8.5	175.9	0.5	12.4	-1.0	5.4	10.9	17.4	93.9	-4.1	6.6	-0.9	2.7	6.6	12.0	
2012	1,533.0	6.6	189.3	3.1	12.4	-0.4	5.2	10.2	17.5	95.7	-7.7	6.2	-0.9	1.9	6.0	11.0	
2013	1,541.1	-0.6	187.1	-2.8	12.1	-0.3	5.1	10.3	18.3	99.5	5.5	6.5	0.4	1.9	5.8	10.9	
2014	1,565.6	1.0	198.7	4.9	12.7	0.5	5.7	10.3	17.2	109.3	8.5	7.0	0.5	1.9	6.1	11.1	
2015	1,636.2	6.9	196.3	-1.0	12.0	-1.0	6.1	10.6	17.6	91.6	-15.9	5.6	-1.5	1.7	6.5	11.3	
2011 H2	730.1	6.9	88.3	-3.6	12.1	-1.3	5.5	11.4	18.0	40.9	-15.4	5.6	-1.5	2.6	7.1	11.8	
2012 H1	751.0	8.1	93.3	3.6	12.4	-0.5	4.7	9.1	16.8	55.7	1.6	7.4	-0.5	1.0	5.7	11.4	
2012 H2	782.2	5.2	95.9	2.6	12.3	-0.3	4.7	11.0	17.9	39.9	-19.2	5.1	-1.4	1.4	6.8	11.7	
2013 H1	762.8	-0.2	93.4	-3.5	12.2	-0.4	3.4	9.3	16.5	53.8	-7.6	7.1	-0.6	0.6	4.9	10.7	
2013 H2	780.0	-1.1	93.8	-2.0	12.0	-0.1	5.4	10.7	19.2	45.7	25.5	5.9	1.3	1.7	6.1	12.1	
2014 H1	757.2	-0.9	97.2	4.6	12.8	0.7	4.7	9.5	16.0	57.8	9.4	7.6	0.7	1.0	5.2	10.5	
2014 H2	808.7	2.9	101.5	5.2	12.6	0.3	5.4	10.8	19.1	51.5	7.6	6.4	0.3	1.7	7.1	12.0	
2015 H1	815.7	8.7	102.9	5.8	12.6	-0.4	4.8	10.1	17.6	59.1	2.1	7.3	-0.5	1.1	5.9	10.9	
2015 H2	831.7	5.1	93.6	-7.6	11.3	-1.5	6.3	11.5	18.1	32.7	-36.5	3.9	-2.5	2.3	7.1	11.7	
2016 H1	782.3	-2.1	111.8	6.2	14.3	1.1	5.9	10.4	17.4	65.7	2.1	8.4	0.3	1.5	6.4	11.3	
<b>Groups with a focus on the production sector 4</b>																	
2008	949.2	7.2	120.0	-6.4	12.7	-1.8	5.7	11.4	15.6	60.5	-17.2	6.4	-1.9	2.3	6.8	11.6	
2009	837.7	-11.8	94.9	-20.6	11.3	-1.3	2.5	9.0	14.0	40.0	-32.6	4.8	-1.5	-1.4	4.3	8.8	
2010	980.7	15.8	136.2	38.7	13.9	2.3	6.6	11.4	16.3	75.7	72.4	7.7	2.6	3.0	7.3	12.0	
2011	1,079.0	10.6	130.0	-1.7	12.1	-1.5	5.5	11.3	16.4	74.1	-4.9	6.9	-1.1	2.1	6.8	11.5	
2012	1,173.8	7.7	140.8	5.3	12.0	-0.3	5.4	10.2	16.1	81.7	2.2	7.0	-0.4	1.8	6.1	9.8	
2013	1,179.0	-0.8	138.7	-2.6	11.8	-0.2	4.4	10.3	15.5	74.5	-5.8	6.3	-0.3	1.3	5.7	10.0	
2014	1,197.3	1.0	147.9	5.8	12.4	0.6	5.1	9.6	15.3	82.0	9.3	6.9	0.5	1.4	5.9	10.2	
2015	1,283.3	7.0	144.0	-2.7	11.2	-1.1	6.1	10.4	15.5	65.2	-19.7	5.1	-1.7	1.8	6.5	10.0	
2011 H2	552.5	8.7	60.8	-9.1	11.0	-2.2	4.8	10.6	15.6	29.3	-20.2	5.3	-2.0	1.6	6.6	10.9	
2012 H1	580.1	9.5	73.3	5.2	12.6	-0.5	5.7	10.5	14.9	46.8	3.5	8.1	-0.5	1.9	6.1	10.5	
2012 H2	593.9	6.1	67.5	5.3	11.4	-0.1	4.4	10.5	15.9	34.9	0.2	5.9	-0.3	0.6	6.2	10.2	
2013 H1	588.8	-0.1	71.7	-4.8	12.2	-0.6	3.1	9.3	15.0	43.1	-10.9	7.3	-0.9	0.6	5.3	9.7	
2013 H2	591.7	-1.4	67.1	-0.3	11.3	0.1	4.0	10.4	15.8	31.4	1.7	5.3	0.2	0.6	5.8	10.9	
2014 H1	584.4	-1.1	74.2	3.8	12.7	0.6	4.7	9.6	15.0	46.2	8.9	7.9	0.7	1.4	5.4	9.6	
2014 H2	613.1	3.0	73.7	7.8	12.0	0.5	4.4	9.8	15.8	35.8	9.8	5.8	0.4	0.7	6.3	10.7	
2015 H1	636.8	8.8	80.1	7.9	12.6	-0.1	5.1	10.0	15.4	48.8	5.7	7.7	-0.2	2.1	6.1	10.0	
2015 H2	647.1	5.2	63.9	-13.4	9.9	-2.1	5.3	10.9	15.5	16.4	-52.3	2.5	-3.2	1.7	6.8	10.3	
2016 H1	610.8	-2.9	83.9	1.2	13.7	0.5	6.6	10.3	15.3	50.6	-7.4	8.3	-0.4	1.7	6.4	9.9	
<b>Groups with a focus on the services sector</b>																	
2008	341.1	3.7	41.9	-4.3	12.3	-1.0	5.8	12.4	19.2	19.0	-14.6	5.6	-1.2	2.6	6.6	12.7	
2009	321.0	-7.4	40.7	-4.9	12.7	0.3	4.7	10.7	20.3	16.0	-16.3	5.0	-0.5	1.7	5.7	12.7	
2010	340.4	5.8	45.1	8.9	13.3	0.4	5.6	10.8	19.6	22.6	46.8	6.7	1.7	3.3	5.9	12.4	
2011	335.5	1.7	45.9	7.6	13.7	0.8	5.4	10.1	20.7	19.7	-0.7	5.9	-0.1	3.2	6.1	13.8	
2012	359.2	2.8	48.5	-3.4	13.5	-0.9	5.1	10.0	22.7	14.0	-47.2	3.9	-3.0	2.1	5.7	14.0	
2013	362.2	-0.1	48.4	-3.3	13.4	-0.4	5.1	9.9	21.1	25.0	84.4	6.9	3.0	2.5	5.9	12.2	
2014	368.3	1.0	50.8	2.2	13.8	0.2	6.0	12.7	22.6	27.3	5.7	7.4	0.3	2.9	6.5	13.7	
2015	352.9	6.4	52.3	4.8	14.8	-0.2	6.1	11.4	22.1	26.4	-1.6	7.5	-0.6	1.4	6.7	14.1	
2011 H2	177.6	1.0	27.5	13.4	15.5	1.7	7.1	12.2	22.4	11.6	0.7	6.6	-0.0	4.3	7.5	14.2	
2012 H1	170.9	3.3	20.0	-2.6	11.7	-0.7	2.6	8.0	21.0	8.9	-9.8	5.2	-0.7	-0.4	4.5	13.9	
2012 H2	188.3	2.3	28.5	-4.0	15.1	-1.0	5.2	11.2	23.7	5.1	-73.2	2.7	-5.2	2.7	7.4	15.3	
2013 H1	174.0	-0.5	21.7	1.4	12.5	0.2	3.9	8.0	19.2	10.7	12.8	6.2	0.7	0.9	4.6	12.8	
2013 H2	188.3	0.3	26.7	-6.7	14.2	-1.1	5.6	11.3	21.8	14.3	241.4	7.6	5.2	2.2	7.3	13.4	
2014 H1	172.9	-0.5	23.0	7.6	13.3	1.0	4.8	9.3	20.4	11.6	11.6	6.7	0.7	1.0	5.1	13.5	
2014 H2	195.6	2.4	27.8	-2.2	14.2	-0.7	6.4	13.5	23.8	15.7	1.4	8.1	-0.1	3.6	8.1	18.0	
2015 H1	178.9	8.4	22.8	-2.2	12.7	-1.5	4.4	10.9	21.5	10.3	-15.7	5.8	-1.6	-0.5	4.5	14.2	
2015 H2	184.7	4.6	29.7	10.8	16.1	0.9	7.3	12.2	23.5	16.3	9.3	8.8	0.4	2.5	7.7	15.0	
2016 H1	171.5	1.1	27.9	27.9	16.3	3.5	5.2	10.4	23.4	15.0	62.7	8.8	3.3	1.1	6.5	15.2	

\* Non-financial groups admitted to the Prime Standard segment of the Frankfurt Stock Exchange which publish IFRS consolidated financial statements on a quarterly or half-yearly basis and make a noteworthy contribution to value added in Germany. Excluding groups engaged in real estate activities. 1 Earnings before interest, taxes, depreciation and amortisation. 2 Quantile data are based on the groups' unweighted

return on sales. 3 Adjusted for substantial changes in the basis of consolidation of large groups and in the reporting sample. See the explanatory notes in the Statistical Supplement Seasonally adjusted business statistics. 4 Including groups in agriculture and forestry.

