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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 Data unknown, not to be published or not meaningful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 still on strong growth path at year-end

The strong upturn in output in the German economy since the beginning of the year is likely to be continuing in the final quarter of 2017. This does not conflict with weaker production activity in industry and the construction sector in October, as this decline was probably very largely due to the exceptional calendar constellation with two “bridge” days. The fact that new industrial orders are continuing to provide a strong stimulus means that industry is likely to remain the driving force behind the upturn. This is consistent with the Ifo business climate index in manufacturing in November reaching a new record high since German reunification. Given the large backlog of orders, the construction sector is likely to be well able to maintain its heightened level of activity in spite of declining orders. Extremely optimistic consumer sentiment and the excellent situation on the labour market continue to provide positive stimuli for economic activity.

Industry

Significant dampener in industry probably for calendar-related reasons

Industrial output in October 2017 was sharply down on the month in seasonally adjusted terms (-2%). It was also considerably lower than its third-quarter level (-1¾%). The exceptional calendar constellation with two “bridge” days around the Day of German Unity and Reformation Day, which had been declared a public holiday this year in all federal states, is likely to have played a major part in the lower level of output in the reporting month. This evidently led in many firms to very little work or no work at all being performed on the working day prior to each of these public holidays. This is suggested by the fact that the fall in production was quite broadly based. The decline was particularly sharp in the automotive sector

(-7%), which has many production sites in federal states which had two consecutive public holidays this year. This was also the reason for the very strong contraction in capital goods output (-2¾%). Moreover, producers of consumer goods reported substantial cutbacks in production (-2%). By contrast, intermediate goods producers cut back their output markedly less (-¾%).

Following an already exceptionally strong third quarter, the upturn in the intake of industrial orders continued in October. The volume of the previous month was exceeded by ½% in seasonally adjusted terms. The inflow of new orders, at +2½%, was up substantially on the quarter. The regional breakdown shows that many orders were received from non-euro area countries, in particular (+3¾%). German motor vehicle manufacturers were the main beneficiaries of the buoyant demand. There was also a considerable increase in the inflow of orders from Germany (+1½%) and from other euro area countries (+2½%); German enterprises received, in particular, a significantly greater number of large-scale orders from these regions than they did in the third quarter. In a sectoral breakdown, higher demand for capital goods (+4¾%) was clearly dominant. By contrast, the inflow of orders for consumer goods showed a noticeably more modest increase (+½%). Producers of intermediate goods, who reported a larger-than-average increase in orders in the third quarter, in fact reported a slight decline in the reporting month (-½%).

Further substantial increase in new orders

Industrial sales followed industrial output in October and fell sharply on the month in seasonally adjusted terms (-1¾%). This meant that they were also clearly below their level in the third quarter (-1½%). This decline was due principally to the sharp drop in sales of motor vehicles and motor vehicle parts, although this came on the back of exceptionally strong growth in the third quarter. This meant that

Industrial sales down, exports lacking momentum

Economic conditions in Germany*

Seasonally adjusted

Period	Orders received (volume); 2010 = 100			
	Industry			Main construction
	Total	of which		
	Domestic	Foreign		
2017 Q1	113.8	107.6	118.9	133.7
Q2	114.7	108.0	120.2	129.6
Q3	118.9	111.5	125.0	126.4
Aug	120.0	112.6	126.1	124.7
Sep	121.4	112.7	128.5	125.6
Oct	122.0	113.2	129.1	...
Output; 2010 = 100				
Period	Industry			Construction
	Total	of which		
		Intermediate goods	Capital goods	
2017 Q1	113.3	109.0	120.8	112.7
Q2	114.9	111.0	122.6	116.3
Q3	117.0	112.9	125.0	115.2
Aug	118.7	113.7	127.9	114.6
Sep	117.3	113.1	125.0	115.3
Oct	114.9	112.0	121.6	113.8
Foreign trade; € billion				Memo item Current account balance in € billion
Exports	Imports	Balance		
2017 Q1	313.42	254.02	59.40	64.38
Q2	318.48	257.76	60.72	58.68
Q3	320.71	258.12	62.59	67.55
Aug	107.89	86.57	21.32	23.45
Sep	107.48	85.62	21.86	22.63
Oct	107.04	87.15	19.89	19.59
Labour market				
Period	Employment	Vacancies ¹	Unemployment	Unemployment rate in %
	Number in thousands			
2017 Q1	44,086	694	2,586	5.9
Q2	44,224	713	2,544	5.7
Q3	44,358	742	2,523	5.7
Sep	44,406	752	2,505	5.6
Oct	44,447	759	2,494	5.6
Nov	...	767	2,476	5.6
Prices				
Period	Import prices	Producer prices of industrial products	Construction prices ²	Harmonised consumer prices
	2010 = 100			2015 = 100
2017 Q1	102.3	104.3	115.5	101.5
Q2	101.1	104.5	116.6	101.8
Q3	100.3	104.9	117.5	102.3
Sep	101.0	105.2	.	102.5
Oct	101.7	105.5	.	102.4
Nov	...	...	.	102.6

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

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there was also a considerable fall in the sales of capital goods manufacturers as a whole. This contrasted with producers of intermediate and consumer goods, who posted strong sales growth. In regional terms, there were slight falls in domestic sales and strong losses in export turnover. In line with this, nominal exports of goods were down on the month (-½%). In comparison with the average of the third quarter, this still represented a slight increase (+¼%), but there was a marginal decline in real terms (-¼%). In October, nominal seasonally adjusted imports of goods showed a distinctly stronger month-on-month increase (+1¾%), and were thus considerably up (+1¼%) on their level in the third quarter. As import prices went up at the same rate, real imports of goods remained at the level of the previous quarter in price-adjusted terms.

Construction

Seasonally adjusted construction output in October 2017 showed a steep decline on the month (-1¼%). There was a similar degree of failure to match the average level of activity in the third quarter. In the construction sector, like in industry, the exceptional calendar constellation with two "bridge" days is likely to have played a key role in the noticeable dampening of activity. There was a significantly stronger decline in output in the main construction sector (-1¾%) than in the finishing trades (-¼%). Firms in the main construction sector were receiving considerably fewer new orders in the third quarter – figures are available up to then – compared with the second quarter. Nevertheless, the large volume of the order backlog – as can be gauged, say, from the reach of orders – indicates that construction output will continue to be booming for the foreseeable future.

Steep decline in construction output

Labour market

Employment continued to grow strongly at the beginning of the fourth quarter. In October, the

Strong increase in employment; outlook remains very positive

total seasonally adjusted number of persons in work in Germany went up by 41,000 on the month. Compared to the same month last year, this was an increase of 650,000, or 1.5%. This development has been sustained throughout by the favourable development in jobs subject to social security contributions. By contrast, there was a further decline in the number of persons working exclusively in low-paid part-time jobs and the self-employed. Leading indicators of the demand for labour, such as the Ifo employment barometer, the Federal Employment Agency's BA-X job index and the labour market barometer of the Institute for Employment Research (IAB) are all at an extremely high level, suggesting that positive job growth is set to continue in the next few months. Nevertheless, it is becoming increasingly difficult to fill vacancies adequately. The steady increase in the time needed to fill vacancies is one indication of this.

Significant decline in registered unemployment

After seasonal adjustment, unemployment in November showed a significant fall on the month. There were 2.48 million persons registered as unemployed with the Federal Employment Agency. The unemployment rate at the end of the period under review was still 5.6%. Compared with the previous year, 164,000 fewer persons were out of work, and the unemployment rate was 0.4 percentage point lower. Overall underemployment, which also counts the number of persons taking part in labour market policy measures, showed a marginally stronger decrease compared with October. The unemployment component of the IAB labour market barometer was still clearly positive recently, suggesting that unemployment will go on falling over the next few months.

Prices

Steep rise in crude oil prices

Crude oil prices, which had been going up since the middle of the year, increased at a faster pace in November and were around 9% higher than the figure for October. This was due to both the fundamentals and growing

geopolitical uncertainties. Prices showed a further slight increase in the first half of December. As this report went to press, the price of a barrel of Brent crude oil stood at US\$63. The discount on crude oil futures was US\$1½ for deliveries six months ahead and US\$3¼ for deliveries 12 months ahead.

Import prices increased again markedly in October in seasonally adjusted terms. This was true of both energy and other goods. Domestic producer prices presented a similar picture, albeit at slightly lower rates. As inflation at both the producer and import level was, in most cases, even stronger a year ago, the year-on-year rates fell slightly in each case from around 3% to 2¾%; it was only in imports excluding energy that the rate persisted at 1¾%.

Consumer prices (HICP) increased moderately again in November by a seasonally adjusted 0.2% after declining slightly in the previous month. There was a noticeable increase in energy prices in line with crude oil prices, and the prices of services were also higher than in the previous month. There was another moderate rise in housing rents. By contrast, lower prices in the case of unprocessed food offset the effects of higher prices for dairy products, and the prices of industrial goods (excluding energy) likewise remained virtually unchanged. Annual headline HICP inflation increased from +1.5% to +1.8% (CPI similarly from 1.6% to 1.8%), while HICP inflation excluding energy and food went up from +1.1% to +1.3%. The headline rate is expected to be significantly lower over the coming months owing to base effects in the case of energy.

Further rise in import and producer prices in domestic sales

Consumer prices going up again

■ Public finances

Statutory health insurance scheme

Overall, the statutory health insurance (SHI) scheme recorded a surplus of €½ billion in the third quarter of 2017, which was broadly un-

Statutory health insurance scheme still in good financial shape

changed on the year. First, the health insurance institutions posted a surplus of €1 billion, as they did in the previous year. The surplus is attributable not only to a seasonal component but also to the fact that increases in expenditure continued to lag behind the figures that had been estimated when the supplementary contributions were determined. Second, following special transfers of €½ billion to the health insurance institutions, the health fund's deficit increased slightly to €½ billion.

Rise in spending on benefits remains moderate

With supplementary contribution rates remaining unchanged on average, the health insurance institutions' revenue (mainly transfers from the health fund) climbed by 4% on the year. By comparison, expenditure rose at a slightly more subdued rate of just over 3½%. Of the total expenditure on benefits, the increase in spending was below average in the case of both hospital treatment, the most significant item in quantitative terms, and the less significant remedies and therapeutic appliances (+2% and +2½% respectively). By contrast, the rise in outlays on outpatient treatment (+5%) and pharmaceuticals (+4½%) was above average. Overall, the increase in spending on benefits stood at 3½%. In view of the continued strong growth in the number of insured persons (+1%), this is a fairly moderate increase. Many of these newly insured persons are probably immigrants,¹ a group that appears to not only have a more favourable age structure than that of existing insured persons (as far as the health insurance institutions' finances are concerned) but also to make less use of health services. In terms of other expenditure, administrative spending increased by 4%, not least because of the health insurance institutions' higher pension provisions.

Health fund feels strain of special transfers

The health fund's revenue increased by 4% in the third quarter, with contribution receipts from persons in employment rising at a slightly higher rate (+4½%) against a backdrop of ongoing favourable developments in wages and employment. By contrast, following the somewhat more moderate pension increase in mid-

2017, pension contributions were up by a markedly lower rate of 2½%. Turning to other revenue items, the planned increase of €½ billion per year in the central government grant to its new standard level of €14½ billion per year also made a positive impact. At 4½%, however, the rise in spending by the health fund was more pronounced than its increase in revenue on account of the fund's special transfers to the health insurance institutions.

In autumn 2016, the group of SHI estimators had forecast a €2 billion deficit in the health fund for 2017 as a whole.² This was due to special transfers to the health insurance institutions that were adopted by legislators, which totalled €1½ billion, as well as €½ billion to be drawn from the reserves for the innovation fund and the structural fund.³ Following the first three quarters, however, a significantly smaller deficit is on the cards for the year as a whole. The improved revenue developments are chiefly due to employment dynamics having generally been underestimated at that time.⁴ As a result, the special transfers can probably be covered for the most part by current revenue. At the time of estimation, the health insurance institutions' spending on benefits was expected to rise by 5%; however, the increase is now likely to be significantly below this. In October of this year, the group of SHI estimators was unable to mutually agree

Considerable surplus for year as a whole, making marked improvement foreseeable

¹ The term "immigrant" refers to persons migrating to participate in the labour market, but also to refugees.

² Spending by the health fund, and thus primarily revenue generated by the health insurance institutions as well, is determined prior to the start of the year and not adjusted as it progresses. Revenue adjustments therefore affect the health fund, whilst unexpected expenditure developments are felt by the health insurance institutions.

³ The innovation fund is used by the health fund and health insurance institutions to provide annual funding of €300 million, starting in 2016 and ending in 2019, for innovations in healthcare provision and related research. Funding provided by the structural fund (totalling €500 million) is channelled into state government investment to improve healthcare provision structures in the hospital sector, with federal states being required to invest the same amount in each case.

⁴ After a temporary data processing error by the Federal Employment Agency was remedied, growth in employment subject to social security contributions underwent a huge upward correction in the second half of 2016.

on an expenditure projection. However, in view of developments over the first nine months (a year-on-year rise of 3½%), the estimates put forward by the Federal Ministry of Health and the German Federal Insurance Office (+4%) – which are slightly lower than those of the representatives of the health insurance institutions – could also still be slightly too high. For the year as a whole, the health insurance institutions are therefore set to record a considerably higher surplus than last year (2016: +€1½ billion). A significant surplus of around €2 billion in the annual accounts thus appears likely for the overall SHI scheme, which equates to a marked year-on-year improvement (2016: almost +€1 billion).

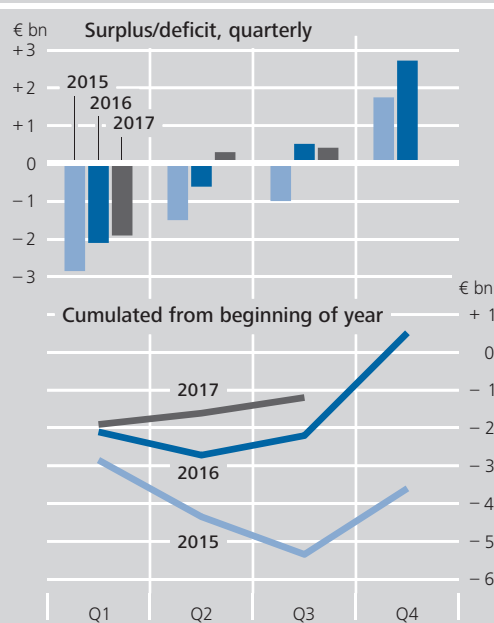
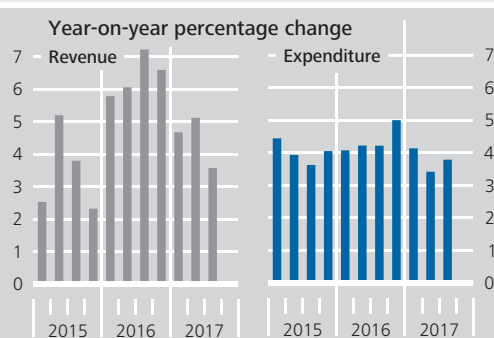
Low health fund deficit expected for 2018

For the coming year, the group of SHI estimators expects a rise in income subject to compulsory insurance contributions of 4%, with both employee contributions and pension contributions increasing to only a slightly lesser degree than in the current year. The health fund will transfer the estimated revenue⁵ to the health insurance institutions. According to the group, the health fund will post a deficit totalling €½ billion arising from the funds to be drawn from the liquidity reserve and transferred to the innovation fund and the structural fund. Total expenditure is expected to rise by 4½%.⁶ The slight acceleration is largely due to anticipated catch-up effects, as some of the new benefits adopted will not be implemented until 2018 and will therefore have no impact on expenditure until that time.

Lowering of supplementary contribution rates plausible

Based on its estimate, the Federal Ministry of Health has lowered the necessary arithmetical supplementary contribution rate to cover relevant expenditure by 0.1 percentage point to 1.0%. The health insurance institutions' estimate would have yielded a somewhat higher supplementary contribution rate of 1.1% that was unchanged from 2017. The extent to which the supplementary contribution rates of each health insurance institution will actually be adjusted is up to the institutions themselves. Current and expected developments suggest that

Finances of the statutory health insurance scheme*

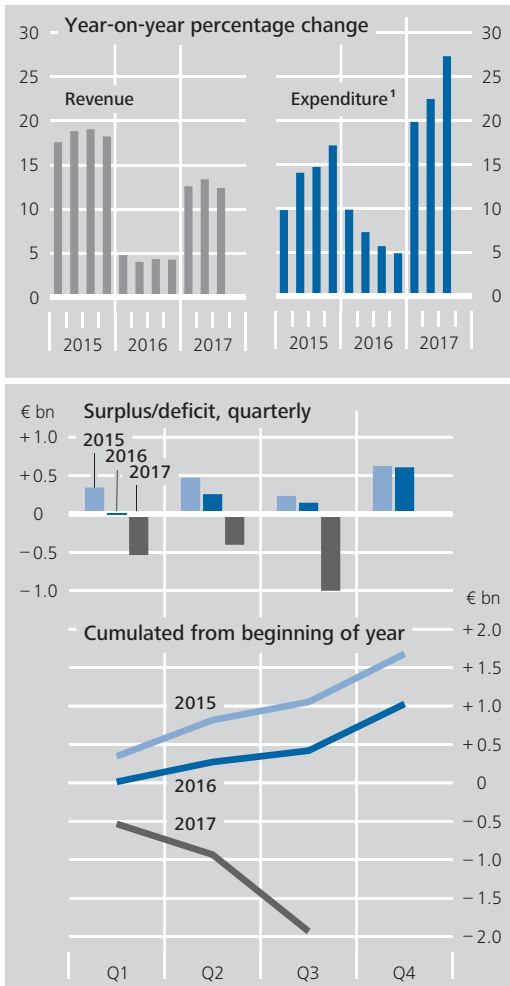


Source: Federal Ministry of Health. * Health fund and health insurance institutions (consolidated). Preliminary quarterly results.
 Deutsche Bundesbank

there will be scope for contribution rate cuts. Efficiency improvements in the healthcare system are a major item on the agenda so as to limit contribution rate increases in the future.

⁵ Including the central government grant and after deducting its relatively low administrative costs.
⁶ The Federal Ministry of Health expects a slightly lower level of expenditure than the representatives of the health insurance institutions as their similar growth estimates are based on different spending estimates for 2017.

Finances of the public long-term care insurance scheme*



Source: Federal Ministry of Health. * Preliminary quarterly results (PV45). ¹ Including the transfers to the long-term care provident fund.
 Deutsche Bundesbank

Public long-term care insurance scheme

Significant deficit in Q3 ...

The public long-term care insurance scheme posted a deficit of €1 billion in the core area⁷ in the third quarter of 2017 compared with a broadly balanced budget in the previous year. This deterioration was attributable, first and foremost, to the benefit increases introduced under the second Act to Strengthen Long-term Care (*Pflegestärkungsgesetz II*). While total revenue exceeded its prior-year figure by 12½% after the contribution rate was raised,⁸ growth in total expenditure was considerably stronger

still at 27½%, with expected high growth in the first half of the year ramping up significantly once again. High growth was recorded in all benefit areas as a result of the scheme's range of benefits undergoing reform. Benefits in kind, together with cash benefits, which are quantitatively less significant, contributed in similar absolute terms to the overall increase (+20% and +54% respectively).

... due to substantial additional expenditure resulting from long-term care reform

A significant deficit and a sharp deterioration are also expected for the year as a whole. All in all, additional expenditure in connection with the latest long-term care reform appears to be higher than originally expected by legislators. Even though the imminent adjustment of benefit rates in 2018 was brought forward under the reform, demographic change will cause the freely available portion of the long-term care insurance institutions' operational reserves⁹ to be gradually depleted in the years to come and further contribution rate rises to be needed in future.

Clear deficit expected for year as a whole, and further contribution rate increases anticipated in future

Securities markets

Bond market

At €93.6 billion, gross issuance in the German bond market in October 2017 was up on the previous month's figure (€83.6 billion). However, after deducting redemptions and taking account of changes in issuers' holdings of their own debt securities, net redemptions of domestic debt securities came to €10.2 billion. The outstanding volume of foreign debt securities in Germany declined by €1.9 billion during

Net redemptions in the German bond market

⁷ The developments outlined here and below exclude consolidation with the long-term care provident fund. Since 2015, the core area has transferred the receipts from 0.1 percentage point of the contribution rate (just under €½ billion in the third quarter of 2017) to this fund.

⁸ On 1 January 2017, the contribution rate was raised from 2.35% to 2.55% (plus an extra 0.25 percentage point in each case for childless persons). Adjusted for the contribution rate rise, the increase stood at around 3½%.

⁹ In total, these reserves amounted to around €7½ billion at the end of the third quarter of 2017 and were thus far above the statutory minimum of 50% of regular monthly expenditure (currently just under €1½ billion).

the reporting month, which meant that the outstanding volume of debt instruments in the German market decreased by €12.1 billion overall.

Fall in credit institutions' capital market debt

Domestic credit institutions redeemed bonds worth €9.8 billion net in October (compared with €8.6 billion in September). There was a fall, in particular, in the outstanding volume of other bank debt securities (€9.8 billion), but also, to a lesser extent, in the outstanding volume of debt securities issued by specialised credit institutions (€1.5 billion). This contrasted with net issuance of mortgage Pfandbriefe and public Pfandbriefe to the tune of €1.3 billion and €0.2 billion respectively.

Net redemptions in the corporate sector

In the reporting month, domestic enterprises lowered their capital market debt by €2.8 billion net, compared with €3.5 billion in the previous month. Viewed in net terms, the redemptions were attributable solely to non-financial corporations, while other financial intermediaries issued bonds on balance.

Net public sector issuance

In October, the public sector issued debt securities worth €2.4 billion net (following net redemptions of €6.2 billion in September). On balance, this was solely attributable to state and local governments, which issued new bonds worth €3.7 billion. Central government, by contrast, reduced its debt by €1.4 billion in net terms. Five-year Federal notes (Bobl) accounted for the bulk of the redemptions (€13.3 billion). This contrasted with net issuance of ten-year Federal bonds (Bunds) worth €7.0 billion and two-year Federal Treasury notes (Schätze) worth €4.2 billion.

Purchases of debt securities

In the reporting month, the Deutsche Bundesbank was the predominant buyer in the German bond market, purchasing debt securities for €12.2 billion net, largely under the Eurosystem's asset purchase programmes. Domestic non-banks expanded their bond portfolios by €7.9 billion, concentrating mainly on domestic public sector instruments. By contrast, non-resident investors and domestic credit institu-

Sales and purchases of debt securities

€ billion

Item	2016	2017	
	October	September	October
Sales			
Domestic debt securities ¹	- 6.3	- 18.3	- 10.2
<i>of which</i>			
Bank debt securities	0.6	- 8.6	- 9.8
Public debt securities	- 10.3	- 6.2	2.4
Foreign debt securities ²	- 2.6	4.4	- 1.9
Purchases			
Residents	11.0	1.4	15.2
Credit institutions ³	- 7.6	- 8.4	- 4.9
Deutsche Bundesbank	17.3	12.9	12.2
Other sectors ⁴	1.3	- 3.1	7.9
<i>of which</i>			
Domestic debt securities	0.2	- 9.4	6.7
Non-residents ²	- 19.9	- 15.2	- 27.3
Total sales/purchases	- 9.0	- 13.8	- 12.1

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.

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tions sold debt securities for €27.3 billion and €4.9 billion net respectively.

Equity market

In October, domestic enterprises placed €0.6 billion worth of new shares in the German equity market. The volume of foreign equities in the German market rose by €1.7 billion. On balance, shares were purchased chiefly by foreign investors (€2.9 billion), but also by domestic credit institutions (€0.7 billion). Domestic non-banks sold equities for €1.3 billion in net terms, all of which were German shares, on balance.

Little net issuance in the German equity market

Mutual funds

Domestic mutual funds recorded net inflows of €11.0 billion in October (compared with €3.2 billion in September). On balance, specialised

German mutual funds record inflows

Major items of the balance of payments

€ billion

Item	2016		2017	
	Oct	Sep	Oct	OctP
I Current account	+ 18.4	+ 25.8	+ 18.1	
1 Goods ¹	+ 20.5	+ 25.7	+ 20.4	
Exports (fob)	100.2	109.7	106.4	
Imports (fob)	79.8	84.1	86.1	
<i>Memo item</i>				
Foreign trade ²	+ 18.8	+ 24.1	+ 18.9	
Exports (fob)	101.1	110.4	108.0	
Imports (cif)	82.2	86.3	89.1	
2 Services ³	- 3.6	- 2.5	- 3.6	
Receipts	20.8	22.4	22.1	
Expenditure	24.3	24.9	25.7	
3 Primary income	+ 5.1	+ 5.7	+ 5.5	
Receipts	14.6	15.2	14.6	
Expenditure	9.5	9.5	9.1	
4 Secondary income	- 3.6	- 3.1	- 4.2	
II Capital account	- 0.2	+ 0.2	- 0.2	
III Financial account				
(increase: +)	+ 30.4	+ 30.4	+ 16.4	
1 Direct investment	+ 13.3	+ 2.9	+ 8.4	
Domestic investment				
abroad	+ 8.8	+ 13.3	+ 10.0	
Foreign investment				
in the reporting country	- 4.5	+ 10.5	+ 1.6	
2 Portfolio investment	+ 21.9	+ 24.5	+ 30.1	
Domestic investment				
in foreign securities				
Shares ⁴	+ 5.6	+ 10.4	+ 6.6	
Investment fund				
shares ⁵	+ 1.6	+ 3.0	+ 1.4	
Long-term debt				
securities ⁶	+ 6.6	+ 3.0	+ 7.2	
Short-term debt				
securities ⁷	- 1.5	+ 6.7	- 0.3	
Foreign investment				
in domestic securities				
Shares ⁴	- 16.4	- 14.1	- 23.5	
Investment fund				
shares	+ 3.4	+ 1.4	+ 2.8	
Long-term debt				
securities ⁶	+ 0.1	- 0.2	+ 1.0	
Short-term debt				
securities ⁷	- 13.1	- 15.3	- 23.3	
3 Financial derivatives ⁸	- 6.8	+ 0.1	- 4.0	
4 Other investment ⁹	+ 4.5	+ 1.1	+ 1.3	
Monetary financial				
institutions ¹⁰	- 9.2	+ 1.3	- 24.7	
of which				
Short-term	+ 4.4	- 22.9	- 11.4	
Enterprises and				
households ¹¹	- 1.3	- 22.5	- 11.0	
General government				
Bundesbank	- 6.8	+ 1.9	+ 0.3	
Bundesbank	- 5.9	- 4.0	+ 0.7	
Bundesbank	- 0.8	+ 26.4	- 14.3	
5 Reserve assets	- 0.1	+ 0.6	+ 1.2	
IV Errors and omissions ¹²	+ 12.2	+ 4.4	- 1.5	

1 Excluding freight and insurance costs of foreign trade. 2 Special trade according to the official foreign trade statistics (source: Federal Statistical Office). 3 Including freight and insurance costs of foreign trade. 4 Including participation certificates. 5 Including reinvestment of earnings. 6 Long-term: original maturity of more than one year or unlimited. 7 Short-term: original maturity of up to one year. 8 Balance of transactions arising from options and financial futures contracts as well as employee stock options. 9 Includes in particular loans and trade credits as well as currency and deposits. 10 Excluding the Bundesbank. 11 Includes the following sectors: financial corporations (excluding monetary financial institutions) as well as non-financial corporations, households and non-profit institutions serving households. 12 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.

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funds reserved for institutional investors were virtually the sole beneficiaries (€10.1 billion). Among the fund providers, mixed securities funds (€6.4 billion) were the main sellers of new shares, followed by bond funds (€1.9 billion) and open-end real estate funds (€1.2 billion). The outstanding volume of foreign mutual fund shares distributed in Germany increased by €7.2 billion during the reporting month. Domestic non-banks were virtually the only buyers of mutual fund shares in October (€16.7 billion). Foreign investors and German credit institutions acquired mutual fund shares worth €1.0 billion and €0.4 billion net respectively.

Balance of payments

Germany's current account posted a surplus of €18.1 billion in October 2017, which was €7.7 billion below the previous month's level. This was caused by a decline in the goods account surplus and a lower invisible current transactions balance, which comprises services as well as primary and secondary income.

Current account surplus down

The October surplus on the goods account was €5.3 billion down on the month at €20.4 billion, with exports of goods falling, while imports rose.

Narrower surplus in goods account

In October, invisible current transactions showed a deficit of €2.3 billion, following broadly balanced income and expenditure balances one month earlier (€0.1 billion). One factor behind this deterioration was the services account deficit growing by €1.1 billion to €3.6 billion, with lower income and increased expenditure both playing a part in this. On the revenue side, it was primarily income from the use of intellectual property that went up, but this was more than offset, in particular, by a decline in receipts from IT and other business services. On the expenditure side, travel-related payments to non-residents saw the largest increase. This was accompanied by a €1.1 billion fall in the secondary income balance to a def-

Decline in the invisible current transactions balance

icit of €4.2 billion, not least on account of lower general government revenue from current taxes paid by non-residents on income and wealth, together with increased government expenditure on current transfers relating to international cooperation. By contrast, the drop in net receipts in the primary income balance by €0.3 billion to €5.5 billion had little impact. This was due mainly to lower income from dividends paid by non-residents.

tember. Domestic enterprises supplied their affiliates abroad with funds worth €10.0 billion net. This was achieved both by boosting their equity capital (€6.1 billion) – chiefly through reinvested earnings – and by expanding their intra-group lending (€3.9 billion). Net funds flowing into Germany in the shape of direct investment came to €1.6 billion. In this context, non-resident investors provided German enterprises with additional equity capital totalling €2.0 billion, predominantly in the form of reinvested earnings. By contrast, intra-group lending from abroad decreased slightly (€0.4 billion).

Other statistically recorded investment, which comprises loans and trade credits (where these do not constitute direct investment), bank deposits and other investments, saw net capital imports of €24.7 billion in October. These arose from high net inflows of funds within the banking system, with funds from abroad flowing to the Bundesbank (€14.3 billion), as well as to monetary financial institutions (€11.4 billion). On balance, the transactions settled via Bundesbank accounts led to a decline in its TARGET2 claims. The cross-border activities of non-banks, by contrast, resulted in modest net outflows. Net capital exports were recorded not just by general government (€0.7 billion) but also by enterprises and households (€0.3 billion).

The Bundesbank's reserve assets rose – at transaction values – by €1.2 billion in October.

*Capital outflows
in portfolio
investment*

In the reporting month, the international financial markets were influenced by a favourable economic outlook and decreasing risk aversion. Against this backdrop, Germany's cross-border portfolio investment generated net capital exports in the amount of €30.1 billion, compared with €24.5 billion in September. Foreign investors sold German securities totalling €23.5 billion net during the month under review, mainly parting with long-term debt securities (€23.3 billion) – particularly private bonds – and money market paper (€4.0 billion). Extensive redemptions also played a key role. By contrast, they acquired German shares (€2.8 billion) and mutual fund shares (€1.0 billion). German investors purchased foreign securities to the tune of €6.6 billion net, focusing on mutual fund shares (€7.2 billion) and shares (€1.4 billion), but disposing of money market instruments (€1.6 billion) and bonds (€0.3 billion).

*Direct invest-
ment sees net
capital exports*

Direct investment likewise generated net capital exports in October; these amounted to €8.4 billion, compared with €2.9 billion in Sep-

*Capital imports
in other invest-
ment*

Reserve assets

Outlook for the German economy – macroeconomic projections for 2018 and 2019 and an outlook for 2020

Germany's economy is experiencing a strong upswing. Driven by lively foreign demand, industry is seeing dynamic growth and the sharp upturn in business investment is persisting. Private consumption and housing investment continue to benefit from the outstanding labour market situation. According to the current forecast, this broad-based, robust economic upswing is reaching an increasingly mature state, which means that the pace of growth is likely to slow in the medium term and converge to that of potential growth. As a result, exports will grow less dynamically, with further growth potential being constrained above all by strong capacity utilisation and, in particular, labour shortages.

In this scenario, the German economy could post strong calendar-adjusted growth rates of 2.6% this year and 2.5% next year, before expanding at a slower pace of 1.7% in 2019 and 1.5% in 2020 (in unadjusted terms: 2.3% in 2017 and 1.9% in 2020). The growth rates of gross domestic product (GDP) are thus considerably outpacing those of potential output, particularly in the short term, and aggregate capacity utilisation could soon reach similarly high levels to those seen at the peak of the last economic cycle in 2007. This will be accompanied by increasing bottlenecks in the labour market and perceptibly rising wage increases.

As measured by the Harmonised Index of Consumer Prices (HICP), the inflation rate, which has increased considerably to 1.7% on average for 2017 owing to markedly higher crude oil prices as well as food shortages, is likely to remain similarly high until 2019 and could rise to 1.9% in 2020. Energy prices, which according to expectations will scarcely rise any further, conceal increasing price pressure among other goods and services resulting predominantly from more dynamic wage growth. Excluding energy and food, inflation is therefore likely to climb from 1.3% in 2017 to 1.9% in 2019. An inflation rate of 2.1% is conceivable for 2020.

Public finances are developing very favourably under the current fiscal policy stance. Buoyed by the exceptionally good state of the economy and the low interest rates, the fiscal surplus would therefore rise noticeably above 1% of GDP in the coming years. However, it is to be expected that additional budgetary burdens will be adopted after the new government has been formed and that fiscal policy will therefore be more expansive. This is a key reason why, all in all, the risks for economic growth – and to a slight extent for price developments – are deemed to be tilted to the upside.

Compared with the June 2017 projection, economic growth expectations have now risen significantly, particularly for 2017 and 2018. Mainly due to the changed outlook for energy prices, the inflation forecast has been raised somewhat for 2017 and 2018 and lowered slightly for 2019.

■ Economic outlook¹

German economy continued its strong upturn in the second and third quarters of 2017 ...

The German economy grew sharply in the second and third quarters of 2017, even somewhat exceeding the strong pace of growth seen in the fourth quarter of 2016 and the first quarter of 2017. In the second and third quarter, real gross domestic product (GDP) rose by 1.5% overall in seasonally and calendar adjusted terms, and thus considerably more strongly than expected in the June projection.² Driven by lively foreign demand, the value added of the manufacturing sector increased sharply. This led to a further rise in capacity utilisation, with enterprises investing more than before in tangible fixed assets. Investment in housing construction also rose again considerably, although signs are showing that the construction sector is increasingly nearing its capacity limits. With a large boost from the favourable development in the labour market, private consumption also expanded considerably.

... and is also likely to expand strongly in the fourth quarter of 2017 and the first quarter of 2018

Growing at rates far above those of potential output, the German economy's high underlying pace of economic growth is likely to continue in the fourth quarter of 2017 and the first quarter of 2018. The recent very strong inflow of orders as well as the record high level of sentiment in the manufacturing sector indicate that industrial activity will continue to rise robustly. As there are a large number of orders, in particular from abroad, and as export expectations are especially optimistic, exports are likely to rise sharply. The increasing capacity utilisation and the lively demand are likely to motivate enterprises to invest more in machinery and equipment. Private consumption also remains on a clearly upward trajectory in light of the marked rise in employment and optimistic consumer sentiment.

Easing of GDP growth in the medium term due to labour shortages and less dynamic exports

Over the course of the projection horizon, it is to be expected that the German economy's current high pace of growth will slow. The considerable deceleration in employment growth, caused principally by demographic and migration factors, will amplify the shortage of skilled

labour that is already perceptible in some sectors. On the supply side, it will therefore be increasingly difficult to maintain a rate of growth that is markedly higher than that of potential output. On the demand side, the currently high rates of export growth are likely to initially align with the lower, and progressively falling, growth in the markets for German exports, and subsequently fall even slightly below this level. This will probably contribute to corporate investment rising more slowly. In addition, the labour supply's slowing growth rates could also have a dampening effect here, as enterprises are less likely to invest in new tangible fixed assets if they anticipate a shortage of skilled labour. The expansion of private consumption could likewise be dampened by the slowing rise in employment. It is not expected that higher real wage growth will be enough to fully offset the braking effect on households' real disposable income.

All this paints a picture of a strong upswing that is reaching an increasingly mature state, whereby the pace of growth is set to slow over time due to a decelerating rise in demand and, above all, gradual supply-side restrictions. Calendar-adjusted real GDP is likely to advance strongly by 2.6% in 2017 and – helped by the high statistical overhang at the beginning of the year – by 2.5% in 2018. In 2019 and 2020, growth rates could fall back to 1.7% and 1.5% respectively. As 2017 has fewer working days than 2016, the growth rate for the current year without adjusting for calendar effects is lower at 2.3%. While such calendar effects scarcely play a role in the coming two years, they increase the growth rate in 2020 by a considerable 0.4 percentage point to 1.9%. The GDP growth rates for 2017 and 2018 are thus expected to be significantly higher than estimated in the June projection, while the growth rate

Economy likely to grow considerably more strongly in 2017 and 2018 than expected in June

¹ This projection for Germany was completed on 30 November 2017. It was incorporated into the projection for the euro area published by the ECB on 14 December 2017.
² See Deutsche Bundesbank, Outlook for the German economy – macroeconomic projections for 2017 and 2018 and an outlook for 2019, Monthly Report, June 2017, pp 11-27.

for 2019 has been revised upwards only marginally (see the table on page 31). An important factor in this upward revision is the greater dynamics³ across the entire upswing, combined with perceptibly higher growth in German export markets for 2018 and somewhat higher growth in these markets for 2019 (see the box on pages 20 to 22).

Aggregate capacity utilisation climbs to an exceptionally high level

According to this projection, the German economy will grow considerably faster than potential output this year and next year, while the difference between the growth rates is set to shrink markedly in 2019 and 2020. It is now estimated that potential output will expand by 1.5% in both 2017 and 2018. Subsequently, it is expected to fall to 1.3% in 2020 on account of demographic change and an anticipated decline in net migration.⁴ The already considerably positive output gap this year will therefore expand again substantially, above all in 2018. According to current estimates, aggregate capacity utilisation could soon reach similarly high levels to those seen at the peak of the last economic cycle in 2007.

Strong momentum in German exports to continue at first, before becoming somewhat more moderate

German exporters benefited in the second and third quarters from the ongoing strong expansion in global trade and, contrary to expectations, perceptibly increased their market share. Exports therefore grew more strongly than assumed in the June projection. In the final quarter of 2017 and the first quarter of 2018, the high export growth is likely to continue and again outpace the expansion of German export markets. At least this is indicated by German industry's exceptionally high volume of incoming orders from abroad, as well as enterprises' very optimistic export expectations. Over the rest of the coming year, the rise in exports is

3 In addition to the stronger-than-expected expansion in the second and third quarters, it is of significance that GDP growth according to the revised figures is somewhat higher in the second half of 2016 and markedly higher in the first quarter of 2017.

4 For more information on the medium-term outlook for potential growth in Germany, see Deutsche Bundesbank, Demographic change, immigration and the potential output of the German economy, Monthly Report, April 2017, pp 35-47.

Aggregate output and output gap

Price, seasonally and calendar-adjusted



Sources: Federal Statistical Office and Bundesbank calculations. 2017 to 2020 Bundesbank projections. **1** Deviation of GDP from estimated potential output. Deutsche Bundesbank

Technical components of the GDP growth projection

% or percentage points

Item	2016	2017	2018	2019	2020
Statistical carry-over at the end of the previous year ¹	0.6	0.6	1.1	0.7	0.6
Fourth-quarter rate ²	1.9	3.1	2.1	1.6	1.5
Average annual GDP growth rate, calendar-adjusted	1.9	2.6	2.5	1.7	1.5
Calendar effect ³	0.1	-0.3	0.0	0.0	0.4
Average annual GDP growth rate ⁴	1.9	2.3	2.5	1.7	1.9

Sources: Federal Statistical Office; 2017 to 2020 Bundesbank projections. **1** Seasonally and calendar-adjusted index level in the fourth quarter of the previous year in relation to the calendar-adjusted quarterly average of the previous year. **2** Annual rate of change in the fourth quarter, seasonally and calendar-adjusted. **3** As a percentage of GDP. **4** Discrepancies in the totals are due to rounding.

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Business situation and expectations in trade and industry

2005 = 100, seasonally and calendar-adjusted, log scale



Source of the unadjusted figures: ifo Institute. **1** For the next six months.
 Deutsche Bundesbank

Manufacturing sector

Seasonally and calendar adjusted



Sources of the unadjusted figures: Federal Statistical Office and ifo Institute. **1** Balance of positive and negative business survey responses.
 Deutsche Bundesbank

likely to align with the increasingly subdued growth of the export markets. As of 2019, German exporters could even relinquish small amounts of market share. In trade with the other euro area countries they are gradually losing price competitiveness, above all because unit labour costs are rising faster in Germany. In addition, the increasing shift in Chinese demand towards consumer goods is likely to dampen the additional need for capital goods. This applies similarly to demand from the United Kingdom, due to the UK's aim to exit from the European Union. This would impact German exports disproportionately, as capital goods comprise a higher-than-average share of the country's exports.

Against the background of the boom in industrial activity and the increasing capital utilisation in manufacturing, industrial investment continued to experience a marked upturn in the second and third quarters. In particular, enterprises invested considerably more in machinery and equipment, and did so to an even greater extent than estimated in the June projection. Industrial construction investment, by contrast, was not able to maintain its fast pace of growth and has been scaled back of late. In light of the highly favourable outlook for industry, the strong cyclical upswing in business investment is likely to continue in the coming quarters. Even beyond this time horizon, commercial investment should remain lively on account of the favourable financing conditions, rising demand and increasing overutilisation in the economy as a whole. However, the growth rates should then gradually decelerate, as the currently very buoyant demand for industrial export goods is set to fall markedly over the course of the projection horizon. In addition, the tendency of enterprises to expand their production capacity in Germany is likely to be less pronounced than in earlier boom periods. On the one hand, this is because Germany is fairly far advanced along the economic cycle compared to other countries, and especially to other euro area countries. Therefore, companies with production facilities abroad could,

Business investment continues its cyclical upturn

for example, first of all exhaust any remaining capacity reserves there. On the other hand, the German economy is on a long-term path to lower potential growth as a result of demographic change. The associated drop in labour force potential is likely to have a dampening effect on business investment going forward.⁵

Housing construction somewhat less dynamic than of late

The housing market is still faced with excess demand. The persistently expansionary underlying trend in housing demand is being fuelled by households' favourable income prospects and low financing costs. Added impetus is being provided by labour market-oriented immigration as well as the increasing population density in urban centres observed for some years now. Supply, measured in terms of housing investment, expanded exceptionally strongly until the middle of the current year. In the third quarter, however, housing investment grew only modestly and growth is expected to be more subdued for the final quarter of 2017 and the first quarter of 2018 as well. This is probably attributable to the fact that the construction sector, given the high production volume that has now been reached, is increasingly nearing its capacity limits. The reported forward reach of the order books in the main construction industry, the level of utilisation of machinery and equipment, and the business climate of the sector are all at a very high level, while enterprises are increasingly reporting difficulties in obtaining qualified staff and construction prices are rising perceptibly. However, construction capacities in the coming years are likely to expand. Housing investment will therefore probably increase further, albeit at a slower rate than this year. The supply bottleneck in the residential property market could soon gradually recede, as demand is likely to increase less considerably than in recent years. This applies in particular to new buildings, with the number of completions jumping especially sharply of late. This is indicated by the lower number of

Key figures of the macroeconomic projection

Year-on-year percentage change, calendar-adjusted¹

Item	2016	2017	2018	2019
GDP (real)	1.9	2.6	2.5	1.7
GDP (real, unadjusted)	1.9	2.3	2.5	1.7
Components of real GDP				
Private consumption	1.9	2.3	1.7	1.7
<i>Memo item</i> Saving ratio	9.7	9.8	10.1	10.1
Government consumption	3.7	1.3	1.8	1.9
Gross fixed capital formation	2.9	4.4	4.2	3.3
Business investment ²	2.5	4.1	4.8	3.2
Private investment in housing construction	3.8	5.2	3.0	3.0
Exports	2.4	5.0	5.4	3.8
Imports	3.8	5.3	6.0	5.1
<i>Memo item</i> Current account balance ³	8.2	7.9	8.0	7.7
Contributions to GDP growth ⁴				
Domestic final demand	2.3	2.4	2.1	1.9
Changes in inventories	-0.1	-0.1	0.1	0.0
Exports	1.1	2.3	2.6	1.8
Imports	-1.5	-2.0	-2.4	-2.1
Labour market				
Total number of hours worked ⁵	0.6	1.7	1.3	0.9
Employed persons ⁵	1.3	1.5	1.1	0.7
Unemployed persons ⁶	2.7	2.5	2.4	2.3
Unemployment rate ⁷	6.1	5.7	5.3	5.1
Wages and wage costs				
Negotiated pay rates ⁸	2.1	2.1	2.6	2.9
Gross wages and salaries per employee	2.4	2.7	2.9	3.3
Compensation per employee	2.2	2.6	2.7	3.1
Real GDP per employed person	0.5	1.1	1.4	1.0
Unit labour costs ⁹	1.7	1.5	1.4	2.1
<i>Memo item</i> GDP deflator	1.3	1.5	1.8	2.1
Consumer prices ¹⁰				
Excluding energy	1.1	1.5	1.7	1.9
Energy component	-5.4	3.1	0.7	0.0
Excluding energy and food	1.1	1.3	1.6	1.9
Food component	1.3	2.7	2.0	1.9

Sources: Federal Statistical Office; Federal Employment Agency. 2017 to 2019 Bundesbank projections. **1** If calendar effects present. For unadjusted data see the table on p 33. **2** Private non-residential fixed capital formation. **3** As a percentage of nominal GDP. **4** In arithmetical terms, in percentage points. Discrepancies in the totals are due to rounding. **5** Domestic concept. **6** In millions of persons (Federal Employment Agency definition). **7** As a percentage of the civilian labour force. **8** Monthly basis (pursuant to the Bundesbank's negotiated wage index). **9** Ratio of domestic compensation per employee to real GDP per employed person. **10** Harmonised Index of Consumer Prices (HICP).

⁵ See also, Deutsche Bundesbank, A reference value for business investment in Germany, Monthly Report, April 2017, pp 44-46.

Underlying conditions for macroeconomic projections

This projection is based on assumptions made by Eurosystem experts about the global economy, exchange rates, commodity prices and interest rates. The assumptions are based on information available as at 22 November 2017. The assumptions regarding economic activity in the euro area are derived from projections made by the national central banks of the euro area countries.¹ With regard to fiscal policy, the projections incorporate all measures that have been adopted or that have been adequately specified and are likely to be implemented.

Global economy gaining momentum, world trade buoyant

The pace of global economic growth over the course of 2017 was slightly higher than forecast in the June projection. It is assumed that the growth rates for the advanced economies (excluding the euro area) will fall again somewhat from their current fairly high levels. The recent solid economic growth in the United States is also likely to mark something of a turnaround compared with the more subdued upward movement observed in the final quarter of 2016 and the first quarter of 2017. Changes in inventories also contributed significantly to economic growth in the third quarter of 2017, meaning that the underlying pace of economic expansion is expected to remain moderate.² Against the backdrop of the debate surrounding the scope and implementation of a tax reform and further expansionary measures, expectations concerning the positive impact on economic growth in the United States were lowered for 2018 and 2019 as compared with the June projection. The assumptions in this projection were determined before the tax reform bill

was passed by the US Senate. If it is approved by Congress, economic growth in the United States could be somewhat higher than assumed here.

Looking over the projection horizon, the emerging market economies will probably be able to largely maintain the pace of growth that they have reached in the meantime. A gradual deceleration in growth in China is being partly offset by developments in other east Asian countries. In addition, Russia and Brazil are continuing to benefit from the recovery on the commodity markets. All in all, the global economy (excluding the euro area and weighted by purchasing power parities) looks set to grow by 3¾% in all years over the projection horizon. The only exception to this is next year, in which a slightly higher growth rate is expected.

World trade expanded more strongly on average for 2017 than forecast in the previous projection. While growth is expected to wane slightly in the years to follow, it is still likely to be markedly higher than the pace of expansion assumed in the June projection – particularly in 2018. Following an uptick of 5½% this year, international trade (excluding the euro area) is expected to increase by 4½% next year, and to a lesser extent in the years thereafter.

¹ The projections made by the national central banks of the euro area countries were completed on 30 November 2017.

² The burden on the US economy caused by hurricanes is likely to have been minimal in this context. See also Deutsche Bundesbank, The impact of hurricanes on economic activity in the United States, Monthly Report, November 2017, pp 14-15.

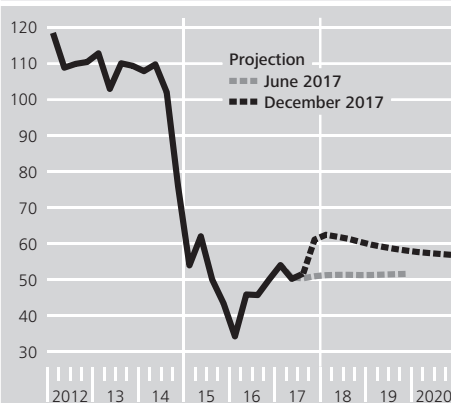
Technical assumptions of the projection

Expectations of oil output cuts in major oil-producing countries and political conflicts in the Middle East during a period of growing demand caused crude oil prices to surge in the third quarter of this year. The forward quotations from which these oil price assumptions are derived are higher than those assumed in the June projection. However, whereas it was assumed in the previous projection that crude oil prices would remain broadly unchanged, they are now expected to fall slightly. The appreciation of the euro significantly lessened the shortfall compared with the June assumptions in euro terms. Following their sharp rise on average this year, the prices of other commodities on a US dollar basis are set to increase moderately in line with expected global economic growth up until 2020.

On 26 October 2017, the ECB Governing Council decided to scale back its net purchases under the expanded asset purchase programme from a monthly pace of €60 billion at present to one of €30 billion from January 2018. The purchases are set to continue until the end of September 2018, or beyond, if necessary, and in any case until the Governing Council sees a sustained adjustment in the path of euro area inflation consistent with its inflation target. The Governing Council also confirmed its continued expectation that policy rates will remain at their current level for an extended period of time, and past the horizon of the net asset purchases. The firm expectations of a sustained accommodative monetary policy stance have helped keep interest rates at a very low level since the June projection was finalised. While market expectations concerning future interest rate movements remain on a slightly upward trajectory, the slight trend increase in short-term interest rates and in yields on nine to ten-year gov-

Oil price

US\$ per barrel, quarterly data



Sources: Bloomberg and ECB projections.
 Deutsche Bundesbank

Major assumptions of the projection

Item	2017	2018	2019	2020
Exchange rates of the euro				
US dollar/euro	1.13	1.17	1.17	1.17
Effective ¹	112.1	115.3	115.3	115.3
Interest rates				
Three-month Euribor	-0.3	-0.3	-0.1	0.2
Yield on government bonds outstanding ²	0.3	0.5	0.8	1.0
Commodity prices				
Crude oil ³	54.9	61.6	58.9	57.3
Other commodities ^{4, 5}	7.9	3.3	3.4	4.3
German exporters' sales markets ^{5, 6}	5.4	4.4	3.9	3.7

¹ Compared with the currencies of the 38 most important trading partners of the euro area (EER-38 group of currencies); 1999 Q1 = 100. ² Yield on German government bonds outstanding with a residual maturity of over nine and up to ten years. ³ US dollars per barrel of Brent crude oil. ⁴ In US dollars. ⁵ Year-on-year percentage change. ⁶ Working day-adjusted.

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ernment bonds will now set in somewhat later than assumed in June. Much the same applies to bank lending rates in Germany. The expectation that the spell of low interest rates will persist is consistent with the fact that the percentage of enterprises citing financing difficulties as a risk to economic development in a survey conducted by the Association of German Chambers of Commerce and Industry (DIHK) in summer 2017 remains at a historically low level.

Positive economic data for the euro area have given rise to a perceptible appreciation in the euro since the second quarter. A shift in expectations concerning economic policy impetus in the United States is likely to have further boosted the single currency's appreciation against the US dollar over the course of the third quarter.³ The euro traded at US\$1.17 in the period used for deriving the exchange rate assumptions, which was 7¼% higher than the assumptions in the June projection. Compared with the currencies of the euro area's 38 most important trading partners, the appreciation averaged 4½%.

Buoyant economic activity in the euro area

The rapid pace of euro area economic growth seen in the final quarter of 2016 and the first quarter of 2017 continued over the course of the year and outstripped the economic upswing projected in June. Against the backdrop of expected further employment gains, rising wage growth and increasing capacity utilisation, domestic demand is set to remain an important provider of stimulus over the projection horizon, too. Turning to exports, growth consistent with robust developments in sales markets abroad is expected. It is therefore assumed that the strong growth rate for exports at present will slow down slightly over the years to come. The current high growth in domestic demand is expected to normalise as well. Moreover, the labour supply is having an increasingly constraining effect in some countries. As a result, the pace of overall economic growth in the euro area is likely to decelerate slightly over the projection horizon.

Given the improved outlook for the external environment compared with June and the buoyant activity in the euro area, expect-

ations regarding GDP growth in the euro area (excluding Germany) were, following an increase of 2.3% this year, raised by around four-tenths to 2.2% for 2018 and by roughly three-tenths to 2.0% for 2019. Economic growth of around 1.8% is expected for 2020.

Fiscal policy measures moderately expansionary

The fiscal policy measures taken into account for Germany will have a moderately expansionary effect, both over the projection horizon as a whole and above all next year. The loss of revenue from income-related taxes as a result of various legislative changes will be broadly offset by additional revenue arising from overall progressive taxation. The contribution rate to the statutory pension insurance scheme will fall slightly next year from 18.7% to 18.6%. According to this projection, an additional reduction of 0.1 percentage point will be needed in 2019 so as to prevent the upper limit for the reserves from once again being exceeded by quite a margin at the end of 2019. The statutory health insurance institutions are expected, on average, to slightly lower their (respective) supplementary contribution rates next year and subsequently leave them unchanged. Furthermore, spending by state and local government will rise – not least on fixed asset formation, for which a higher outflow of provided funds is assumed.

³ See also Deutsche Bundesbank, Financial markets, Monthly Report, November 2017, pp 32-40.

building permits issued this year to date, which at the start of 2017 had already fallen sharply after the elevated level of the year before. In addition, the fall in population in Germany as well as – according to assumptions – receding immigration levels look set to have a dampening effect on additional housing demand over time. In terms of housing investment as a whole, the flagging momentum in new construction will probably be counteracted by a further increase in investment in the housing stock, for example in connection with renovation work to improve energy efficiency or to make accommodation more suitable for the elderly.

Gradual decline in housing price inflation

The increased expansion of the housing supply was also reflected in the growth rate of housing prices, which had been slightly lower since the first quarter of 2017. Nonetheless, price growth, which remains high and partially exceeds the rates set by macroeconomic determinants, is set to recede further in future. As price adjustments on the property market are typically sluggish, the current price surge will probably have a certain knock-on effect on the rates in the coming years. Looking ahead, prices should increase at a pace consistent with the anticipated increase in disposable household income and the expected development of interest rates for mortgage loans (see the box on pages 24 to 26). In addition, price impulses, which are the result of immigrants entering the labour market and the increased share of the population living in urban areas, will probably continue to decline.

Considerable increase in government investment

Growth in government investment should significantly outstrip GDP growth over the projection horizon. At the political level, a need for greater investment has been identified, above all, in the areas of transport infrastructure as well as child day-care and schools.⁶ Considering the favourable prospects for central, state and local government budgets, a pronounced increase in investing activities thus seems plausible. Here it is assumed that the apparent planning shortfalls at the general government level

at present can be better surmounted. Central government has also provided extensive funding for financially weak local governments, which is likely to be used to a far greater extent than has been the case to date, not least once it has been stocked up and its range of potential uses extended.

As was the case this year, there is set to be a strong increase in overall gross fixed capital formation next year. Growth is projected to slacken somewhat in 2019 on account of weaker increases in commercial investment. As things stand, this trend appears likely to continue into 2020.

Gross fixed capital formation experiencing strong but declining growth stimulus

In spite of a dip in the third quarter, households stepped up their expenditure considerably in the second and third quarters overall. They also increased their savings by greater amounts. In the light of the very positive economic activity and the excellent condition of the German labour market, private consumption remains on a clear upward trajectory, though the saving rate could also rise somewhat further again in the short term. Over the course of the projection horizon, however, the current extremely strong growth in real disposable income is likely to slow down perceptibly. This expectation is driven by the fact that due to the increasing supply shortages in the labour market, markedly slower employment growth is expected also when demand is persistently high, and that this is likely to be only partially offset by steeper rises in real wages. If households' savings behaviour remains largely unchanged, private consumption is also likely to experience correspondingly weaker expansion.

Private consumption shaped by positive labour market situation

Government consumption rose sharply last year, due in part to additional expenditure on refugees in Germany. Such expenditure is now expected to decline markedly, particularly on

Considerable increase in government consumption

⁶ In the light of past developments and decisions as well as central government's plans to date, growth in defence expenditure is also expected. Large military procurements are recorded as state investment in machinery and equipment in the national accounts.

A model of housing price developments in Germany

The Eurosystem's projections for the country-specific development of key macroeconomic variables are also to serve in future as a starting point for the scenario calculations on which the bank stress tests of the European Banking Authority (EBA) are based. These variables include, among others, housing prices, for which the Bundesbank has so far not published any projections. The Bundesbank's macroeconomic projections for the German economy can be used to derive the data on housing prices in Germany which are required for these stress tests. These data are, however, of secondary importance from a monetary policy perspective. The incorporation of these data into the macroeconomic projections ensures that the derived estimates of housing prices, as were required in the stress tests, are consistent with the expected macroeconomic developments.¹

The extrapolation of housing prices in Germany is based on an econometric approach, the core component of which comprises a long-term equilibrium relationship between housing prices, households' disposable income and interest rate developments for mortgage loans. The error correction approach also covers the dynamics in short-term price adjustments towards the equilibrium relationship if housing prices temporarily deviate from it.² The long-term equilibrium can be interpreted as a price-income-relationship adjusted for interest rate developments. Here it is assumed that in the long term, and provided that changes in interest rates are also taken into account, housing prices will develop in line with incomes. In the short term, the interdependence between price changes and housing completions is also factored into the model. While growth in the housing stock is likely

to have a dampening effect on prices, it can be assumed that price growth, when viewed in isolation, provides an incentive to expand the supply of housing.³ Inflation for construction services is also factored into the short-term equations.⁴

The empirical approach is consistent with the theoretical concept of a stock-flow equilibrium in the housing market, according to which both prices and the housing supply can adjust themselves to balance supply and demand in the housing market.⁵ The housing stock is thus derived in the long term from the cumulative changes in supply resulting from the number of housing completions and the number of housing units that are no longer available on the market.⁶ In line with standard practice, the interaction of the various influencing fac-

¹ See EBA, 2018 EU-wide stress test – Methodological note, 17 November 2017.

² See C Leung (2014), Error correction dynamics of house prices: an equilibrium benchmark, *Journal of Housing Economics* 25, pp 75-95; S Malpezzi (1999), A simple error correction model of house prices, *Journal of Housing Economics* 8, pp 27-62.

³ See C Mayer and T Somerville (2000), Residential construction: using the urban growth model to estimate housing supply, *Journal of Urban Economics* 48, pp 85-109. The approach, which involves linking the rate of change in housing prices in the short term to housing investment or housing completions, corresponds with the view that the long-term equilibrium requires neither a price change nor an expansion of the housing supply.

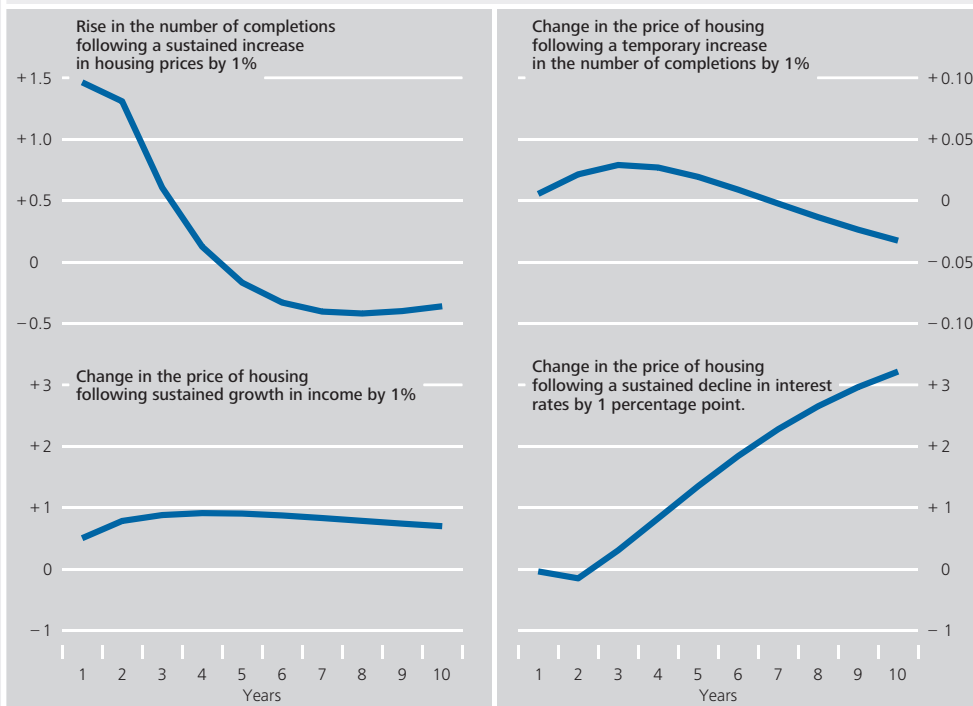
⁴ Credit growth does not form part of the model at present, as it has so far not been possible to determine an economically and statistically significant relationship between housing prices and the granting of housing loans in a sufficiently clear-cut manner. This could be due, in part, to the fact that the quality-adjusted price index for housing, on which the estimates are based, refers to a hypothetical dwelling with – in terms of design – time-invariant characteristics such as age, size or location. By contrast, the available data on lending reflect the actual regional mix as well as the average characteristics from changing property types.

⁵ See D DiPasquale and W Wheaton (1994), Housing market dynamics and the future of house prices, *Journal of Urban Economics* 35, pp 1-27.

⁶ Changes in the vacant housing stock are not taken into consideration in this approach.

Estimated interrelationships in the housing market

Deviation from the baseline (in %)



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tors is determined in a first step on the basis of past data. In a second step, these results are used to assess future housing price developments.

Housing price developments are recorded in the empirical approach using the Association of German Pfandbrief Banks' (*Verband deutscher Pfandbriefbanken*, or vdp) price index for owner-occupied housing in Germany, for which quarterly data have been available since 2003.⁷ The price-sensitive change in the housing supply refers to the number of housing completions, including construction work to existing buildings, whereas housing that has been withdrawn from the market, which results in a reduction of the housing supply, is assumed not to respond to price signals in the calculations.

According to the estimation results, income growth in the case of households has a

positive long-term impact on housing prices, whereas higher interest rates tend to push prices down.⁸ The estimated long-term interest rate effect also reflects the extremely sharp decline in interest rates in the

⁷ The vdp price index for owner-occupied housing, which is quality-adjusted using hedonic methods, reflects the development of prices for owner-occupied apartments and houses in Germany. See Deutsche Bundesbank, *House prices in Germany in 2009*, Monthly Report, February 2010, pp 58-59. No statistically consistent quarterly data on macroeconomic developments in housing prices in Germany are available which stretch back over a longer period of time. The temporal comparability of the Federal Statistical Office's house price index is only ensured following completion of the development phase from the reporting year 2014 onwards. See Federal Statistical Office, *Qualitätsbericht Häuserpreisindex*, 17 January 2017.

⁸ Nominal variables, adjusted for the general price level as measured by the GDP deflator, are factored into the estimates. An exception here are interest rates on housing loans, which were adjusted to take account of the survey-based data of Consensus Economics for longer-term inflation expectations. Moreover, in the calculations the variables referring to a quantity were placed in relation to the number of households. The estimate is based on the period from the first quarter of 2003 to the third quarter of 2017.

years 2011 to 2016, which coincided with the recent upswing in prices in the German housing market. Housing prices were markedly higher of late than the estimates made on the basis of the long-term relationship.⁹ Nevertheless, the estimation results for the short-term adjustment dynamics – including the delayed impact of price changes – suggest that price changes, in particular, will cause the housing market to approach its long-term equilibrium again in the future.¹⁰

The empirical results can be illustrated using model-based reactions of housing prices and completions to unexpected changes in the other factors (see the chart on page 25).¹¹ For example, rises in housing prices result in an expansion of completion numbers, which is consistent with price-induced investment incentives. According to the results, however, exogenous expansions of the housing stock result in rather minor price-dampening effects. By contrast, income growth or a reduction in interest rates are likely to have a comparatively large impact on housing prices in Germany. On the whole, the simulation results suggest that the German housing market adjusts rather sluggishly to exogenous developments.

The estimation results for the price dynamics of housing and housing completions derived from past data are used to extrapolate the prices of housing, taking the long-term relationship into account. In this context, conditioning on the projections for households' disposable income and construction price rises as well as the assumptions regarding interest rate developments ensure that the housing price forecast is consistent with the expected macroeconomic developments. Moreover, further price-related aspects, such as regional shifts in the demand for housing, which are not automat-

ically captured by the model, can also be taken into account. Without them, the incorporation into the macroeconomic context would be incomplete.

9 So far, this approach has not been readily suitable for evaluation purposes since, among other things, household income and mortgage interest rates do not necessarily reach their longer-term levels in the estimation period and may, in some cases, move only slowly closer towards them again. The Bundesbank's data on housing overvaluations are currently based on a different, regionally differentiated estimation model. They refer to an estimated fundamentally justified property price, which is conceptually based on the sustainable components of economic and socio-demographic factors. See F Kajuth, N Pinkwart and T Knetsch (2016), *Assessing House Prices in Germany: evidence from a regional dataset*, *Journal of European Real Estate Research* 9 (3), pp 286-307.

10 The estimated adjustment coefficient in the property price equation is negative. Furthermore, statistical tests show that, from a macroeconomic perspective, neither household income nor the interest rate level contribute to the equilibrium adjustment in the housing market.

11 The determination of the structural relationships is based on a recursive identification, according to which financial variables, such as housing prices or mortgage lending rates, are assumed to react more quickly to other shocks than real variables such as housing completions or household income. See K Tsatsaronis and H Zhu (2004), *What drives housing price dynamics: cross-country evidence*, *Bank for International Settlements Quarterly Review*; and C Goodhart and B Hoffmann (2008), *House prices, money, credit and the macro-economy*, *Oxford Review of Economic Policy* 24 (1), pp 180-205.

account of the fact that assistance is increasingly shifting to unemployment benefit II and related benefit payouts. This is curbing the increase in government consumption considerably, particularly this year. However, an acceleration can then be expected once more, contributing to the overall expansionary fiscal stance. A renewed increase in tangible goods purchases is likely to be followed by a continued building-up of staff levels, and health-care and long-term care benefits should also continue to rise noticeably.

Strong rise in imports, particularly in the short term

In 2018, imports of goods and services to Germany will probably even slightly exceed the strong growth seen in 2017, but will then gradually lose momentum. In terms of exports and business investment, this time frame reflects the development of those demand components which are fuelled to a particularly great extent, directly and indirectly, by imports of intermediate goods. Alongside only moderately rising import prices based on international commodity price assumptions, imports are also bolstered by the fact that the German economy's international financial interconnectedness is expected to increase further, meaning that the import shares of all demand components should rise, too. Other EU member states are particularly likely to benefit from the high German demand for foreign products on account of their increasing price competitiveness. Yet fairly strong growth rates can be expected for the imports from trading partners outside the euro area as well.

Slight fall in current account surplus

The high current account surplus will probably fall only slightly over the projection horizon. This is due to offsetting price and volume effects in the trade balance and the expectation of only minimal changes in net primary and secondary income over the projection horizon. In spite of the strong expansion of exports, the trade surplus this year is likely to decline. Price effects play a key role here, as imports rise in price more quickly than exports on account of higher crude oil prices. The reverse will probably be true in 2019, when based on the as-

sumptions made regarding international commodity prices and exchange rates, import prices will increase only moderately whilst export prices rise considerably more strongly owing to domestic labour cost pressures. However, this is offset by the fact that in the light of substantial domestic demand, imports would then increase more strongly than exports in real terms, with the result that the overall trade surplus could decline somewhat further. The same is true of the balance on the current account, which is nevertheless expected to remain high in 2019 at 7.7% of GDP.

■ Labour market

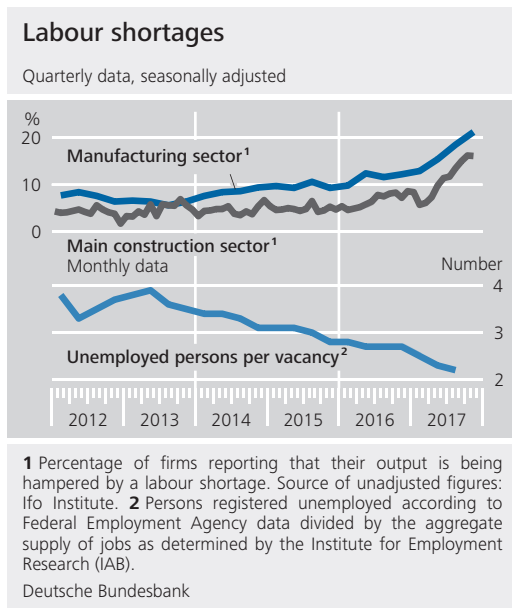
Very favourable labour market developments continued in the second and third quarters of 2017. Although over the past six months employment growth lagged behind the extraordinarily strong increase in the final quarter of 2016 and the first quarter of 2017, it was nonetheless somewhat stronger than assumed in the June forecast. Registered unemployment declined to roughly the extent projected. The positive labour market developments are also likely to continue into the turn of 2017/2018. Leading indicators suggest that employment will see a further strong increase and that the number of unemployed persons will fall.

Further improvement of very positive labour market situation in second and third quarters as well as at turn of 2017/2018

In the recent past, labour market tension has become amplified. Underemployment fell and the number of vacancies increased, meaning that in arithmetical terms, only about 2.3 unemployed persons applied for each vacancy during the first three quarters of 2017.⁷ This trend will continue in the years ahead. While the demand for labour will continue to rise significantly on account of strong economic activity, the number of persons potentially available

Labour market tensions to increase further as ...