## XII External sector

### 1 Major items of the balance of payments of the euro area \*

€ million

Item	2013	2014	2015	2016					
				Q1	Q2	Q3	Aug	Sep	Oct P
A Current account	+ 215,988	+ 241,245	+ 316,648	+ 59,516	+ 88,074	+ 93,722	+ 23,718	+ 33,951	+ 32,756
1 Goods									
Exports	1,913,552	1,963,183	2,109,809	501,736	535,549	519,824	164,962	182,198	176,989
Imports	1,703,376	1,721,836	1,759,171	421,307	428,493	426,700	139,333	148,280	149,950
Balance	+ 210,173	+ 241,345	+ 350,640	+ 80,430	+ 107,057	+ 93,124	+ 25,629	+ 33,918	+ 27,039
2 Services									
Receipts	646,905	710,777	768,725	178,241	193,502	206,083	67,582	70,765	65,523
Expenditure	576,355	633,319	710,057	168,623	177,908	180,796	60,949	60,610	57,362
Balance	+ 70,546	+ 77,458	+ 58,669	+ 9,618	+ 15,594	+ 25,287	+ 6,633	+ 10,155	+ 8,161
3 Primary income									
Receipts	610,254	626,709	631,890	137,968	154,203	142,799	45,426	49,750	45,856
Expenditure	530,432	562,506	590,743	124,054	167,043	135,334	41,912	48,785	37,060
Balance	+ 79,822	+ 64,203	+ 41,148	+ 13,914	- 12,840	+ 7,463	+ 3,513	+ 964	+ 8,796
4 Secondary income									
Receipts	86,685	91,481	103,531	22,498	27,601	23,314	7,204	8,028	7,100
Expenditure	231,239	233,243	237,338	66,943	49,337	55,467	19,262	19,114	18,339
Balance	- 144,555	- 141,764	- 133,807	- 44,445	- 21,737	- 32,152	- 12,058	- 11,086	- 11,239
B Capital account	+ 19,338	+ 13,053	- 12,404	- 1,319	+ 453	+ 768	- 27	+ 166	+ 1,335
C Financial account (Increase: +)	+ 423,350	+ 329,295	+ 296,925	+ 4,603	+ 62,255	+ 165,721	+ 51,851	+ 89,485	- 11,718
1 Direct investment	+ 27,130	+ 62,686	+ 243,367	+ 38,996	- 38,105	+ 125,234	+ 42,180	+ 51,183	+ 68,628
By resident units abroad	+ 512,758	+ 161,435	+ 820,319	+ 113,783	- 13,498	+ 37,470	+ 44,509	- 12,184	+ 95,309
By non-resident units in the euro area	+ 485,627	+ 98,749	+ 576,950	+ 74,787	+ 24,606	- 87,765	+ 2,329	- 63,367	+ 26,681
2 Portfolio investment	- 27,145	+ 68,959	+ 106,359	+ 93,546	+ 156,551	+ 167,820	+ 70,365	+ 38,633	- 3,495
By resident units abroad	+ 271,362	+ 460,696	+ 404,150	+ 134,138	+ 122,317	+ 138,249	+ 54,188	+ 30,447	- 12,796
Equity and investment fund shares	+ 167,450	+ 141,720	+ 22,028	- 18,294	+ 2,588	+ 19,978	+ 5,511	+ 7,130	+ 13,169
Long-term debt securities	+ 77,038	+ 226,560	+ 369,804	+ 140,480	+ 112,057	+ 108,804	+ 46,119	+ 6,522	+ 7,868
Short-term debt securities	+ 26,876	+ 92,414	+ 12,318	+ 11,951	+ 7,672	+ 9,467	+ 2,558	+ 16,795	- 33,833
By non-resident units in the euro area	+ 298,505	+ 391,735	+ 297,791	+ 40,591	- 34,234	- 29,570	- 16,176	- 8,186	- 9,302
Equity and investment fund shares	+ 203,379	+ 282,558	+ 267,544	- 14,303	+ 75,526	+ 34,824	+ 998	+ 20,399	+ 198
Long-term debt securities	+ 62,540	+ 127,161	+ 78,800	+ 30,332	- 159,926	- 65,044	- 13,100	- 50,152	+ 10,522
Short-term debt securities	+ 32,585	- 17,984	- 48,554	+ 24,563	+ 50,166	+ 651	- 4,073	+ 21,567	- 20,021
3 Financial derivatives and employee stock options	+ 31,797	+ 45,483	+ 85,833	+ 27,331	- 44,606	+ 26,023	+ 6,742	+ 4,563	+ 8,952
4 Other investment	+ 386,921	+ 147,803	- 149,207	- 156,241	- 13,773	- 161,093	- 69,248	- 11,697	- 81,890
Eurosysteem	+ 57,976	+ 55,898	- 13,611	- 7,278	- 19,284	- 35,356	- 8,486	- 23,776	- 5,985
General government	- 8,831	+ 11,850	+ 19,114	+ 7,326	+ 1,205	- 13	+ 3,227	- 1,325	- 8,795
MFIs (excluding the Eurosystem)	+ 275,227	+ 98,549	- 123,572	- 89,483	- 22,737	- 89,686	- 17,869	+ 2,291	- 58,462
Enterprises and households	+ 62,547	- 18,491	- 31,132	- 66,807	+ 27,042	- 36,037	- 46,119	+ 11,113	- 8,649
5 Reserve assets	+ 4,647	+ 4,361	+ 10,569	+ 970	+ 2,186	+ 7,737	+ 1,812	+ 6,802	- 3,913
D Net errors and omissions	+ 188,025	+ 74,997	- 7,321	- 53,593	- 26,274	+ 71,231	+ 28,160	+ 55,368	- 45,809

\* Source: ECB, according to the international standards of the Balance of Payments Manual in the 6th edition of the International Monetary Fund.

XII External sector

2 Major items of the balance of payments of the Federal Republic of Germany  
(balances)

€ million

Period	Current account							Financial account (Net lending: + / net borrowing: -)			
	Total	Goods (fob/fob) 1		Services (fob/fob) 3	Primary income	Secondary income	Balance of capital account 4	Total	of which Reserve assets	Errors and omissions 5	
		Total									of which Supple- mentary trade items 2
2001	-	7,911	+ 101,273	+ 3,321	- 62,833	- 17,195	- 29,155	- 3,258	+ 947	- 6,032	+ 12,116
2002	+	41,655	+ 142,103	+ 6,008	- 45,440	- 25,596	- 29,413	- 4,010	+ 8,038	- 2,065	- 29,606
2003	+	31,347	+ 130,021	- 2,105	- 48,708	- 18,920	- 31,047	+ 5,920	+ 47,559	- 445	+ 10,292
2004	+	101,205	+ 153,166	- 6,859	- 38,713	+ 16,860	- 30,109	- 119	+ 112,834	- 1,470	+ 11,748
2005	+	105,730	+ 157,010	- 6,068	- 40,600	+ 20,905	- 31,585	- 2,334	+ 96,436	- 2,182	- 6,960
2006	+	135,959	+ 161,447	- 4,205	- 34,641	+ 41,453	- 32,300	- 1,328	+ 157,142	- 2,934	+ 22,511
2007	+	169,636	+ 201,989	- 922	- 34,881	+ 36,332	- 33,804	- 1,597	+ 183,169	+ 953	+ 15,130
2008	+	143,318	+ 184,521	- 3,586	- 31,467	+ 24,724	- 34,461	- 893	+ 121,336	+ 2,008	- 21,088
2009	+	141,233	+ 141,167	- 6,064	- 19,648	+ 54,757	- 35,043	- 1,858	+ 129,693	+ 8,648	- 9,683
2010	+	144,890	+ 161,146	- 5,892	- 27,041	+ 50,665	- 39,880	+ 1,219	+ 92,757	+ 1,613	- 53,351
2011	+	164,581	+ 163,426	- 8,900	- 32,482	+ 69,156	- 35,520	+ 1,642	+ 120,858	+ 2,836	- 45,365
2012	+	193,593	+ 200,401	- 10,518	- 32,775	+ 65,825	- 39,858	- 413	+ 144,802	+ 1,297	- 48,378
2013	+	190,428	+ 211,647	- 4,331	- 43,223	+ 65,763	- 43,758	- 591	+ 219,079	+ 838	+ 29,242
2014	+	212,880	+ 226,499	- 7,739	- 35,353	+ 62,387	- 40,653	+ 1,138	+ 244,445	- 2,564	+ 30,426
2015	+	252,580	+ 259,621	- 4,407	- 31,230	+ 63,739	- 39,550	- 159	+ 225,551	- 2,213	- 26,870
2013 Q4	+	62,067	+ 53,496	- 1,273	- 6,470	+ 26,156	- 11,114	- 1,738	+ 71,549	+ 1,464	+ 11,219
2014 Q1	+	48,137	+ 52,292	+ 168	- 6,298	+ 17,061	- 14,918	+ 2,142	+ 60,275	- 565	+ 9,996
Q2	+	44,982	+ 54,295	- 2,031	- 7,242	+ 4,641	- 6,712	+ 519	+ 55,959	- 610	+ 10,457
Q3	+	54,257	+ 60,313	- 2,818	- 15,461	+ 17,223	- 7,818	+ 367	+ 59,285	+ 332	+ 4,661
Q4	+	65,503	+ 59,599	- 3,058	- 6,352	+ 23,462	- 11,206	- 1,890	+ 68,926	- 1,722	+ 5,312
2015 Q1	+	57,887	+ 60,084	- 1,680	- 4,714	+ 18,340	- 15,822	+ 218	+ 30,366	- 21	- 27,739
Q2	+	57,431	+ 68,318	- 2,043	- 5,941	+ 2,107	- 7,052	+ 1,098	+ 72,772	- 465	+ 14,243
Q3	+	65,022	+ 67,108	+ 577	- 13,852	+ 18,393	- 6,628	+ 703	+ 64,092	- 1,455	- 1,634
Q4	+	72,240	+ 64,112	- 1,260	- 6,722	+ 24,898	- 10,048	- 2,178	+ 58,322	- 272	- 11,740
2016 Q1	+	64,276	+ 64,018	+ 333	- 5,707	+ 19,425	- 13,460	- 417	+ 23,864	+ 1,228	- 39,995
Q2	+	72,106	+ 77,101	+ 38	- 5,040	+ 4,526	- 4,482	+ 1,557	+ 73,876	+ 761	+ 214
Q3	+	61,401	+ 68,144	- 38	- 12,896	+ 16,836	- 10,682	+ 448	+ 57,651	- 261	- 4,198
2014 June	+	16,301	+ 17,960	+ 363	- 3,708	+ 4,456	- 2,406	+ 405	+ 17,051	- 130	+ 345
July	+	20,303	+ 22,747	- 1,684	- 4,991	+ 5,562	- 3,016	- 402	+ 13,450	+ 431	- 6,451
Aug	+	10,707	+ 14,254	- 748	- 6,617	+ 5,430	- 2,359	+ 426	+ 13,062	+ 166	+ 1,930
Sep	+	23,247	+ 23,312	- 385	- 3,853	+ 6,231	- 2,442	+ 343	+ 32,773	- 265	+ 9,182
Oct	+	21,331	+ 22,823	- 1,448	- 4,994	+ 6,058	- 2,556	- 112	+ 15,292	+ 203	- 5,928
Nov	+	18,686	+ 18,095	- 382	- 2,039	+ 6,130	- 3,500	+ 152	+ 22,905	+ 30	+ 4,067
Dec	+	25,486	+ 18,681	- 1,228	+ 681	+ 11,274	- 5,150	- 1,930	+ 30,729	- 1,955	+ 7,173
2015 Jan	+	14,676	+ 15,484	- 1,154	- 1,713	+ 5,103	- 4,199	+ 20	- 3,642	+ 372	- 18,338
Feb	+	16,055	+ 19,360	- 948	- 1,625	+ 5,826	- 7,505	+ 24	+ 11,595	+ 266	- 4,485
Mar	+	27,157	+ 25,240	+ 422	- 1,376	+ 7,411	- 4,117	+ 173	+ 22,413	- 660	- 4,917
Apr	+	21,110	+ 22,116	- 1,240	- 1,432	+ 3,303	- 2,877	+ 348	+ 31,171	- 69	+ 9,712
May	+	11,366	+ 21,155	- 437	- 2,002	- 5,805	- 1,982	+ 557	+ 17,540	- 78	+ 5,617
June	+	24,955	+ 25,047	- 367	- 2,507	+ 4,609	- 2,194	+ 192	+ 24,061	- 318	- 1,086
July	+	25,002	+ 25,102	- 1,024	- 4,339	+ 6,553	- 2,314	+ 462	+ 20,319	- 1,170	- 5,146
Aug	+	14,231	+ 16,658	+ 472	- 5,423	+ 5,735	- 2,739	+ 40	+ 19,460	- 180	+ 5,189
Sep	+	25,788	+ 25,348	+ 1,129	- 4,090	+ 6,106	- 1,575	+ 201	+ 24,313	- 105	- 1,677
Oct	+	21,741	+ 23,867	+ 23	- 5,847	+ 6,808	- 3,087	- 94	+ 16,508	+ 154	- 5,140
Nov	+	24,894	+ 22,245	- 378	- 1,741	+ 6,874	- 2,485	+ 163	+ 20,149	- 548	- 4,908
Dec	+	25,604	+ 17,999	- 905	+ 866	+ 11,216	- 4,476	- 2,248	+ 21,665	+ 123	- 1,692
2016 Jan	+	14,029	+ 13,619	- 183	- 2,455	+ 5,140	- 2,275	- 89	- 5,464	- 186	- 19,404
Feb	+	20,755	+ 22,485	+ 673	- 1,143	+ 6,932	- 7,518	+ 426	+ 9,544	+ 1,478	- 11,637
Mar	+	29,492	+ 27,914	- 158	- 2,109	+ 7,353	- 3,666	- 754	+ 19,784	- 64	- 8,954
Apr	+	27,944	+ 27,243	- 188	- 845	+ 3,238	- 1,692	+ 1,267	+ 41,438	+ 696	+ 12,227
May	+	18,100	+ 23,445	+ 500	- 1,584	- 3,170	- 591	+ 153	+ 9,261	+ 776	- 8,992
June	+	26,062	+ 26,413	- 274	- 2,611	+ 4,458	- 2,199	+ 137	+ 23,178	- 711	- 3,021
July	+	19,837	+ 20,804	+ 508	- 3,868	+ 6,337	- 3,435	- 135	+ 19,073	+ 342	- 629
Aug	+	17,106	+ 21,427	- 342	- 5,559	+ 5,749	- 4,510	- 114	+ 16,116	+ 93	- 876
Sep	+	24,458	+ 25,913	- 204	- 3,469	+ 4,750	- 2,737	+ 697	+ 22,462	- 695	- 2,693
Oct	+	19,403	+ 21,103	+ 220	- 3,652	+ 5,734	- 3,783	- 175	+ 28,153	- 145	+ 8,925
Nov p	+	24,593	+ 24,274	- 421	- 1,829	+ 6,128	- 3,979	- 74	+ 30,501	+ 140	+ 5,982