⁷ Measured by the ratio of registered unemployed persons to the number of vacancies as determined by the Institute for Employment Research (IAB) Job Vacancy Survey. Although the indicator provides general information regarding the degree of labour market tension, it can only give an approximate reflection of mismatches between vacancy requirements and unemployed persons' qualifications.



ing to Germany. Whereas the migration flow from central and eastern European countries to Germany was initially relatively one-sided shortly after the introduction of the free movement of workers, an increasing number of persons are now moving in the opposite direction, resulting in lower net migration rates. Income has recently increased in these countries significantly more strongly than in western Europe. In addition, unemployment and consequently migration probability are declining both in these countries and in southern EU member states. The United Kingdom's exit from the EU could trigger or divert migration flows towards Germany to a certain extent. However, at least the number of migrants coming from eastern Europe to Great Britain was no longer particularly high shortly before the "Leave" vote.

to the labour market is set to rise considerably more slowly in future.

... demographic trends dampen labour supply, ...

Demographic trends are a key reason for increasingly subdued labour force growth over the next few years. Not only is the number of persons of working age declining at an increasing pace, but the age structure is also shifting, meaning that the age groups with the highest level of labour force participation will be smaller in future.⁸

... immigration recedes ...

Moreover, it should be assumed that migration will contribute less significantly to the expansion of the labour supply in the years to come. The number of migrants had already decreased significantly last year, on balance. This concerned the number of refugees, for one thing. However, should refugees' asylum applications be approved, they will only gradually become active in the German labour market and therefore bolster the labour supply for a while. As most of the asylum application procedures for refugees who migrated to Germany between 2014 and 2016 have been completed and the overall recognition rate is only around 50%, a large number of persons are also obliged to leave the country and are therefore not entering the labour market. A crucial factor for the future labour supply is that substantially fewer persons from other EU member states are com-

Labour force participation is likely to increase further as workplace conditions and opportunities for balancing work and family commitments improve. By international standards, however, it has already reached a very high level, and saturation effects are clearly identifiable in individual age groups. This means that in spite of the outstanding labour market situation in Germany at present, which is making it particularly easy to take up employment, it will be difficult to raise the participation rate to the same extent as in previous years.

... and labour force participation increases more slowly

According to the projection, increasing labour market tension will result in the average duration of unemployment phases falling further and even persons with placement difficulties finding employment in more cases. The unemployment rate over the projection horizon could therefore sink to around 5%. Nonetheless, employment growth is set to decline from 1.5% in 2017 to around half of that by 2019, and will be considerably lower still in 2020. A primarily cyclically-induced increase in time worked per employed person could partly off-

Further moderate decline in unemployment, considerable slowdown in employment growth

⁸ See also Deutsche Bundesbank, Demographic change, immigration and the potential output of the German economy, Monthly Report, April 2017, pp 35-47.

set the total number of hours worked. The declining trend, based on the increasing share of part-time employees, was already reversed in 2017. In the next few years, too, it is likely that more overtime hours will be worked and fewer persons will be involuntarily working part-time, and that part-time employees' work time will continue to increase. All in all, however, the rise in the total number of hours worked will be curbed substantially over the course of the projection horizon on account of a limited labour supply.

■ Labour costs and prices

Considerably increased negotiated wage adjustment from 2018

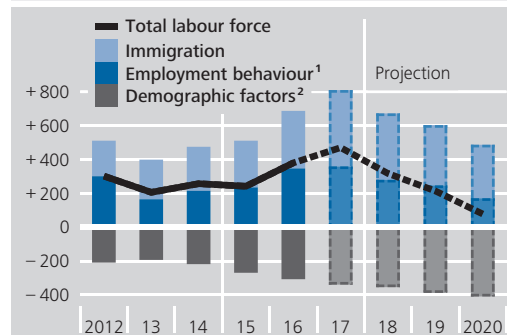
Negotiated rates of pay increased only modestly in 2017, too, given the high degree of labour market tension.⁹ Low productivity growth and consumer price inflation coupled with high levels of immigration from other EU countries in previous years, which expanded the supply of available labour, contributed to the comparatively subdued wage development. It can be assumed that management and labour in the "large" wage round of 2018 will negotiate perceptibly higher rates than before. This is primarily due to the excellent economic situation, which is also reflected in stronger productivity gains and considerably increasing domestic labour market tension, but also because inflation rates have risen in the meantime. It is likely that the effects of high levels of labour market-induced migration in past years will continue to make themselves felt for a prolonged period and will, when viewed in isolation, also dampen wage developments over the projection horizon. However, staff shortages will probably become further exacerbated in 2019 and 2020, with the result that negotiated rates of pay will rise even more dynamically than in 2018.

Steep rise in unit labour costs only temporarily subdued by high productivity growth

Actual earnings are likely to increase much more strongly than negotiated rates of pay over the entire projection horizon. The main drivers of the consistently positive wage drift will be cyclically induced increases in working hours, performance-based bonuses and more

Labour force

Year-on-year change, in thousands of persons



Sources: Federal Statistical Office and Bundesbank calculations. 2017 to 2020 Bundesbank projections. ¹ Of domestic workers. ² Contains the demographic effect of changes in the domestic labour force on labour force participation as well as changes resulting from shifts in the age structure of the domestic population.

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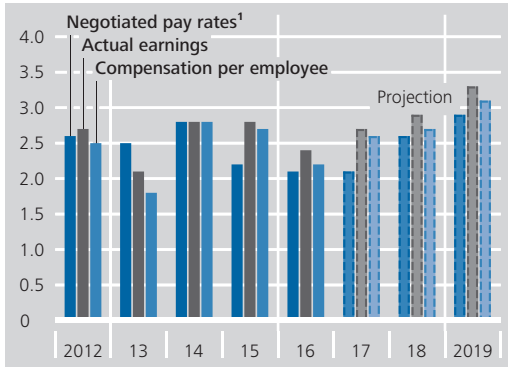
wages exceeding collectively agreed rates in areas with particularly pronounced labour shortages.¹⁰ Average compensation per employee, which includes employers' social contributions on top of actual earnings, will thus also pick up perceptibly over the projection horizon. As in previous years, however, it will rise at slightly lower rates than actual earnings, especially as the contribution rate for the statutory pension insurance scheme will be falling slightly in the next two years. The steep surge in unit labour costs, which has persisted since 2012 and is strong by historical standards, will nonetheless be distinctly dampened in this year and the next, since the slight acceleration in labour cost growth will be outstripped by the exceptionally large increase in productivity growth induced by cyclical factors. Unit labour costs are likely to rise much more strongly again from 2019.

⁹ All past pay agreements included in the Bundesbank's negotiated pay rate statistics (around 500 collective wage agreements and regulations on civil servant pay) are factored into the projections of negotiated wage increases and extrapolated beyond their contractual term, taking into account the overall economic situation and industry-specific features.

¹⁰ Furthermore, the assumed increase in the statutory general minimum wage in 2019 is expected to exert upward pressure on wages in wage segments that are not captured in the negotiated pay rate statistics. It is therefore likely to be reflected in the wage drift. In 2018 and 2020, when the minimum wage will not be raised, a certain countermovement is expected.

Negotiated pay rates, actual earnings and compensation of employees

Year-on-year percentage change, monthly basis

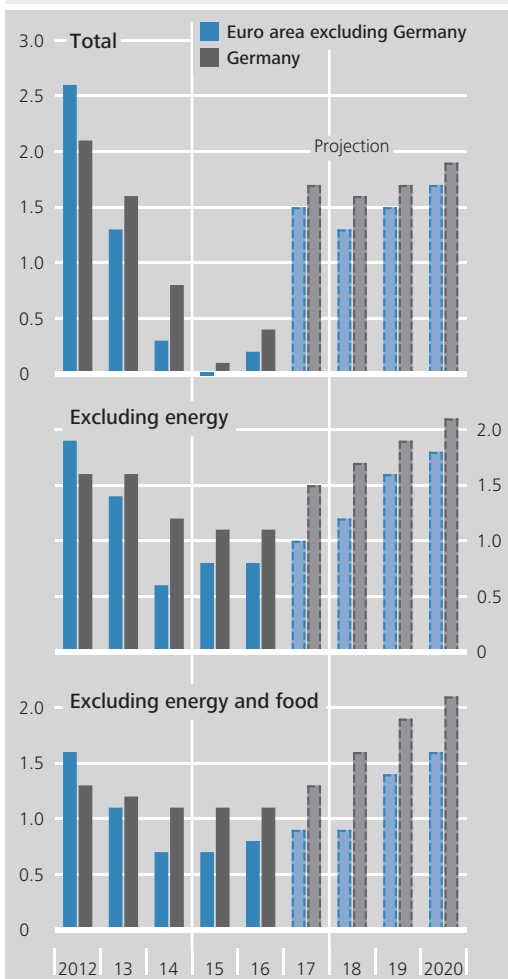


Sources: Federal Statistical Office. 2017 to 2019 Bundesbank projections. ¹ According to the Bundesbank's negotiated wage index.

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Price projection (HICP)*

Year-on-year percentage change



Sources: Federal Statistical Office, Eurostat and Bundesbank calculations. 2017 to 2020 Bundesbank projections (for Germany) and calculations based on Eurosystem projections (for the euro area excluding Germany). * Based on the Harmonised Index of Consumer Prices.

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The unit labour cost profile and the changes in aggregate profit margins together determine domestic inflation as measured by the GDP deflator. Given the healthy economic situation, the temporarily subdued increase in unit labour costs should, on its own, allow enterprises to widen their profit margins in the short term. However, this effect is being counteracted this year by the deterioration in the real terms of trade on account of resurgent energy prices. Barring a further deterioration in the real terms of trade, though, margins should widen considerably next year. Starting in 2019, profit margins will then broadly stabilise as unit labour costs rise more strongly again. Overall, domestic inflation as measured by the GDP deflator is likely to pick up from 1.5% this year to 2.1% by 2019 and to rise even further in 2020.

Domestic inflation measured by GDP deflator considerably higher

Consumer prices rose more strongly from the third quarter of 2017 than was predicted in the June projection. This was down to higher crude oil prices, on the one hand, which drove energy prices up considerably. On the other hand, food prices exceeded the projection owing to more dynamic commodity prices and more expensive tobacco products. Excluding the two volatile components of energy and food, however, the rate increased a little less strongly than assumed in June. Services, in particular, experienced distinctly weaker-than-expected price rises recently. This was largely because October saw not only a marked reduction in premiums for motor vehicle insurance but also a noticeable decline in the prices of package holidays.¹¹ Finally, the slightly higher rates of increase in rents recorded when the June forecast was prepared tailed off. By contrast, the prices of non-energy industrial goods even rose somewhat more strongly than anticipated, despite the unexpected appreciation of the euro. Overall, annual inflation as measured by the Harmonised Index of Consumer Prices (HICP)

Inflation stronger than expected of late

¹¹ For specific details about the package holiday component in the Harmonised Index of Consumer Prices, see Deutsche Bundesbank, The volatility of the traditional core inflation rate in Germany, Monthly Report, November 2017, pp 49-51.

stood at 1.8% in November and was thus 0.3 percentage point higher than assumed in the June projection.

Exceptionally healthy economic setting leading to steady rise in inflation rate excluding energy and food ...

Over the projection horizon, the extremely favourable economic setting is likely to enable enterprises to initially widen their profit margins and subsequently to pass on to consumers the increasing price pressures brought about chiefly by rising labour costs. The inflation rate excluding energy and food should therefore be going up steadily over the coming years. Already this year, the prices of non-energy industrial goods have risen more sharply than the average for the preceding years. However, inflation in non-energy industrial goods will probably tail off a little to begin with in 2018, before picking up again thanks to the cyclical effect. This is because the steep upward pressure on the prices of industrial goods this year also stemmed from a significant increase in commodity prices, which is not anticipated to continue in this manner. For services, the underlying upward tendency this year was still obscured by lower consumer prices owing to the reform of long-term care in January 2017, which means that the rate is likely to surge up in 2018 when this effect is no longer present. Overall, consumer price inflation excluding energy and food could climb incrementally from 1.3% in the current year to 1.9% in 2019. A further increase to 2.1% in 2020 is conceivable owing to significant overutilisation of economic capacity.¹²

... and pushing up headline rate despite dwindling energy inflation

The current significant price rises for food are likely to weaken slightly from 2018; prices should then more or less match the inflation rate excluding energy and food. By the end of this year, the steep rise in crude oil prices seen recently is likely to have largely been funnelled into consumer prices for energy, but the elevated price level should mean that energy continues to make a positive contribution to the headline rate on average in 2018. In the subsequent years, however, energy prices are unlikely to rise by much, primarily because of the assumption that crude oil prices will fall. Head-

Revisions since the June 2017 projection

Year-on-year percentage change

Item	2017	2018	2019
GDP (real, calendar-adjusted)			
Projection from December 2017	2.6	2.5	1.7
Projection from June 2017	1.9	1.7	1.6
Difference in percentage points	0.7	0.8	0.1
Harmonised Index of Consumer Prices			
Projection from December 2017	1.7	1.6	1.7
Projection from June 2017	1.5	1.4	1.8
Difference in percentage points	0.2	0.2	-0.1

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line HICP inflation should therefore lag slightly behind the rate excluding energy (and food), putting inflation in the next few years at a similarly high level to this year. In 2020, consumer price inflation could reach 1.9%.

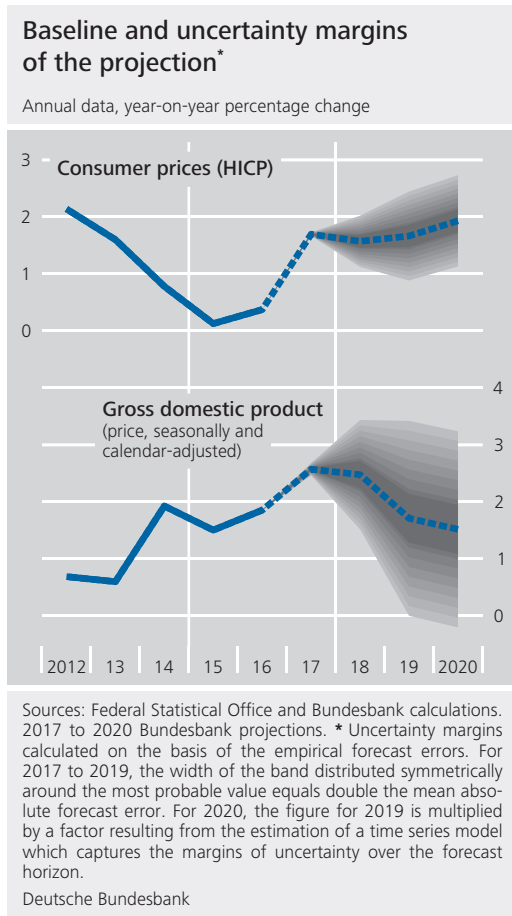
Public finances

Public finances are benefiting in this projection from very favourable framework conditions. The general government surplus is still growing this year (2016 surplus: +0.8% of GDP), in spite of the repayment of nuclear fuel tax.¹³ In the absence of any new measures, the surplus will then rise to just over 1½% of GDP in 2020. This improvement reflects both the cyclical upturn and declining interest expenditure. It will also be augmented in 2018, when the nuclear fuel tax repayment comes to an end. The baseline fiscal policy stance, as measured by the struc-

Baseline government budgets with growing surpluses in favourable setting

¹² For the purposes of the projection, it is assumed that the infrastructure levy will be collected from 2020. This will increase the inflation rate slightly, despite the price-dampening effect of the motor vehicle tax relief, which will more than compensate German residents. This is because the HICP is based on the domestic concept, which means that domestic expenditure by non-residents is included in the basket of goods and is taken into account when measuring inflation.

¹³ Due to the Federal Constitutional Court's June ruling that this tax is invalid, payments in the amount of 0.2% of GDP had to be made.



tural primary balance,¹⁴ will be distinctly expansionary next year and slightly so thereafter. However, since budgetary policymakers are unlikely to aim for surpluses as high as those arrived at under this projection's assumptions, tax cuts and additional spending are expected, in particular, after the new government has been formed. As a result, the fiscal balances are likely to be much lower than described here, and the fiscal policy stance more expansionary.¹⁵

Clear growth in revenue, but primary expenditure also rising fairly strongly

The revenue ratio is likely to rise again slightly this year. In particular, revenue from profit-related taxes is continuing to grow strongly, but the favourable developments in wages and the labour market are also having a positive effect. On the whole, the ratio is expected to shrink somewhat next year, when, amongst other things, the contribution rates for the pension insurance scheme and health insurance will be lowered slightly. Moreover, the fast pace of revenue growth from profit-related

taxes is unlikely to be maintained. Virtually no changes are expected from 2019, on the whole. The expenditure ratio is under strain from strong nominal GDP growth in the ratio's denominator, falling interest expenditure and, next year, from the lapsing of the nuclear fuel tax repayment.¹⁶ Structural primary expenditure¹⁷ is likely to increase fairly perceptibly, however. As regards public long-term care insurance and health insurance, dynamic growth is expected overall, as in the recent past. Furthermore, wage growth and the contribution rate cuts combined with more people entering retirement will lead to distinctly rising pension outlays, even if the sustainability factor is again expected to have a slightly restraining effect in future. In addition, the primary expenditure of central, state and local governments is likely to rise considerably given their growing surpluses. So far, there are plans to boost expenditure, particularly on child day-care, education, transport infrastructure, internal security and defence.

Debt ratio remains on downward path

The debt ratio is likely to continue its rapid descent (end-2016: 68.1%) and fall below the 60% threshold in 2019 – even in the event of budgetary burdens posed by newly agreed fiscal policy measures. Alongside the budget surpluses of central, state and local governments, growth in nominal GDP will depress the ratio (via its denominator). The positive economic development will thus make itself felt in two ways: through the significant cyclical increase in surpluses and through higher GDP growth. The ongoing resolution of the government-owned bad banks is accelerating the decline,

¹⁴ Fiscal balance plus interest expenditure (primary balance) less temporary and cyclical effects.

¹⁵ See p 22 for information on the measures included in the baseline. Aside from the uncertainties affecting economic growth that are described in the next section, public finances are exposed to risks stemming from the remaining state government guarantees issued for HSH Nordbank (by mid-year, roughly €3½ billion of the €10 billion in guarantees had been called).

¹⁶ In the national accounts, tax repayments stemming from court rulings are recorded as capital transfers.

¹⁷ Expenditure excluding interest payments as well as temporary and cyclical effects.

though developments here have sometimes been rather volatile in the past.

Risk assessment

Baseline scenario risks

Although this projection outlines the most probable scenario for economic growth and the inflation rate from today's perspective under the given assumptions, there are a multitude of risks and uncertainties that could cause economic developments to turn out differently than described here. All things considered, economic growth is predominantly facing upward risks stemming chiefly from the domestic economy; the risks facing consumer prices also appear to be tilted slightly to the upside on the whole.

No clear path for oil price risk

As regards future crude oil prices, which could have a major impact on the consumer price projection in particular, neither upside nor downside risk seems to have clearly gained the upper hand at present. A tightened oil supply – owing to political tensions in major oil-producing countries, for example – could result in considerably higher oil prices than assumed here on the basis of forward quotations. However, unconventional forms of oil production in the United States, in particular, could also see stronger growth and dampen prices, offsetting this risk.

External risks to economic growth broadly balanced

For an export-oriented economy like Germany's, the global environment sets key conditions for its economic prospects. A sudden tightening of global financing conditions, which would hit vulnerable emerging market economies especially hard, or a sharp downturn in China could put a heavy brake on global economic growth and adversely affect German exports and investment. While the likelihood of growing protectionism has subsided markedly since the June projection, new trade barriers would take a heavy toll on the German economy. These risks are countered by a potentially more expansionary fiscal policy in the United States, on the one hand. On the other, the eco-

Key figures of the macroeconomic projection – non-calendar adjusted

Year-on-year percentage change

Item	2016	2017	2018	2019
GDP (real)	1.9	2.3	2.5	1.7
GDP (real, calendar-adjusted)	1.9	2.6	2.5	1.7
Components of real GDP				
Private consumption	2.1	2.1	1.7	1.6
<i>Memo item</i> Saving ratio	9.7	9.8	10.1	10.1
Government consumption	3.7	1.3	1.8	1.9
Gross fixed capital formation	3.1	3.8	4.1	3.2
Business investment ¹	2.6	3.6	4.6	3.1
Private investment in housing construction	4.0	4.5	2.9	3.0
Exports	2.6	4.4	5.3	3.8
Imports	3.9	4.8	5.9	5.1
<i>Memo item</i> Current account balance ²	8.2	7.9	7.9	7.7
Contributions to GDP growth ³				
Domestic final demand	2.4	2.1	2.1	1.9
Changes in inventories	-0.2	0.0	0.2	0.0
Exports	1.2	2.0	2.5	1.8
Imports	-1.5	-1.8	-2.3	-2.1
Labour market				
Total number of hours worked ⁴	0.6	1.3	1.2	0.9
Employed persons ⁴	1.3	1.5	1.1	0.7
Unemployed persons ⁵	2.7	2.5	2.4	2.3
Unemployment rate ⁶	6.1	5.7	5.3	5.1
Wages and wage costs				
Negotiated pay rates ⁷	2.1	2.1	2.6	2.9
Gross wages and salaries per employee	2.4	2.7	2.9	3.3
Compensation per employee	2.2	2.6	2.7	3.1
Real GDP per employed person	0.6	0.8	1.4	1.0
Unit labour costs ⁸	1.6	1.8	1.4	2.1
<i>Memo item</i> GDP deflator	1.3	1.5	1.8	2.1
Consumer prices ⁹				
Excluding energy	1.1	1.5	1.7	1.9
Energy component	-5.4	3.1	0.7	0.0
Excluding energy and food	1.1	1.3	1.6	1.9
Food component	1.3	2.7	2.0	1.9

Sources: Federal Statistical Office; Federal Employment Agency; Association of German Pfandbrief Banks (vdp). 2017 to 2019 Bundesbank projections. ¹ Private non-residential fixed capital formation. ² As a percentage of nominal GDP. ³ In arithmetical terms, in percentage points. Discrepancies in the totals are due to rounding. ⁴ Domestic concept. ⁵ In millions of persons (Federal Employment Agency definition). ⁶ As a percentage of the civilian labour force. ⁷ Monthly basis (pursuant to the Bundesbank's negotiated wage index). ⁸ Ratio of domestic compensation per employee to real GDP per employed person. ⁹ Harmonised Index of Consumer Prices (HICP).

conomic upturn in the advanced economies could well persist longer than assumed here given continued favourable financing conditions, accelerating growth in the global economy. The attendant higher demand for German exports could buoy up commercial investment in Germany even more.

Expansionary fiscal policy could result in higher economic growth ...

Fiscal policy could provide added domestic impetus. Once a new federal government has been formed, considerable expansionary fiscal measures are expected given the favourable budget position. Against the backdrop of the major overutilisation of aggregate capacity already included in the baseline, this could also exert additional distinct upward pressure on consumer prices.

All in all, domestic factors therefore give rise to price risk that is tilted slightly to the upside. The

possibility of the labour supply reacting more elastically than assumed to the sustained high demand for labour, causing both wages and prices to rise more weakly than projected, only partially offsets the countervailing risk of higher demand for goods. The impact of the above-described global price risks is considered to be broadly level. In addition, the switch to a new weighting scheme in the HICP, now envisaged for 2019, is likely to give rise to considerable uncertainty surrounding measured price developments, with an unknown direction of impact.¹⁸

... and sets the scene for, overall, slightly upward-tilted risks to prices

18 The scheduled switch originally envisaged for January 2018 was postponed by one year. For more information, see the press release issued by the Federal Statistical Office: "Consumer prices in October 2017" (No 403, 14 November 2017).

German enterprises' profitability and financing in 2016

The profitability of non-financial corporations improved significantly in the favourable overall economic environment of 2016, having dipped in the previous year, partly as a result of one-off effects. With demand in the sales markets strong, enterprises' gross revenue rose further, although sales growth slowed. However, enterprises' exceptionally good average return on sales – the highest since the Great Recession of 2008-09 – is partly the result of sectoral developments and other one-off effects. These include, in particular, valuation gains due to a change in the way that the provisions that need to be made for pension obligations are calculated, which brought down interest expenditure and personnel expenses in 2016. In addition, the cost of materials fell relative to sales, reflecting developments in prices for domestic and foreign intermediate goods; this boosted non-financial corporations' annual results. Looking at the individual sectors, service enterprises, especially, benefited from the good business conditions and sharply expanded sales and total income. By contrast, income in manufacturing fell as sales stagnated.

The upward trend seen in enterprises' equity ratio over the past few years is likely to have stabilised at its elevated level in 2016. In any case, firms' equity ratio has recently neither increased nor decreased substantially, with a factor being the temporary valuation gains on provisions for pensions in the reporting year. However, the equity ratio of enterprises without pension obligations also stabilised at its previous level in 2016.

On the assets side of non-financial corporations' balance sheet, the trend towards an increased build-up of financial assets compared to tangible fixed capital formation continued, and the increase in absolute fixed assets was somewhat smaller than in the preceding years. Energy companies also again effected large write-downs on their power plants in the reporting year. Not only did enterprises trim their capacity expansion last year, they also modified their strategy of expanding by purchasing shareholdings. However, German enterprises' growing interconnectedness is also reflected in the significant proportion of funds that were used to purchase financial assets. Given that the German economy is still growing rapidly and in view of the group accounts available so far, the profitability of non-financial corporations is likely to have continued to strengthen in 2017.

■ Underlying trends

Very favourable macroeconomic environment

In 2016, the strong upturn of the German economy continued apace despite weaker impetus from foreign trade. Dynamic private and public consumption and the strong increase in housing investment helped the real gross domestic product (GDP) grow faster than in the previous year, at 1.9%. Aggregate output consequently again outpaced potential output. Aggregate capacity utilisation rose further and considerably exceeded normal capacity utilisation. In addition to the favourable developments in sales markets, prices for intermediate goods fell again. Moreover, wage growth made a smaller contribution to enterprises' cost increases than a year earlier. The extremely favourable overall economic environment helped non-financial corporations further improve their earning power. At 4.7%, their return on sales before tax reached its highest level since the Great Recession of 2008-09, not least because enterprises were able to further boost gross revenue.¹ Another important factor was the relief provided by valuation gains on provisions for pensions.

Recalculation of the discount rate for pension provisions affecting profit and loss account and balance sheet

The way in which the discount rate for pension provisions is calculated was revised at the beginning of 2016. The reference period for the average discount rate, which is the basis, amongst other things, for long-term provisions for pension liabilities towards active and former employees, was extended from seven to ten years. This meant that the discount rate rose in 2016, as interest rates were higher in the three extra years that are now included than in the seven years of the original reference period. The necessary provisions for pension obligations were consequently much lower in 2016 in some cases, resulting in additional income. This had a dampening impact on interest expenditure and personnel expenses in enterprises' profit and loss accounts and also affected balance sheet ratios.

In the reporting year, the equity ratio in the aggregate balance sheet of the non-financial

corporations sector, in essence, stabilised at the elevated level it has stood at since 2014. The slight lift in the equity ratio reported for non-financial corporations overall can be attributed, in particular, to valuation gains on provisions for pensions. One reason for the increase in equity held by enterprises with pension liabilities is probably that the distribution of any additional calculatory income resulting from the revaluation of the required provisions is prohibited.² Another reason is that the revaluation of pension provisions meant that external funds on enterprises' balance sheets grew significantly less than in the preceding year. In addition, the equity ratio of enterprises without pension liabilities also stabilised at its previous level. While the ratio between external funds and equity is stable, there is a trend on the assets side for companies to expand financial assets more than tangible fixed assets. The change in percentages given continuous balance sheet growth was in 2016 again reflected mainly in a weaker expansion of tangible fixed assets as compared to increased growth in claims on affiliated enterprises.

Equity ratio strengthened further

After the change in the calculation method raised the discount rate in the reporting year, a renewed decline in the discount rate is nonetheless on the cards in the following years; the necessary provisions are, however, unlikely to hit enterprises as hard as in 2015. Nonetheless, the equity ratio among enterprises obliged by falling interest rates to form additional pension provisions again following the 2016 financial year will probably be strained. However, enterprises with pension obligations could tend to increase savings going forward in order to balance out this effect by retaining more earn-

Renewed rise in pension provisions expected in the coming years

¹ The analyses for 2016 are based on some 25,000 financial statements, which were roughly extrapolated based on the evaluation of aggregate sales data from the company register. For details on the current procedure, see Deutsche Bundesbank, Financial statements statistics with broader sectoral coverage and a new basis of extrapolation, Monthly Report, December 2011, pp 32-33.

² However, profits may be distributed if the distributable reserves (including retained earnings) remaining after the pay-out are at least as high as this additional income.

The emergence of zombie firms in Germany in the low-interest-rate environment

In functioning market economies, outdated production processes are usually gradually replaced by more efficient methods. The corporate sector is a crucial player in this process, with its innovations causing new goods and services, as well as production processes, to be developed, thereby spurring productivity gains. However, direct or indirect subsidies can enable companies that are not really competitive in terms of productivity to remain in the market. The low-interest-rate setting which has prevailed in the euro area for some years now could have been another factor leading to a situation in which undercapitalised lenders, in particular, continue to fund inefficient or even insolvent corporate borrowers – known as zombie firms.¹ The low interest rates could be reducing the opportunity costs for creditors of rolling over non-performing loans (NPLs) or allowing deferment of payments as compared to making write-downs on claims, realising losses or forming provisions.² This would mean that economic resources would tend to remain in less productive uses. In macroeconomic terms, productivity and economic growth could be stifled via this channel.

How to define and statistically capture zombie firms

Current empirical research suggests a relationship between a slowdown in productivity growth in some advanced economies over the past few decades and a rise in the number of zombie firms.³ Firm-level micro-data from the Bundesbank's Financial Statement Data Pool can be used to assess the quantitative importance of zombie firms in Germany and their contribution to overall economic developments in the corporate sector.⁴

If firms in the dataset do not exit the market even though their medium-term operating revenue is insufficient to fund major expenditure items, they are classified as zombie firms.⁵ In line with the approach pursued in the literature, variant A classifies as a zombie firm one that cannot meet its interest payments (including similar expenses) out of its operating and investment income for three consecutive years. For a zombie firm, the interest coverage ratio, ie the ratio of operating and investment income to interest payments, would be less than one in three consecutive years.⁶ Alternatively, variant B defines a zombie firm as one whose cash flow has been negative for three consecutive years.⁷

The results based on the latest available three-year period, which ends in 2015, are compared with two suitable points in time

¹ See eg F Schivardi, E Sette and G Tabellini (2017), Credit misallocation during the European financial crisis, CESifo Working Paper No 6406.

² Another possible effect of low interest rates is to obscure the actual (inferior) quality of the loans and thus the need for write-downs, since the debt is easier to service even for ailing borrowers.

³ See eg M Adalet McGowan, D Andrews and V Millot (2017), The walking dead? Zombie firms and productivity performance in OECD countries, OECD Economics Department Working Paper No 1372.

⁴ See Deutsche Bundesbank, Financial statements statistics with broader sectoral coverage and a new basis of extrapolation, Monthly Report, December 2011, pp 32-33.

⁵ See M Adalet McGowan et al (2017), op cit and Bank of Korea (2013), Financial Stability Report, October. For other possible criteria for classifying firms as "zombies", see R Caballero, T Hoshi and A Kashyap (2008), Zombie lending and depressed restructuring in Japan, American Economic Review, Vol 98 (5), pp 1943-1977, or M Storz, M Koetter, R Setzer and A Westphal (2017), Do we want these two to tango? On zombie firms and stressed banks in Europe, IWH Discussion Papers No 13.

⁶ The reason for choosing a three-year period is to eliminate temporary slumps in individual firms' profitability and to capture only those enterprises with deep-seated productivity issues.

⁷ For the definition of cash flow, see Deutsche Bundesbank, Special Statistical Publication 5.

Zombie firms in Germany*

%			
Variant	2000	2007	2015
	Share of all non-financial corporations		
Variant A ¹	7.9	4.8	4.7
Variant B ²	1.7	1.4	2.2

* The data set covers firms from the following economic sectors: mining and quarrying; manufacturing; electricity, gas and water supply; waste disposal; construction; wholesale and retail trade, transportation and storage; accommodation and restaurants; information and communication technology; and business services. In variant A, the benchmark group of firms contains 46,297 non-financial corporations for the year 2000, 54,286 for 2007 and 48,884 for 2015. In variant B, the figures are 39,360, 44,487 and 42,429 firms respectively. ¹ Firms' interest coverage ratio (operating and investment income (EBIT) over interest and similar expenses, including expenditure from discounting) is smaller than one in the reporting year and the two preceding years. ² Firms' cash flow is negative in the reporting year and the two preceding years.

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prior to the extraordinary slide in interest rates following the financial and economic crisis in the euro area. One of the reference points in time is the year 2007, the last year of the solid upswing in Germany prior to the onset of the Great Recession. The other is the year 2000, in which aggregate capacity utilisation was at a similar level to the evaluation period.⁸

The definition of the measure in variant A incorporates not only conventional interest payments on loans but also expenditure necessitated by the low-interest-rate environment. Such expenditure includes pension entitlement-related interest expenditure over the past few years due to changes to accounting rules.⁹ These considerations thus rest on the assumption that servicing overall interest expenditure – and not just interest expenditure based on ongoing lending relationships – is relevant to a firm's financial stability. Income from equity holdings between affiliated firms is also taken into account.¹⁰

No increase in percentage share of zombie firms in low-interest-rate setting

The results of both approaches show that zombie firms make up a small percentage of all firms in Germany and that this share has not increased in the low-interest-rate setting. In 2000, they accounted for only somewhere near 8% of all firms according to variant A; in 2007 and 2015, this share was even lower, at around 4¾% in each of those years. Variant B yields a similar picture; here, zombie firms make up only around 1½% to 2% of all firms in 2000 and 2007 – even less than in variant A – and the figure for 2015 is only barely higher than in the two reference years. What the analyses therefore show is that, in 2015 – the latest year for which data are available – the quantitative importance of zombie firms in Germany was similarly small as in earlier upswings and has not increased in the low-interest-rate setting.

⁸ As in the case of the evaluation period, the results for the reference years are based on three-year time-spans.

⁹ Since the German Commercial Code (Handelsgesetzbuch) was amended in 2010, discount rates must be calculated based on average yields over a period of several years. With interest rates persistently low, pension liabilities consequently necessitate additional interest expenses. See also Deutsche Bundesbank, German enterprises' profitability and financing in 2015, Monthly Report, December 2016, pp 57-76.

¹⁰ This means that earnings and expenditure metrics are consistently captured together when calculating the interest coverage ratio. Interest expenditure also contains interest on loans taken out by a parent for subsidiaries. The operating result from core business is also augmented to include income from equity holdings in other firms so as, for instance, to factor holdings without self-generated income out of the population of zombie firms. Alternative versions, in which income from equity holdings in other firms or additional interest expenses owing to the setting-aside of provisions for future pension obligations are excluded, produce qualitatively similar results.

Zombie firms: lower profitability, lower investment and more highly leveraged

From a macroeconomic perspective, it is of interest whether and how zombie firms impede the efficient allocation of labour and capital, and to what extent they affect the productivity and investment patterns of all non-financial corporations. Not surprisingly, variant A shows that zombie firms are considerably less profitable than other firms – measured in terms of the ratio of annual result before taxes on income over gross revenue – which, in many cases, is actually negative.¹¹ In all reporting years, zombie firms’ share of sales is low.¹²

The ratio of the gross increase in tangible fixed assets to total assets is smaller for zombie firms than for others in all reporting periods. Consequently, zombie firms tend to underinvest. However, their small share of total fixed assets means that their dampening impact on non-financial corporations’ productivity is likely to be small.¹³ In addition, the extent of potential capital misallocation is likely to be very limited given the small share of fixed assets tied up in zombie firms.

Moreover, the evaluations show that zombie firms have, on the whole, a significantly lower equity ratio and are more dependent on external funding than other firms. In all evaluation periods, they are generally more highly indebted to affiliated enterprises and, in some cases, to credit institutions.

No signs of dampening effects on growth or productivity

It must be noted that the analyses are subject to constraints which make it difficult to draw conclusions regarding the universe of firms. One is that the Financial Statements Data Pool tends to be biased towards more

German non-financial corporations’ balance sheet and P/L metrics*

%			
Metric	2000	2007	2015
Share of all non-financial corporations			
Sales ¹			
Zombie firms	7.1	4.4	5.7
All others	92.9	95.6	94.3
Tangible fixed assets ²			
Zombie firms	9.0	5.9	8.3
All others	91.0	94.1	91.7
Profitability ³	Median		
Zombie firms	-1.8	-2.2	-3.8
All others	2.2	3.4	3.6
Gross increase in tangible fixed assets ⁴			
Zombie firms	2.1	1.6	1.7
All others	3.3	2.9	2.6
Equity ⁴			
Zombie firms	3.8	8.0	11.6
All others	11.7	20.5	28.7
Liabilities ⁴			
Zombie firms	87.7	79.8	73.2
All others	77.7	66.0	58.6

* Data refer to the definition of zombie firms according to variant A. **1** As a percentage of total firms’ sales. **2** As a percentage of total firms’ fixed assets including intangible fixed assets. **3** Ratio of annual result before taxes on income to gross revenue (%). **4** As a percentage of total assets.

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stable firms, which means that zombie firms might be under-recorded. On the other hand, though, the identified sample of zombie firms could also contain young firms and start-ups with a promising economic outlook since the firm age could not be taken into account owing to the absence of information on the year the firm was founded. All in all, the descriptive results do, however, indicate that, for the sample of firms in Germany covered by the analysis, zombie firms are not a significant factor in

11 For many firms, the size of interest expenditure does not appear to determine whether the firm is classified as a zombie firm. Other cost components, such as the cost of materials and staff or write-downs, as well as earnings components seem to play a more prominent role.

12 The groups of zombie firms and non-zombie firms show a similar size structure in the underlying reference data set.

13 This finding also holds if the respective previous year is assessed, mitigating the potential impact of clustered investment. In addition, variant B produces, on the whole, a qualitatively similar picture.

terms of their number, sales or tangible fixed assets held.¹⁴ Their weight has not increased in the low-interest-rate setting, either. As they lack significance, zombie firms are currently unlikely to be having any perceptibly dampening effect on productivity and economic growth in Germany. This finding is consistent with the assessment that the German corporate sector has been in largely good shape for several years now.

14 This finding is reinforced by the fact that a relatively large number of companies classified as “zombies” are part of a corporate group. In these cases, overriding considerations could encourage parent enterprises to assume reported losses in the long term.

ings.³ Overall, it is therefore unlikely that such provisions will lower the capital adequacy of many enterprises with pension obligations to such an extent as to cause funding difficulties, for example.

Moderate sales growth

At just over 1%, companies' sales growth was weaker in the reporting year than in the two preceding years. The sharp decline in sales among energy suppliers, as a consequence of both smaller trading volumes and lower prices, had a dampening effect. Excluding energy supply, sales would have risen by approximately 2% in aggregate. Moreover, one-off effects in connection with the new accounting rules under the German Accounting Directive Implementation Act (*Bilanzrichtlinie-Umsetzungsgesetz*) have an impact on the way sales are reported and on the expense items. First, parts of other operating income were, for the first time, allocated to sales in 2016 and, second, excise duties have, since then, no longer been reported under sales and thus not under operat-

ing taxes. In the reporting year, these two opposing effects resulted, overall, in a slight increase in sales as reported in enterprises' aggregate profit and loss accounts.

Non-financial corporations' cash flow grew sharply again in 2016, although the net inflow of funds as a whole declined. However, externally financed capital injections for corporations were comparatively small as well. A considerable proportion of the incoming funds was – as in the previous year – used to acquire financial assets. In this context, companies granted loans mainly in the context of trade payables and within their corporate group. The percentage of enterprises' funds used to acquire liabilities was roughly three times as high

Net inflow of funds lower

3 A simulation-based quantification suggests that this effect could be a factor in non-financial corporations' increased saving. See Deutsche Bundesbank, Potential effects of the increase in pension provisions as a result of changes to the discount rate on non-financial corporations' savings, Monthly Report, December 2016, pp 60-63.

as that used to expand the stock of tangible fixed assets. The pace of corporate expansion through the acquisition of shareholdings slowed down in the reporting year, falling short of the very high levels seen in the two previous years.

Corporate insolvencies at historical low

The number of corporate insolvencies continued to decline in 2016 and hit a new all-time low. The continued strong increase in cash flows and favourable conditions for debt restructuring have probably improved non-financial corporations' prospects. By and large, sectoral trends reflected macroeconomic developments. In manufacturing, the construction sector as well as in the services sector, the number of insolvencies fell sharply again. However, some sectors exhibited something of a slowdown in business activity. For example, the number of bankruptcies in accommodation and food services increased, and business conditions in transportation and storage did not appear to improve either.

■ Sales and income

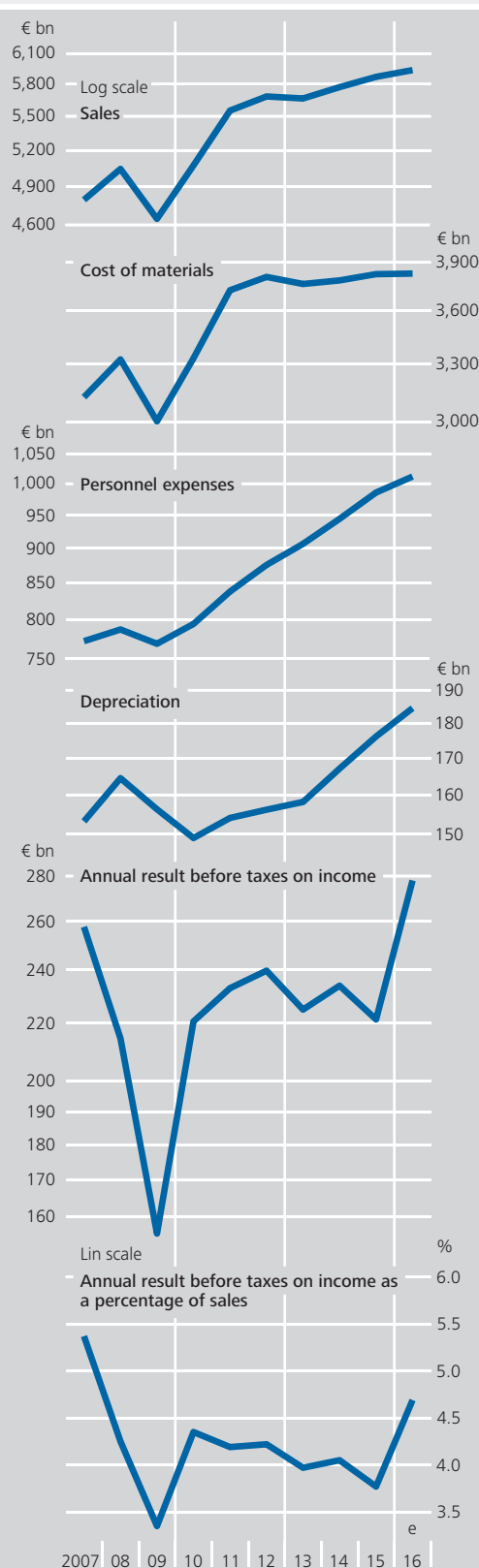
Moderate nominal sales momentum understates the marked increase in volume

At just over 1%, non-financial corporations' sales growth was slightly weaker in 2016 than in the previous year, when it was almost 2%. However, this probably understates growth in the volume of goods and services, as sales prices moderated further in the reporting year. For instance, prices of manufactured goods sold domestically fell by 1.8% and those intended for export came down by 0.8% as compared with the previous year, in which domestic producer prices had declined at a similar pace, but export prices rose moderately, by 0.8%.

Domestically oriented sectors with higher sales growth

At the sectoral level, there were again relatively large differences in terms of the integration in international value chains in the year under review. This is clear from the fact that sectors that focus on domestic markets tended to exhibit higher sales growth than those active in international trade. Whereas sales growth was

Selected indicators from German enterprises' income statement*



* Extrapolated results from corporate financial statements statistics.
 Deutsche Bundesbank

Enterprises' income statement*

Item	2014	2015	2016 ^e	Year-on-year change	
				2015	2016 ^e
Income	€ billion			%	
Sales	5,770.0	5,868.7	5,934	1.7	1
Change in finished goods ¹	22.3	30.1	32.5	35.2	7.5
Gross revenue	5,792.3	5,898.8	5,966.5	1.8	1
Interest and similar income	17.0	17.4	17.5	2.2	0.5
Other income ²	249.5	291.6	222	16.9	-24
<i>of which</i>					
from long-term equity investments	31.7	45.7	41	44.1	-10
Total income	6,058.8	6,207.8	6,205.5	2.5	0
Expenses					
Cost of materials	3,785.8	3,825.0	3,828.5	1.0	0
Personnel expenses	943.9	985.7	1,012	4.4	2.5
Depreciation	167.0	176.1	184.5	5.4	5
of tangible fixed assets ³	155.0	156.9	166	1.2	6
Other ⁴	12.0	19.2	18.5	59.6	-3
Interest and similar expenses	65.1	78.7	55.5	20.8	-29.5
Operating taxes	69.1	69.3	9.5	0.4	-86
<i>of which</i>					
Excise duties	64.7	64.9	5	0.3	-92.5
Other expenses ⁵	794.1	851.8	837	7.3	-1.5
Total expenses before taxes on income	5,825.0	5,986.6	5,927.5	2.8	-1
Annual result before taxes on income	233.8	221.2	278	-5.4	25.5
Taxes on income ⁶	51.8	50.1	57	-3.2	13.5
Annual result	182.0	171.1	221	-6.0	29.5
<i>Memo item</i>					
Cash flow ⁷	378.2	404.2	427.5	6.9	5.5
Net interest paid	48.1	61.3	38	27.5	-37.5
	As a percentage of sales			Percentage points	
Gross income ⁸	34.8	35.3	36.0	0.6	0.7
Annual result	3.2	2.9	3.7	-0.2	0.8
Annual result before taxes on income	4.1	3.8	4.7	-0.3	0.9
Net interest paid	0.8	1.0	0.6	0.2	-0.4

* Extrapolated results; differences in the figures due to rounding. **1** Including other own work capitalised. **2** Excluding income from profit transfers (parent company) and loss transfers (subsidiary). **3** Including write-downs of intangible fixed assets. **4** Predominantly write-downs of receivables, securities and other long-term equity investments. **5** Excluding cost of loss transfers (parent company) and profit transfers (subsidiary). **6** In the case of partnerships and sole proprietorships, trade earnings tax only. **7** Annual result, depreciation, and changes in provisions, in the special tax-allowable reserve and in prepaid expenses and deferred income. **8** Gross revenue less cost of materials.

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moderate to strong in all observed services sectors – with the exception of the import and export-heavy wholesale trade – sales in the industrial sector fell perceptibly, by just over 1%, in 2016. Besides the change in the way in which excise duties are reported, sharply lower import prices – especially for energy – are likely to have been a major factor.⁴ The resulting savings in the cost of materials were, in part, passed on in the form of lower sales prices. This relationship is reflected in the electricity, gas and water supply sector, which contributes some 10% to sales. As a result of the lower cost of materials (-10%), domestic prices there also declined sharply (-6%) in a business enviro-

ment characterised by low margins.⁵ Overall, revenues in this sector were considerably down from the previous year's level (-8.5%). In addition, sales momentum in the industrial sector, which is heavily geared towards exports, eased off noticeably, and revenues more or less stag-

⁴ The decline in sales as a result of the change in the way in which excise duties are reported is relevant mainly for enterprises in the production sector.

⁵ The cost of materials as a percentage of sales is 85% in this sector, compared with 66% for all surveyed enterprises. As a consequence, sales in this sector are particularly sensitive to changes in the cost of materials.

nated in the year under review.⁶ By contrast, sales in the construction sector, which mainly serves domestic markets, expanded sharply in the reporting year (6%) following moderate growth in the previous year (3%).

Enterprises' other income strongly influenced by one-off effects

Enterprises' other income, which mainly comprises income from non-core-business activities as well as income from participating interests, fell sharply in the reporting year. Again, one-off factors had a role to play. The Accounting Directive Implementation Act means that parts of the sums which had, up until 2015, been reported as other operating income have since been allocated to sales.⁷ As a result, other operating income – and thus other income as a whole – fell sharply on paper in the reporting year (-27.5%). Even so, in relation to gross revenue, other operating income still represented the largest item under other income. Moreover, the reallocation of other operating income to sales meant that sales growth was just over 1 percentage point stronger in 2016 than it would have been if the reporting change had not taken place. This did not affect income developments as a whole, however, as it merely represents a reorganisation among different earnings items. Another dampening factor was income from long-term equity investments, which fell by just under one-tenth in the reporting year, after having grown very strongly in the previous year (+44%). Non-financial corporations' interest and similar income has been at a fairly steady low level since 2013.

Calculatory decline in total expenditure due to legislative change

In the reporting year, non-financial corporations' total expenditure decreased slightly by 1%. This was due mainly to changes made in the context of the German Accounting Directive Implementation Act, as a result of which reported operating taxes in particular and, to a lesser extent, other expenditure were lower compared with the previous year.

The largest item in the expenditure account, ie cost of materials, remained virtually unchanged on the year. The share of this item in gross revenue, which has been declining since 2012, fell

further to just over 64% at last count. The favourable evolution of prices of intermediate goods and raw materials in this period is likely to have played a key role here. However, there are major differences at the sectoral level. On the one hand, a number of economic sectors – such as the industrial sector or electricity, gas and water supply – continued to benefit from the more favourable prices of raw materials in 2016 compared with a year earlier. On the other hand, significant increases were recorded in the cost of materials in the construction sector (7%) and a number of areas of the services sector, especially business services (6.5%), the information and communications sector (8%) and motor vehicle trade (8.5%).

Favourable developments in intermediate goods prices reduced corporate expenditure

Mirroring the share of the cost of materials, the importance of the second-largest expenses item, ie personnel costs, continued to expand in 2016. However, the increase in this cost item, at 2.5%, was weaker than the average across the five preceding years. Against the backdrop of the favourable economic situation, this somewhat unusual low expansion is also linked to the increase in the statutory reference rate for pension provisions as from the 2016 financial year. Consequently, non-financial corporations were able in 2016 to make lower pension provisions or dissolve those previously set aside. Some companies record such relief under personnel expenses, while others book it under interest expenditure; in the reporting year, this meant that the alleviating effect of provisions was felt in both items. Firms without pension reserves saw personnel costs rise considerably, whereas firms with pension reserves recorded only a slight increase. However, given that interest expenditure excluding pension liabilities represents a relatively small cost item,

Smaller increase in personnel costs

⁶ At a more deeply disaggregated level, it is evident, however, that revenues in vehicle manufacture rose particularly sharply – as in the preceding years; gains of 8.5% in 2014 and 9.5% in 2015 were followed by a plus of 5% in the year under review. The motor vehicle trade also benefited, with sales picking up by 8.5% in 2016, following 6.5% in 2015.

⁷ Other operating income includes exchange gains and write-ups as well as revenue from the release of provisions or the sale of tangible fixed assets.

the new method of calculating the reference rate in this case led to a fairly sharp decline of 29.5%. By contrast, interest expenditure remained virtually unchanged for firms without pension provisions.

Decline in other expenses also due to legislative changes

Following a strong previous year (+7.5%), growth in the third large expenses item, ie other expenses, dropped by just over 1.5% in the reporting year. Besides one-off expenses in the case of some large firms in the previous year, in the year under review, this was also attributable – as mentioned above – to changes in reporting based on the Accounting Directive Implementation Act at the expense of other operating expenses and in favour of the cost of materials, which mirrored the changes in other operating income and in sales. Moreover, with regard to operating taxes, the 2016 income statement for enterprises reflected the fact that excise duties are no longer included in sales, rendering the corresponding expenditure item obsolete. Hence, expenditure on operating taxes decreased by 86% in the reporting year.⁸ Without this reform, growth in sales, total income and expenditure would have been just under 1 percentage point higher.⁹ On balance, this does not affect the annual result.

Corporate profitability probably largely unchanged

Resulting from an essentially unchanged total income and a decline in total expenses, the return on sales before tax improved from 3.8% in the previous year to 4.7% in the reporting year. However, in 2015, the emissions scandal weighed heavily on profits in motor vehicle manufacturing. If, in addition, the relief provided by the reduced requirements for pension provisions is taken into account, the profitability of non-financial corporations in the reporting year should not differ substantially from the previous year's level.

■ Sources and uses of funds

Sources of funds remain abundant

In the light of the ongoing economic recovery, internal financing remained at a high level despite the slight drop in 2016. Concerning exter-

nal funding, non-financial corporations' confidence in the sustainability of the healthy economy is probably also reflected in the increased build-up of long-term obligations. Overall, external financing decreased slightly amidst reduced capital injections. This development could also have something to do with reduced purchase volumes for long-term equity investments following the one-off effects in the two preceding years, particularly as a result of the consolidation in the telecommunications sector and the chemical industry.

As in the preceding year, around half of the available funds were used for investment in tangible fixed assets. The gross increase in tangible fixed assets was somewhat higher than the subdued level a year earlier. However, adjusted for replacement investment and depreciation, the increase in tangible fixed assets was lower than the year before. This was attributable, in particular, to the information and communications sector; in 2016, activity in this sector was, amongst other things, characterised by the slowdown in broadband network expansion. In addition, negative impulses emanated from transport and energy companies, which continued to record substantial write-downs on their power plants.

Little change in tangible fixed assets

Following the consolidation of enterprises in the telecommunications sector and the chemical industry in 2014 and 2015, during which an above-average increase in purchases of long-term equity investments was recorded, the pace of corporate expansions calmed in the reporting year. After a boost to the acquisition of long-term equity investments in the two preceding years, expansionary activities in motor vehicle manufacturing were likewise scaled

Calming of expansionary strategy in some sectors

⁸ The excise taxes recorded for 2016 are essentially attributable to enterprises whose financial year differs from the calendar year and started as early as 2015. For these enterprises, the aforementioned effect does not occur until the following year.

⁹ At the sectoral level, the areas of the manufacturing sector "manufacture of food products, beverages and tobacco products" as well as "manufacture of coke and refined petroleum products" were particularly affected by the changes due to the Accounting Directive Implementation Act.

Enterprises' sources and uses of funds*					
€ billion					
Item	2014	2015	2016 ^e	Year-on-year change	
				2015	2016 ^e
Sources of funds					
Capital increase from profits and contributions to the capital of non-corporations ¹	68.7	38.0	55	- 30.7	17
Depreciation (total)	167.0	176.1	184.5	9.1	8.5
Increase in provisions ²	28.0	57.6	21	29.5	- 36.5
Internal funds	263.8	271.6	260.5	7.9	- 11
Increase in capital of corporations ³	15.9	23.3	10	7.5	- 13.5
Change in liabilities	52.9	77.5	85.5	24.6	8
Short-term	48.7	73.8	62.5	25.1	- 11.5
Long-term	4.2	3.7	23	- 0.5	19.5
External funds	68.8	100.9	95.5	32.1	- 5.5
Total	332.6	372.5	356	39.9	- 16.5
Uses of funds					
Increase in tangible fixed assets (gross) ⁴	194.0	186.2	189	- 7.8	3
<i>Memo item</i>					
Increase in tangible fixed assets (net)	39.0	29.2	23	- 9.7	- 6.5
Depreciation of tangible fixed assets	155.0	156.9	166	1.9	9
Change in inventories	19.3	26.0	21.5	6.7	- 4.5
Non-financial asset formation (gross investments)	213.3	212.2	210.5	- 1.1	- 1.5
Change in cash	7.4	12.2	22.5	4.9	10
Change in receivables ⁵	29.8	72.1	72	42.3	- 0.5
Short-term	15.2	70.3	59.5	55.0	- 10.5
Long-term	14.5	1.8	12	- 12.7	10.5
Acquisition of securities	8.0	5.6	3	- 2.4	- 2.5
Acquisition of other long-term equity investments	74.2	70.5	48.5	- 3.8	- 22
Financial asset formation	119.3	160.3	145.5	41.0	- 14.5
Total	332.6	372.5	356	39.9	- 16.5
<i>Memo item</i>					
Internal funds as a percentage of gross investments	123.7	128.0	124	.	.

* Extrapolated results; differences in the figures due to rounding. **1** Including "GmbH und Co KG" and similar legal forms. **2** Including change in the balance of prepaid expenses and deferred income. **3** Increase in nominal capital through the issue of shares and transfers to capital reserves. **4** Change in tangible fixed assets (including intangible assets) plus depreciation. **5** Including unusual write-downs of current assets.

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back. By contrast, manufacturers of machinery and equipment, energy suppliers and retailers increasingly invested in equity stakes.

■ Balance sheet developments

Stable growth in total assets

The good economic situation in 2016 was also reflected in the development of the aggregate balance sheet of the non-financial corporations sector, which grew to much the same extent, on average, as it had in the preceding five years. This was in part due to the interconnect- edness of companies, which could be observed in balance sheet developments. The rate at

which companies became more interconnected in the reporting year hardly dropped; this was mirrored by the increase in claims and liabilities vis-à-vis affiliated companies. Against this back- drop, long-term positions, in particular, grew perceptibly in almost all sectors. Overall, finan- cial obligations to affiliated enterprises con- tinued to make the largest contribution to the increase in external funds. In the reporting year, the expansion of enterprises' balance sheets was also reflected in the greater use of trade credits. Both short-term receivables and ac- counts payable rose a great deal more across all sectors than in previous years.

Enterprises' balance sheet*

Item	2014	2015	2016 ^e	Year-on-year change	
				2015	2016 ^e
Assets	€ billion			%	
Intangible fixed assets	85.3	89.4	89	4.8	-0.5
Tangible fixed assets	939.9	965.0	988.5	2.7	2.5
Inventories	631.2	657.2	679	4.1	3.5
Non-financial assets	1,656.4	1,711.6	1,756	3.3	2.5
Cash	271.6	283.8	306	4.5	8
Receivables	1,249.0	1,317.0	1,383	5.4	5
<i>of which</i>					
Trade receivables	394.8	395.7	416	0.2	5
Receivables from affiliated companies	694.1	758.7	795.5	9.3	5
Securities	86.1	91.7	94.5	6.5	3.5
Other long-term equity investments ¹	653.1	708.4	744.5	8.5	5
Prepaid expenses	20.1	20.5	21.5	2.0	4.5
Financial assets	2,279.8	2,421.4	2,549.5	6.2	5.5
Total assets ²	3,936.2	4,133.0	4,305.5	5.0	4
Capital					
Equity ^{2, 3}	1,159.4	1,220.7	1,285.5	5.3	5.5
Liabilities	2,110.8	2,188.3	2,274	3.7	4
<i>of which</i>					
to banks	469.7	475.8	470	1.3	-1
Trade payables	304.4	307.4	320	1.0	4
to affiliated companies	831.7	885.3	932	6.4	5.5
Payments received on account of orders	220.2	230.6	234.5	4.7	1.5
Provisions ³	637.8	693.6	714	8.8	3
<i>of which</i>					
Provisions for pensions	212.3	234.7	231	10.5	-1.5
Deferred income	28.2	30.4	32.5	7.7	6.5
Liabilities and provisions	2,776.8	2,912.3	3,020	4.9	3.5
Total capital ²	3,936.2	4,133.0	4,305.5	5.0	4
<i>Memo item</i>					
Sales	5,770.0	5,868.7	5,934	1.7	1
Sales as a percentage of total assets	146.6	142.0	138	.	.

* Extrapolated results; differences in the figures due to rounding. 1 Including shares in affiliated companies. 2 Less adjustments to equity. 3 Including half of the special tax-allowable reserve.

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*Further decline
in financing
via credit
institutions*

While liabilities arising from trading activities and to affiliated companies showed dynamic growth, the significance of credit institutions in the external financing of non-financial corporations continued to wane in 2016. The share of obligations to the banking sector in liabilities fell from just over 30% in the early 2000s to around 20% in 2016.¹⁰ The reduction in long-term liabilities to banks in the reporting year took place, for the most part, in the energy supply and the information and communications sectors.

The downward trend in borrowing through credit institutions was counterbalanced by a

strong expansion in liabilities in the form of bonds.¹¹ The share of issued bonds in corporations' total liabilities tended to increase in the period between 2011 and 2016, though this form of financing played a fairly minor role for non-corporations. This can probably be explained by the prolonged period of low interest

*Corporate bonds
become even
more important*

¹⁰ This decline was offset by a build-up of liabilities to affiliated companies in connection with cash pooling and financing entities.

¹¹ The fact that the share of bonds in total assets remains relatively low is, amongst other things, due to the fact that bonds are often issued via foreign financing entities and that intra-group funding is, in this case, recorded under obligations to affiliated enterprises. The actual volume of financing generated via bonds is thus higher than indicated in the category of bonds.

rates and investors pursuing higher yields. In 2016, the issuance of both short-term and long-term bonds rose, with the strong increase confined to just a few sectors. In the case of long-term bonds, more than half of the growth was down to the manufacture of motor vehicles, while around half of the increase in short-term bonds was attributable to the energy sector.

Equity ratio stabilised at elevated level

In 2016, external funds grew at a more moderate rate than in the previous year. While the volume of liabilities expanded by roughly the same measure as total assets, the increase in reserves was distinctly lower on the year owing to the recalculation of the discount rate for pension provisions. Provisions for pensions even fell on aggregate, with manufacturers of motor vehicles, in particular, experiencing a significant decline. In the reporting year, enterprises again reported higher equity ratios. However, adjusted approximately for the valuation gains from pension provisions, the equity ratio of non-financial corporations remained more or less constant at what is now a clearly elevated level.

Growth trend in liquid funds persists

On the assets side, the trend increase in liquid funds relative to total assets observed across several sectors since the early 2000s continued. In the case of non-financial corporations as a whole, the share of cash and bank balances in total assets (7%) was 2 percentage points higher in 2016 than at the beginning of the millennium. On the one hand, this appears to indicate non-financial corporations' higher preference for liquidity. On the other hand, however, this balance sheet item could also reflect the fact that interest rate spreads between short and long-term yields have been relatively narrow due to the low-interest-rate setting.

No additional growth in tangible fixed assets

The increase in tangible fixed assets was somewhat lower compared with previous years and failed to keep pace with the expansion of total assets in the year under review. Mirroring the development of financial assets, the importance of tangible fixed assets for investment

Enterprises' balance sheet ratios*

Item	2014	2015	2016 ^e
	As a percentage of total assets ¹		
Intangible fixed assets	2.2	2.2	2
Tangible fixed assets	23.9	23.3	23
Inventories	16.0	15.9	16
Short-term receivables	29.1	29.3	29.5
Long-term equity and liabilities ²	49.8	49.5	49.5
of which			
Equity ¹	29.5	29.5	30
Long-term liabilities	14.7	14.1	14
Short-term liabilities	38.9	38.8	38.5
	As a percentage of tangible fixed assets ³		
Equity ¹	113.1	115.8	119.5
Long-term equity and liabilities ²	191.1	194.1	198
	As a percentage of fixed assets ⁴		
Long-term equity and liabilities ²	107.0	106.5	107
	As a percentage of short-term liabilities		
Cash resources ⁵ and short-term receivables	94.9	95.6	97
	As a percentage of liabilities and provisions ⁶		
Cash flow ⁷	15.1	15.4	15.5

* Extrapolated results; differences in the figures due to rounding.
 1 Less adjustments to equity. 2 Equity, provisions for pensions, long-term liabilities and the special tax-allowable reserve.
 3 Including intangible fixed assets. 4 Tangible fixed assets, intangible fixed assets, other long-term equity investments, long-term receivables and long-term securities. 5 Cash and short-term securities. 6 Liabilities, provisions, deferred income and half of the special tax-allowable reserve less cash. 7 Annual result, depreciation, and changes in provisions, in the special tax-allowable reserve and in prepaid expenses and deferred income.
 Deutsche Bundesbank

continued to decrease, with the trend increase in long-term equity holdings also a relevant factor. In addition, growth in intangible assets was weak on the whole.¹² However, the traditionally relatively volatile goodwill in some sectors came into play here. Excluding the damper emanating from this sub-item, total intangible assets increased sharply again.

¹² Despite the weight of this balance sheet item being relatively small, it increasingly comprises production-relevant capital goods such as software and databases.

Net assets, financial position and results of operations of listed German non-financial groups in 2016

In 2016, the roughly 240 German non-financial groups listed in the Prime Standard segment saw their sales decline slightly by 0.4% from the previous year. The positive impact of the slight global GDP growth was counteracted by negative exchange rate effects.¹ Groups active primarily in the services sector reported an increase in sales of 2.4%, whereas groups from the industrial sector saw their earnings go down by 1.1%. Various groups were forced to contend with increased competitive pressure in their sales markets, which meant that price reductions, especially of commodity inputs for low-value-added products, were passed on to purchasers.

Operating results, measured in terms of earnings before interest, tax, depreciation and amortisation (EBITDA) as well as after depreciation (EBIT), were up significantly, at 7.8% and 9.2%, respectively, on the year; provisioning by the Volkswagen group and write-downs by E.ON had weighed heavily on the previous year's figures. Distinct reductions in personnel and distribution costs by some large groups played a role in the positive growth. At €112.1 billion, groups achieved the highest EBIT figure since statistics were first collected in 2007.

The year 2016 saw significant extraordinary expenses as well. For instance, the motor vehicle industry set aside further provisions for legal risk (Volkswagen group) and posted substantial expenditure in connection with defective airbags supplied by a now insolvent Japanese supplier. The energy supply sector, which is assigned to the industrial sector, once again posted a weak operating result. The aftermath of the decision to phase out nuclear energy and the energy U-turn, as well as ongoing provisioning in conjunction with falling crude oil and gas prices, have been weighing dis-

tinctly on the operating result. In 2016 alone, expenditure on provisioning totalled more than €13 billion. On balance, the industrial sector increased its EBIT by 4.4%. By contrast, corporate groups in the services sector posted a much higher operating result of 24.7%.

For the universe of groups, the strong rise in results, amidst a slight decline in sales, means that profitability was higher than the average of previous years. For all of 2016, the weighted return on sales across all sectors rose by 0.5 percentage point to 6.9%. Here, too, the positive result was driven mainly by groups in the services sector, which generated a return of 8.8%, the highest since 2007 and up by 1.6 percentage points on the year. Measured against previous years, the return generated by groups in the industrial sector was, at 6.4%, more on the average side.

German groups' total assets were up by 6.5% compared with 2015. On the assets side, non-current assets contributed 3.8 percentage points to the increase, while current assets accounted for 2.7 percentage points.

On the liabilities side, debt and equity grew at around the same rate. It was specifically short-term financial liabilities which, on aggregate, grew increasingly significant relative to total assets. This reflects the use of favourable short-term funding terms. In particular, large groups with access to global financial markets took advantage of international bank loans and commercial paper as sources of funding. Short-term

¹ Foreign subsidiaries' sales are denominated in euro, which means that, even in the short term, earnings are heavily dependent on foreign exchange rate fluctuations.

liabilities continued to be fully covered by current assets.

The equity ratio remained, on balance, largely unchanged in 2016 at 28.5%. This is due to a combination of counterbalancing effects. On the one hand, one-off effects in the case of E.ON depressed this figure by around 0.8 percentage point. The increase in provisioning for pension obligations also had a negative effect on account of a further decrease in end-of-period interest rates, with the 15-year discount rate standing at 1.7% at the end of 2016, as against 2.4% a year earlier.² This is the primary reason why German groups' pension obligations are estimated to have gone up by more than €24 billion to around €178 billion.³

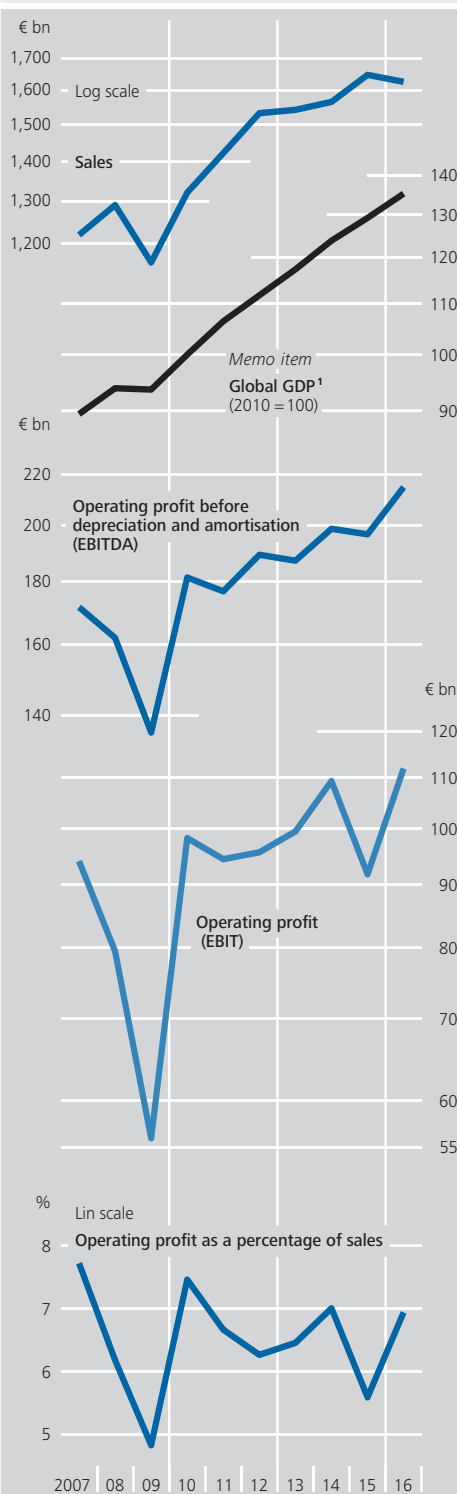
On the other hand, the overall positive earnings development among the reporting groups – with isolated exceptions – increased equity, since these groups were usually able to retain large amounts of their earnings and transfer them to their reserves. Capital increases and balance sheet effects relating to the hedging of future cash flows, along with earnings from currency translation differences, likewise impacted positively on the reported level of equity.

The equity ratio of groups focused mainly in the industrial sector fell slightly by 0.3 percentage point to 26.9%, whereas that of groups in the services sector, owing in particular to retained profits, increased by a significant 1.6 percentage points to 35%, the highest aggregate value since figures

² For valuations according to international accounting standards (IFRS/US GAAP/FRS), the end-of-period interest rate is to be identified according to the maturity of the liability based on "high quality corporate bonds".