1 Excluding freight and insurance costs of foreign trade. 2 For example, warehouse transactions for the account of residents, deductions of goods returned and deductions of exports and imports in connection with goods for processing. 3 Including freight and insurance costs of foreign trade. 4 Including net

acquisition/disposal of non-produced non-financial assets. 5 Statistical errors and omissions, resulting from the difference between the balance on the financial account and the balances on the current account and the capital account.

## XII External sector

### 3 Foreign trade (special trade) of the Federal Republic of Germany, by country and group of countries \*

€ million

Ländergruppe/Land		2013	2014	2015	2016					
					Jan. / Oct.	Jul	Aug	Sep	Oct	Nov P
All countries <sup>1</sup>	Exports	1,088,025	1,123,746	1,193,555	1,001,766	96,041	96,245	106,042	101,561	108,467
	Imports	890,393	910,145	949,245	790,055	76,944	76,550	81,808	82,154	85,849
	Balance	+ 197,632	+ 213,601	+ 244,310	+ 211,711	+ 19,097	+ 19,695	+ 24,234	+ 19,407	+ 22,618
I European countries	Exports	743,067	761,914	803,425	684,974	65,193	63,892	73,330	69,148	...
	Imports	625,934	642,738	653,782	545,298	53,410	51,082	57,003	56,488	...
	Balance	+ 117,133	+ 119,176	+ 149,643	+ 139,677	+ 11,783	+ 12,810	+ 16,328	+ 12,661	...
1 EU member states (28)	Exports	618,383	648,446	692,493	590,328	56,081	54,154	63,082	59,684	...
	Imports	509,738	527,117	543,334	458,433	44,979	42,080	48,263	47,089	...
	Balance	+ 108,645	+ 121,329	+ 149,159	+ 131,895	+ 11,102	+ 12,073	+ 14,819	+ 12,595	...
Euro-area (19) countries	Exports	405,220	413,753	434,075	368,513	35,537	32,777	39,354	37,514	...
	Imports	343,487	350,550	356,643	299,150	29,815	27,025	31,078	30,588	...
	Balance	+ 61,732	+ 63,203	+ 77,432	+ 69,363	+ 5,722	+ 5,752	+ 8,276	+ 6,926	...
of which Austria	Exports	56,217	55,807	58,217	49,829	4,773	4,865	5,356	5,118	...
	Imports	36,734	36,218	37,250	32,154	3,284	3,021	3,448	3,268	...
	Balance	+ 19,483	+ 19,590	+ 20,967	+ 17,675	+ 1,490	+ 1,845	+ 1,908	+ 1,850	...
Belgium and Luxembourg	Exports	47,954	47,345	46,196	39,238	3,631	3,663	4,146	3,850	...
	Imports	41,965	42,548	40,116	34,156	3,294	3,288	3,321	3,325	...
	Balance	+ 5,989	+ 4,797	+ 6,079	+ 5,082	+ 337	+ 375	+ 824	+ 525	...
France	Exports	99,250	100,580	102,762	84,431	7,969	7,096	9,029	8,518	...
	Imports	63,489	66,714	66,819	55,587	5,626	4,496	5,398	5,832	...
	Balance	+ 35,761	+ 33,866	+ 35,943	+ 28,845	+ 2,343	+ 2,600	+ 3,632	+ 2,686	...
Italy	Exports	53,212	54,240	57,987	51,292	5,244	3,929	5,529	5,369	...
	Imports	46,911	48,522	49,038	43,047	4,598	3,791	4,434	4,458	...
	Balance	+ 6,301	+ 5,718	+ 8,949	+ 8,246	+ 646	+ 137	+ 1,095	+ 911	...
Netherlands	Exports	70,975	72,736	79,191	65,826	6,600	6,392	7,071	6,753	...
	Imports	88,698	87,796	87,889	68,990	6,812	6,810	7,136	7,028	...
	Balance	- 17,723	- 15,060	- 8,697	- 3,164	- 211	- 418	- 65	- 276	...
Spain	Exports	31,349	34,820	38,715	33,691	3,199	2,762	3,549	3,402	...
	Imports	23,639	24,804	26,442	22,592	2,127	1,770	2,382	2,260	...
	Balance	+ 7,709	+ 10,016	+ 12,273	+ 11,099	+ 1,072	+ 992	+ 1,167	+ 1,142	...
Other EU member states	Exports	213,163	234,693	258,417	221,815	20,545	21,377	23,728	22,170	...
	Imports	166,251	176,567	186,691	159,284	15,165	15,056	17,185	16,500	...
	Balance	+ 46,912	+ 58,126	+ 71,727	+ 62,532	+ 5,380	+ 6,321	+ 6,543	+ 5,669	...
of which United Kingdom	Exports	71,280	79,163	89,018	72,876	6,890	6,882	7,809	6,549	...
	Imports	39,466	38,545	38,414	29,394	2,871	2,701	3,116	2,907	...
	Balance	+ 31,815	+ 40,618	+ 50,604	+ 43,483	+ 4,018	+ 4,182	+ 4,693	+ 3,642	...
2 Other European countries	Exports	124,684	113,468	110,932	94,646	9,112	9,738	10,249	9,464	...
	Imports	116,196	115,621	110,448	86,864	8,430	9,001	8,740	9,399	...
	Balance	+ 8,488	- 2,153	+ 484	+ 7,782	+ 682	+ 737	+ 1,509	+ 65	...
of which Switzerland	Exports	46,924	46,202	49,070	41,943	4,073	4,157	4,607	4,358	...
	Imports	38,321	39,392	42,089	35,832	3,546	3,366	3,722	3,935	...
	Balance	+ 8,603	+ 6,810	+ 6,981	+ 6,110	+ 526	+ 792	+ 885	+ 423	...
II Non-European countries	Exports	341,213	358,337	387,398	314,714	30,590	32,316	32,471	32,156	...
	Imports	264,459	267,407	295,461	244,682	23,534	25,399	24,804	25,666	...
	Balance	+ 76,754	+ 90,930	+ 91,936	+ 70,032	+ 7,056	+ 6,917	+ 7,667	+ 6,491	...
1 Africa	Exports	21,803	22,505	23,897	20,351	1,802	2,015	2,058	2,044	...
	Imports	23,108	20,242	18,307	13,549	1,345	1,335	1,268	1,598	...
	Balance	- 1,305	+ 2,263	+ 5,590	+ 6,802	+ 458	+ 680	+ 790	+ 447	...
2 America	Exports	130,427	135,293	156,982	122,648	12,063	12,062	12,809	12,024	...
	Imports	75,023	74,191	85,582	68,684	6,851	7,027	6,945	6,724	...
	Balance	+ 55,404	+ 61,103	+ 71,400	+ 53,964	+ 5,212	+ 5,035	+ 5,863	+ 5,300	...
of which United States	Exports	89,348	95,928	113,733	88,653	8,777	8,575	9,179	8,797	...
	Imports	48,582	49,207	60,217	47,981	4,737	4,900	4,738	4,630	...
	Balance	+ 40,766	+ 46,721	+ 53,516	+ 40,672	+ 4,040	+ 3,675	+ 4,441	+ 4,167	...
3 Asia	Exports	179,038	190,973	196,297	163,196	15,819	17,334	16,670	17,177	...
	Imports	162,960	170,050	188,621	159,943	15,099	16,790	16,347	17,137	...
	Balance	+ 16,077	+ 20,923	+ 7,676	+ 3,252	+ 720	+ 543	+ 323	+ 39	...
of which Middle East	Exports	32,754	35,462	39,518	29,244	2,356	3,359	2,553	2,583	...
	Imports	8,921	7,865	7,330	5,410	518	550	626	560	...
	Balance	+ 23,833	+ 27,598	+ 32,188	+ 23,834	+ 1,838	+ 2,809	+ 1,928	+ 2,023	...
Japan	Exports	17,076	16,910	16,968	15,056	1,584	1,632	1,645	1,607	...
	Imports	19,492	19,007	20,180	18,246	1,706	1,907	1,906	1,844	...
	Balance	- 2,416	- 2,097	- 3,213	- 3,190	- 122	- 275	- 261	- 237	...
People's Republic of China <sup>2</sup>	Exports	66,912	74,369	71,284	61,857	6,396	6,301	6,590	6,300	...
	Imports	74,544	79,828	91,930	77,144	7,219	8,127	7,958	8,693	...
	Balance	- 7,633	- 5,459	- 20,646	- 15,287	- 822	- 822	- 1,368	- 2,393	...
New industrial countries and emerging markets of Asia <sup>3</sup>	Exports	45,894	48,476	51,510	43,037	4,048	4,548	4,420	5,263	...
	Imports	36,672	38,782	42,478	35,491	3,326	3,610	3,492	3,672	...
	Balance	+ 9,222	+ 9,695	+ 9,032	+ 7,546	+ 722	+ 938	+ 928	+ 1,591	...
4 Oceania and polar regions	Exports	9,946	9,566	10,221	8,520	905	906	935	911	...
	Imports	3,368	2,924	2,951	2,506	238	247	244	207	...
	Balance	+ 6,578	+ 6,641	+ 7,271	+ 6,014	+ 666	+ 659	+ 691	+ 705	...