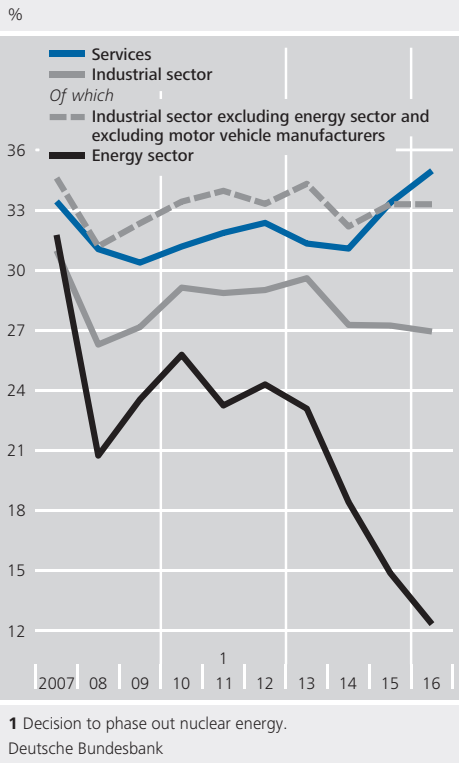
³ Extrapolated from the largest non-financial groups of enterprises listed in the Prime Standard to all Prime Standard-listed non-financial groups. It should be noted here that not only changes in interest rates but also new claims, changes in claims and disbursements are the factors dictating the changes in pension provisions.

Sales, earnings and return on sales of German non-financial groups*



* The reporting population comprises approximately 230 non-financial groups listed in Germany in the Prime Standard segment. ¹ GDP of selected industrial countries and emerging market economies which together make up four-fifths of global economic output, calculated using purchasing power parities.
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Capital ratios of German non-financial groups



were first collected in 2007. At the end of 2014, the equity ratio of groups in the services sector was merely 31%.

On aggregate, the equity ratio of groups in the industrial sector is lower than that of groups in the services sector, owing primarily to motor vehicle manufacturers' funding business (customer financing and financial leasing), which impacts heavily on the funding structure at group level. In 2016, moreover, the adverse effects on energy suppliers' equity of, first and foremost, impairments on assets made themselves felt. Excluding the large car manufacturers and one-off developments in the energy sector, the aggregated equity ratio of groups in the industrial sector would be comparable to that of groups in the services sector. Overall, German non-financial groups are in good shape, both in terms of their net assets and financial position as well as in terms of their earnings position.

Trends for 2017

Signs of improvement in corporate profitability

With regard to the persistently high growth levels of the German economy in the current year, non-financial corporations' sales are likely to have risen significantly. Enterprises' earnings may improve as the broad-based economic recovery now also encompasses positive stimuli from investment in machinery and equipment. By contrast, the costs of intermediate goods and raw materials in 2017 probably again exceeded the preceding year's level, after having fallen – in relation to sales – to an all-time low in 2016. Given the excellent state of the labour market, enterprises' personnel costs in 2017 are also likely to have risen somewhat more strongly than in 2016.

Noticeable rise in groups' return on sales in 2017

Overall, the profitability of groups in the current year can be regarded as good; this is also reflected by the solid growth in sales. In the first three quarters of the current year, the gross return on sales of German groups for

which final data are already available increased to 8%.¹³ This significant rise is based, first, on a countermovement to the depressed level a year earlier, which had been induced by extraordinary burdens.¹⁴ Second, the listed groups have not yet reported any exceptional burdens on the aggregate for 2017. On the contrary, the energy sector benefited from the Federal Constitutional Court ruling that the Nuclear Fuel Tax Act (*Kernbrennstoffsteuergesetz*) of October 2010 is incompatible with the German constitution. Groups of corporations in this sector therefore received repayments amounting to €4.6 billion.

The good earnings position is one of the main reasons for the increase in the equity ratio of

Groups improve equity ratio

¹³ The figures from the consolidated financial statement statistics as at 30 September 2017 are based on data provided by the 35 largest groups listed in the Prime Standard segment of the Frankfurt Stock Exchange.

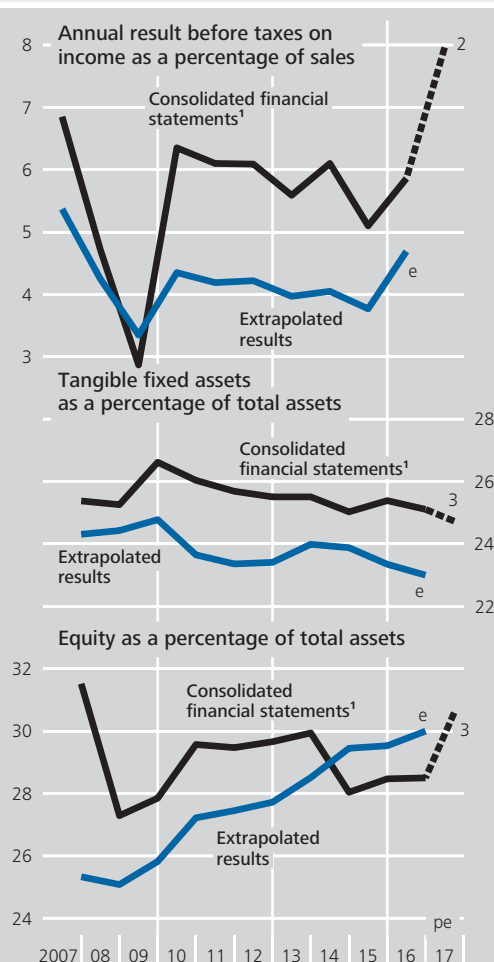
¹⁴ For more on trends in German non-financial groups' net assets, financial position and results of operations in 2016, see the box on pp 48-50.

listed groups. While individual components of items with no effect on profit or loss led to significant changes in equity in the first nine months, on balance, these changes were largely offset by the end of the third quarter. The revaluation of groups' pension obligations as a result of the end-of-period interest rate being increased at the end of the third quarter as well as the revaluation of hedges of future cash flows had a positive impact on equity in this context. By contrast, converting the balance sheets of subsidiaries from foreign currency to euro led to an exchange rate-induced loss. Besides the good earnings position, capital increases among individual groups of enterprises caused equity to increase further.

Growing propensity to invest

Concerning assets, it is likely that the long-observed trend of a declining tangible fixed assets ratio in favour of intangible assets continued in the current year. However, experience has shown that this decline cannot be used as a guide as to the general development of non-financial corporations' holdings of tangible fixed assets, as groups' financial figures are often shaped by outsourcing or acquisitions. On the other hand, the earnings situation of groups, which is expected to improve greatly in 2017, suggests that non-financial corporations' sales growth gained further momentum in the current year. The already very high level of aggregate capacity utilisation, too, might have boosted enterprises' willingness to expand their productive capacities.

Selected ratios from consolidated and individual financial statements



1 The reporting population comprises approximately 230 Prime Standard listed groups of non-financial corporations in Germany. **2** Seasonally adjusted average for the 2017 Q1 to Q3 period. **3** Reporting date: 30 September 2017.
 Deutsche Bundesbank

Long series of extrapolated results from the corporate financial statement statistics are available online at http://www.bundesbank.de/Navigation/EN/Statistics/Enterprises_and_households/Corporate_financial_statements/Tables/table.html

Mark-ups of firms in selected European countries

Growing mark-ups of firms are seen by many as evidence of increasing market power and a falling degree of competition. Indications of such a development in the United States have become more prevalent in the past few years, where recent studies find that both market concentration and mark-ups of firms are on the rise. This raises the question as to which firm mark-up trends are cropping up in EU countries. It should be noted that the EU integration process and the accelerated pace of structural reforms are expected to have pushed up competitive pressure somewhat. The prolonged economic downturn in some European economies may also have had an impact on mark-ups.

Since firms' mark-ups cannot be observed directly, they have to be estimated. To that end, a commonly used econometric method has been applied to data from 27 sectors dominated by private firms in seven European countries for the period from 1996 to 2014. The cross-section analysis of these data shows that mark-ups in manufacturing were on average lower than in services sectors. Within manufacturing, higher mark-ups are demanded in segments where research and development activities are comparatively high. In cross-country comparisons, there are indications of above-average mark-ups in research-intensive branches of manufacturing in Germany and in various service sectors in Italy. The revenue that may result from these mark-ups appears to be shared to some extent with employees.

Over time, mark-ups in the European countries studied have been seen to behave in a largely procyclical manner. This appears to be connected to the sharp dip caused by the financial and sovereign debt crisis. There is no evidence of a long-term increase in mark-ups, and in some cases, the estimations even indicate a decline in the structural component of the mark-ups. The divergent findings between Europe and the United States may suggest that different factors have been at play. It may be assumed that globalisation has raised competitive pressure in general and has therefore had a similar impact on mark-ups on both sides of the Atlantic, but this overall trend is likely to have been augmented in Europe by the European integration process. By way of contrast, the fact that a large number of newer, internet-based firms, which in some cases have pronounced market power owing to network effects, primarily have their origins and bases in the United States may have played a role there. The protracted economic crisis also had an adverse impact on the mark-ups of firms in Europe. The extent to which mark-ups will rise again as the economy recovers remains to be seen. This normalisation could temporarily fuel general inflation pressures in European countries.

■ Background

Mark-ups as indicators of competitive intensity

Competition is considered to underpin economic prosperity. It induces firms to align themselves with the wishes of customers and to strive to improve. Competition boosts product diversity and quality, and stimulates innovativeness. Competition for labour ensures that employees benefit from economic progress in the form of higher wages. Most importantly, however, competition limits firms' market power, meaning that prices are geared to costs. From this perspective, rising mark-ups would be a sign of increasing market power and a falling degree of competition.

Indications of decreasing degree of competition in United States

In the United States, there have been growing signs of such a development in the past few years. Recent studies indicate a reduced momentum in terms of firms being founded and wound up, an increase in market concentration and a rise in the mark-ups of firms.¹ Among other things, these factors serve as an explanation for the weak investment momentum experienced since the turn of the millennium and for the lower productivity growth.²

Focus on market integration and structural reforms in EU

In the European Union (EU), access to what were previously national markets was to be simplified with the single market. Similarly, product market reforms, such as those suggested in the European Commission's country-specific recommendations, often aimed at intensifying competition by taking down barriers to entry. This was also accompanied by the expectation that the scope of firms' market power would be reduced. Furthermore, the question arises as to how the period of prolonged economic weakness has impacted on firms' mark-ups in certain countries.

Only limited analysis of EU countries possible

The mark-ups of firms in selected European countries are analysed below against this backdrop. A comprehensive analysis is precluded by the limited availability of data in Europe compared to the United States. Since the mark-ups of firms cannot be observed directly, they have to be estimated. The standard data on EU

countries required for these estimations are only available in a very highly aggregate format and for a limited period of time. This analysis is therefore limited to seven economies³ and a period of just under 20 years (1996 to 2014); it covers the private sector broken down into 27 sectors.

■ Determining factors of mark-ups

The intensity of price competition in a market is typically estimated based on mark-ups resulting from the difference between prices and marginal costs.⁴ Strong mark-ups, ie prices that are significantly higher than the marginal costs, serve as an indication of a limited degree of competition or a high level of market power. Firms exposed to high competitive pressures have a greater incentive to keep mark-ups low to prevent market share losses.

The context in which firms operate is a key factor in determining the intensity of competition. In particular, factors such as entry barriers, openness to foreign competition, anti-trust and

Mark-ups and competition

Context crucial to competition

¹ See OECD (2016), OECD Economic Surveys: United States 2016; D Autor, D Dorn, L Katz, C Patterson and J Van Reenen (2017), The fall of the labor share and the rise of superstar firms, NBER Working Paper, No 23396; and J De Loecker and J Eeckhout (2017), The rise of market power and the macroeconomic implications, NBER Working Paper, No 23687.

² Gutiérrez and Philippon (2017) present evidence that the subdued increases in investment in the United States are partly connected to the falling degree of competition because this reduces incentives to invest. Decker et al (2017) conclude that a lower allocative efficiency is an explanation for the weakness of aggregate productivity growth in the United States and that the reduced allocative efficiency is related to declining business dynamism, among other factors. See G Gutiérrez and T Philippon (2017), Declining competition and investment in the U.S., NBER Working Paper, No 23583; and RA Decker, J Haltiwanger, RS Jarmin and J Miranda (2017), Declining dynamism, allocative efficiency, and the productivity slowdown, American Economic Review: Papers & Proceedings 107, pp 322-326.

³ This group comprises six euro area economies (Austria, Belgium, Finland, France, Germany and Italy) as well as Denmark, which has pegged its currency to the euro.

⁴ Marginal costs refer to the costs that arise from the production of an additional unit of a product. For information on the relationships between price-cost margins, returns and profits, see the box on pp 55-56.

Margin concepts and indicators of the profitability of non-financial corporations in the euro area

Price-cost margins shed light on the intensity of price competition. However, it is not possible to directly infer firms' profitability from the size and development of these margins, as fixed costs are not taken into account. For instance, software development can entail high costs. By contrast, the (marginal) costs associated with selling a licence are usually very low. Prices must therefore be higher than marginal costs in order to cover total costs. This should be borne in mind when analysing the profitability of the corporate sector.

The profit share, which in the national accounts framework is the ratio of gross operating surplus to the gross value added of the non-financial corporations sector, is often used as an indicator of the profitability of non-financial corporations.¹ The gross operating surplus itself is defined as gross value added less compensation of employees.² It is often interpreted as the share of value added that remunerates the factor capital. However, this indicator falls short in some respects since the incomes of self-employed persons are assigned in their entirety to income from capital. What is more, the gross operating surplus can also contain economic rents, ie gains that go beyond what is needed for the remuneration of the factor capital.

In the national accounts framework, moreover, entrepreneurial income is reported; this is conceptually equivalent to profit before distribution and income tax as calculated in business accounting.³ Essentially, it differs from the gross operating surplus through the addition of income on assets and the deduction of interest and lease expenses.⁴ The ratio of gross entrepreneurial

income to gross value added is referred to here as the entrepreneurial income ratio. Another measure of profitability is the gross return on capital, ie the ratio of gross operating surplus to capital stock.⁵

An examination of these indicators for the euro area reveals rather divergent developments. The profit share rose markedly until 2007, then declined during the crisis before recovering somewhat later. These developments are also reflected in the entrepreneurial income ratio, which shows an upward trend overall, however. This was attributable to rising property income before the financial crisis and a decline in the interest burden since then. The gross return on capital initially increased quite significantly, then fell again, and has recovered only marginally to date. Most recently, it

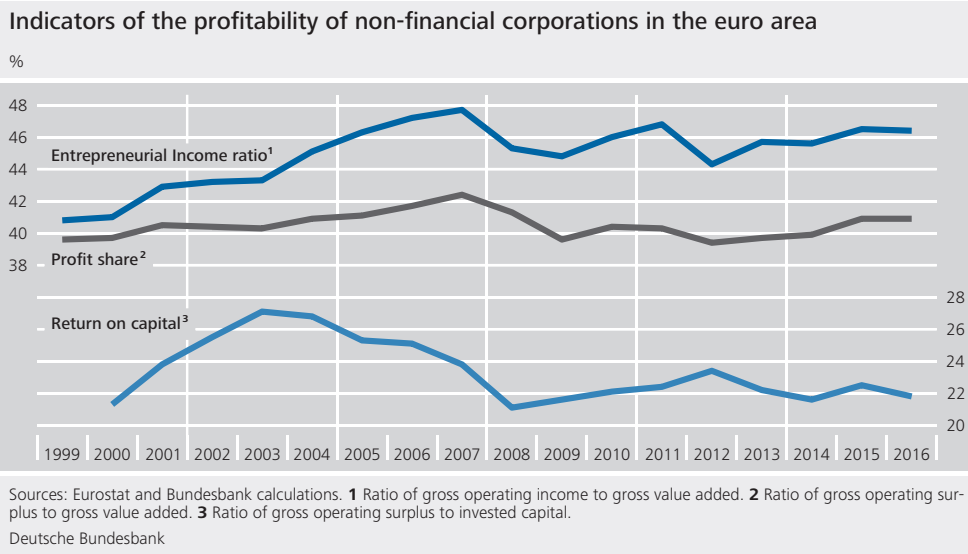
¹ This indicator is also referred to as the profit ratio. In the context of business cycle analysis, it is often considered in combination with movements in other real economic variables (such as investment) and prices. The profit share is counterbalanced by the wage ratio. See, for example, European Central Bank, *Measuring and analysing profit developments in the euro area*, Monthly Bulletin, January 2004, pp 63-73; and National Bank of Belgium, *Corporate profit margins: Recent developments in a low inflation context*, NBB Economic Review, September 2015, pp 41-54.

² In this context, "other subsidies received" are added and "other taxes on production" are subtracted. Both items are less substantial in quantitative terms, however.

³ For more information on this, see the comments on p 209, Eurostat, *European system of accounts – ESA 2010*, European Commission, 2014.

⁴ In short-term business cycle analysis, reference is often made to a macroeconomic margin indicator that is calculated as the difference between the rates of growth of the value added deflator (or alternatively, the GDP deflator) and unit labour costs. A positive difference denotes an increase in the profit share and, accordingly, a decrease in the wage ratio.

⁵ The indicator used here is published by Eurostat and is calculated as the ratio of the gross operating surplus to the (net) assets and liabilities of non-financial corporations.



stood at roughly the same level as in the year 2000.

Overall, the various indicators for the euro area do not point to a broad-based increase in profitability with regard to the oper-

ational business of non-financial corporations.

competition regulations and their implementation are important.

The size of mark-ups is also affected by a range of other factors, which do not necessarily indicate inefficiencies and anti-competitive behaviour. For example, mark-ups vary with demand's sensitivity to price changes (price elasticity of demand). Product diversity, which takes account of the different wishes of consumers and the need for variety, often goes hand in hand with reduced elasticity. While this does allow higher mark-ups in market segments, these mark-ups may be necessary to cover the higher costs of product diversity. Likewise, firms may temporarily achieve a competitive edge because of their innovations. In this case, higher mark-ups reflect, among other things, prior expenditure on research and development (R&D).⁵ Due to returns to scale, there may also be a rise in market concentration, where care should be taken to ensure that gains in efficiency also reach consumers

through lower prices. In general, it is important that markets do not become unassailable so that firms cannot continue to amass revenue without assigning it to a function.

According to a recent study on the United States, initial competitive restrictions are not the most significant factor in the long-term rise in market concentration.⁶ Rather, the most productive firms appear to be increasingly able to acquire larger market shares because of tech-

Other structural influences on mark-ups

Evidence for the US

⁵ Békés et al (2016), for example, present evidence that innovative firms may demand higher mark-ups and that product quality is positively correlated with the mark-ups of firms. See G Békés, C Hornok and B Muraközy (2016), Globalization and the markups of European firms, IfW Kiel Working Paper, No 2044.

⁶ It should be noted that an increase in market concentration does not necessarily imply a rise in mark-ups (see also the box on pp 62-63). In a recent study, the OECD nevertheless found evidence of a positive correlation of this kind based on sectoral data for the United States. See OECD (2016), op cit.

nical change and globalisation.⁷ This correlation is also referred to as the “superstar firm” hypothesis. These firms include platforms that allow simple price and quality comparisons, from which more productive firms in particular would be able to benefit. The growing importance of information-based goods, which are characterised by high fixed costs and low marginal costs, eg online services, may also explain this development. Furthermore, new technologies may amplify network effects and thus lead to dominant market positions. Nonetheless, there are also indications in the United States that regulatory and competitive aspects may have been a factor in the rise of market concentration.⁸

In addition to these structural factors, there are cyclical influences on the mark-ups of firms, though it is not clear *a priori* whether procyclical or countercyclical trends are predominant.⁹ Empirical studies also do not give a clear picture in this regard.¹⁰ Mark-ups typically have a countercyclical pattern in New Keynesian macroeconomic models. Owing to adjustment costs, prices respond more slowly than procyclical marginal costs, which are determined by the costs of intermediate goods.¹¹ By contrast, the fact that the price elasticity of demand could contract during an upswing, for instance, suggests procyclical mark-ups. This would allow firms to increase their mark-ups.¹²

Mark-up estimations for selected European countries

Neither firms’ marginal costs nor mark-ups can be observed directly. Estimation methods therefore have to be applied, in which a distinction can be made between methods that are applied to either the demand side or the production side. Both approaches complement each other in principle, but a production-side method is used here since the data requirements are less exacting.¹³

The estimating approach was selected based on considerations regarding the Solow residual, which is calculated from the difference between the growth rate of (gross) output and the contributions to growth from labour, capital and intermediate goods. Under certain conditions, this residual measures the rate of technical change when there is perfect competition. When competition is imperfect, the Solow residual can be shown as a combination of technical change, the growth in the output-capital ratio and price-cost margins.¹⁴ Mark-ups can be estimated based on these findings with the aid of a traditional regression.¹⁵ This method is used in numerous studies; it can be implemented using sectoral data without major

Basic features of estimating approach

Cyclical influences on mark-ups

Supply and demand approaches to estimating mark-ups

⁷ See Autor et al (2017), op cit. The study’s findings also match a situation in which established firms are more likely to produce innovations and the persistence of this innovation advantage has increased with time.

⁸ See CEA (2016), Benefits of competition and indicators of market power, Council of Economic Advisers Issue Brief, April 2016; and BA Blonigen and JR Pierce (2016), Evidence for the effects of mergers on market power and efficiency, Federal Reserve Board, Finance and Economics Discussion Series, No 2016-082.

⁹ See OJ Blanchard (2008), The state of macro, NBER Working Paper, No 14259.

¹⁰ See, for example, M Bils, PJ Klenow and BA Malin (2014), Resurrecting the role of the product market wedge in recessions, NBER Working Paper, No 20555; and CJ Nekarda and VA Ramey (2013), The cyclical behavior of the price-cost markup, NBER Working Paper, No 19099.

¹¹ See JJ Rotemberg and M Woodford (1999), The cyclical behavior of prices and costs, NBER Working Paper, No 6909. Furthermore, models with an oligopolistic market structure or endogenous market entry and exit of firms may account for countercyclical mark-ups. See JJ Rotemberg and G Saloner (1986), A supergame-theoretic model of price wars during booms, *American Economic Review* 76, pp 390-407; and N Jaimovich and M Floetotto (2008), Firm dynamics, markup variations, and the business cycle, *Journal of Monetary Economics* 55, pp 1238-1252.

¹² See J Stroebel and J Vavra (2014), House prices, local demand, and retail prices, NBER Working Paper, No 20710. Models with consumer markets can also produce procyclical and countercyclical mark-ups. See JA Chevalier and DS Scharfstein (1996), Capital-market imperfections and countercyclical markups: Theory and evidence, *American Economic Review* 86, pp 703 to 725.

¹³ See J De Loecker and PT Scott (2016), Estimating market power: Evidence from the US brewing industry, NBER Working Paper, No 22957; and J De Loecker (2011), Recovering markups from production data, *International Journal of Industrial Organization* 29, pp 350-355.

¹⁴ See RE Hall (1988), The relation between price and marginal cost in U.S. industry, *Journal of Political Economy* 96, pp 921-947.

¹⁵ See W Roeger (1995), Can imperfect competition explain the difference between primal and dual productivity? Estimates for U.S. manufacturing, *Journal of Political Economy* 103, pp 316-330.

Average price-cost margins in selected European countries*

Sectors	Austria	Belgium	Denmark	Finland	France	Germany	Italy
All sectors	1.35	1.27	1.29	1.34	1.40	1.39	1.54
Excluding sectors 19 and 68	1.28	1.20	1.24	1.29	1.19	1.33	1.35
Manufacturing	1.20	1.14	1.20	1.21	1.13	1.21	1.16
High R&D intensity ¹	1.23	1.17	1.25	1.23	1.14	1.26	1.15
Low R&D intensity ¹	1.14	1.10	1.07	1.18	1.11	1.13	1.18
Other sectors	1.34	1.25	1.28	1.35	1.25	1.42	1.50
High R&D intensity ¹	1.32	1.24	1.26	1.34	1.25	1.49	1.60
Low R&D intensity ¹	1.36	1.26	1.29	1.36	1.25	1.37	1.43

Source: Estimations based on OECDSTAN and AMECO data for the period from 1996 to 2014. * Sector-specific mark-ups are included when calculating the average (arithmetic mean) if the parameter for this sector's market power is estimated to be statistically significant at the 10% level. Sectors 19 (coke and refined petroleum products) and 68 (real estate activities) are only considered in the first row (All sectors). Sectors 01 to 03 (agriculture, forestry and fishing) and 05 to 09 (mining and quarrying) are not included in the analysis. A value of, say, 1.2 implies a price-cost margin of 20%. ¹ R&D stands for research and development.

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difficulty. It is based, however, on a number of assumptions that should be taken into account when interpreting the results. For instance, there is an assumption of constant returns to scale, and an approximation of the user cost of capital is also necessary. Moreover, the original approach permits the estimation of time-invariant mark-ups only. For details of the estimation method and the selection of data, see pages 65 to 67.

Cross-section analysis of sectoral mark-ups

First, the mark-ups are calculated separately for each of the seven countries under review and each of the 27 sectors for the period from 1996 to 2014. The results show clear indications that prices exceed marginal costs in most sectors. Exceptionally high mark-ups are reported for real estate. This is also likely to be due to the fact that these calculations use a high degree of notional revenue (for instance, hypothetical rents for owner-occupied housing). As a result, this sector is excluded from further analysis.¹⁶

It can be seen that, on average, the dispersion of mark-ups within countries (ie between sectors) is greater than that of the sector-specific

mark-ups between countries,¹⁷ which suggests that there are sectoral particularities that span national borders. For instance, the mark-ups demanded in the manufacturing industry are typically lower than in other areas which are predominantly associated with services. The reason for this finding is often attributed to the international competition that firms operating in these sectors face due to the greater tradability of goods.¹⁸ Moreover, if the sectors are sorted according to the level of spending on research and development, all countries (with the exception of Italy) demand higher mark-ups in those manufacturing sectors that are

Intra-country dispersion of mark-ups wider than inter-country dispersion

Prices typically higher than marginal costs

¹⁶ The manufacture of coke and refined petroleum products is also excluded from the analysis as estimates of pricing in this sector are often only imprecise.

¹⁷ On average, the standard deviation of mark-ups within countries is 0.15, while the average dispersion of sector-specific mark-ups between countries is 0.11.

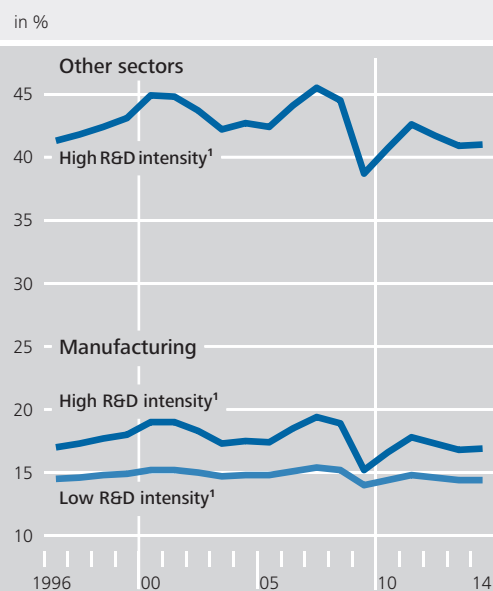
¹⁸ See, for example, J Amador and A Soares (2016), Markups and bargaining power in tradeable and non-tradeable sectors, *Empirical Economics* 53, pp 669-694. It should also be noted that returns to scale may be higher for the manufacturing industry, meaning that mark-ups would be underestimated.

R&D intensive.¹⁹ In the other sectors, the picture is not entirely clear. According to the estimation, among the countries under review, mark-ups were highest in Italy, closely followed by Germany. This was due, amongst other things, to the fact that mark-ups in the R&D-intensive manufacturing industry in Germany were slightly above average and those for other sectors in Italy, especially the services industry, were well above average.

Mark-ups over time

The question is whether market power has changed over the past few years. In order to answer this, the empirical model is extended and mark-ups are decomposed into a structural and a cyclical factor which varies over time depending on the output gap.²⁰ The structural component can change once, with a possible structural break occurring in any of the years from 1999 to 2011. Ultimately, the model with the least sum of squared errors is chosen.

Price-cost margins according to model calculations*



Source: Bundesbank calculations based on OECD STAN and AMECO data. * Country-specific price-cost margins based on parameter estimates and the development of output gaps, and then weighted by the gross value added of 1996. The development of other sectors with low R&D intensity is not shown as the parameter for the cyclical market power factor was estimated to be not significant. The group of countries comprises Austria, Belgium, Denmark, Finland, France, Germany and Italy. ¹ R&D: research and development. Deutsche Bundesbank

Modelling of changes in mark-ups over time

Panel estimations to ensure larger number of observations

Indications predominantly point to procyclical development of mark-ups

Indications of structurally declining mark-ups, too

To ensure that the number of observations is sufficient to enable the parameters to be identified, average mark-ups across countries and sectors are estimated in a panel. The previous results showed that mark-ups between sectors and countries vary to a lesser extent when broadly classified according to tradability and R&D intensity. It therefore appears appropriate to estimate these four items separately.

The application of the extended estimation approach initially confirms that, on average, lower mark-ups are demanded in the manufacturing industry than in the other sectors, and that, on average, R&D-intensive sectors have higher mark-ups. Furthermore, in three of the four sector aggregates (manufacturing industry and R&D-intensive other areas), mark-ups demonstrate procyclical behaviour.

With regard to the structural component of the mark-ups, indications of declining mark-ups can be found for three of the four broad sector

definitions considered (less R&D-intensive manufacturing industry and other areas). Here, the break date identified varies across sectors.

¹⁹ The classification of sectors according to R&D intensity is in line with the OECD's definition. The OECD defines five levels of R&D intensity. The OECD does not assign the last category "low" to any of the manufacturing sectors. In this analysis, the manufacturing sectors that are assigned one of the first three categories are referred to as R&D intensive. The OECD categorises most of the other non-manufacturing sectors as having a "low" R&D intensity. For this reason, in this analysis, the non-manufacturing sectors that are assigned one of the first four categories are referred to as R&D intensive. The OECD-STAN data used for the analysis combine some sectors at a higher level of aggregation. As a result, the classification for sector aggregates 24 to 25 and 58 to 60 of the fourth revision of the International Standard Industry Classification (ISIC Rev 4) is not entirely clear. However, in this analysis, the former is considered to comprise manufacturing sectors with low R&D intensity whereas the latter encompasses non-manufacturing sectors with high R&D intensity (see also the table in the annex on page 66). See F Galindo-Rueda and F Verger (2016), OECD taxonomy of economic activities based on R&D intensity, OECD Science, Technology and Industry Working Papers, No 2016/04.

²⁰ See H Badinger (2007), Has the EU's single market programme fostered competition? Testing for a decrease in mark-up ratios in EU industries, Oxford Bulletin of Economics and Statistics 69, pp 497-519.

Price-cost margins over time^o

Parameter estimates	Changes to price-cost margins owing to cyclical factors				Changes to price-cost margins owing to cyclical and structural factors			
	Manufacturing		Other sectors		Manufacturing		Other sectors	
	high	low	high	low	high	low	high	low
Lerner index ¹	0.151*** (0.014)	0.129*** (0.009)	0.299*** (0.020)	0.258*** (0.026)	0.168*** (0.018)	0.157*** (0.015)	0.471*** (0.075)	0.320*** (0.048)
Cyclical factor	0.484*** (0.139)	0.171** (0.072)	0.553*** (0.122)	0.058 (0.083)	0.440*** (0.148)	0.146* (0.078)	0.495*** (0.113)	-0.042 (0.109)
Change to Lerner index after break	-	-	-	-	-0.035 (0.022)	-0.044** (0.016)	-0.197** (0.088)	-0.094** (0.042)
Observations	931	532	798	1,064	931	532	798	1,064
R-squared (within)	0.569	0.703	0.633	0.629	0.571	0.712	0.649	0.641
Break test – statistics	-	-	-	-	5.323	15.018	34.464	33.448
Break test – p-value	-	-	-	-	0.077	0.000	0.003	0.000
Break date	-	-	-	-	2009	2007	1999	2005
Implied price-cost margin ²								
Total	1.18	1.15	1.43	1.35	-	-	-	-
Prior to break	-	-	-	-	.	1.19	1.89	1.47
After break	-	-	-	-	.	1.13	1.38	1.29

Source: Weighted estimations based on OECDSTAN and AMECO data for the period from 1996 to 2014. ^o Estimations based on equation 4 in the annex. Weights for estimations correspond to the sectoral value added in 1996. Robust standard errors in brackets. ***/** denote the statistical significance of the parameter estimates at the usual levels. Estimations include fixed country/sector and annual effects. The break test's p-value is calculated based on the bootstrapping method by Hansen (1999), with 300 simulation rounds. A value below 0.05 indicates a significant structural break. ¹ The Lerner index is a measure of market power. ² A value of, say, 1.2 implies a price-cost margin of 20%.

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Impact of the crisis years and the long-term interest rate measure on mark-up estimations^o

Parameter estimates	Sample: 1996 to 2008				Constant real interest rate			
	Manufacturing		Other sectors		Manufacturing		Other sectors	
	high	low	high	low	high	low	high	low
Lerner index ¹	0.158*** (0.023)	0.174*** (0.023)	0.486*** (0.078)	0.320*** (0.051)	0.148*** (0.033)	0.172*** (0.014)	0.505*** (0.085)	0.467*** (0.088)
Cyclical factor	-0.070 (0.156)	-0.000 (0.108)	0.453** (0.208)	-0.059 (0.170)	0.365*** (0.117)	0.121 (0.073)	0.371*** (0.126)	-0.098 (0.100)
Change to Lerner index after break	0.041 (0.033)	-0.047** (0.021)	-0.176 (0.106)	-0.092* (0.050)	0.080* (0.043)	-0.052** (0.019)	-0.229* (0.115)	-0.169*** (0.058)
Observations	637	364	546	728	931	532	798	1,064
R-squared (within)	0.556	0.671	0.650	0.628	0.569	0.695	0.419	0.452
Break test – statistic	4.028	7.129	20.412	11.808	11.536	5.396	30.660	39.996
Break test – p-value	0.123	0.017	0.013	0.013	0.013	0.037	0.023	0.000
Break date	2001	2001	1999	2005	2001	2011	1999	2002
Implied price-cost margin ²								
Prior to break	.	1.21	1.95	1.47	1.17	1.21	2.02	1.88
After break	.	1.15	1.45	1.30	1.30	1.14	1.38	1.42

Source: Weighted estimations based on OECDSTAN and AMECO data for the period from 1996 to 2014. ^o Estimations based on equation 4 in the annex. Weights for estimations correspond to the sectoral value added in 1996. Robust standard errors in brackets. ***/** denote the statistical significance of the parameter estimates at the usual levels. Estimations include fixed country/sector and annual effects. The break test's p-value is calculated based on the bootstrapping method by Hansen (1999), with 300 simulation rounds. A value below 0.05 indicates a significant structural break. ¹ The Lerner index is a measure of market power. ² A value of, say, 1.2 implies a price-cost margin of 20%.

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Impact of bargaining power in the labour market on margin estimations^o

Parameter estimates	Assumption of constant parameters				Modelling of one-off change to parameters			
	Manufacturing		Other sectors		Manufacturing		Other sectors	
	Research and development intensity							
	high	low	high	low	high	low	high	low
Lerner index ¹	0.281*** (0.028)	0.179*** (0.020)	0.365*** (0.039)	0.368*** (0.068)	0.272*** (0.027)	0.200*** (0.023)	0.577*** (0.082)	0.453*** (0.084)
Bargaining power parameter	0.225*** (0.036)	0.088*** (0.029)	0.129*** (0.048)	0.194** (0.088)	0.190*** (0.041)	0.076* (0.038)	0.229** (0.099)	0.271*** (0.102)
Change to Lerner index after break	–	–	–	–	0.045 (0.061)	–0.034 (0.025)	–0.250** (0.118)	–0.158** (0.071)
Change to bargaining power parameter	–	–	–	–	0.100 (0.088)	0.017 (0.042)	–0.126 (0.124)	–0.159* (0.086)
Observations	931	532	798	1,064	931	532	798	1,064
R-squared (within)	0.632	0.721	0.636	0.659	0.636	0.730	0.654	0.671
Implied price-cost margin ²	1.39	1.22	1.58	1.58	–	–	–	–

Source: Weighted estimations based on OECD STAN and AMECO data for the period from 1996 to 2014. ^o Estimations based on equation 5 in the annex. Weights for estimations correspond to the sectoral value added in 1996. Robust standard errors in brackets. ***/*** denote the statistical significance of the parameter estimates at the usual levels. Estimations include fixed country/sector and annual effects. ¹ The Lerner index is a measure of market power. ² A value of, say, 1.2 implies a price-cost margin of 20%.

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For the R&D-intensive other industries, a structural break is identified in 1999, which may be connected to deregulation efforts in the EU. In the case of less R&D-intensive other areas, the results suggest a connection with the eastward enlargement of the EU (break date in 2005). This may also be true for the less R&D-intensive manufacturing industry, although the structural break is identified in 2007 and may also be accounted for by the global financial crisis. No clear trend could be identified for the R&D-intensive manufacturing industry.

Special features of the period under review

The time period underlying the analysis was characterised by exceptional developments due to the global financial and economic crisis as well as the subsequent European sovereign debt crisis, and these may have an impact on the estimation results. If the period from 2009

to 2014 is thus excluded from the sample, the parameter for measuring the cyclicity of mark-ups is estimated to be statistically significant in one case only. This suggests that the economy primarily had a procyclical impact on mark-ups during the crisis years. With regard to the structural component of mark-ups, break tests continue to show declines for three of the four sector aggregates.²¹

During the period under review, there was also a sharp decline in yields on corporate bonds. This has an impact on the assumed user cost of capital. However, other return on capital indicators imply only smaller declines or even a rise in the period under review.²² For this reason, the user cost of capital was calculated under

Alternative assumption regarding user cost of capital

²¹ In one case, however, the break date was estimated to be somewhat earlier. In the estimations, tests were conducted for breaks potentially occurring in any of the years from 1999 to 2005.

²² See Deutsche Bundesbank, Developments in the real return on capital in Germany, Monthly Report, October 2017, pp 37-41.

Market concentration in selected European countries

Estimations of price-cost margins provide no indication of a general increase in price-setting scope for European countries. This suggests that the intensity of competition in this group of countries has probably not receded markedly in the past years. To that extent, the question arises as to whether this outcome can be supported by other indicators. Measures of concentration are often used as an alternative means of examining market structures.¹ A small number of firms accounting for a high proportion of sales may point to dominant market positions. In the United States, such measures show a general increase in sales concentration, which is in line with the finding of higher margins.²

In the EU, unlike in the United States, the statistical offices do not, as a rule, publish market concentration indicators. However, in 2008, as part of the work for EU KLEMS,

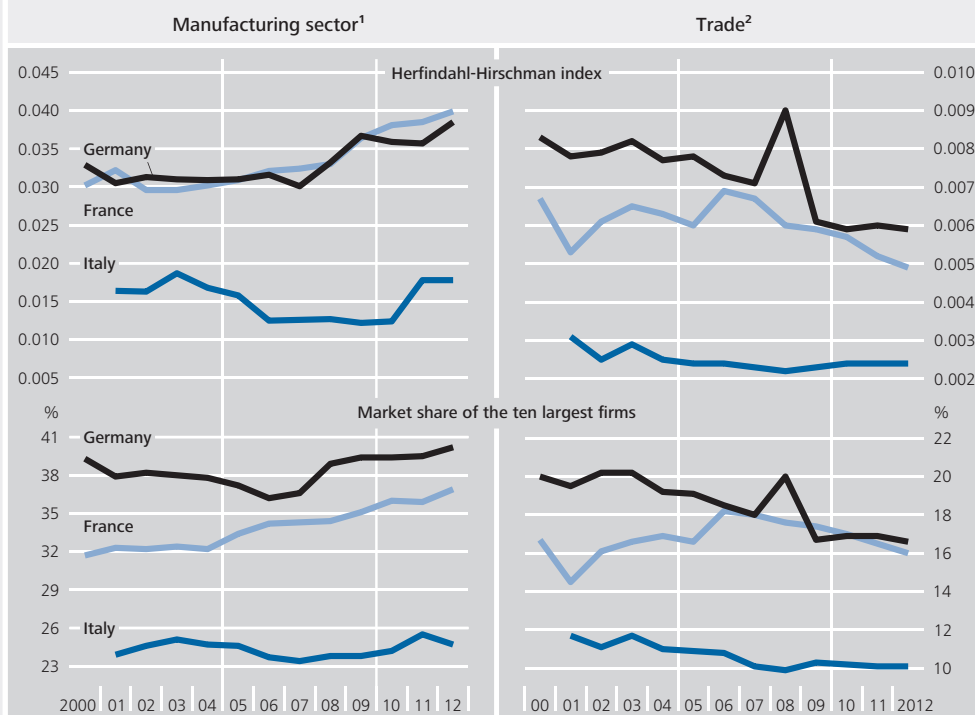
measures of concentration for the years 1997 to 2006 were published on a one-off basis.³ In particular, the Herfindahl-Hirschman index (HH index) – the sum of the squared market shares of the firms belonging to a given sector – was reported.

¹ It is important to emphasise that indicators of market concentration do not constitute a perfect measure of competition intensity, which depends on a wide range of factors such as market entry barriers, competition with imports, strategic interaction and economies of scale.

² See OECD (2016), OECD Economic Surveys: United States 2016; D Autor, D Dorn, L Katz, C Patterson and J Van Reenen (2017), The fall of the labor share and the rise of superstar firms, NBER Working Paper No 23396; and J De Loecker and J Eeckhout (2017), The rise of market power and the macroeconomic implications, NBER Working Paper No 23687.

³ The data were published in the context of EU KLEMS – Linked Data 2008 Release – Company Accounts. See MO'Mahony, C Castaldi, B Los, E Bartelsman, Y Maimaiti and F Peng (2008), EU KLEMS – Linked Data: Sources and Methods. University of Birmingham, October.

Market concentration in selected countries



Sources: CompNet and Bundesbank calculations. ¹ Arithmetic average of the information provided for 22 sectors in manufacturing. ² Arithmetic average of the information provided for the sectors in trade.
 Deutsche Bundesbank

The indicator assumes values between (close to) zero and one; larger figures imply a higher market concentration.⁴

More recent information on the development of concentrations stems from indicators that were generated within CompNet.⁵ In addition to the HH index, the share held by the ten largest firms of the total sales of a sector is reported here. CompNet provides better coverage of areas outside the manufacturing sector than EU KLEMS.⁶ For the most part, relevant data are available for the years 2000 to 2012.

The different indicators do not show a uniform trend. Although in isolated cases there are signs of an increase in market concentration in the manufacturing sector, market concentration seems to be decreasing in other areas, such as trade, or showing little change. Combined, concentration indicators do not point to a broad-based change

in the competitive conditions in the countries observed.⁷

⁴ The HH index is published there for sectors according to NACE Revision 1 (mostly using the 2-digit level, partly in more detail). On the whole, a distinction is made between up to 43 sectors, of which up to 30 are in manufacturing. Besides the traditional HH index, an adjusted index is also calculated within EU KLEMS with the aim of controlling for distortions where only few firms report their information. See O'Mahony et al (2008), op cit.

⁵ CompNet is a research network in which indicators on the competitiveness of European countries are determined on the basis, amongst other things, of firm-level data. The data used here are based on a 2014 survey. See P Lopez-Garcia, F di Mauro and the CompNet Task Force (2015), Assessing European competitiveness: the new CompNet microbased database, ECB Working Paper No 1764.

⁶ Within CompNet, indicators are calculated according to the classification of industries according to NACE Revision 2 for up to 53 (2-digit) sectors.

⁷ However, it should be noted that the definition of the relevant market plays an important role when calculating these indicators. In the case at hand, markets are defined on the basis of relatively rough sector classifications and national borders. It cannot therefore be ruled out that the results would in some cases be different given a more appropriate sectoral and regional classification.

the alternative assumption that the real interest rate relevant for the firms' activities amounted to 5% throughout the period. This modification has only a slight impact on the results, which continue to imply that mark-ups fell in three of the four sector aggregates. However, under this approach, there may have been a structural increase in mark-ups in the R&D-intensive manufacturing industry. In addition, the breaks are now estimated to have occurred on different dates. In this specification, however, there are again a number of indications of procyclical mark-ups.

Role of bargaining power on the labour market

So far the estimations of mark-ups have not included the particular features of wage formation. However, the behavioural patterns on product and labour markets can influence one another.²³ If firms have market power, they

may generate income. The degree of employees' bargaining power determines how this income is shared. The method applied here does not take into consideration such income to be shared with employees. As a result, it is possible that the price-cost margins are underestimated. Recent studies therefore expand the original models of Hall and Roeger to allow for potential imperfect competition on the labour market.²⁴

For the countries reviewed here, the estimated parameter of employees' bargaining power, on

²³ See, for example, O Blanchard and F Giavazzi (2003), Macroeconomic effects of regulation and deregulation in goods and labor markets, *Quarterly Journal of Economics* 118, pp 879-907.

²⁴ See S Dobbelaere (2004), Estimation of price-cost margins and union bargaining power for Belgian manufacturing, *International Journal of Industrial Organization* 22, pp 1381-1398; B Crépon, R Desplatz and J Mairesse (2005), Price-cost margins and rent sharing: Evidence from a panel of French manufacturing firms, *Annals of Economics and Statistics* 79-80, pp 583-610; and J Amador and A Soares (2016), op cit.

Mark-ups somewhat higher; evidence of structural breaks weaker

average, is significantly positive and the estimated mark-ups are also higher. This is particularly reflected in the R&D-intensive manufacturing industry and the less R&D-intensive other areas; sectors where trade unions are likely to be relatively strong. However, for the most part, the remaining results from the analysis conducted thus far are qualitatively confirmed, in particular with regard to the grading of mark-ups between the industries. However, evidence of possible changes in the structural component is weaker.²⁵ The results indicate a decline in market power over time for the two non-manufacturing sector aggregates only. Employees' bargaining power does not appear to have changed on the whole. It should be noted, however, that the assumption of an average parameter for bargaining power inherent in the panel estimations is highly simplified given the heterogeneous labour market structures in Europe.²⁶

■ Classification

Largely in line with other studies

The analysis presented here does not point to a long-term rise in mark-ups during the past 20 years in the EU countries under review. Instead, the results reveal some signs of a decline in mark-ups. However, it should be noted that the scope of the underlying data and thus the basis for the analysis are limited.²⁷ Nevertheless, the results are largely in line with other studies on European countries.²⁸ Figures on market concentration do not suggest that there has been a broad-based increase either (see the box on pages 62 and 63). Indicators on the profitability of non-financial corporations do not show any evidence of sharp increases in returns on capital or profit ratios in the euro area (see the box on pages 55 and 56). These findings stand in contrast to those for the United States.²⁹

Empirical evidence still at an early stage

A comprehensive assessment of the developments in the United States and Europe currently appears to be premature. Evidence on the development of price-cost margins is still rather limited and is not always clear. For instance, a recent study for the United States for

the period from 1992 to 2005 finds welfare gains in connection with advancing globalisation, which can be partly explained by lower mark-ups as a result of increased import competition.³⁰ However, should the evidence of increasing mark-ups in the United States continue to be substantiated, the causes will need to be identified. For example, rising price-cost margins could be explained by both greater market power and an increasing importance of fixed costs.

²⁵ The break dates calculated in the base model are used for this analysis.

²⁶ See Deutsche Bundesbank, Wage dynamics amid high euro area unemployment, Monthly Report, December 2016, pp 33-55. It is also possible that a structural break occurred at another point in time with this parameter.

²⁷ For instance, the modelling of a one-off, immediate structural break in otherwise time-invariant mark-ups is restrictive.

²⁸ Badinger (2007) finds evidence of declining mark-ups in the manufacturing industry but rising mark-ups in the services industry for ten European countries in the period from 1981 to 1999. Bassanetti et al (2010) confirm unchanged or decreasing mark-ups (ten European countries; period from 1982 to 2005). Christopoulou and Vermeulen (2012) estimate the Roeger model for eight EU countries in two periods (1981 to 1992 and 1993 to 2004) and find no indications of systematic changes in mark-ups. Thum-Thysen and Canton (2015) come to the conclusion that mark-ups in most of the services sectors that they examined declined over the period from 1996 to 2013 owing to regulations to promote competition. Montero and Urtasun (2014) find mark-ups in Spain remained virtually constant until the outbreak of the financial crisis and then tended to increase. Other country-specific studies using firm-level data suggest that pro-competitive effects in conjunction with globalisation have had a negative impact on mark-ups in the manufacturing industry. See H Badinger (2007), op cit; A Bassanetti, R Torrini and F Zollino (2010), Changing institutions in the European market: The impact on mark-ups and rents allocation, Banca d'Italia Working Papers, No 781; R Christopoulou and P Vermeulen (2012), Markups in the euro area and the US over the period 1981-2004: A comparison of 50 sectors, Empirical Economics 42, pp 53-77; A Thum-Thysen and E Canton (2015), Estimation of service sector mark-ups determined by structural reform indicators, European Commission Economic Papers, No 547; JM Montero and A Urtasun (2014), Price-cost mark-ups in the Spanish economy: A microeconomic perspective, Banco de Espana Working Paper, No 1407; as well as M Bugamelli, S Fabiani and E Sette (2015), The age of the dragon: The effect of imports from China on firm-level prices, Journal of Money Credit and Banking 47, pp 1091-1118.

²⁹ This is consistent with a forthcoming study by Gutiérrez (2017) which concludes that the share of economic gains in value added in the United States has risen since the 1970s, while no significant increase was found for an aggregate of developed economies in Europe. See G Gutiérrez (2017), Investigating global labor and profit shares, Mimeo, New York Stern University, October.

³⁰ See RC Feenstra and DE Weinstein (2017), Globalization, markups, and U.S. welfare, Journal of Political Economy 125, pp 1041-1074.

Explanatory approaches

Some of the factors which affect mark-ups are global phenomena. Greater import competition or increasing online trading should have a similar impact on mark-ups in the United States and in Europe, depending on the specific conditions.³¹ However, there are also a number of region-specific factors. For instance, the European integration process is likely to have intensified competition in the EU. One factor that may help explain US developments is that a large number of newer, internet-based firms, which in some cases have pronounced market power owing to network effects, primarily have their origins and bases in the United States. Most of their European branches are located in countries that are

not analysed here. In addition, the protracted economic crisis has had an adverse impact on the mark-ups of firms in Europe over the past few years. The extent to which mark-ups will rise again as the economy recovers remains to be seen. This normalisation could temporarily fuel general inflation pressures in European countries.

³¹ It should be noted that there is no clear connection between online trading and the degree of competition. On the one hand, the internet has made it easier to compare prices, which should promote competition. On the other hand, online trading opens up greater opportunities for firms to offer customers differentiated and tailor-made products, which may restrict price competition. See Y Bakos (2001), The emerging landscape for retail e-commerce, *Journal of Economic Perspectives* 15, pp 69-80.

■ Annex

Method to estimate price-cost margins

Interpreting the Solow residual under imperfect competition

In a neoclassical growth decomposition model, the Solow residual is given by the difference between the growth rate of (gross) output and the contributions to growth from labour, capital and intermediate goods. Under a number of assumptions – including profit maximisation and perfect competition – the Solow residual represents technical change.³² In the case of imperfect competition, Hall calculates the Solow residual as a weighted sum of changes to the output-capital ratio and to the rate of technical change, where the weights are functions of the mark-ups.³³ Regressing the Solow residual on the change in the (real) output-capital ratio therefore allows conclusions to be drawn about the mark-ups. However, in such estimations, technical change – which cannot be observed directly – is included in the error term. If technical change has an impact on the output-capital ratio, this distorts the estimation results. Instrumental variables could be helpful in this regard; however, it is difficult to find suitable instruments.

Roeger's modification of Hall's approach

Alternatively, the (dual) Solow residual can be determined under the assumption that firms endeavour to minimise their costs. According to Roeger, if both approaches are combined, the unobservable technical change drops out of the estimation equation.³⁴ Mark-ups can then be estimated on the basis of a simple regression of the (non-price-adjusted) Solow residual y_t on the rate of change of the (nominal)

output-capital ratio x_t using the method of least squares:³⁵

$$y_t = \beta x_t + \varepsilon_t. \quad (1)$$

In this representation, t indexes one year, ε_t is the error term and β stands for the Lerner index,³⁶

³² In addition, it is assumed that technical change is Hicks-neutral and that returns to scale are constant. Hicks-neutral technical change means that technical change has a proportional impact on the factors of production such that there is no change in their balance. Constant returns to scale means that a proportional change of one factor in the production resources changes output by this factor, too.

³³ See RE Hall (1988), The relation between price and marginal cost in U.S. industry, *Journal of Political Economy* 96, pp 921-947.

³⁴ See W Roeger (1995), Can imperfect competition explain the difference between primal and dual productivity? Estimates for U.S. manufacturing, *Journal of Political Economy* 103, pp 316-330.

³⁵ In formal terms, this produces $y_t = (\Delta p_t + \Delta Q_t) - \alpha_{Nt}(\Delta w + \Delta N_t) - \alpha_{Mt}(\Delta m_t + \Delta M_t) - (1 - \alpha_{Nt} - \alpha_{Mt})(\Delta r_t + \Delta K_t)$ as well as $x_t = (\Delta p_t + \Delta Q_t) - (\Delta r_t + \Delta K_t)$, where Δ is the difference operator and t indexes one year. Q , N and M give the natural logarithm of output as well as the factor inputs for labour and intermediate goods. p , w and m are the corresponding logarithmised prices; α_{Nt} and α_{Mt} are the shares of the relevant input factors in revenue. $(\Delta p_t + \Delta Q_t)$ thus shows growth of the nominal output value; $(\Delta w + \Delta N_t)$ and $(\Delta m_t + \Delta M_t)$ show the growth rates of the costs for labour and intermediate goods. $(\Delta r_t + \Delta K_t)$ shows the change in capital costs where K_t is the natural logarithm of real net capital stock and r_t is the logarithmised user cost of capital.

³⁶ The Lerner index is a measure of a firm's market power. It is defined as $(P - MC)/P$, where P is the price and MC the marginal costs of a firm, or as $1/|E|$, where $|E|$ shows the absolute price elasticity of demand. The index takes values between zero and one, with higher values indicating greater market power.

Estimated sectoral price-cost margins and sectoral division according to tradability and R&D intensity*

Sector description ¹	R&D intensity ²	Austria	Belgium	Denmark	Finland	France	Germany	Italy
Manufacturing								
Food products, beverages and tobacco products (10-12)	low	1.13	1.05	1.06	1.10	1.15	1.06	1.13
Textiles, wearing apparel, leather and related products (13-15)	low	1.13	1.14	³ 1.05	1.11	1.08	1.14	1.20
Wood and paper products, and printing (16-18)	low	1.13	1.12	1.08	1.29	1.09	1.15	1.23
Coke and refined petroleum products (19)	low	³ 1.13	1.06	³ 0.98	1.09	1.03	³ 1.07	1.07
Chemical and pharmaceutical products (20-21)	high	³ 1.06	1.20	1.58	1.28	1.14	1.24	1.10
Rubber and plastics products, and other non-metallic mineral products (22-23)	high	1.25	1.09	1.17	1.21	1.11	1.17	1.16
Basic metals and fabricated metal products, except machinery and equipment (24-25)	low	1.19	1.11	1.08	1.21	1.14	1.18	1.16
Computer, electronic and optical products (26)	high	1.33	1.21	1.28	1.48	1.17	1.45	1.17
Electrical equipment (27)	high	1.22	1.23	1.23	1.26	1.10	³ 1.07	1.10
Machinery and equipment n.e.c. ⁴ (28)	high	1.26	1.27	1.06	1.15	1.17	1.24	1.17
Transport equipment (29-30)	high	1.13	1.05	1.16	1.12	1.10	1.29	1.15
Other manufacturing, and repair and installation of machinery and equipment (31-33)	high	1.22	1.10	1.28	1.13	1.18	1.15	1.20
Other sectors								
Electricity, gas, steam and air-conditioning supply (35)	low	1.11	1.35	1.67	1.65	³ 1.06	1.46	1.31
Water supply, sewerage, waste management and remediation (36-39)	low	1.52	1.24	1.35	1.52	1.23	1.41	1.17
Construction (41-43)	low	1.25	1.18	1.13	1.15	1.18	1.15	1.25
Wholesale and retail trade, repair of motor vehicles and motorcycles (45-47)	low	1.38	1.26	1.18	1.33	1.23	1.40	1.67
Transportation and storage (49-53)	low	1.28	1.17	1.19	1.23	1.20	1.25	1.36
Accommodation and food service activities (55-56)	low	1.56	1.31	1.12	1.16	1.30	1.21	1.55
Publishing, audiovisual and broadcasting activities (58-60)	high	1.38	1.26	1.28	1.25	1.27	1.45	1.34
Telecommunications (61)	high	³ 0.95	1.28	1.27	1.29	³ 1.18	1.41	1.96
IT and other information services (62-63)	high	1.25	1.24	1.21	1.35	1.28	1.64	1.37
Financial and insurance activities (64-66)	low	1.35	1.38	1.55	1.64	1.30	1.61	1.77
Real estate activities (68)	low	2.84	3.08	2.38	2.85	6.58	2.85	6.66
Legal, accounting, management, architecture, engineering, technical testing and analysis activities (69-71)	high	1.33	1.34	1.22	1.35	1.20	1.57	1.96
Scientific research and development (72)	high	1.51	³ 1.10	1.40	1.57	1.27	1.44	1.29
Other professional, scientific and technical activities (73-75)	high	1.14	1.08	1.17	1.21	1.24	1.41	1.66
Administrative and support service activities (77-82)	low	1.42	1.16	1.11	1.23	1.30	1.45	1.34

Source: Estimations based on OECD STAN and AMECO data for the period from 1996 to 2014. * Estimations based on equation 1 in this annex. A value of, say, 1.2 implies a price-cost margin of 20%. ¹ The sector descriptions according to ISIC (International Standard Industrial Classification of All Economic Activities, Rev. 4) can be found in brackets. ² R&D stands for research and development. ³ The parameter for market power (Lerner index) is estimated to be not significant (at least at the 10% level). ⁴ n.e.c. stands for not elsewhere classified.

which – after rearranging – gives the price-cost margin μ :

$$\mu = \frac{1}{1 - \beta}. \quad (2)$$

Limitations of this approach

As outlined in the main text, this approach initially allows the estimation of time-invariant mark-ups only. In addition, it is based on the assumption of constant returns to scale and the user cost of capital has to be approximated.³⁷

Data used

Information on revenue, labour, intermediate costs and costs of capital is required to estimate the mark-ups. This analysis uses data from the OECD's STAN database.³⁸ In order to ensure comparability of the data, only those countries are included which have the relevant data for 27 sectors dominated by private firms for the period from 1995 to 2014 without any major statistical breaks. This group comprises the three major economies of France, Germany and Italy as well as Austria, Belgium, Denmark and Finland.

Consideration of cyclical factors ...

Additions to this methodology enable dynamic aspects to be taken into consideration, too. To identify the cyclical impact, the Lerner index can be shown as the sum of a structural component $\bar{\beta}$ and a cyclical component γGAP_t :

$$\beta_t = \bar{\beta} + \gamma GAP_t, \quad (3)$$

where GAP_t is the macroeconomic output gap in year t .³⁹ Estimations by the European Commission are used for the output gaps.

... and structural breaks

With a dummy variable ϕ_t^T , which takes the value of one if $t \geq T$ and zero in all other cases, structural breaks can also be identified:⁴⁰

$$y_{cst} = \bar{\beta}_1 x_{cst} + \bar{\beta}_2 \phi_t^T x_{cst} + \gamma(x_{cst} GAP_{ct} + \Delta GAP_{ct}) + \alpha_{cs} + \gamma_t + \varepsilon_{cst}, \quad (4)$$

where Δ is the difference operator. $\bar{\beta}_1$ shows the Lerner index prior to the structural break and $\bar{\beta}_1 + \bar{\beta}_2$ shows the index after the break.⁴¹ The model is estimated numerous times with the possible year in which the break occurs varying from 1999 to 2011. The model with the least sum of squared errors is chosen and a break test on the basis of a bootstrapping method is carried out for this model.⁴² Furthermore, c stands for a country and s for a sector. The model is estimated in a panel in order to allow for a sufficient number of observations to identify the par-

ameters. Country-sector dummies (α_{cs}) as well as year dummies (γ_t) control for time-constant, unobservable country-sector-specific aspects and aggregated shocks. The models are estimated using weights, thus ensuring that the impact of an observation is in proportion to the value added of the sector in 1996.

The method used here underestimates the scope for market power if revenue earned is shared with employees. Thus the estimation approach is expanded to include a parameter (λ) for employees' bargaining power. This is based on the change in the ratio of labour cost to cost of capital z_t :⁴³

$$y_{cst} = \beta x_{cst} + \lambda z_{cst} + \alpha_{cs} + \gamma_t + \varepsilon_t. \quad (5)$$

³⁷ With regard to the returns to scale, it should be noted that the estimation method results in an underestimation (overestimation) of the mark-ups for increasing (decreasing) returns to scale. Moreover, measurement errors in the capital stock, for example, may distort the estimated mark-ups. See R Christopoulos and P Vermeulen (2012), Markups in the euro area and the US over the period 1981-2004: A comparison of 50 sectors, *Empirical Economics* 42, pp 53-77.

³⁸ One exception is user cost of capital ($r_t = \ln(R_t)$), which is approximated in accordance with conventional practice and in line with Hall and Jorgensen (1967) as: $R_t = P_t[i - \pi + \delta]$, where $i - \pi$ is a real interest rate, δ the rate of depreciation and P_t the deflator for capital goods. A value of 10% is used for δ , the relevant deflator from the European Commission's AMECO database is taken for P_t and $i - \pi$ is approximated using the real long-term interest rate according to the AMECO database, with any negative values being set to zero. See RE Hall and DW Jorgensen (1967), Tax policy and investment behavior, *American Economic Review* 57, pp 391-414.

³⁹ Oliveira Martins et al (1996) derive a corresponding estimation equation in the context of the Roeger approach. See J Oliveira Martins, S Scarpetta and D Pilat (1996), Markup pricing, market structure and the business cycle, *OECD Economic Studies*, No 27.

⁴⁰ See H Badinger (2007), Has the EU's single market programme fostered competition? Testing for a decrease in mark-up ratios in EU industries, *Oxford Bulletin of Economics and Statistics* 69, pp 497-519.

⁴¹ In principle, an estimation of time-varying firm-specific (or sector-specific) mark-ups would be preferable. Although there are approaches for conducting such estimations, these usually require firm-level data. See, for example, J De Loecker and F Warzynski (2012), Markups and firm-level export status, *American Economic Review* 102, pp 2437-2471.

⁴² See BE Hansen (1999), Threshold effects in non-dynamic panels: Estimation, testing, and inference, *Journal of Econometrics* 93, pp 345-368.

⁴³ Amador and Soares (2016) derive this estimation equation in line with Roeger (1995), taking into account the aspect of bargaining power on the labour market. In formal terms, this produces $z_t = (\alpha_{nt} - 1)[(\Delta w_t + \Delta N_t) - (\Delta r_t + \Delta K_t)]$. Measures for the output gap are included in the regressions to control for cyclical factors. See J Amador and A Soares (2016), Markups and bargaining power in tradeable and non-tradeable sectors, *Empirical Economics* 53, pp 669-694.

Consideration of bargaining power on the labour market

The Eurosystem's financial market infrastructure – origin and future set-up

The Deutsche Bundesbank has the statutory mandate to arrange for the execution of domestic and cross-border payments and to contribute to the stability of payment and settlement systems.¹ Promoting the smooth operation of payment systems is also a fundamental task of the European System of Central Banks.²

The single European TARGET2 platform has been contributing towards fulfilling these obligations in the area of high-value payments for the last ten years. TARGET2 went live in November 2007 as the Eurosystem's first joint market infrastructure and quickly went on to become one of the biggest high-value payment systems in the world. The introduction of TARGET2-Securities (T2S) in June 2015 saw the single European settlement platform being expanded to include securities settlement.

The Eurosystem's TARGET2 and T2S services provide the financial markets in Europe with a harmonised infrastructure for the settlement of national and cross-border payments and securities transactions in safe central bank money, thereby contributing to the integration of Europe's money and capital markets and to the stability of the European financial system.

New developments and market requirements in the area of payments and securities settlement, efforts to further integrate European financial markets in line with the capital markets union (CMU) envisaged by the European Commission, as well as the increasing importance of fending off cyberattacks are the backdrop against which the Eurosystem is working towards further developing its market infrastructure.

This article provides an overview of the existing TARGET2 and T2S market infrastructure services and looks ahead to the ongoing projects which will expand upon the TARGET services offered by the Eurosystem.

¹ See section 3 of Bundesbank Act (Gesetz über die Deutsche Bundesbank).

² See Article 127 of the Treaty on the Functioning of the European Union.

Ten years of TARGET2 – a single shared platform for high-value payments

Ten years of
TARGET2

Around ten years ago – on 19 November 2007, to be precise – the Eurosystem’s high-value payment system – TARGET2 – went live and has since become synonymous in the European financial community and beyond with the quick and reliable settlement of urgent euro payments in central bank money. It ranks as one of the biggest high-value payment systems in the world, handling an average of 340,000 payments with a value of around €1.7 trillion every business day,³ a figure that equates to more than half of Germany’s annual gross domestic product. Germany’s TARGET2 component system alone accounts for around half of the volumes and more than one-third of the turnover (see the box on page 71).

TARGET2 operates on a single technical platform and replaced the original linked system, TARGET, which was launched in 1999 with the introduction of the euro. This linked system consisted of the national RTGS systems⁴ of the participating central banks – RTGS^{plus} in the case of the Bundesbank – and the European Central Bank’s payment mechanism, which were technically interlinked via SWIFT.⁵

TARGET stands
for Trans-
European Auto-
mated Real-time
Gross settlement
Express Transfer

In the case of both the previous linked system and TARGET2, the acronym TARGET stands for Trans-European Automated Real-time Gross settlement Express Transfer and thus aptly describes the cornerstones of the joint payment system. Throughout Europe, highly automated urgent payments are processed in real time and with immediate finality on a gross basis – ie every payment is settled on an individual basis in central bank money. TARGET2, the second generation of TARGET, marked the first ever implementation of a joint Eurosystem market infrastructure operating on a single technical platform – known as the Eurosystem’s single shared platform (SSP).

In the early years of the single currency, TARGET successfully contributed to the implementation of the single monetary policy and the integration of European money markets. It was undisputed, however, that the linked system, with its very different national RTGS systems in some cases, would no longer be able to meet the needs of market participants in the long run and promote the vision of European integration. Against this backdrop, the Governing Council of the European Central Bank decided in December 2004 to develop a single technical platform for TARGET2. The ECB Governing Council entrusted the Banca d’Italia, the Banque de France and the Deutsche Bundesbank (a team known as the 3CB) with the development and future operation of the platform. The Bundesbank was consequently able to incorporate key features of its former high-value payment system, RTGS^{plus}, such as comprehensive liquidity management capabilities and liquidity-saving settlement in a gross settlement system, as building blocks in TARGET2.

Technically, TARGET2 runs on a single platform, but in legal terms, it is structured as a multiplicity of individual component systems. This means that each central bank is regarded as an independent system operator. The German component system is called “TARGET2-Bundesbank”. Customer support also remains in the hands of the national central banks (NCBs). The legal conditions of the individual systems have been harmonised to the greatest extent possible, however. Derogations are only possible in justified exceptional cases, such as in the event of national law constraints. This set-up reflects the principle of subsidiarity enshrined in the Treaty on European Union, besides ensuring that customers are supported as far as possible by local experts.

Transition from
TARGET to
TARGET2

Single technical
platform with
legally decen-
tralised com-
ponent systems

³ These figures refer to the settlement of payments on accounts in TARGET2’s payments module (PM).

⁴ RTGS: Real-Time Gross Settlement.

⁵ SWIFT: Society for Worldwide Interbank Financial Telecommunication.

25 central banks currently using TARGET2

The enlargement of the European Union and the euro area has steadily increased the size of the TARGET2 family in recent years. At present, 25 EUNCBs are using the SSP. In addition to the euro area NCBs and the European Central Bank, the NCBs of Bulgaria, Croatia, Denmark, Poland and Romania are also connected to the system. While participation is compulsory for euro area NCBs, those from the other EU countries are free to decide whether they wish to take part in TARGET2 and thereby provide their markets with access to the euro payment settlement system.

Centralised platform for settling urgent payments in central bank money

The Eurosystem uses TARGET2 to settle its monetary policy operations for the provision and absorption of liquidity. The SSP is therefore the central infrastructure for implementing monetary policy. Measured in terms of total volume, however, these transactions account for only a relatively small share. The bulk of the volumes and turnover in TARGET2 are generated, *inter alia*, by banks which make extensive use of TARGET2 to settle their interbank payments, ie trade between banks in central bank balances, as well as the settlement of customer payments (see the chart on page 72).

Other settlement systems are also connected to TARGET2 via the ancillary system interface, such as retail payment, securities and foreign exchange settlement systems, including the SEPA-Clearer⁶ operated by the Bundesbank, via which customer payments (SEPA credit transfers, SEPA direct debits and SEPA card clearing collections) of participating banks are settled. Six standardised settlement procedures, known as ancillary system interface (ASI) procedures, which are tailored to the specific needs of the individual ancillary systems, are used to settle the transactions from these ancillary systems via the accounts of the participants in TARGET2, and thus in central bank money.

The Eurosystem's TARGET2 service gives European market participants neutral access to a

⁶ SEPA: Single Euro Payments Area.

Volumes in different high-value payment systems

TARGET2 is Europe's biggest high-value payment system, ranking alongside the leading RTGS¹ systems operated by the United States Federal Reserve Banks (Fedwire), the Bank of England (CHAPS) and the Bank of Japan (BOJ-NET).

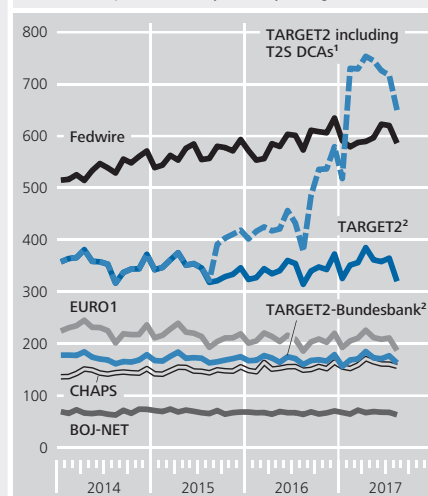
Around half of the 340,000 payments processed on average every business day are generated by the German component system, TARGET2-Bundesbank, alone.