\* Source: Federal Statistical Office. Exports (fob) by country of destination, imports (cif) by country of origin. Individual countries and groups of countries according to the current position. Euro-area including Lithuania. <sup>1</sup> Including fuel and other

supplies for ships and aircraft and other data not classifiable by region. <sup>2</sup> Excluding Hong Kong. <sup>3</sup> Brunei Darussalam, Hong Kong, Indonesia, Malaysia, Philippines, Republic of Korea, Singapore, Taiwan and Thailand.

## XII External sector

### 4 Services and Primary income of the Federal Republic of Germany (balances)

€ million

Period	Services								Primary income		
	Total	of which							Compensation of employees	Investment income	Other primary income <sup>3</sup>
		Transport	Travel <sup>1</sup>	Financial services	Charges for the use of intellectual property	Tele-communications, computer and information services	Other business services	Government goods and services <sup>2</sup>			
2011	- 32,482	- 8,533	- 33,755	+ 7,812	+ 2,389	+ 857	- 6,787	+ 2,939	+ 3,358	+ 64,718	+ 1,081
2012	- 32,775	- 10,189	- 35,422	+ 8,793	+ 3,030	+ 1,442	- 9,459	+ 3,103	+ 3,155	+ 61,666	+ 1,005
2013	- 43,223	- 12,075	- 37,713	+ 8,123	+ 3,605	- 758	- 5,912	+ 3,078	+ 523	+ 64,017	+ 1,223
2014	- 35,353	- 13,254	- 37,653	+ 7,817	+ 4,274	+ 2,600	- 1,785	+ 3,035	+ 259	+ 61,258	+ 871
2015	- 31,230	- 12,655	- 36,632	+ 10,181	+ 5,118	+ 3,796	- 3,659	+ 3,102	+ 735	+ 63,370	- 366
2015 Q1	- 4,714	- 2,926	- 5,740	+ 2,319	+ 1,306	+ 278	- 347	+ 904	+ 799	+ 18,598	- 1,057
Q2	- 5,941	- 2,218	- 7,808	+ 2,272	+ 1,093	+ 1,298	- 1,155	+ 830	- 31	+ 3,256	- 1,118
Q3	- 13,852	- 3,352	- 14,495	+ 2,779	+ 847	+ 292	- 594	+ 770	- 445	+ 20,042	- 1,204
Q4	- 6,722	- 4,158	- 8,590	+ 2,811	+ 1,872	+ 1,928	- 1,563	+ 598	+ 411	+ 21,474	+ 3,013
2016 Q1	- 5,707	- 2,439	- 6,421	+ 2,272	+ 1,243	+ 249	- 1,168	+ 840	+ 754	+ 19,315	- 645
Q2	- 5,040	- 1,190	- 8,057	+ 2,369	+ 1,119	+ 1,108	- 955	+ 855	- 154	+ 5,764	- 1,084
Q3	- 12,896	- 1,401	- 15,654	+ 1,901	+ 1,552	+ 573	- 329	+ 849	- 434	+ 18,445	- 1,175
2016 Jan	- 2,455	- 921	- 1,687	+ 952	+ 184	- 459	- 722	+ 276	+ 258	+ 5,227	- 345
Feb	- 1,143	- 1,039	- 1,723	+ 607	+ 774	+ 165	- 138	+ 290	+ 272	+ 6,590	+ 70
Mar	- 2,109	- 479	- 3,011	+ 714	+ 285	+ 543	- 308	+ 274	+ 224	+ 7,498	- 370
Apr	- 845	- 443	- 1,174	+ 809	+ 480	- 5	- 666	+ 300	- 33	+ 3,726	- 455
May	- 1,584	- 277	- 3,302	+ 854	+ 743	+ 197	- 268	+ 251	- 90	- 2,736	- 344
June	- 2,611	- 470	- 3,582	+ 707	- 104	+ 916	- 22	+ 305	- 32	+ 4,774	- 285
July	- 3,868	- 394	- 4,284	+ 725	+ 568	- 204	- 411	+ 296	- 173	+ 6,867	- 357
Aug	- 5,559	- 598	- 6,541	+ 588	+ 830	+ 64	- 248	+ 264	- 136	+ 6,289	- 405
Sep	- 3,469	- 409	- 4,828	+ 588	+ 155	+ 712	+ 331	+ 288	- 125	+ 5,289	- 413
Oct	- 3,652	- 464	- 5,328	+ 631	+ 1,073	+ 31	- 148	+ 199	+ 150	+ 6,169	- 585
Nov P	- 1,829	- 572	- 1,993	+ 637	+ 643	- 24	- 821	+ 210	+ 127	+ 6,412	- 411

<sup>1</sup> Since 2001, the sample results of a household survey have been used on the expenditure side. <sup>2</sup> Domestic public authorities' receipts from and expenditure on services, not included elsewhere; including the receipts from foreign military bases.

<sup>3</sup> Includes, inter alia, taxes on leasing, production and imports transferred to the EU as well as subsidies received from the EU.

### 5 Secondary income of the Federal Republic of Germany (balances)

€ million

Period	General government					All sectors excluding general government <sup>2</sup>			
	Total	Total	of which			Total	of which		
			Current international cooperation <sup>1</sup>	Current taxes on income, wealth etc.			Personal transfers between resident and nonresident households <sup>3</sup>	of which Workers' remittances	
2011	- 35,520	- 21,293	- 4,446	+ 6,718	- 14,227	- 2,977	- 2,977		
2012	- 39,858	- 25,493	- 5,214	+ 5,206	- 14,366	- 2,952	- 2,952		
2013	- 43,758	- 29,708	- 5,611	+ 6,177	- 14,050	- 3,250	- 3,229		
2014	- 40,653	- 28,169	- 6,076	+ 8,088	- 12,485	- 3,476	- 3,451		
2015	- 39,550	- 25,546	- 7,065	+ 9,800	- 14,004	- 3,540	- 3,523		
2015 Q1	- 15,822	- 12,975	- 2,614	+ 1,327	- 2,847	- 885	- 881		
Q2	- 7,052	- 1,803	- 1,161	+ 6,278	- 5,249	- 885	- 881		
Q3	- 6,628	- 3,850	- 1,196	+ 1,212	- 2,778	- 885	- 881		
Q4	- 10,048	- 6,918	- 2,094	+ 981	- 3,130	- 885	- 881		
2016 Q1	- 13,460	- 10,054	- 2,704	+ 1,284	- 3,406	- 1,270	- 1,267		
Q2	- 4,482	- 998	- 1,618	+ 5,527	- 3,484	- 1,056	- 1,053		
Q3	- 10,682	- 6,952	- 1,702	+ 1,753	- 3,731	- 1,053	- 1,049		
2016 Jan	- 2,275	- 1,167	- 1,181	+ 586	- 1,109	- 441	- 440		
Feb	- 7,518	- 6,258	- 1,079	+ 281	- 1,260	- 441	- 440		
Mar	- 3,666	- 2,629	- 444	+ 416	- 1,038	- 388	- 387		
Apr	- 1,692	- 703	- 509	+ 1,217	- 989	- 354	- 353		
May	- 591	+ 555	- 408	+ 3,020	- 1,147	- 351	- 350		
June	- 2,199	- 850	- 701	+ 1,290	- 1,348	- 351	- 350		
July	- 3,435	- 2,335	- 451	+ 378	- 1,100	- 352	- 350		
Aug	- 4,510	- 3,013	- 983	+ 257	- 1,497	- 350	- 350		
Sep	- 2,737	- 1,603	- 268	+ 1,118	- 1,133	- 351	- 350		
Oct	- 3,783	- 2,857	- 658	+ 326	- 926	- 352	- 350		
Nov P	- 3,979	- 2,940	- 449	+ 20	- 1,040	- 353	- 350		

<sup>1</sup> Excluding capital transfers, where identifiable. Includes current international cooperation and other current transfers. <sup>2</sup> Includes insurance premiums and claims

(excluding life insurance policies). <sup>3</sup> Transfers between resident and non-resident households.

### 6 Capital account of the Federal Republic of Germany (balances)

€ million

Period	Total	Non-produced non-financial assets	Capital transfers
2011	+ 1,642	+ 1,148	+ 494
2012	- 413	+ 1,745	- 2,158
2013	- 591	+ 1,076	- 1,667
2014	+ 1,138	+ 2,782	- 1,643
2015	- 159	+ 2,136	- 2,295
2015 Q1	+ 218	- 10	+ 228
Q2	+ 1,098	+ 1,143	- 45
Q3	+ 703	+ 870	- 167
Q4	- 2,178	+ 134	- 2,312
2016 Q1	- 417	- 676	+ 259
Q2	+ 1,557	+ 2,072	- 516
Q3	+ 448	+ 1,110	- 662
2016 Jan	- 89	+ 2	- 91
Feb	+ 426	+ 188	+ 238
Mar	- 754	- 866	+ 112
Apr	+ 1,267	+ 1,411	- 144
May	+ 153	+ 244	- 91
June	+ 137	+ 417	- 281
July	- 135	+ 98	- 233
Aug	- 114	+ 157	- 271
Sep	+ 697	+ 855	- 158
Oct	- 175	- 8	- 167
Nov P	- 74	+ 255	- 329