EBA CLEARING runs the pan-European high-value payment system EURO1, providing European banks with an infrastructure that complements TARGET2. EURO1 differs from TARGET2 in that it is a (secure) net settlement system. This means that the balances that accumulate through the course of the day between the banks are only settled at the close of business in TARGET2, and thus in central bank money.

¹ RTGS: Real-time Gross Settlement.

Volumes in different high-value payment systems

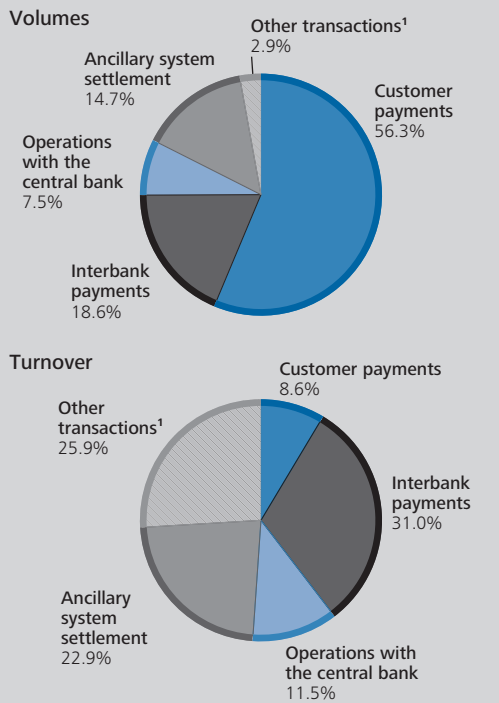
In thousands, per business day, monthly averages



¹ Given that the T2S DCAs (TARGET2-Securities dedicated cash accounts) form part of TARGET2 for legal purposes, bookings on the DCAs have been added to the TARGET2 statistics since T2S was launched on 22 June 2015. The cash leg of securities transactions, which to a large extent used to be netted and then settled via the ancillary system interface of TARGET2, is now therefore posted to the T2S DCAs on a transaction-by-transaction basis. ² Not including bookings on T2S DCAs.

Deutsche Bundesbank

TARGET2 volumes and turnover*



* TARGET2 system as a whole (RTGS accounts) in the year 2016. ¹ Including, for example, liquidity transfers within the same group.
 Deutsche Bundesbank

Possibility to participate directly or indirectly

payment system for the settlement of high-value euro payments in central bank money with a fully harmonised range of services for all participants at uniform prices in all participating countries. By providing the option of connecting as either a direct or an indirect participant, the Eurosystem addresses, amongst other things, the challenges presented by the very heterogeneous European banking sector and the varied needs of the individual institutions.

In the case of direct participation, credit institutions or, for example, authorised investment firms have one or several RTGS accounts of their own for the settlement of payments – known as PM accounts⁷ – as well as access to the information and control module (ICM), which operates in real time. Direct participants can use the ICM to view their liquidity position and the status of payments at any time and actively manage their liquidity using a variety of functions. Direct participation is open to supervised credit institutions in the European Eco-

nomie Area (EEA), although this criterion is also deemed to have been met by EEA-domiciled branches whose parent groups are domiciled outside the EEA. This gives internationally active banks domiciled outside the EEA the option of using their EEA-domiciled branch as a way of participating directly in the high-value euro payment system with settlement in central bank money. With the United Kingdom's decision to leave the European Union and the associated uncertainty regarding its continued membership in the EEA, this model has recently moved into the focus of interest of internationally active large banks based in the UK.

Indirect participants settle their TARGET2 payments via a direct participant, ie they do not have their own account in TARGET2. They send and receive payments solely via the direct participant acting on their behalf. Indirect participation is only available to credit institutions domiciled in the EEA.

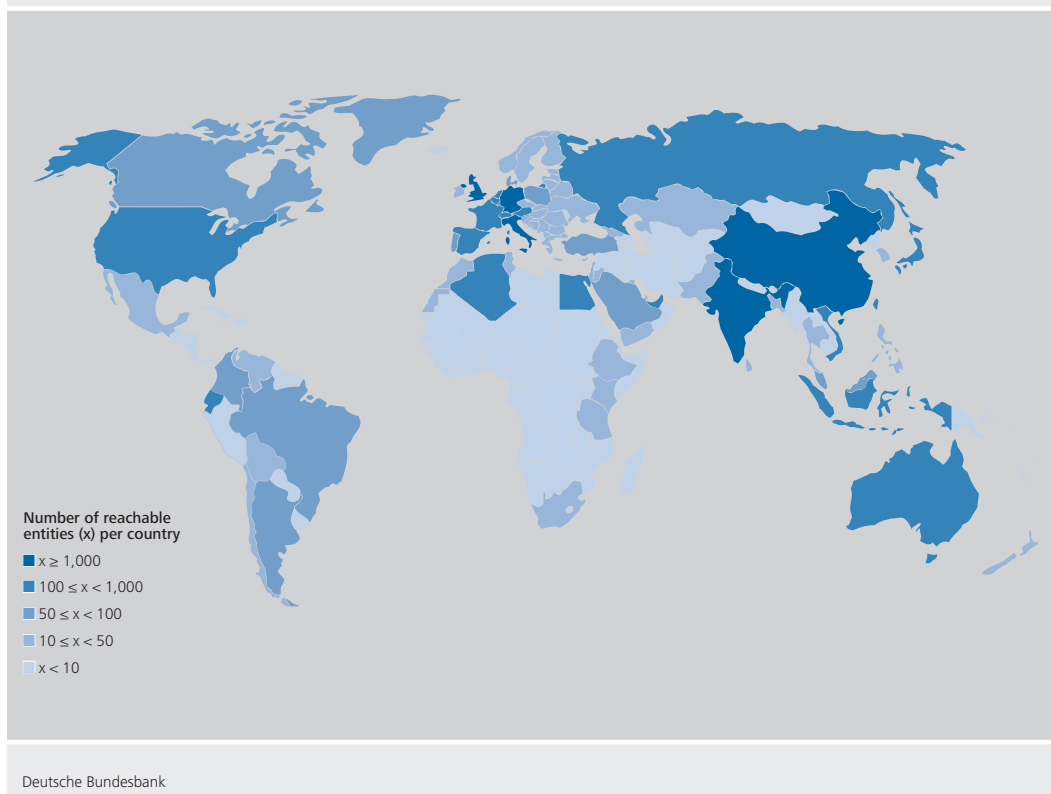
Across Europe, around 1,600 financial institutions are connected to TARGET2 as direct participants and around 700 as indirect participants, with the German component system, TARGET2-Bundesbank, contributing roughly 750 direct and around 170 indirect participants to these overall figures. The German market therefore accounts for almost 50% of all direct TARGET2 participants. This can be explained, above all, by a feature particular to the German market whereby, when compared with other component systems, a disproportionately large share of direct participants in TARGET2-Bundesbank use their RTGS accounts solely for the settlement of certain transactions, such as monetary policy operations, and not for payment transactions.

German market accounts for almost 50% of all direct TARGET2 participants

Direct participants can have their branches and correspondent banks – worldwide and without regional constraints – added to the TARGET2 directory as what are known as addressable

⁷ RTGS accounts held in the payments module (PM) of the SSP.

Worldwide reachability – TARGET2 as the backbone of correspondent banking



BIC⁸ holders. On top of the 1,600 direct and 700 indirect participants, this adds more than 49,000 additional payment recipients worldwide who can be reached via TARGET2. Just like in the case of direct and indirect participants, most of the addressable BIC holders are domiciled in the EEA. Yet, even beyond the borders of the EEA, there are thousands of institutions around the globe that can be reached via TARGET2 (see the chart above). This plays a significant role in correspondent banking, in particular, which is fundamentally supported by TARGET2.

Market participants in Germany were already familiar with many of these functions from RTGS^{plus}, which was one of the first ever RTGS systems to provide credit institutions with a notable array of options for managing their own liquidity. TARGET2 modelled itself on the RTGS^{plus} system and adopted many of its functions. This range of liquidity management capabilities continues to make TARGET2 one of the world's leading RTGS systems in operation today. These functions include, for example, the assignment of priorities, the possibility of liquidity pooling, and a limit-setting function.⁹

Extensive liquidity management functions enable comfortable management of central bank liquidity throughout Europe

The SSP gave banks the opportunity to focus their technical access to TARGET2 on one country, thereby enabling them to consolidate their payment operations and reduce the liquidity buffers they held for payment purposes in the individual countries. The liquidity management functions introduced with TARGET2 also allow banks to comfortably manage their central bank liquidity throughout Europe.

Besides offering these active liquidity management capabilities, TARGET2's very design makes it a highly efficient and liquidity-conserving sys-

⁸ BIC: Business Identifier Code – a unique international bank sort code used to identify a specific bank.

⁹ A detailed overview of the liquidity management functions generally available in TARGET2 can be found in Deutsche Bundesbank, TARGET2 – the new payment system for Europe, Monthly Report, October 2007, pp 69-82.

tem given that, amongst other things, it uses liquidity-saving algorithms and takes mutual payments into account as coverage for settlement purposes.

Integration of users – fundamental prerequisite for the service's success

The successful design and development, smooth operation and ongoing needs-driven further development of a market infrastructure such as TARGET2 would be impossible without systematically taking the needs of its users into account. Involving payment participants to a suitable degree in the discussion and decision-making process was therefore particularly important for the Eurosystem NCBs from the very outset. In Germany, cooperation between the Bundesbank and representatives of German banks takes place via the Payment and Settlement Systems Working Group (*Arbeitskreis Zahlungs- und Verrechnungssysteme*, or AKZVS). This working group provides a forum for debate and opinion forming with the aim of gaining early insights into the opinion of German banks on the design of payment and settlement systems as a source of information for the (European) decision-making process. Members of the working group include the largest banks and ancillary systems participating in TARGET2-Bundesbank, the leading institutions of cooperative banks and savings banks, as well as the banking associations.

In recent years, TARGET2 has also become the focus of public attention, especially with regard to TARGET2 balances (see the box on pages 75 and 76).

TARGET2-Securities: Europe's hub for securities settlement

Post-trade landscape characterised by fragmentation and national monopoly structures

TARGET2-Securities (T2S) transfers the idea of TARGET2's single technical platform to the area of securities settlement in central bank money. While TARGET2 contributed significantly to promoting the integration of Europe's payment system infrastructure, the post-trade landscape remained highly fragmented and characterised by national monopoly structures for years after

the euro was introduced. For market participants, this translated above all into complex structures, inefficiencies and high costs for the cross-border settlement of securities transactions.

The Giovannini Group¹⁰ pinpointed the weaknesses in the post-trade landscape in reports published back in 2001 and 2003, identifying a total of 15 technical, legal and fiscal barriers that hindered efficient cross-border clearing and settlement. These barriers are still used today to assess the progress that has already been made towards greater harmonisation. T2S did a great deal to directly and indirectly dismantle six of the 15 barriers, primarily in technical areas.¹¹

T2S is an integrated securities settlement service that brings together the cash and securities legs of a DvP transaction¹² on a single technical platform – the SSP, which the Eurosystem is already using for TARGET2 (see the box on page 78). Unlike TARGET2, T2S is capable of processing multiple currencies, which means that non-euro area NCBs also have the option of making their national currencies available for settlement in T2S, thereby allowing their market participants to take advantage of the benefits of T2S. In October 2018, Denmark's Nationalbank will be the first non-euro area NCB to connect its RTGS system to T2S, thus facilitating the settlement of securities in Danish krone via T2S from this date onwards.

Transactions in T2S are settled exclusively in central bank money. This feature, combined with real-time settlement and shorter settlement chains, mitigates post-trade risks and thus boosts the stability of the financial markets in Europe. Settlement in central bank

Giovannini barriers stand for the prevailing inefficiencies in the cross-border post-trade landscape

T2S integrates securities and central bank money accounts on a single technical platform

T2S underpins the efficient settlement of securities transactions in central bank money

¹⁰ https://ec.europa.eu/info/publications/giovannini-reports_en

¹¹ <https://www.ecb.europa.eu/paym/t2s/about/html/giovannini.en.html>

¹² DvP: Delivery versus payment – the simultaneous exchange of the securities and the corresponding amount of money underlying a transaction.

TARGET2 balances – mirroring developments in financial markets

Origin

TARGET2, the Eurosystem’s high-value payment system, may run on a single shared platform (SSP), but legally speaking, it is made up of multiple component systems operated by the national central banks (NCBs) and the ECB. Thus, both the Bundesbank and the Banque de France will be involved in a cross-border payment transaction¹ made in settlement of a German export to France, for instance. That transaction begins when the French importer’s commercial bank in France debits the purchase amount from the importer’s account and submits a credit transfer in TARGET2 to the German exporter’s commercial bank in Germany. The Banque de France then debits the amount from the TARGET2 account it operates for the French commercial bank and posts a liability owed to the Bundesbank. For its part, the Bundesbank posts a claim on the Banque de France and credits the amount to the German commercial bank’s TARGET2 account. The transaction is concluded when the commercial bank

credits the amount in question to the account it operates for the German exporter.²

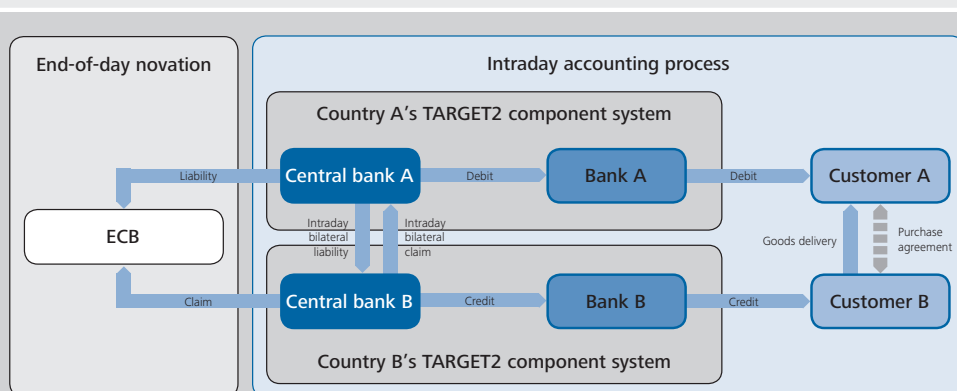
At the end of the business day, all the intraday bilateral liabilities and claims are automatically cleared as part of a multilateral netting procedure and transferred to the ECB via novation, leaving a single NCB liability to, or claim on, the ECB.³ Viewed in isolation, the transaction used as an example above leaves the Banque de France with a liability to the ECB and the Bundesbank with a claim on the ECB at the end of the business day. These claims on, or liabilities to, the ECB are generally referred to as TARGET2 balances.

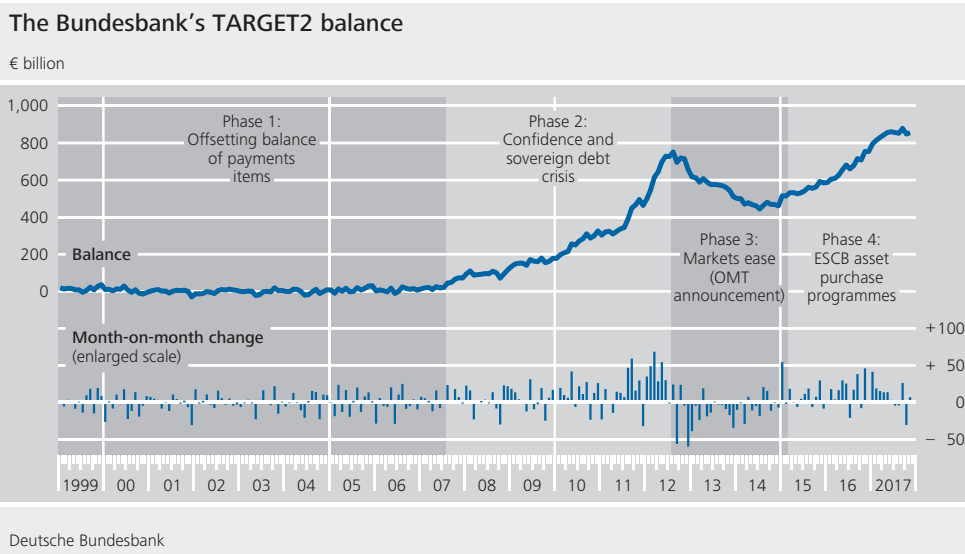
¹ Transactions are said to be cross-border transactions when the originators and beneficiaries are connected to TARGET2 via separate NCBs.

² In transactions confined to a national component system, the debit and credit entries on the TARGET2 accounts of the commercial banks involved in the transaction would net each other out. National and cross-border transactions generate the same accounting process in the commercial banks’ ledgers.

³ See Article 6 (2) of the Guideline of the European Central Bank of 5 December 2012 on a Trans-European Automated Real-time Gross settlement Express Transfer system (TARGET2) (recast) (ECB/2012/27).

Origin of TARGET2 balances





Evolution

Historically, the evolution of TARGET2 balances can be broken down into four phases. In phase one, monthly TARGET2 balances were highly volatile at a low level, frequently fluctuating between positive and negative figures. Germany's current account surpluses were matched by a similar volume of capital exports by private actors (eg interbank loans), balancing out the Bundesbank's TARGET2 transactions overall. The onset of the financial crisis in 2007 prompted a sharp rise in Germany's TARGET2 balance. While banks domiciled in Germany continued to attract substantial safe haven flows from abroad, the crisis of confidence reduced the volume of credit transfers to foreign institutions in crisis-hit countries to a trickle. The evolution of TARGET2 balances in phase two was a symptom of the crisis.⁴ Conditions in financial markets eased in mid-2012, not least after ECB President Mario Draghi pledged to do "whatever it takes" to preserve the euro and the Eurosystem announced its outright monetary transactions (OMT) programme. This initially sent TARGET2 balances broadly lower at the beginning of phase three, before they embarked, in phase four, upon a steady in-

crease when the expanded asset purchase programme (APP) was launched. This fresh upturn in TARGET2 balances starting in 2015 can largely be put down to the effects stemming from the technical settlement of the purchase programmes given that, for the most part, these programmes are currently giving rise to cross-border transactions in TARGET2. Since the APP is to be extended beyond 2017, TARGET2 balances are likely to continue rising, all other things being equal.⁵

⁴ These effects are outlined in detail in Deutsche Bundesbank, The dynamics of the Bundesbank's TARGET2 balance, Monthly Report, March 2011, pp 34-35.

⁵ The implications of the APP for TARGET2 balances are discussed in greater detail inter alia in Deutsche Bundesbank, The impact of Eurosystem securities purchases on the TARGET2 balances, Monthly Report, March 2016, pp 53-55; and in European Central Bank, TARGET balances and the asset purchase programme, Economic Bulletin, Issue 7/2016, pp 20-23.

money is also consistent with the CPMI¹³ Principles for Financial Market Infrastructures¹⁴ and the European Union's Central Securities Depositories Regulation (CSD Regulation),¹⁵ both of which stipulate that central bank money should be used for settlement where practical and available. The Bundesbank therefore also supports the use of central bank money for the settlement of securities transactions. T2S gives market participants the tools they need to settle their transactions in central bank money in a broad context, and these capabilities are now available for the simple and efficient settlement of cross-border transactions as well.

T2S is not a central securities depository

T2S provides the participating central securities depositories (CSDs) and their customer communities with a settlement service, but is not, itself, a CSD. The safe custody of securities and the services this entails remain in the hands of the CSDs. Likewise, the contractual relationship with their customers remains unaffected by T2S. Although participation in T2S is voluntary, in 2012 virtually every euro area CSD plus four non-euro area ones signed the T2S Framework Agreement.

Official project launch in July 2008

In July 2008, the Governing Council of the ECB gave the go-ahead to launch the T2S project and entrusted the developer and operator consortium from TARGET2 – consisting of the German, French and Italian NCBs, as well as the Banco de España (known as the 4CB) – with the development and subsequent operation of the platform. The T2S project thus marked a continuation of the Eurosystem NCBs' successful cooperation on TARGET2.

T2S user group the key forum for exchanging information and for debate and opinion forming

Involving market participants to an appropriate degree in the design and implementation of the T2S range of services was one of the main endeavours of the Eurosystem and the Bundesbank from the outset. The national user groups, which bring together T2S stakeholders from each country and offer a forum for the exchange of information, debate and opinion forming, play an essential role in this regard. The German T2S user group chaired by the

Bundesbank was established back at the end of 2006 as one of the first T2S user groups in Europe and has since become an integral part of the cooperation between the Bundesbank and the German financial market with regard to T2S.

T2S went live on 22 June 2015. The now 21 participating CSDs migrated to T2S in a total of five waves between June 2015 and autumn 2017.¹⁶ The German CSD – Clearstream Banking AG – which alone contributes just under 40% to the overall T2S settlement volume, migrated its settlement business to T2S as part of the fourth wave on 6 February of this year. The successful migration of this heavyweight CSD posed a major challenge for all the stakeholders and was the result of years of preparatory work at both the European and national level. This achievement was due, not least, to the good cooperation with Clearstream and the early involvement of the customers in the adjustment, testing and migration process.

Operational launch on 22 June 2015

T2S handles an average of around 550,000 transactions with an average total value of more than €800 billion every business day (see the chart on page 79).

One of the NCBs' core responsibilities within the T2S set-up is to provide T2S dedicated cash accounts (DCAs) for their customers. These DCAs are used to settle the cash leg of securities transactions. Legally, they are part of the respective connected RTGS system, so in the case of euro-denominated DCAs, they belong to TARGET2. The DCAs opened by the Bundesbank are therefore subject to the legal provisions and access requirements of the TARGET2-Bundesbank component system.

NCBs provide DCAs needed to settle securities transactions

¹³ CPMI: Committee on Payments and Market Infrastructures, located at the Bank for International Settlements (BIS).

¹⁴ http://www.bis.org/cpmi/info_pfmi.htm

¹⁵ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014R0909>

¹⁶ <http://www.ecb.europa.eu/paym/t2s/progplan/html/index.en.html>

TARGET2-Securities (T2S) – an integrated platform for securities settlement in central bank money

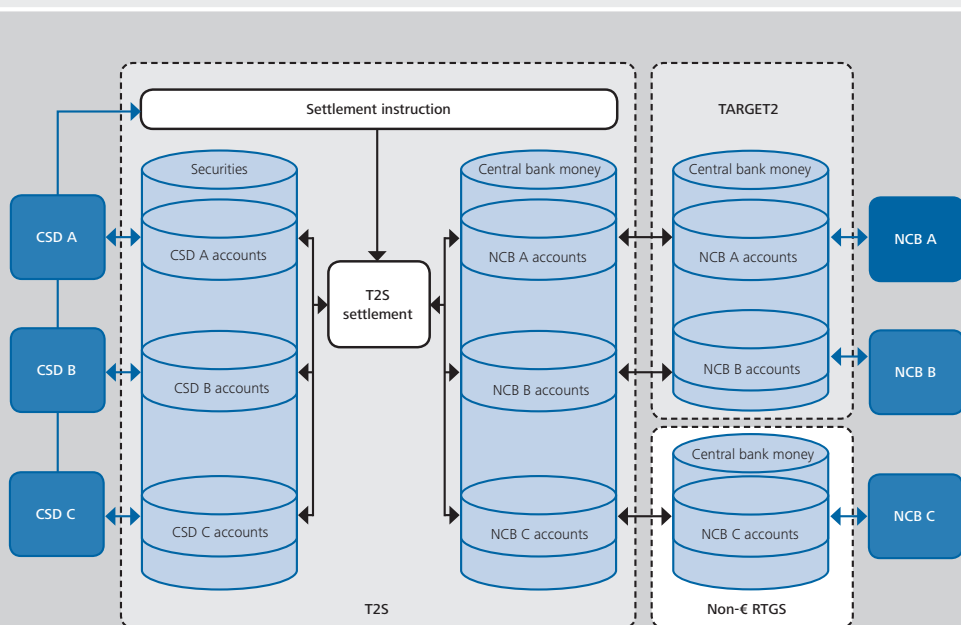
T2S is a single technical platform which integrates the securities accounts of central securities depositories (CSDs) and the cash accounts of national central banks (NCBs). The liquidity needed for settling securities comes from the RTGS systems which are run by the NCBs and connected to T2S – so from TARGET2 in the case of the euro. Once Denmark's NCB joins the T2S system in October 2018, the Danish RTGS system will also be linked to T2S. Both T2S and TARGET2 are run on the Eurosystem's single shared platform (SSP).

Communication with T2S is via either an automated interface (application-to-application) or a graphical user interface (user-to-application), and the messages used are ISO 20022-compliant. CSDs or their customers with a direct technical link to T2S send their settlement instructions to

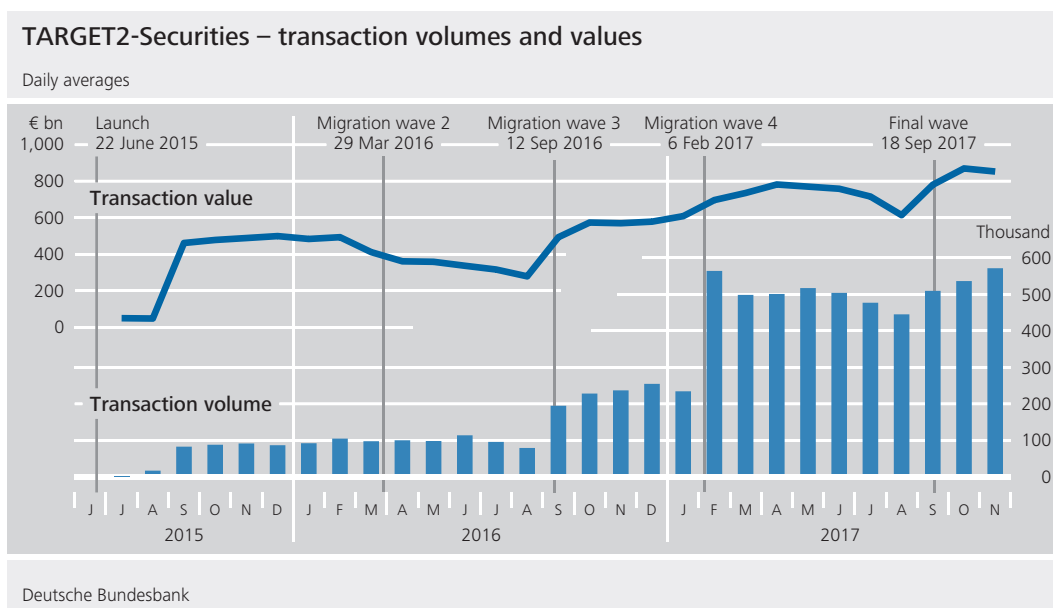
T2S. There they undergo validation and, if need be, matching. They are then fed into the settlement process. In the case of night-time processing this is done in batches; during the day it happens in real time on a transaction-by-transaction basis. The process culminates in the posting of the securities and cash legs to the relevant T2S accounts. Bookings are final and irrevocable.

To boost settlement efficiency, T2S also incorporates an auto-collateralisation function. Triggered when certain conditions are met, auto-collateralisation is a credit operation which enables transactions to be settled in the absence of sufficient liquidity. This credit provided by the NCB in question is automatically secured using the security which is being settled or securities already held by the buyer.

TARGET2-Securities (T2S) – an integrated platform for securities settlement in central bank money



Source: T2S User Requirements, Eurosystem.
 Deutsche Bundesbank



Auto-collateralisation function smoothens the settlement process

If there is insufficient liquidity on a DCA to settle a securities transaction, the auto-collateralisation function offered by T2S can be used under certain circumstances. This function generates the liquidity needed by triggering an automated credit operation at the relevant home central bank. While some individual markets were already familiar with auto-collateralisation from their own national market infrastructures, this function can now be offered across all the markets participating in T2S. Furthermore, it is also possible to use collateral across national borders.

TARGET2 value added services for Eurosystem central bank customers indirectly connected to T2S

Customers of CSDs and NCBs can communicate either directly or indirectly with T2S. If they communicate indirectly with T2S, there is no technical connection to T2S and their interaction is routed solely via the CSD's or NCB's interface. Eurosystem central bank customers that are indirectly connected on the cash leg do this using the TARGET2 value added services that have been developed specifically for T2S. These offer basic functions such as transferring liquidity between TARGET2 and T2S as well as viewing intraday DCA balances. T2S users that wish to actively manage their liquidity, however, need to have a direct connection on the cash leg in order to take advantage of the full range of cash-leg functions offered by T2S. Noteworthy components of the full ser-

vice package include liquidity monitoring and comprehensive reporting capabilities.

T2S was, and still is, a major challenge for the entire European post-trade landscape. Processes that had evolved over many decades and been tailored to suit the individual needs of each national market were broken up. The general thrust of T2S is to provide European market participants with a harmonised and standardised settlement service and to avoid replicating the specific features of national systems. T2S thus makes a valuable direct contribution to forging integrated and harmonised European post-trade markets. Tangible benefits include the universal use of ISO 20022-compliant messages, a single settlement day for all participants, and a harmonised set of rules on the finality of settlement instructions across T2S. Furthermore, T2S has become a significant catalyst for the further harmonisation of Europe's post-trade markets. Stakeholders appreciate that a harmonised environment allows them to leverage more of the benefits of the single, integrated settlement platform.

Besides this key contribution to harmonising Europe's post-trade markets, and thus to dismantling the Giovannini barriers mentioned earlier in this article, one of the most promising features of T2S is that it optimises pan-

T2S adds substantially to integration and harmonisation of European post-trade markets

T2S lays foundation for optimising pan-European liquidity and collateral management

European liquidity and collateral management. T2S brings together the accounts of all participating CSDs and NCBs on a single technical platform, effectively eliminating the differences between domestic and cross-border settlement. On the cash leg, banks can settle securities transactions in any of the CSDs participating in T2S using just a single DCA on the T2S platform, so they can scale back the liquidity buffers they held in each individual market. As for collateral management, T2S gives participants a quick, efficient and cost-effective way of moving collateral across Europe to precisely where it is needed at any given time. The collateral buffers that participants had to hold in individual markets on account of the complexity of cross-border securities movements can therefore be dismantled. T2S, then, means that liquidity and collateral can be utilised far more efficiently and effectively.

Identifying and harnessing the opportunities and potential offered by T2S

To harness the new opportunities and potential offered by T2S, most market participants will need to rethink their existing structures and adapt to the new conditions – both technically and strategically. Similarly, the European regimes governing the post-trade markets which entered into force in recent years – such as the CSD Regulation – have shaken up the underlying conditions, forcing participants to adjust. By successfully connecting to T2S, European market participants have impressively overcome the technical and organisational challenges presented by the T2S project. There are probably many T2S stakeholders who, even after completing technical migration, still have not concluded their strategic reflections on how to reposition themselves in a changed market environment, and given how dynamically the post-trade landscape is evolving, those considerations look set to remain on the agenda. By rolling out T2S and the regulatory frameworks and pushing for greater harmonisation, the Eurosystem and the European Union have laid the foundations for a single, competitive, European post-trade landscape. Market participants are now working towards (re)positioning themselves within the value

added chain and capitalising on the particular opportunities and potential this presents for them. This may include expanding upon their existing service offerings or embracing new technologies and innovative business models.

Next steps in the evolution of the Eurosystem's market infrastructure

The Eurosystem is working on the next steps for its market infrastructure amid new developments and market requirements in the areas of payments and securities settlement, efforts to further integrate Europe's financial markets in line with the capital markets union¹⁷ envisaged by the European Commission, as well as the mounting importance of fending off cyber-attacks.

Eurosystem working on the next steps for its market infrastructure

The Eurosystem identified a total of three initiatives whose potential was analysed and fleshed out in greater detail during a formal investigation phase conducted in close cooperation with the market from September 2016:

- Settlement of instant payments in central bank money;
- Consolidation of existing TARGET2 and T2S services;
- Developing a European collateral management system.

All three of these initiatives have since evolved into official projects aimed at developing and expanding the infrastructure offered by the Eurosystem. In June 2017, the ECB Governing Council approved the launch of the realisation phase of the TARGET instant payment settlement (TIPS) project, which will see the Eurosystem offering the settlement of instant pay-

ECB Governing Council approves projects to develop and expand Eurosystem infrastructure

¹⁷ The capital markets union initiative aims to integrate further the capital markets of the EU member states (<http://www.consilium.europa.eu/en/policies/capital-markets-union>).

ments in central bank money as from November 2018. The projects to consolidate TARGET2 and T2S as well as establish a Eurosystem collateral management system (ECMS)¹⁸ were officially given the green light by the ECB Governing Council at its meeting on 6 December 2017.

4CB again entrusted with developing and running projects

The ECB Governing Council has again entrusted the development and subsequent operation of the three projects to the 4CB in a move which cements the status of the four largest NCBs in the Eurosystem as the Eurosystem's provider of infrastructural services.

By bringing TIPS and the consolidation project to fruition, the Eurosystem will be expanding upon its current TARGET repertoire, consisting of TARGET2 and T2S, by adding a range of core services, which are described in greater detail below.

TARGET instant payment settlement (TIPS)

Instant payments – real-time fund transfers, around the clock

The implementation of the Single Euro Payments Area (SEPA) and the Payment Services Directive (PSD) has made cashless payments in Europe faster and more harmonised overall. Settling a euro-denominated credit transfer within the EEA now takes only one business day at most. However, given the advances in mobile communications technology, the increasing use of mobile terminal devices, the mounting importance of internet retail, as well as the extensive real-time communication capabilities offered by social media, many customers and enterprises expect to be able to exchange payments significantly faster and whenever it suits them, too. Internationally, these types of payments have become known as "fast payments". The Committee on Payments and Market Infrastructures (CPMI), based at the Bank for International Settlements, defines fast payments as "payments in which the transmission of the payment message and the availability of final funds to the payee occur in real time or near-real time and on as near to a 24-hour

and 7-day (24/7) basis as possible".¹⁹ In Europe, these "fast" criteria have led to these payments being known as "instant payments", a term which even more accurately reflects the immediate availability of final funds.

As long ago as December 2014, the Euro Retail Payments Board (ERPB)²⁰ agreed to back the introduction of pan-European instant payments. The ERPB commissioned the European Payments Council – a body of credit institutions from the SEPA countries whose tasks include managing the procedural rules for processing SEPA payments – to develop a pan-European scheme for instant payments. The European Payments Council decided to draw up this set of rules on the basis of the SEPA credit transfer (SCT) and fittingly named it the SEPA instant credit transfer scheme (SCT^{Inst}). In November 2016, following a market consultation, the document was published and entered into force one year later on 21 November 2017. Amongst other things, this scheme provides for the use of the message format based on ISO 20022 as well as IBANs and BICs. In addition, it stipulates that the transferred funds should be available to the beneficiary no later than ten seconds after initiation by the originator's payment service provider.

SCT^{Inst} – a pan-European scheme for settling instant payments

Following the ERPB decision, various clearing houses began to develop clearing solutions for instant payments. Many of these solutions, however, focus primarily on national markets. In order to prevent a refragmentation of the

Investigation of a Eurosystem service to prevent refragmentation of the European payments area

¹⁸ The ECMS project will migrate the currently decentralised collateral management systems of the individual Eurosystem NCBs to a common system. Launch is scheduled for November 2022.