## XII External sector

### 7 Financial account of the Federal Republic of Germany (net)

€ million

Item	2013	2014	2015	2016					
				Q1	Q2	Q3	Sep	Oct	Nov P
<b>I Net domestic investment abroad</b> (Increase: +)	+ 60,705	+ 299,954	+ 253,658	+ 154,533	+ 162,379	+ 50,196	+ 20,785	+ 47,813	+ 32,820
1 Direct investment	+ 68,688	+ 85,658	+ 98,017	+ 30,747	+ 11,281	+ 21,261	+ 14,841	+ 9,422	+ 9,083
Equity of which	+ 43,586	+ 66,413	+ 69,542	+ 22,203	+ 10,478	+ 17,012	+ 5,046	+ 7,013	+ 6,051
Reinvestment of earnings <b>1</b>	+ 17,880	+ 21,373	+ 15,866	+ 7,335	+ 5,100	+ 9,721	+ 3,167	+ 3,325	+ 1,374
Debt instruments	+ 25,103	+ 19,246	+ 28,475	+ 8,544	+ 804	+ 4,249	+ 9,795	+ 2,409	+ 3,032
2 Portfolio investment	+ 140,366	+ 149,023	+ 124,134	+ 47,212	+ 34,264	+ 19,775	+ 12,054	+ 5,483	- 594
Shares <b>2</b>	+ 18,946	+ 12,380	+ 19,737	+ 1,314	+ 4,668	+ 8,154	+ 2,784	+ 1,628	+ 2,473
Investment fund shares <b>3</b>	+ 32,407	+ 41,302	+ 35,495	+ 9,724	+ 7,875	+ 8,857	+ 3,952	+ 6,546	- 757
Long-term	+ 84,469	+ 95,794	+ 73,923	+ 31,209	+ 26,381	+ 5,903	+ 5,956	- 1,590	- 1,854
debt securities <b>4</b>	+ 4,543	- 454	- 5,021	+ 4,965	- 4,659	- 3,138	- 637	- 1,101	- 457
Short-term									
debt securities <b>5</b>									
3. Financial derivatives and employee stock options <b>6</b>	+ 23,944	+ 31,769	+ 25,796	+ 4,925	+ 3,940	+ 10,024	+ 5,093	+ 4,421	+ 5,231
4. Other investment <b>7</b>	- 173,131	+ 36,069	+ 7,923	+ 70,420	+ 112,132	- 604	- 10,507	+ 28,631	+ 18,960
Monetary financial institutions <b>8</b>	- 56,929	+ 76,305	- 90,287	+ 11,342	+ 38,457	- 29,468	- 46,801	+ 47,742	- 22,427
Long-term	- 50,777	+ 21,149	- 2,803	+ 1,948	+ 8,368	+ 7,704	+ 910	+ 6,418	+ 12,737
Short-term	- 6,152	+ 55,156	- 87,484	+ 9,394	+ 30,089	- 37,172	- 47,711	+ 41,324	- 35,164
Enterprises and households <b>9</b>	+ 21,335	- 7,517	- 13,097	+ 29,038	- 605	- 11,317	- 4,038	- 5,828	- 1,893
Long-term	+ 7,033	+ 2,091	+ 12,588	- 772	- 219	+ 996	- 1,372	- 186	+ 1,150
Short-term	+ 14,302	- 9,608	- 25,685	+ 29,810	- 386	- 12,313	- 2,667	- 5,642	- 3,043
General government	+ 7,982	+ 17,161	- 12,057	+ 5,061	+ 2,400	+ 5,124	+ 1,684	- 5,524	- 2,830
Long-term	+ 15,663	- 405	- 7,425	- 1,367	- 832	- 982	+ 69	- 501	+ 281
Short-term	- 7,681	+ 17,566	- 4,632	+ 6,428	+ 3,232	+ 6,106	+ 1,615	- 5,023	- 3,111
Bundesbank	- 145,519	- 49,880	+ 123,364	+ 24,980	+ 71,881	+ 35,056	+ 38,648	- 7,760	+ 46,110
5. Reserve assets	+ 838	- 2,564	- 2,213	+ 1,228	+ 761	- 261	- 695	- 145	+ 140
<b>II Net foreign investment</b> in the reporting country (Increase: +)	- 158,374	+ 55,510	+ 28,106	+ 130,669	+ 88,503	- 7,455	- 1,676	+ 19,660	+ 2,319
1 Direct investment	+ 47,079	+ 6,240	+ 41,579	+ 26,907	+ 28,169	+ 8,742	+ 11,990	- 6,558	+ 6,775
Equity of which	+ 685	+ 23,991	+ 18,498	+ 6,492	+ 5,101	+ 3,377	+ 99	+ 973	+ 669
Reinvestment of earnings <b>1</b>	- 4,538	+ 3,662	+ 5,765	+ 3,677	+ 800	+ 3,548	+ 994	+ 1,248	+ 1,744
Debt instruments	+ 46,394	- 17,751	+ 23,081	+ 20,416	+ 23,068	+ 5,365	+ 11,891	- 7,531	+ 6,106
2 Portfolio investment	- 20,184	+ 11,583	- 75,003	+ 6,102	- 32,275	- 29,040	- 6,992	- 16,190	- 15,459
Shares <b>2</b>	+ 4,933	+ 5,137	+ 10,255	- 2,998	- 5,660	+ 1,195	- 636	+ 3,449	- 125
Investment fund shares <b>3</b>	+ 6,069	- 5,154	+ 5,515	- 2,777	- 1,864	- 2,298	- 210	+ 116	- 1,087
Long-term	- 8,329	+ 14,785	- 97,980	- 6,427	- 32,283	- 23,893	- 13,810	- 12,928	- 661
Short-term	- 22,857	- 3,185	+ 7,207	+ 18,303	+ 7,533	- 4,044	+ 7,663	- 6,827	- 13,586
debt securities <b>5</b>									
3. Other investment <b>7</b>	- 185,270	+ 37,687	+ 61,529	+ 97,659	+ 92,608	+ 12,843	- 6,674	+ 42,408	+ 11,003
Monetary financial institutions <b>8</b>	- 158,518	+ 32,484	- 41,137	+ 41,213	+ 68,410	+ 884	- 35,422	+ 43,368	+ 2,870
Long-term	- 16,819	- 14,555	- 19,517	- 3,913	- 3,177	+ 5,499	+ 316	+ 778	+ 1,637
Short-term	- 141,699	+ 47,039	- 21,621	+ 45,126	+ 71,587	- 4,615	- 35,738	+ 42,590	+ 1,233
Enterprises and households <b>9</b>	- 1,957	+ 16,777	+ 18,120	+ 39,419	- 486	- 23,546	+ 2,308	+ 3,596	- 4,280
Long-term	- 13,166	- 2,008	+ 15,290	+ 141	+ 1,454	+ 3,839	+ 2,701	+ 2,512	- 28
Short-term	+ 11,209	+ 18,785	+ 2,829	+ 39,278	+ 968	- 27,385	- 393	+ 1,084	- 4,252
General government	- 1,900	- 5,610	- 11,235	+ 5,643	+ 6,643	- 2,770	- 409	+ 377	+ 1,066
Long-term	+ 8,979	- 931	- 3,654	- 2,478	+ 2,897	- 54	- 19	+ 59	- 830
Short-term	- 10,878	- 4,680	- 7,582	+ 8,121	+ 3,746	- 2,716	- 390	+ 319	+ 1,896
Bundesbank	- 22,895	- 5,964	+ 95,782	+ 11,384	+ 18,042	+ 38,274	+ 26,849	- 4,933	+ 11,347
<b>III Net financial account</b> (Net lending: + / net borrowing: -)	+ 219,079	+ 244,445	+ 225,551	+ 23,864	+ 73,876	+ 57,651	+ 22,462	+ 28,153	+ 30,501

**1** Estimate based on data on direct investment stocks abroad and in the Federal Republic of Germany (see Special Statistical Publication 10). **2** Including participation certificates. **3** Including reinvestment of earnings. **4** Up to and including 2012, without accrued interest. Long-term: original maturity of more than one year or unlimited. **5** Short-term: original maturity up to one year. **6** Balance of transactions

arising from options and financial futures contracts as well as employee stock options. **7** Includes in particular loans, trade credits as well as currency and deposits. **8** Excluding Bundesbank. **9** Includes the following sectors: financial corporations (excluding monetary financial institutions) as well as non-financial corporations, households and non-profit institutions serving households.



## XII. External sector

### 8. External position of the Bundesbank since the beginning of European monetary union °

€ million

End of reporting period	External assets									External-liabilities 3,4	Net external position (col 1 minus col 10)
	Total	Reserve assets					Other investment				
		Total	Gold and gold receivables	Special drawing rights	Reserve position in the IMF	Currency, deposits and securities	Total	of which Clearing accounts within the ESCB 1	Portfolio investment 2		
1	2	3	4	5	6	7	8	9	10	11	
1999 Jan 5	95,316	93,940	29,312	1,598	6,863	56,167	1,376	–	–	9,628	85,688
1999	141,958	93,039	32,287	1,948	6,383	52,420	48,919	26,275	–	7,830	134,128
2000	100,762	93,815	32,676	1,894	5,868	53,377	6,947	– 6,851	–	8,287	92,475
2001	76,147	93,215	35,005	2,032	6,689	49,489	– 17,068	– 30,857	–	10,477	65,670
2002	103,948	85,002	36,208	1,888	6,384	40,522	18,780	4,995	166	66,213	37,735
2003	95,394	76,680	36,533	1,540	6,069	32,538	18,259	4,474	454	83,296	12,098
2004	93,110	71,335	35,495	1,512	5,036	29,292	21,110	7,851	665	95,014	– 1,904
2005	130,268	86,181	47,924	1,601	2,948	33,708	43,184	29,886	902	115,377	14,891
2006	104,389	84,765	53,114	1,525	1,486	28,640	18,696	5,399	928	134,697	– 30,308
2007	179,492	92,545	62,433	1,469	949	27,694	84,420	71,046	2,527	176,569	2,923
2008	230,775	99,185	68,194	1,576	1,709	27,705	129,020	115,650	2,570	237,893	– 7,118
2009	323,286	125,541	83,939	13,263	2,705	25,634	190,288	177,935	7,458	247,645	75,641
2010	524,695	162,100	115,403	14,104	4,636	27,957	337,921	325,553	24,674	273,241	251,454
2011	714,662	184,603	132,874	14,118	8,178	29,433	475,994	463,311	54,065	333,730	380,932
2012	921,002	188,630	137,513	13,583	8,760	28,774	668,672	655,670	63,700	424,999	496,003
2013	721,741	143,753	94,876	12,837	7,961	28,080	523,153	510,201	54,834	401,524	320,217
2014	678,804	158,745	107,475	14,261	6,364	30,646	473,274	460,846	46,784	396,623	282,181
2015	800,709	159,532	105,792	15,185	5,132	33,423	596,638	584,210	44,539	493,509	307,199
2016	990,450	175,765	119,253	14,938	6,581	34,993	767,128	754,263	47,557	609,909	380,541
2014 Apr	692,956	150,048	101,564	13,057	7,893	27,534	490,117	477,688	52,792	403,530	289,426
May	680,888	148,949	100,274	13,213	7,912	27,550	479,290	466,862	52,649	406,416	274,472
June	678,136	153,017	104,600	13,213	7,582	27,622	474,245	461,817	50,874	399,788	278,348
July	660,521	154,885	105,317	13,497	7,665	28,406	455,977	443,548	49,659	378,120	282,401
Aug	681,324	156,411	106,079	13,794	7,339	29,199	476,732	464,303	48,181	380,001	301,323
Sep	696,802	156,367	104,629	14,113	7,751	29,873	492,348	479,920	48,087	386,216	310,586
Oct	681,790	154,133	101,929	14,125	7,628	30,450	481,136	468,708	46,521	396,445	285,345
Nov	682,969	155,424	103,245	14,045	7,520	30,615	480,294	467,866	47,250	400,850	282,119
Dec	678,804	158,745	107,475	14,261	6,364	30,646	473,274	460,846	46,784	396,623	282,181
2015 Jan	751,062	176,741	121,607	14,895	6,488	33,751	527,698	515,266	46,623	452,230	298,833
Feb	744,552	172,120	116,647	14,956	6,361	34,157	525,795	513,365	46,637	444,069	300,483
Mar	767,856	176,922	119,988	15,311	5,944	35,679	544,130	531,701	46,804	435,366	332,490
Apr	762,437	171,758	116,812	14,967	5,796	34,184	544,620	532,192	46,058	436,617	325,820
May	758,500	173,842	118,141	15,124	5,744	34,833	538,619	526,191	46,039	437,079	321,421
June	756,263	168,299	113,838	15,000	5,617	33,844	543,502	531,074	44,461	440,233	316,029
July	763,247	163,071	108,872	15,172	4,919	34,107	555,013	542,585	45,162	446,157	317,090
Aug	781,286	162,917	110,012	14,934	5,164	32,807	573,712	561,284	44,657	443,522	337,764
Sep	774,428	161,922	108,959	14,941	5,191	32,831	567,602	555,174	44,903	466,216	308,212
Oct	786,694	166,664	112,836	15,126	5,199	33,503	575,246	562,818	44,784	474,882	311,811
Nov	813,320	163,816	108,820	15,475	5,217	34,303	604,946	592,518	44,558	491,813	321,506
Dec	800,709	159,532	105,792	15,185	5,132	33,423	596,638	584,210	44,539	493,509	307,199
2016 Jan	807,971	164,656	111,126	15,055	5,197	33,278	599,427	587,000	43,888	485,028	322,943
Feb	839,336	177,917	122,535	15,109	6,899	33,374	617,434	605,006	43,985	501,590	337,745
Mar	837,375	171,266	117,844	14,730	6,730	31,962	621,617	609,190	44,491	504,447	332,928
Apr	856,266	175,738	121,562	14,793	6,759	32,623	638,201	625,774	42,327	505,222	351,045
May	884,887	173,927	118,133	14,970	6,839	33,984	667,972	655,544	42,988	508,576	376,311
June	922,232	184,628	128,963	14,746	6,780	34,139	693,498	681,070	44,106	522,762	399,470
July	904,044	186,300	130,417	14,698	6,736	34,449	672,748	660,320	44,996	525,468	378,577
Aug	918,692	183,951	128,171	14,685	6,642	34,452	689,906	677,479	44,834	534,120	384,572
Sep	957,860	183,796	128,795	14,657	6,605	33,738	728,554	715,738	45,510	560,933	396,927
Oct	947,718	181,623	126,245	14,708	6,631	34,039	720,795	708,029	45,300	556,076	391,642
Nov	991,108	177,348	121,032	14,917	6,572	34,826	766,905	754,057	46,855	567,692	423,417
Dec	990,450	175,765	119,253	14,938	6,581	34,993	767,128	754,263	47,557	609,909	380,541

° Assets and liabilities vis-à-vis all countries within and outside the euro area. Up to December 2000, the levels at the end of each quarter are shown, owing to revaluations, at market prices; within each quarter, however, the levels are computed on the basis of cumulative transaction values. From January 2001, all end-of-month levels are valued at market prices. 1 Mainly net claims on TARGET2 balances (according to

the respective country designation), since November 2000 also balances with non-euro-area central banks within the ESCB. 2 Mainly long-term debt securities from issuers within the euro area. 3 Including estimates of currency in circulation abroad. 4 See Deutsche Bundesbank, Monthly Report, October 2014, p. 22. 5 Euro opening balance sheet of the Bundesbank as at 1 January 1999.

## XII External sector

### 9 Assets and liabilities of enterprises in Germany (other than banks) vis-à-vis non-residents \*

€ million

End of year or month	Claims on non-residents							Liabilities vis-à-vis non-residents						
	Total	Balances with foreign banks	Claims on foreign non-banks					Total	Loans from foreign banks	Liabilities vis-à-vis foreign non-banks				
			Total	from financial operations	from trade credits					Total	from financial operations	from trade credits		
					Total	Credit terms granted	Advance payments effected					Total	Credit terms used	Advance payments received
<b>All countries</b>														
2012	740,809	271,964	468,845	294,248	174,597	158,825	15,772	910,837	170,262	740,575	578,391	162,184	94,292	67,892
2013	785,507	281,970	503,537	323,869	179,668	164,454	15,214	936,110	143,112	792,998	630,740	162,258	95,301	66,957
2014	822,028	278,523	543,506	357,855	185,651	170,854	14,797	939,809	150,429	789,379	624,860	164,519	98,104	66,415
2015	852,363	264,278	588,085	395,013	193,072	178,495	14,576	976,497	142,494	834,003	652,968	181,035	108,750	72,285
2016 June	880,231	275,683	604,547	404,619	199,928	184,927	15,001	1,051,943	151,906	900,037	715,827	184,209	109,968	74,241
July	872,867	269,516	603,351	408,811	194,540	179,557	14,984	1,025,343	137,347	887,996	708,327	179,669	105,137	74,532
Aug	864,498	271,893	592,605	405,951	186,654	171,668	14,986	1,018,942	133,955	884,987	710,397	174,589	99,789	74,800
Sep	870,194	265,904	604,290	406,265	198,025	182,902	15,123	1,029,233	131,609	897,624	715,495	182,129	107,804	74,325
Oct r	868,602	258,934	609,668	411,026	198,641	183,661	14,980	1,026,651	131,181	895,470	711,550	183,921	108,769	75,151
Nov	873,837	253,417	620,419	418,119	202,301	187,438	14,862	1,029,780	128,304	901,476	716,143	185,334	110,678	74,655
<b>Industrial countries <sup>1</sup></b>														
2012	653,244	269,560	383,684	265,387	118,297	104,957	13,339	824,118	167,853	656,265	542,976	113,289	79,107	34,181
2013	694,860	278,667	416,194	294,116	122,077	108,620	13,458	849,161	141,744	707,417	593,197	114,219	79,543	34,676
2014	720,924	273,624	447,300	321,894	125,406	112,308	13,098	851,172	149,212	701,960	585,678	116,282	81,103	35,179
2015	747,289	260,378	486,912	354,225	132,687	119,558	13,129	881,625	137,526	744,099	617,932	126,168	89,593	36,575
2016 June	773,332	271,873	501,459	363,357	138,102	124,648	13,454	950,300	141,757	808,543	680,114	128,428	91,144	37,285
July	767,312	265,844	501,468	368,406	133,062	119,682	13,380	930,002	132,545	797,457	673,228	124,229	87,151	37,078
Aug	760,349	268,276	492,073	365,959	126,114	112,725	13,389	922,549	128,036	794,514	675,080	119,434	82,278	37,155
Sep	765,037	262,134	502,903	366,502	136,401	122,931	13,471	934,092	125,582	808,510	681,410	127,099	90,063	37,036
Oct r	761,601	255,158	506,444	370,239	136,205	122,795	13,410	932,199	126,322	805,877	676,951	128,925	91,367	37,558
Nov	766,418	249,476	516,942	376,876	140,066	126,728	13,338	935,971	123,939	812,032	682,093	129,939	92,754	37,185
<b>EU member states <sup>1</sup></b>														
2012	541,602	247,534	294,068	209,426	84,642	74,167	10,474	695,152	156,550	538,602	458,488	80,114	53,607	26,507
2013	586,790	264,116	322,674	235,608	87,066	76,539	10,527	710,428	127,372	583,057	503,394	79,662	53,339	26,323
2014	606,568	258,507	348,061	259,475	88,585	77,975	10,611	712,497	134,943	577,555	496,878	80,677	53,797	26,880
2015	613,734	242,218	371,516	276,868	94,648	84,071	10,577	725,496	127,114	598,383	513,560	84,823	58,469	26,354
2016 June	636,918	254,792	382,126	284,614	97,513	86,675	10,838	778,440	128,084	650,357	564,103	86,253	59,287	26,966
July	632,816	248,022	384,794	291,338	93,456	82,665	10,791	762,484	122,432	640,052	557,228	82,824	56,116	26,708
Aug	628,502	251,471	377,032	288,412	88,620	77,811	10,809	754,013	118,565	635,448	555,534	79,913	53,039	26,874
Sep	629,382	244,777	384,605	288,917	95,688	84,849	10,840	760,149	114,895	645,254	559,864	85,390	58,731	26,659
Oct r	622,234	236,265	385,969	288,829	97,140	86,414	10,725	757,569	114,658	642,910	555,692	87,219	60,346	26,872
Nov	623,751	231,000	392,752	293,058	99,694	89,135	10,559	761,533	113,900	647,633	559,853	87,780	61,063	26,717
<b>of which: Euro-area member states <sup>2</sup></b>														
2012	392,642	188,317	204,325	149,452	54,873	48,975	5,898	572,475	110,053	462,423	408,485	53,937	36,741	17,196
2013	427,049	197,297	229,752	173,609	56,143	49,968	6,175	602,056	101,150	500,906	447,404	53,502	36,670	16,832
2014	449,392	203,069	246,323	189,755	56,568	50,348	6,220	598,660	105,883	492,777	440,290	52,487	35,568	16,919
2015	457,947	195,011	262,936	201,414	61,522	54,913	6,609	589,407	91,735	497,672	444,542	53,130	37,976	15,155
2016 June	469,798	198,645	271,153	207,677	63,476	56,689	6,787	634,180	96,858	537,322	482,312	55,011	39,693	15,318
July	463,405	194,782	268,623	207,441	61,182	54,455	6,727	621,855	92,779	529,076	476,124	52,952	37,770	15,182
Aug	462,132	196,653	265,478	207,231	58,248	51,495	6,752	619,740	90,989	528,751	477,999	50,751	35,495	15,256
Sep	462,490	189,648	272,842	210,493	62,349	55,565	6,784	623,563	87,086	536,477	482,658	53,820	39,029	14,791
Oct r	455,585	181,180	274,405	210,655	63,750	57,063	6,687	619,908	86,221	533,686	478,599	55,087	40,150	14,938
Nov	453,290	177,184	276,107	211,157	64,950	58,307	6,642	614,905	80,742	534,163	478,805	55,358	40,642	14,717
<b>Emerging economies and developing countries <sup>3</sup></b>														
2012	87,552	2,404	85,147	28,858	56,289	53,856	2,432	86,688	2,409	84,279	35,415	48,864	15,181	33,683
2013	90,640	3,303	87,337	29,751	57,586	55,829	1,757	86,946	1,368	85,578	37,543	48,035	15,755	32,280
2014	101,101	4,899	96,202	35,957	60,244	58,546	1,699	88,634	1,217	87,417	39,182	48,235	17,001	31,234
2015	104,086	3,093	100,994	40,788	60,205	58,546	1,448	90,701	997	89,704	34,836	54,868	19,157	35,710
2016 June	105,866	2,995	102,871	41,228	61,643	60,096	1,547	92,780	1,526	91,254	35,513	55,741	18,785	36,956
July	104,512	2,855	101,656	40,370	61,286	59,682	1,604	91,998	1,659	90,339	34,900	55,440	17,986	37,453
Aug	102,872	2,566	100,306	39,957	60,348	58,751	1,597	91,505	1,272	90,232	35,118	55,115	17,470	37,645
Sep	103,847	2,676	101,171	39,729	61,443	59,790	1,653	90,013	1,156	88,857	33,885	54,972	17,701	37,272
Oct r	105,662	2,646	103,016	40,753	62,263	60,693	1,570	90,519	1,208	89,311	34,373	54,938	17,362	37,576
Nov	106,046	2,791	103,255	41,207	62,048	60,524	1,524	90,439	1,252	89,187	33,850	55,337	17,884	37,453

\* The assets and liabilities vis-à-vis non-residents of banks (MFIs) in Germany are shown in Table 4 of Section IV, "Banks". Statistical increases and decreases have not been eliminated; to this extent, the changes in totals are not comparable with the figures shown in Table XI.7. From December 2012 onwards, the results base on a extended survey and a new calculation method. <sup>1</sup> From July 2013 including

Croatia. <sup>2</sup> From January 2011 including Estonia; from January 2014 including Latvia; from January 2015 including Lithuania. <sup>3</sup> All countries that are not regarded as industrial countries. From January 2011 including Bonaire, St.Eustatius, Saba and Curacao and St.Martin (Dutch part); up to June 2013 including Croatia. r Corrected.

## XII External sector

### 10 ECB's euro foreign exchange reference rates of selected currencies \*

EUR 1 = currency units ...

Yearly or monthly average	Australia	Canada	China	Denmark	Japan	Norway	Sweden	Switzerland	United Kingdom	United States
	AUD	CAD	CNY 1	DKK	JPY	NOK	SEK	CHF	GBP	USD
1999	1.6523	1.5840	.	7.4355	121.32	8.3104	8.8075	1.6003	0.65874	1.0658
2000	1.5889	1.3706	2 7.6168	7.4538	99.47	8.1129	8.4452	1.5579	0.60948	0.9236
2001	1.7319	1.3864	7.4131	7.4521	108.68	8.0484	9.2551	1.5105	0.62187	0.8956
2002	1.7376	1.4838	7.8265	7.4305	118.06	7.5086	9.1611	1.4670	0.62883	0.9456
2003	1.7379	1.5817	9.3626	7.4307	130.97	8.0033	9.1242	1.5212	0.69199	1.1312
2004	1.6905	1.6167	10.2967	7.4399	134.44	8.3697	9.1243	1.5438	0.67866	1.2439
2005	1.6320	1.5087	10.1955	7.4518	136.85	8.0092	9.2822	1.5483	0.68380	1.2441
2006	1.6668	1.4237	10.0096	7.4591	146.02	8.0472	9.2544	1.5729	0.68173	1.2556
2007	1.6348	1.4678	10.4178	7.4506	161.25	8.0165	9.2501	1.6427	0.68434	1.3705
2008	1.7416	1.5594	10.2236	7.4560	152.45	8.2237	9.6152	1.5874	0.79628	1.4708
2009	1.7727	1.5850	9.5277	7.4462	130.34	8.7278	10.6191	1.5100	0.89094	1.3948
2010	1.4423	1.3651	8.9712	7.4473	116.24	8.0043	9.5373	1.3803	0.85784	1.3257
2011	1.3484	1.3761	8.9960	7.4506	110.96	7.7934	9.0298	1.2326	0.86788	1.3920
2012	1.2407	1.2842	8.1052	7.4437	102.49	7.4751	8.7041	1.2053	0.81087	1.2848
2013	1.3777	1.3684	8.1646	7.4579	129.66	7.8067	8.6515	1.2311	0.84926	1.3281
2014	1.4719	1.4661	8.1857	7.4548	140.31	8.3544	9.0985	1.2146	0.80612	1.3285
2015	1.4777	1.4186	6.9733	7.4587	134.31	8.9496	9.3535	1.0679	0.72584	1.1095
2016	1.4883	1.4659	7.3522	7.4452	120.20	9.2906	9.4689	1.0902	0.81948	1.1069
2016 Jan	1.5510	1.5447	7.1393	7.4619	128.32	9.5899	9.2826	1.0941	0.75459	1.0860
Feb	1.5556	1.5317	7.2658	7.4628	127.35	9.5628	9.4105	1.1018	0.77559	1.1093
Mar	1.4823	1.4697	7.2220	7.4569	125.39	9.4300	9.2848	1.0920	0.78020	1.1100
Apr	1.4802	1.4559	7.3461	7.4427	124.29	9.3224	9.2027	1.0930	0.79230	1.1339
May	1.5461	1.4626	7.3864	7.4386	123.21	9.3036	9.2948	1.1059	0.77779	1.1311
June	1.5173	1.4477	7.4023	7.4371	118.45	9.3278	9.3338	1.0894	0.79049	1.1229
July	1.4694	1.4428	7.3910	7.4390	115.25	9.3690	9.4742	1.0867	0.84106	1.1069
Aug	1.4690	1.4557	7.4537	7.4408	113.49	9.3030	9.4913	1.0881	0.85521	1.1212
Sep	1.4768	1.4677	7.4819	7.4475	114.22	9.1971	9.5655	1.0919	0.85228	1.1212
Oct	1.4470	1.4594	7.4198	7.4402	114.47	9.0009	9.7073	1.0887	0.89390	1.1026
Nov	1.4331	1.4519	7.3883	7.4406	116.93	9.0807	9.8508	1.0758	0.86894	1.0799
Dec	1.4356	1.4070	7.2983	7.4362	122.39	9.0252	9.7095	1.0750	0.84441	1.0543

\* Averages: Bundesbank calculations based on the daily euro foreign exchange reference rates published by the ECB; for additional euro foreign exchange reference rates, see Statistical Supplement 5, Exchange rate statistics. **1** Up to March 2005, ECB indicative rates. **2** Average from 13 January to 29 December 2000.

### 11 Euro-area member states and irrevocable euro conversion rates in the third stage of European Economic and Monetary Union

From	Country	Currency	ISO currency code	EUR 1 = currency units ...	
1999 January 1	Austria	Austrian schilling	ATS	13.7603	
	Belgium	Belgian franc	BEF	40.3399	
	Finland	Finnish markka	FIM	5.94573	
	France	French franc	FRF	6.55957	
	Germany	Deutsche Mark	DEM	1.95583	
	Ireland	Irish pound	IEP	0.787564	
	Italy	Italian lira	ITL	1,936.27	
	Luxembourg	Luxembourg franc	LUF	40.3399	
	Netherlands	Dutch guilder	NLG	2.20371	
	Portugal	Portuguese escudo	PTE	200.482	
	Spain	Spanish peseta	ESP	166.386	
	2001 January 1	Greece	Greek drachma	GRD	340.750
	2007 January 1	Slovenia	Slovenian tolar	SIT	239.640
	2008 January 1	Cyprus	Cyprus pound	CYP	0.585274
Malta		Maltese lira	MTL	0.429300	
2009 January 1	Slovakia	Slovak koruna	SKK	30.1260	
2011 January 1	Estonia	Estonian kroon	EEK	15.6466	
2014 January 1	Latvia	Latvian lats	LVL	0.702804	
2015 January 1	Lithuania	Lithuanian litas	LTL	3.45280	

## XII External sector

### 12 Effective exchange rates of the Euro and indicators of the German economy's price competitiveness \*

1999 Q1=100

Period	Effective exchange rate of the Euro				Indicators of the German economy's price competitiveness									
	EER-19 <sup>1</sup>				EER-38 <sup>2</sup>		Based on the deflators of total sales <sup>3</sup>				Based on consumer price indices			
	Nominal	In real terms based on consumer price indices	In real terms based on the deflators of gross domestic product <sup>3</sup>	In real terms based on unit labour costs of national economy <sup>3</sup>	Nominal	In real terms based on consumer price indices <sup>4</sup>	26 selected industrial countries <sup>5</sup>			37 countries <sup>6</sup>	26 selected industrial countries <sup>5</sup>	37 countries <sup>6</sup>	56 countries <sup>7</sup>	
							Total	Euro-area countries	Non-euro-area countries					
1999	96.3	96.0	96.1	96.0	96.5	95.8	97.8	99.5	95.8	97.6	98.2	98.0	97.7	
2000	87.1	86.5	85.9	85.2	87.9	85.8	91.7	97.3	85.1	90.7	92.9	91.9	90.8	
2001	87.8	87.1	86.5	86.1	90.5	86.9	91.5	96.4	85.9	90.0	92.9	91.4	90.8	
2002	90.1	90.2	89.5	89.5	95.0	90.5	92.2	95.4	88.4	90.6	93.5	91.9	91.7	
2003	100.7	101.2	100.4	100.8	106.9	101.4	95.6	94.5	97.5	94.8	97.1	96.5	96.7	
2004	104.5	105.0	103.3	104.3	111.5	105.1	95.9	93.3	99.9	95.0	98.5	98.0	98.3	
2005	102.9	103.5	101.1	102.3	109.5	102.5	94.7	91.9	99.0	92.9	98.5	96.9	96.6	
2006	102.8	103.5	100.4	101.2	109.4	101.8	93.5	90.3	98.4	91.2	98.6	96.5	95.8	
2007	106.3	106.2	102.3	103.5	112.9	103.8	94.4	89.4	102.4	91.4	100.9	97.9	97.0	
2008	109.4	108.3	103.7	106.8	117.1	105.8	94.5	88.0	105.4	90.5	102.2	97.8	97.1	
2009	110.8	109.0	104.5	111.5	120.0	106.8	94.7	88.8	104.6	91.0	101.8	98.0	97.5	
2010	103.6	101.3	96.2	103.5	111.5	97.8	92.2	88.4	98.2	87.2	98.8	93.6	92.0	
2011	103.3	100.2	94.1	102.1	112.2	97.2	91.8	88.2	97.6	86.3	98.2	92.8	91.3	
2012	97.6	95.0	88.6	95.9	107.0	92.4	90.0	88.2	92.6	83.7	95.9	89.8	88.2	
2013	101.2	98.2	91.7	99.0	111.9	95.5	92.4	88.7	98.4	85.7	98.3	91.6	90.3	
2014	101.8	97.8	91.9	100.0	114.7	96.0	93.2	89.6	98.9	86.5	98.5	91.8	91.0	
2015	92.4	88.4	83.7	90.9	106.5	87.8	90.8	90.7	90.6	83.1	94.7	86.9	86.3	
2016	94.8	90.1	...	...	110.4	90.0	...	...	...	...	95.2	87.8	87.4	
2014 Jan	103.0	99.4			115.8	97.9					99.2	92.5	91.9	
Feb	103.2	99.6	93.6	101.9	116.3	98.2	93.6	89.2	100.6	87.1	99.0	92.6	92.0	
Mar	104.3	100.6			117.5	99.0					99.3	93.1	92.4	
Apr	104.2	100.4			117.0	98.4					99.2	93.1	92.2	
May	103.6	99.5	93.3	101.4	116.1	97.3	93.5	89.5	99.9	87.2	98.8	92.6	91.5	
June	102.7	98.7			115.1	96.5					98.7	92.3	91.2	
July	102.3	98.2			114.7	95.9					98.7	92.2	91.0	
Aug	101.5	97.5	91.2	99.5	114.0	95.3	92.9	89.7	98.1	86.2	98.4	91.8	90.7	
Sep	99.9	95.9			112.3	93.9					98.0	91.0	89.9	
Oct	99.1	94.9			111.8	93.2					97.6	90.4	89.4	
Nov	99.0	94.9	89.5	97.4	111.9	93.2	92.7	90.0	97.0	85.5	97.7	90.4	89.5	
Dec	99.0	94.8			113.1	93.8					97.6	90.2	89.8	
2015 Jan	95.2	91.1			108.9	90.1					95.7	88.2	87.5	
Feb	93.3	89.5	84.2	91.8	107.0	88.7	90.7	90.4	91.0	83.1	95.2	87.5	86.8	
Mar	90.6	86.9			103.8	85.9					94.3	86.1	85.2	
Apr	89.7	86.1			102.4	84.7					94.0	85.7	84.5	
May	91.6	87.8	82.4	89.8	104.7	86.5	90.4	90.6	89.8	82.4	94.6	86.6	85.6	
June	92.3	88.5			106.0	87.5					94.7	86.9	86.1	
July	91.3	87.5			105.1	86.6					94.3	86.3	85.6	
Aug	93.0	88.9	84.1	91.2	108.1	88.9	91.0	90.8	91.0	83.4	94.9	87.2	87.0	
Sep	93.8	89.6			109.6	90.1					95.1	87.6	87.7	
Oct	93.6	89.6			109.0	89.6					95.1	87.5	87.4	
Nov	91.1	87.1	84.1	90.6	106.0	86.8	91.0	91.0	90.8	83.5	94.1	86.3	85.9	
Dec	92.5	88.3			108.0	88.3					94.3	86.7	86.5	
2016 Jan	93.6	89.1			109.9	89.6					94.5	87.2	87.3	
Feb	94.7	90.0	85.6	91.9	111.3	90.8	91.4	91.2	91.5	84.2	94.9	87.6	87.7	
Mar	94.1	89.5			110.0	89.9					95.0	87.4	87.3	
Apr	94.8	90.1			110.6	90.2					95.4	87.9	87.6	
May	95.1	90.5	86.1	92.2	111.1	90.7	91.5	91.2	91.7	84.5	95.2	88.1	87.9	
June	94.7	90.2			110.5	90.2					95.0	87.9	87.6	
July	94.9	90.4			110.2	89.9					95.2	87.9	87.3	
Aug	95.2	90.6	86.2	92.2	110.6	90.2	91.7	91.2	92.1	84.6	95.4	88.0	87.5	
Sep	95.4	90.6			110.9	90.3					95.5	88.0	87.6	
Oct	95.5	90.8			110.6	90.1					95.9	88.2	87.6	
Nov	95.0	90.1	...	...	110.3	89.6	...	...	...	...	95.2	87.7	87.1	
Dec	94.2	89.3			109.2	88.7					94.8	87.3	86.5	

\* The effective exchange rate corresponds to the weighted external value of the currency concerned. The method of calculating the indicators of the German economy's price competitiveness is consistent with the procedure used by the ECB to compute the effective exchange rates of the euro (see Monthly Report, November 2001, pp 50-53, May 2007, pp 31-35 and August 2015, pp 40-42). For more detailed information on methodology see the ECB's Occasional Paper No 134 (www.ecb.eu). A decline in the figures implies an increase in competitiveness. <sup>1</sup> ECB calculations are based on the weighted averages of the changes in the bilateral exchange rates of the euro against the currencies of the following countries: Australia, Bulgaria, Canada, China, Croatia, Czech Republic, Denmark, Hong Kong, Hungary, Japan, Norway, Poland, Romania, Singapore, South Korea, Sweden, Switzerland, the United Kingdom and the United States. Where current price and wage indices were not available, estimates were used. <sup>2</sup> ECB calculations. Includes countries belonging to the EER-19 group (see footnote 1) and additional Algeria,

Argentina, Brazil, Chile, Iceland, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, Philippines, Russian Federation, South Africa, Taiwan, Thailand, Turkey and Venezuela. <sup>3</sup> Annual and quarterly averages. <sup>4</sup> Data for Argentina are currently not available due to the state of emergency in the national statistical system declared by the government of Argentina on 7 January 2016. As a consequence, Argentina is not included in the calculation of the EER-38 CPI deflated series from February 2016. The policy regarding the inclusion of Argentina will be reconsidered in the future depending on further developments. <sup>5</sup> Euro-area countries (from 2001 including Greece, from 2007 including Slovenia, from 2008 including Cyprus and Malta, from 2009 including Slovakia, from 2011 including Estonia, from 2014 including Latvia, from 2015 including Lithuania) as well as Canada, Denmark, Japan, Norway, Sweden, Switzerland, the United Kingdom and the United States. <sup>6</sup> Euro-area countries and countries belonging to the EER-19 group. <sup>7</sup> Euro-area countries and countries belonging to the EER-38 group (see footnote 2).

## Overview of publications by the Deutsche Bundesbank

This overview provides information about selected recent economic and statistical publications by the Deutsche Bundesbank. Unless otherwise indicated, these publications are available in both English and German, in printed form and on the Bundesbank's website.

The publications are available free of charge from the External Communication Division. Up-to-date figures for some statistical datasets are also available on the Bundesbank's website.

### ■ Annual Report

### ■ Financial Stability Review

### ■ Monthly Report

For information on the articles published between 2000 and 2016 see the index attached to the January 2017 Monthly Report.

### Monthly Report articles

#### February 2016

- The current economic situation in Germany

#### March 2016

- On the weakness of global trade
- German balance of payments in 2015
- Household wealth and finances in Germany: results of the 2014 survey
- The role and effects of the Agreement on Net Financial Assets (ANFA) in the context of implementing monetary policy

#### April 2016

- Stock market valuations – theoretical basics and enhancing the metrics

- The Phillips curve as an instrument for analysing prices and forecasting inflation in Germany

#### May 2016

- The current economic situation in Germany

#### June 2016

- Outlook for the German economy – macroeconomic projections for 2016 and 2017 and an outlook for 2018
- The macroeconomic impact of quantitative easing in the euro area
- Structure and dynamics of manufacturing production depth as reflected in the financial statements of German enterprises

#### July 2016

- Evolution of the Bank Lending Survey since the onset of the financial crisis
- Approaches to resolving sovereign debt crises in the euro area
- Bank recovery and resolution – the new TLAC and MREL minimum requirements

#### August 2016

- The current economic situation in Germany

#### September 2016

- Distributional effects of monetary policy

- Globalisation and the transmission of global financial shocks to the euro-area countries
  - implications for (national) economic policy
- The performance of German credit institutions in 2015

#### **October 2016**

- Local government finances: Development and selected aspects
- Significance and impact of high-frequency trading in the German capital market

#### **November 2016**

- The current economic situation in Germany

#### **December 2016**

- Outlook for the German economy – macro-economic projections for 2017 and 2018 and an outlook for 2019
- Wage dynamics amid high euro-area unemployment
- German enterprises' profitability and financing in 2015

#### **January 2017**

- The Eurosystem's bond purchases and the exchange rate of the euro
- Recent developments in the indebtedness of the private non-financial sector in selected euro-area countries

## **Statistical Supplements to the Monthly Report**

- 1 Banking statistics<sup>1, 2</sup>
- 2 Capital market statistics<sup>1, 2</sup>
- 3 Balance of payments statistics<sup>1, 2</sup>
- 4 Seasonally adjusted business statistics<sup>1, 2</sup>
- 5 Exchange rate statistics<sup>2</sup>

## **Special Publications**

Makro-ökonomisches Mehr-Länder-Modell, November 1996<sup>3</sup>

Europäische Organisationen und Gremien im Bereich von Währung und Wirtschaft, May 1997<sup>3</sup>

Die Zahlungsbilanz der ehemaligen DDR 1975 bis 1989, August 1999<sup>3</sup>

The market for German Federal securities, May 2000

Macro-Econometric Multi-Country Model: MEMMOD, June 2000

Bundesbank Act, September 2002

Weltweite Organisationen und Gremien im Bereich von Währung und Wirtschaft, March 2013<sup>3</sup>

Die Europäische Union: Grundlagen und Politikbereiche außerhalb der Wirtschafts- und Währungsunion, April 2005<sup>3</sup>

Die Deutsche Bundesbank – Aufgabenfelder, rechtlicher Rahmen, Geschichte, April 2006<sup>3</sup>

European economic and monetary union, April 2008

## ■ Special Statistical Publications

- 1 Banking statistics guidelines,  
July 2016<sup>2, 4</sup>
- 2 Bankenstatistik Kundensystematik,  
July 2016<sup>2, 3</sup>
- 3 Aufbau der bankstatistischen Tabellen,  
July 2013<sup>2, 3</sup>
- 4 Financial accounts for Germany 2010 to  
2015, May 2016<sup>2</sup>
- 5 Hochgerechnete Angaben aus Jahres-  
abschlüssen deutscher Unternehmen von  
1997 bis 2013, May 2015<sup>2, 3</sup>
- 6 Verhältniszahlen aus Jahresabschlüssen  
deutscher Unternehmen von 2012 bis 2013,  
May 2016<sup>2, 3</sup>
- 7 Notes on the coding list for the balance of  
payments statistics, September 2013<sup>2</sup>
- 8 The balance of payments statistics of the  
Federal Republic of Germany, 2nd edition,  
February 1991<sup>o</sup>
- 9 Securities deposits, August 2005
- 10 Foreign direct investment stock statistics,  
April 2016<sup>1, 2</sup>
- 11 Balance of payments by region,  
July 2013
- 12 Technologische Dienstleistungen in der  
Zahlungsbilanz, June 2011<sup>3</sup>

## ■ Discussion Papers\*

- 44/2016  
Optimal fiscal substitutes for the exchange rate  
in a monetary union
- 45/2016  
Support for the SME supporting factor – multi-  
country empirical evidence on systematic risk  
factor for SME loans
- 46/2016  
Time-varying volatility, financial intermediation  
and monetary policy
- 47/2016  
Macroeconomic now- and forecasting based  
on the factor error correction model using  
targeted mixed frequency indicators
- 48/2016  
On measuring uncertainty and its impact on  
investment: cross-country evidence from the  
euro area
- 49/2016  
The effect of conventional and unconventional  
euro area monetary policy on macroeconomic  
variables
- 50/2016  
The imperfect-common-knowledge Phillips  
curve: Calvo versus Rotemberg
- 51/2016  
Fire buys of central bank collateral assets
- 52/2016  
Trade in value added: Do we need new meas-  
ures of competitiveness?

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o Not available on the website.

\* As of 2000 these publications have been made available  
on the Bundesbank's website in German and English. Since  
the beginning of 2012, no longer subdivided into series 1  
and series 2.

For footnotes, see p 86•.

## ■ Banking legislation

- 1 Bundesbank Act, July 2013, and Statute of the European System of Central Banks and of the European Central Bank, June 1998
- 2 Banking Act, July 2014<sup>2</sup>

2a Solvency Regulation, December 2006<sup>2</sup>  
Liquidity Regulation, December 2006<sup>2</sup>

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- 1 Only the headings and explanatory notes to the data contained in the German originals are available in English.
- 2 Available on the website only.
- 3 Available in German only.
- 4 Only some parts of the Special Statistical Publications are provided in English. The date refers to the German issue, which may be of a more recent date than the English one.