¹⁹ See CPMI, Fast payments – enhancing the speed and availability of retail payments, November 2016.

²⁰ The Euro Retail Payments Board (ERPB) promotes the European single market for payments and contributes to further developing payment instruments and infrastructure. Chaired by a high-level representative of the ECB, the ERPB is composed of payment and credit institutions from the supply side, and consumers, retailers, businesses and public administrations from the demand side. Eurosystem NCBs take part in the meetings on a rotating basis. Being the largest NCB, the Bundesbank is present at most meetings (see also Die Deutsche Bundesbank – Notenbank für Deutschland, January 2017).

pan-European payments area created through SEPA, the ECB Governing Council decided in September 2016 to also consider the prospect of the Eurosystem itself offering an instant payment settlement service with 24/7/365 availability, and initiated an investigation phase lasting just under nine months. During the investigation phase, the user requirements for an instant payment settlement service offered by the Eurosystem were devised in close cooperation with market participants and then put to public consultation.

At the same time, the Eurosystem sounded out what the European user community expected from a Eurosystem settlement service, asking market participants to say exactly what potential they saw in instant payments as a financial instrument. Based on the responses, it is expected that just under a quarter of all payments will be submitted as instant payments by 2023. In addition, more than 80% of the participants are considering making full use (22%) or partial use (60%) of the instant payment settlement service offered by the Eurosystem.²¹ This feedback significantly exceeded the Eurosystem's conservative volume estimates made at the beginning of the investigation phase.

ECB Governing Council approves launch of TIPS project

Based on the results of the market consultations regarding a future instant payment settlement service offered by the Eurosystem, the ECB Governing Council approved the official launch of the TARGET instant payment settlement (TIPS) project on 21 June 2017. TIPS is scheduled to start operating on 30 November 2018.

At the very outset of the project, the ECB Governing Council set the maximum price for settling a payment at 0.20 eurocent (€0.0020) for the first two years following launch.²² This means that settling an instant payment via TIPS will cost about the same as a retail payment today. After the first two years of operation, the TIPS pricing policy will be reassessed in order to comply with the Eurosystem's full cost recovery principle.

The launch of TIPS will see the Eurosystem provide Europe's financial markets with a harmonised and standardised pan-European service for settling instant payments in central bank money 24 hours a day, seven days a week, 365 days a year. TIPS will enable payments to be settled irrevocably and with finality in central bank money within a matter of seconds around the clock on every day of the year – including at weekends and on bank holidays (see the box on page 83). TIPS is designed primarily for settling instant payments denominated in euro, but like T2S, it is also capable of handling multiple currencies. This means that NCBs outside the euro area would also be able to make their national currencies available for settling instant payments in central bank money via TIPS.

As a means of settling instant payments in euro, TIPS is a stand-alone service of TARGET2. Therefore, participation in TIPS will essentially be subject to the same access requirements as for the TARGET2 component systems operated by each NCB. However, clearing houses and technical service providers will have the option to assume the function of an "instructing party" in TIPS, where they assume responsibility for a particular participant's technical communication with TIPS without having a TIPS account of their own. This will allow clearing houses to route payments from their own group of users to other TIPS participants and thereby extend their own users' reach.

TIPS is a stand-alone service of TARGET2

TIPS participants will hold one or more TIPS DCAs in order to settle instant payments. These TIPS DCAs will be provided with liquidity transferred from TARGET2 to TIPS. Liquidity transfers to TIPS will be available during TARGET2's usual operating hours. As TIPS payments are settled on a credit balance basis, the TIPS accounts will need to have ample liquidity,

DCAs for settling instant payments

²¹ Results of the Eurosystem's public consultation on the estimated TIPS settlement volume.

²² See the ECB's press release of 22 June 2017 (<https://www.ecb.europa.eu/press/pr/date/2017/html/ecb.pr170622.en.html>).

Settlement of an instant payment via TARGET instant payment settlement (TIPS)

TIPS enables the final and irrevocable settlement of payments in central bank money around the clock, 365 days a year – including at weekends and on bank holidays – with the money moving from the payer’s account to the payee’s account within the space of seconds. It thus supports the SEPA instant credit transfer scheme (SCT^{Inst}), the European Payments Council’s (EPC) rulebook for the settlement of instant payments.

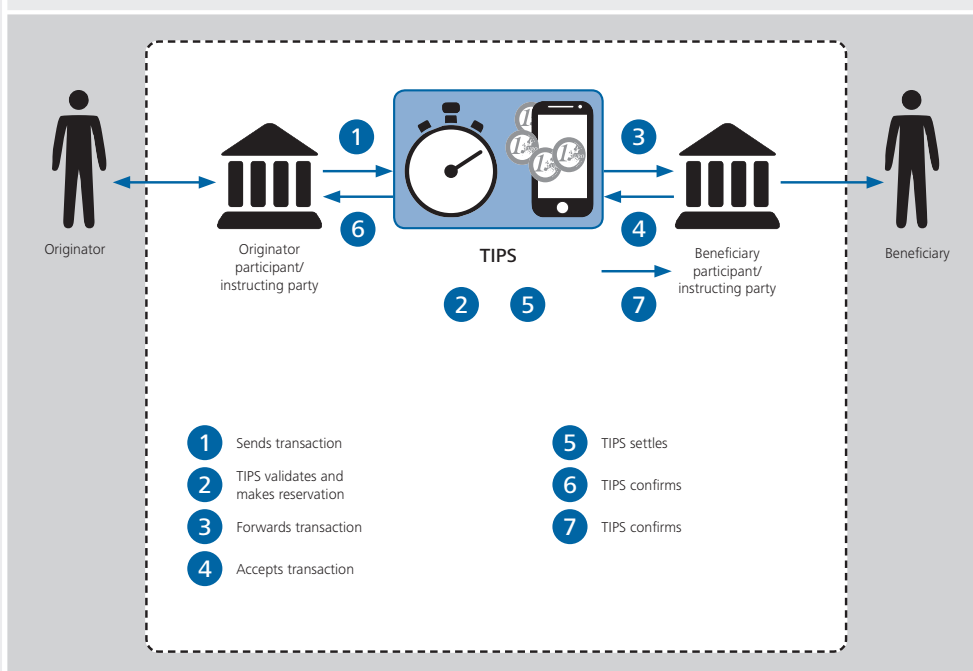
Once TIPS receives this transaction, it is validated and the relevant funds are reserved (step 2). TIPS then informs the counterparty of the transaction (step 3). Once the counterparty has confirmed the payment (step 4), the reservation becomes a posting to the TIPS accounts (step 5). After that, TIPS sends a confirmation to both participants or their instructing parties (steps 6 and 7). And with that, the funds have been transferred with finality.

Settlement of an instant payment via TIPS involves a number of different steps.

In step 1, a transaction conforming with the criteria laid down in the EPC’s rulebook is sent to TIPS by the TIPS participant (originator) or an instructing party¹ appointed by

¹ Whilst a TIPS participant can have a dedicated cash account, or TIPS DCA, of its own for settling instant payments via the service, an instructing party’s responsibilities are confined to technical communication with TIPS on behalf of a participant and it has no TIPS DCA of its own.

Settlement of an instant payment via TARGET instant payment settlement (TIPS)



Source: TIPS User Requirements, Eurosystem.
 Deutsche Bundesbank

especially on weekends and TARGET2 closing days.²³

Communication based on ISO 20022-compliant messages

As is the case with T2S, communication with TIPS will be based on messages compliant with ISO 20022. Regarding network connectivity, TIPS follows a neutral and network-agnostic approach. This will allow TIPS participants to choose their network providers based on their own needs, provided that the provider they choose meets the requirements set out by the Eurosystem.

TIPS is a complementary service to clearing house offerings

TIPS will see the Eurosystem offering a service which complements the offerings of clearing houses. The Eurosystem will therefore be supporting a total of three settlement channels (see the chart on page 85). The first enables payments to be settled as usual via TARGET2 in central bank money using RTGS services (see left column of the chart). Second, to help clearing houses settle instant payments, the Eurosystem has been offering a dedicated ancillary system interface in TARGET2 – ASI 6 real-time – since November 2017. Using this interface, clearing houses can collateralise the settlement of instant payments by procuring cover in TARGET2 using central bank money (see middle column of the chart). Third, starting in November 2018, the TIPS service from the Eurosystem will complete the range of options (see right column of the chart). From that date, TIPS users will be able to route their payments to TIPS directly or through an instructing party, ie via another user, technical service provider or clearing house.

The next generation of TARGET – TARGET2/T2S consolidation

The Eurosystem's single shared platform has been the technical platform for the operation of TARGET2 for a decade and also for T2S since June 2015. The TIPS project described above will add another service to the TARGET family as of November 2018.

The consolidation project will migrate the Eurosystem's TARGET family to a common platform – the Eurosystem market infrastructure platform (EMIP) – in a move which will transform the SSP into a unified, forward-looking and customer-oriented hub for TARGET's high-value payments, T2S and TIPS services (see the box on pages 86 and 87).

Eurosystem's range of services migrating to a common platform

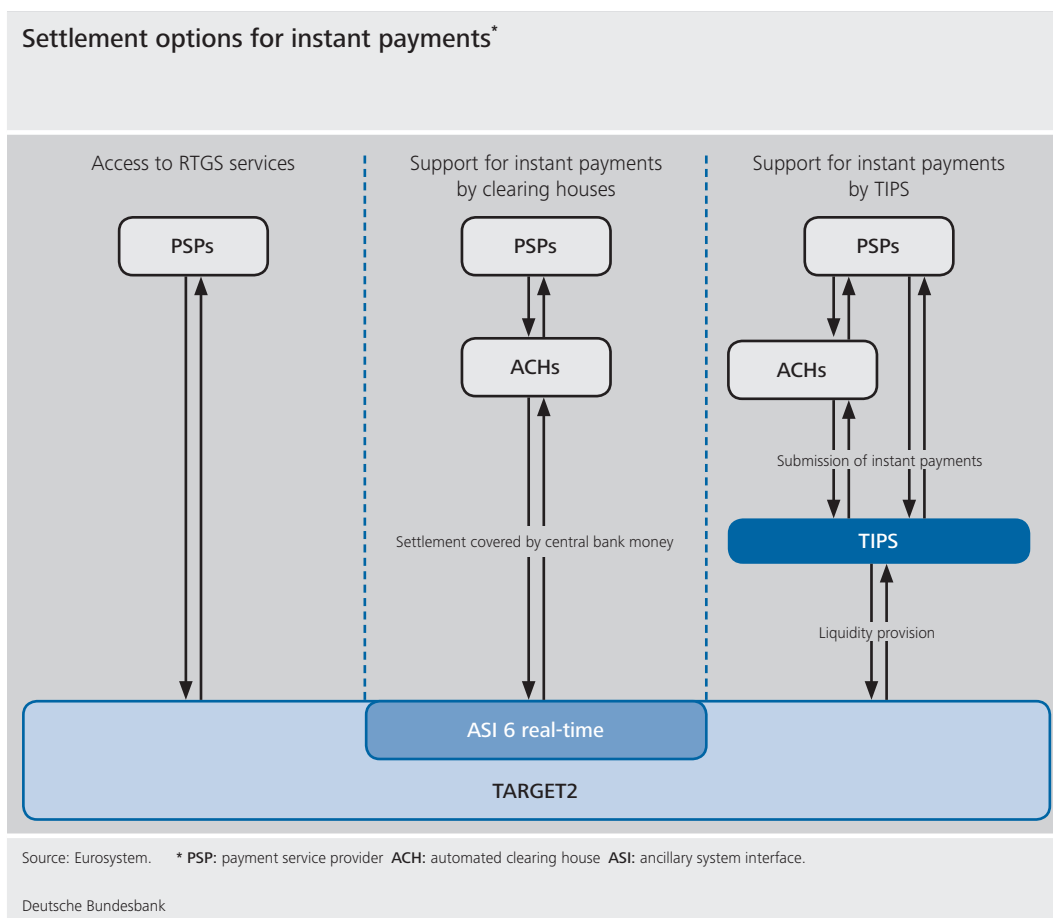
- This project aims to make even greater use of shared infrastructure and security components in an effort to exploit synergies and increasingly automate processes, thereby boosting efficiency levels overall. Its objectives include reducing the overall costs of running the shared infrastructure as well as increasing resistance to cyberattacks.
- The implementation of central liquidity management (CLM) will give bank treasurers a single point of reference for their central bank liquidity, which they can then allocate to the individual settlement services flexibly and conveniently.
- A Eurosystem single market infrastructure gateway (ESMIG) will give customers a secure and uniform means of accessing the Eurosystem's range of financial market infrastructure services. Consistent use of ISO 20022-compliant messages across the Eurosystem's entire range of services ensures that communication conforms to the latest standards.

One of the main objectives of the consolidation project, then, is to make the Eurosystem's range of services, which is already highly valued by market participants, even more user-friendly and fit for purpose.

Even before the start of the investigation phase, the core components and potential opportunities of the future range of RTGS services were identified in close cooperation with the market.

Identifying core components of the future range of services with the market

²³ New Year, Good Friday, Easter Monday, 1 May, 25 and 26 December.



One major factor in this regard was the decision to extend the rollout of the ISO 20022 standard into the RTGS sector. The systematic use of ISO 20022-compliant messages follows an international trend. Other major NCBs such as the US Federal Reserve System,²⁴ the Bank of England,²⁵ and the Bank of Japan²⁶ are also working on introducing the ISO 20022 standard in their own high-value payment systems.

cient lead time for implementation and an appropriate testing phase.

The realisation phase of the project began with the decision by the ECB Governing Council on 6 December 2017. Launch is scheduled for November 2021. Some components of the consolidation project, such as common reference data management and access via ESMIG, are already needed to run TIPS, which is why they will be made available for these purposes as of November 2018.

Launch scheduled for November 2021

In the further development of the Eurosystem's market infrastructure, the consolidation project, in particular, is of great significance to the Bundesbank. Within the 4CB, the Bundesbank

German market participants emphasise complexity of ISO 20022 migration in high-value payments

After the start of the investigation phase in September 2016, the user requirements for the future RTGS services were formulated in cooperation with stakeholders and subsequently put to public consultation. German market participants used this consultation to point out, amongst other things, that the complexity of introducing the ISO 20022 standard in high-value payments should not be underestimated. They stressed the importance of close cooperation with the market when determining specific message formats and of granting a suffi-

²⁴ <https://fedpaymentsimprovement.org/wp-content/uploads/strategies-improving-us-payment-system.pdf>

²⁵ <http://www.bankofengland.co.uk/payment-and-settlement>

²⁶ https://www.boj.or.jp/en/paym/bojnet/new_net/index.htm

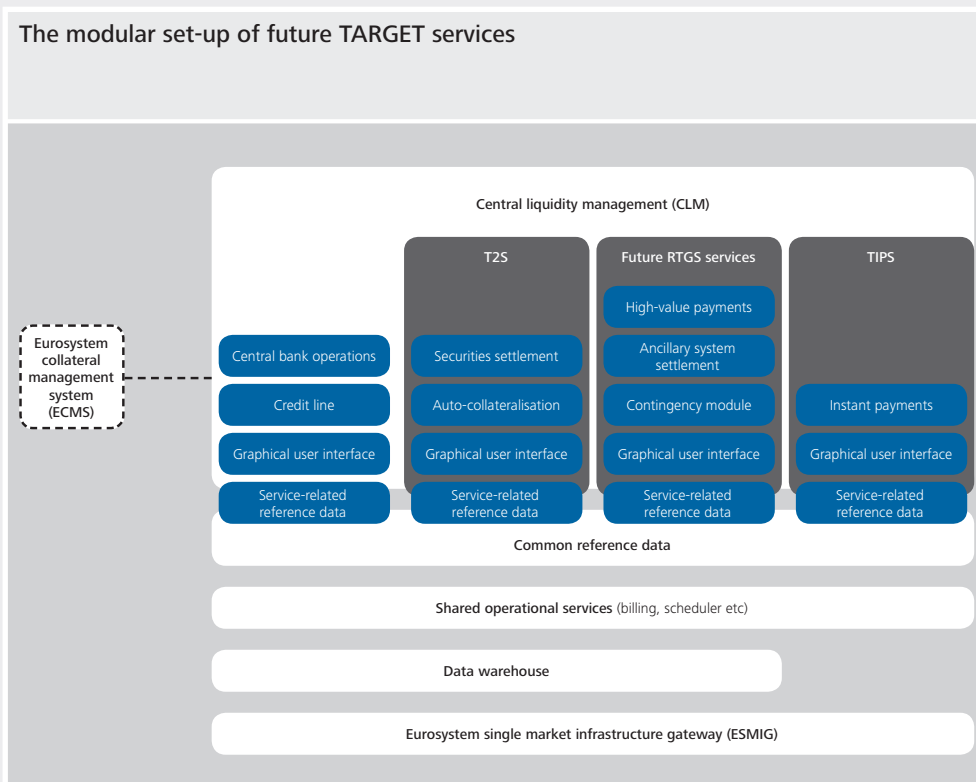
The modular set-up of future TARGET services

The consolidation project will see the technical consolidation of the individual service components in a way that will enable customers to use them flexibly according to their needs. The modular set-up will be built around the central liquidity management (CLM) module, which will be a flexible source of liquidity for high-value payments and ancillary system settlement (RTGS services), securities settlement (T2S) and instant payment settlement (TIPS). Each participant's central bank liquidity will be pooled in the main cash accounts located in the CLM. These main cash accounts will be used to settle monetary policy operations with the relevant NCB. Any credit line a participant might have – which as from the end of 2022 will be provided by the Eurosystem collateral management system (ECMS) – will also be linked to one of that participant's main cash accounts. This

means that monetary policy operations and high-value payments – which in the current TARGET2 set-up are settled together on the RTGS accounts – will, in future, be settled separately from one another. The CLM module will enable bank liquidity managers to manage, allocate and monitor their central bank liquidity across all services and accounts of a particular currency with flexibility and ease.

Separate dedicated cash accounts (DCAs) will be set up for securities settlement in T2S, RTGS services and the settlement of instant payments via TIPS. At the end of each day, the balances on all of these DCAs can be combined with the main cash account balance for the purposes of calculating whether the participant fulfils its minimum reserve requirements.

The modular set-up of future TARGET services



Source: TARGET2-T2S Consolidation User Requirements.
 Deutsche Bundesbank

T2S and TIPS will largely be integrated into the new modular set-up in their current form. The T2S settlement process will continue to be supported by the auto-collateralisation function.

The high-value payments currently routed via TARGET2 and ancillary system settlement will become integral elements of the future RTGS services. Payment settlement itself will remain much the same as it is in TARGET2, however. Like T2S and TIPS, the RTGS services will be capable of handling multiple currencies. As a result, every component of the platform will be able to handle various currencies, creating an overall package which non-euro area NCBs can use flexibly for themselves and their customers. The contingency module, a familiar feature from TARGET2, will undergo further development and reinforcement in an effort to enhance resilience against cyberattacks, in particular.

Support functionalities such as common reference data management and joint data archiving will be available across all services. As is already the case, service-specific master data will be accessible in each individual service.

The Eurosystem single market infrastructure gateway (ESMIG) will function as the main point of access to the individual services. It decouples the market infrastructure services from the network interface and is designed with multiple network service providers in mind. This means that communication will be network agnostic and not dependent on proprietary features of particular network providers. Communication with the individual services will be facilitated by an automated interface (application-to-application) and by each service module's separate graphical user interface (user-to-application).

Bundesbank assumes responsibility for core components of consolidation project

is responsible for developing the CLM and the future RTGS services. Taking charge of these two core components of the Eurosystem's future range of services will enable the Bundesbank to strengthen its role at the European level.

Reorientation of governance structures takes account of increasing integration of individual service offerings

The further development of the Eurosystem's market infrastructure is also bringing about changes in the structure of governance. The integration of the individual service offerings has significantly expanded the remit of what were until now dedicated national TARGET2 and T2S user groups, which are now generally involved in matters of payments, as well as securities settlement and collateral management. The AKZVS working group, which once performed the role of Germany's TARGET2 user group, now functions as the national stakeholder group in AMI-Pay, which has been newly established at the European level.²⁷ The T2S user group, meanwhile, has been incorporated into the national stakeholder group in AMI-SeCo,²⁸

which was formed through a merger of the previous T2S advisory group and COGESI.²⁹ This reorientation of governance structures gives market participants an extensive and purposeful voice on both current and future operations, besides facilitating the increasingly vital matter of interdisciplinary dialogue.

■ Summary and outlook

This year saw the Eurosystem celebrate the tenth anniversary of its TARGET2 high-value payment system, which laid the foundation for what has become a broadly based range of market infrastructure services offered by the Eurosystem. In the years ahead, the shared

²⁷ AMI-Pay: Advisory Group on Market Infrastructures for Payments.

²⁸ AMI-SeCo: Advisory Group on Market Infrastructures for Securities and Collateral.

²⁹ COGESI: Contact Group on Euro Securities Infrastructures.

range of services offered by NCBs will be successively expanded to include the settlement of instant payments in central bank money, a range of RTGS services that are even better suited to the market, as well as a common collateral management system. At the same time, the infrastructure will be put on a common, forward-looking and customer-oriented footing underpinned by the very latest communica-

tion and security standards. This will make it even more convenient, straightforward and efficient for market participants to settle both their domestic and cross-border transactions in central bank money. The Eurosystem is thus playing an important role in taking the free movement of capital within the European Union to the next level and making the envisaged capital markets union a reality.

Statistical Section

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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		
2016 Feb	10.4	5.6	5.1	5.1	3.3	1.2	- 3.3	- 0.24	- 0.18	1.0	
Mar	10.2	5.6	5.2	5.0	3.2	1.1	- 3.2	- 0.29	- 0.23	0.9	
Apr	9.7	5.3	4.8	5.0	3.5	1.3	- 2.6	- 0.34	- 0.25	0.9	
May	9.1	5.1	4.9	4.9	3.7	1.4	- 2.2	- 0.34	- 0.26	0.8	
June	8.7	5.1	5.1	5.1	4.0	1.5	- 2.1	- 0.33	- 0.27	0.7	
July	8.7	5.1	5.2	5.1	3.9	1.3	- 2.4	- 0.33	- 0.29	0.6	
Aug	8.6	5.0	5.0	5.1	3.9	1.6	- 2.3	- 0.34	- 0.30	0.5	
Sep	8.3	5.0	5.0	4.8	4.0	1.9	- 2.2	- 0.34	- 0.30	0.6	
Oct	8.0	4.6	4.5	4.7	4.3	2.2	- 1.6	- 0.35	- 0.31	0.7	
Nov	8.5	4.8	4.7	4.7	4.4	2.2	- 1.5	- 0.35	- 0.31	1.0	
Dec	8.8	4.8	5.0	4.8	4.7	2.4	- 1.6	- 0.35	- 0.32	1.0	
2017 Jan	8.4	4.6	4.7	4.8	4.5	2.4	- 1.4	- 0.35	- 0.33	1.1	
Feb	8.3	4.7	4.6	4.8	4.3	2.2	- 1.0	- 0.35	- 0.33	1.2	
Mar	8.9	5.0	5.1	4.8	4.8	2.8	- 1.1	- 0.35	- 0.33	1.2	
Apr	9.1	5.0	4.8	4.9	4.5	2.6	- 1.4	- 0.36	- 0.33	1.1	
May	9.2	5.1	4.9	4.8	4.3	2.6	- 1.2	- 0.36	- 0.33	1.1	
June	9.5	5.2	4.9	4.8	4.1	2.8	- 1.1	- 0.36	- 0.33	1.0	
July	9.2	5.0	4.6	4.8	3.9	2.6	- 0.9	- 0.36	- 0.33	1.2	
Aug	9.5	5.4	5.0	4.9	3.8	2.3	- 0.8	- 0.36	- 0.33	1.0	
Sep	9.8	5.4	5.2	5.1	3.9	2.5	- 0.7	- 0.36	- 0.33	1.0	
Oct	9.4	5.4	5.0	...	3.8	2.6	- 1.0	- 0.36	- 0.33	1.1	
Nov	...	...	...	...	...	...	...	- 0.35	- 0.33	0.9

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	
2016 Feb	+ 16,855	+ 28,021	+ 12,281	+ 41,080	+ 40,966	+ 12,915	- 83,740	+ 1,061	1.1093	94.2	89.2
Mar	+ 38,405	+ 38,714	+ 35,470	+ 31,751	- 10,505	- 421	+ 13,582	+ 1,063	1.1100	93.6	88.8
Apr	+ 34,868	+ 35,894	+ 30,063	- 12,331	+ 133,964	- 22,481	- 67,471	- 1,617	1.1339	94.4	89.5
May	+ 18,369	+ 32,761	+ 22,831	+ 23,295	- 1,260	- 14,350	+ 12,036	+ 3,110	1.1311	94.6	89.9
June	+ 36,583	+ 39,381	+ 22,068	+ 3,962	- 1,828	- 10,342	+ 29,584	+ 692	1.1229	94.4	89.7
July	+ 32,779	+ 33,951	+ 22,644	+ 16,776	+ 63,238	+ 13,108	- 69,599	- 878	1.1069	94.6	89.8
Aug	+ 23,197	+ 25,467	+ 33,793	+ 35,568	+ 50,127	+ 6,367	- 60,082	+ 1,813	1.1212	94.9	90.0
Sep	+ 35,272	+ 33,730	+ 58,532	+ 70,442	+ 19,020	+ 4,104	- 41,824	+ 6,789	1.1212	95.1	90.1
Oct	+ 33,265	+ 28,548	+ 22,714	+ 22,862	+ 47,758	+ 6,297	- 50,253	- 3,951	1.1026	95.1	90.3
Nov	+ 36,039	+ 34,309	+ 5,706	- 287	- 24,823	+ 2,899	+ 25,459	+ 2,457	1.0799	94.6	89.6
Dec	+ 43,379	+ 33,282	+ 65,909	+ 41,249	+ 23,024	+ 6,688	- 11,125	+ 6,073	1.0543	93.7	88.9
2017 Jan	- 2,747	+ 7,076	+ 9,107	+ 6,725	+ 8,441	+ 6,056	- 7,037	- 5,077	1.0614	93.9	89.1
Feb	+ 22,425	+ 25,409	+ 19,764	+ 26,217	+ 52,458	+ 7,818	- 68,764	+ 2,036	1.0643	93.4	88.8
Mar	+ 44,285	+ 37,944	+ 33,549	- 45,664	+ 45,680	+ 7,951	+ 25,029	+ 554	1.0685	94.0	89.2
Apr	+ 18,219	+ 24,657	+ 10,677	+ 39,034	+ 24,090	+ 2,157	- 50,092	- 4,513	1.0723	93.7	89.0
May	+ 13,297	+ 29,263	+ 7,881	- 1,176	+ 5,207	+ 4,040	- 1,561	+ 1,372	1.1058	95.6	90.5
June	+ 31,400	+ 34,260	+ 30,109	- 57,383	+ 34,662	- 7,472	+ 58,866	+ 1,436	1.1229	96.3	91.3
July	+ 36,143	+ 30,046	+ 43,079	+ 9,640	+ 13,814	- 3,919	+ 28,712	- 5,168	1.1511	97.6	92.4
Aug	+ 30,751	+ 23,648	+ 37,903	- 8,007	+ 93,448	- 7,939	- 38,937	- 662	1.1807	99.0	93.6
Sep	+ 41,813	+ 34,119	+ 80,485	+ 9,544	+ 48,357	- 7,831	+ 23,990	+ 6,425	1.1915	99.0	93.6
Oct	...	...	...	...	...	...	...	...	1.1756	98.6	p 93.1
Nov	...	...	...	...	...	...	...	...	1.1738	98.5	p 93.1

* 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
Real gross domestic product ^{1,2}										
2014	1.3	1.3	1.9	2.9	- 0.6	0.9	0.7	8.3	0.1	1.9
2015	2.1	1.4	1.7	1.7	0.0	1.1	- 0.3	25.6	1.0	2.8
2016	1.8	1.5	1.9	2.1	1.9	1.2	- 0.2	5.1	0.9	2.1
2016 Q2	1.8	1.6	3.3	0.9	1.8	1.8	- 0.6	5.4	1.3	2.6
Q3	1.7	1.6	1.7	2.0	2.2	0.6	1.1	2.7	0.7	0.5
Q4	1.9	1.5	1.3	3.1	2.0	0.9	- 1.3	9.9	0.5	2.8
2017 Q1	2.1	1.8	3.4	4.6	3.8	1.5	0.7	5.2	2.0	4.0
Q2	2.4	1.5	1.0	5.7	3.0	1.1	1.5	5.8	1.2	4.0
Q3	2.6	1.6	2.3	4.2	2.8	2.0	1.3	...	1.4	5.8
Industrial production ^{1,3}										
2014	0.8	1.0	1.4	4.3	- 1.9	- 0.8	- 2.0	20.9	- 0.7	- 0.9
2015	2.1	0.0	0.8	0.1	- 1.2	1.8	1.0	36.9	1.1	3.6
2016	1.5	4.3	1.0	1.8	2.3	0.3	2.6	0.7	1.7	4.9
2016 Q2	1.1	3.5	0.6	- 1.2	3.6	0.5	5.3	0.7	0.2	4.4
Q3	1.0	4.9	0.6	3.0	2.6	- 0.6	2.0	- 0.8	1.6	1.4
Q4	2.4	4.5	1.4	7.6	3.2	0.5	4.0	3.2	3.6	9.8
2017 Q1	1.3	1.6	1.0	10.4	2.5	0.8	9.7	- 6.0	1.6	8.6
Q2	2.7	3.5	3.1	11.2	4.3	1.6	3.2	- 1.1	2.9	9.3
Q3	3.7	p 5.2	p 4.3	4.5	4.0	2.8	3.9	- 3.4	4.0	11.4
Capacity utilisation in industry ⁴										
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
2017	83.0	81.8	86.5	74.9	82.3	84.8	70.0	-	76.8	74.5
2016 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	83.6	69.3	-	75.7	73.1
2017 Q1	82.5	80.7	85.9	74.4	81.0	84.6	68.6	-	76.5	74.5
Q2	82.6	81.4	86.0	76.4	82.1	84.3	68.1	-	76.0	74.8
Q3	83.2	82.0	86.7	73.9	82.6	84.7	72.0	-	77.0	74.5
Q4	83.8	82.9	87.2	74.8	83.6	85.4	71.2	-	77.6	74.2
Standardised unemployment rate ⁵										
2014	11.6	8.5	5.0	7.4	8.7	10.3	26.5	11.9	12.7	10.8
2015	10.9	8.5	4.6	6.2	9.4	10.4	24.9	9.9	11.9	9.9
2016	10.0	7.8	4.1	6.8	8.8	10.1	23.6	8.4	11.7	9.6
2017 June	9.0	7.2	3.7	6.5	8.7	9.5	21.2	6.5	11.1	9.0
July	9.0	7.3	3.6	6.0	8.7	9.7	20.9	6.5	11.3	8.9
Aug	9.0	7.2	3.7	5.5	8.7	9.7	20.6	6.4	11.2	8.7
Sep	8.9	7.1	3.7	5.8	8.7	9.5	...	6.4	11.1	8.4
Oct	8.8	6.9	3.7	...	8.7	9.4	...	6.3	11.1	8.2
Nov	...	...	...	...	...	...	...	6.1	...	...
Harmonised Index of Consumer Prices ¹										
2014	6 0.4	0.5	0.8	0.5	1.2	0.6	- 1.4	0.3	0.2	0.7
2015	7 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	- 0.2	- 0.1	0.1
2017 June	1.3	1.5	1.5	3.1	0.9	0.8	0.9	- 0.6	1.2	3.1
July	1.3	1.8	1.5	3.9	0.6	0.8	0.9	- 0.2	1.2	2.6
Aug	1.5	2.0	1.8	4.2	0.8	1.0	0.6	0.4	1.4	3.2
Sep	1.5	2.0	1.8	3.9	0.8	1.1	1.0	0.2	1.3	3.0
Oct	1.4	1.8	1.5	4.0	0.5	1.2	0.5	0.5	1.1	2.7
Nov	1.5	...	1.8	...	...	...	1.1	...	e 1.1	2.7
General government financial balance ⁸										
2014	- 2.6	- 3.1	0.3	0.7	- 3.2	- 3.9	- 3.6	- 3.6	- 3.0	- 1.2
2015	- 2.1	- 2.5	0.6	0.1	- 2.7	- 3.6	- 5.7	- 1.9	- 2.6	- 1.2
2016	- 1.5	- 2.5	0.8	- 0.3	- 1.7	- 3.4	0.5	- 0.7	- 2.5	0.0
General government debt ⁸										
2014	91.8	106.8	74.6	10.7	60.2	95.0	179.0	104.5	131.8	40.9
2015	89.9	106.0	70.9	10.0	63.6	95.8	176.8	76.9	131.5	36.9
2016	88.9	105.7	68.1	9.4	63.1	96.5	180.8	72.8	132.0	40.6

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

4 Manufacturing, in %; seasonally adjusted; data are collected in January, April, July and October. **5** As a percentage of the civilian labour force; seasonally adjusted. Standardised unemployment rate of Germany: Bundesbank 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	
Real gross domestic product ^{1,2}											
3.5	5.8	8.1	1.4	0.8	0.9	2.8	3.0	1.4	-	1.4	2014
2.0	2.9	7.2	2.3	1.1	1.8	3.9	2.3	3.4	3.4	2.0	2015
2.3	3.1	5.5	2.2	1.4	1.5	3.3	3.1	3.3	3.3	3.0	2016
1.7	3.4	4.9	2.3	1.9	1.2	3.8	3.2	3.6	3.6	2.6	2016 Q2
1.8	5.0	4.9	2.4	1.0	1.7	2.7	3.4	3.3	3.3	3.0	Q3
3.6	4.2	5.7	2.4	1.1	1.9	3.2	3.5	2.5	2.5	3.7	Q4
4.2	3.9	6.5	3.2	3.2	3.2	3.0	5.1	2.8	2.8	3.8	2017 Q1
4.1	2.3	7.9	3.3	2.7	2.7	3.7	4.6	3.2	3.2	4.0	Q2
3.1	...	7.2	3.0	3.2	2.5	3.3	4.5	2.9	2.9	3.8	Q3
Industrial production ^{1,3}											
0.3	4.4	- 5.7	- 2.9	1.0	1.6	3.6	1.7	1.3	-	0.8	2014
4.6	1.2	6.3	3.4	2.2	2.1	7.3	5.1	3.4	3.4	3.4	2015
2.8	0.2	- 3.8	2.2	2.1	2.4	4.7	7.8	1.8	1.8	7.9	2016
- 0.3	1.0	- 4.6	3.4	1.7	2.1	7.3	6.7	1.3	1.3	8.7	2016 Q2
3.0	- 0.7	- 3.3	3.4	1.0	1.6	2.9	7.9	0.9	0.9	6.1	Q3
3.1	- 1.5	- 2.0	5.6	3.6	1.6	4.1	9.4	1.8	1.8	7.0	Q4
5.9	- 3.9	7.2	2.2	3.0	3.4	7.7	6.7	1.9	1.9	8.7	2017 Q1
6.7	- 0.1	4.0	1.5	4.3	2.4	1.8	7.7	2.2	2.2	5.0	Q2
8.8	2.5	3.7	1.8	...	5.7	3.4	8.3	2.7	2.7	...	Q3
Capacity utilisation in industry ⁴											
74.2	68.3	78.6	81.8	84.0	80.4	82.4	83.6	77.8	58.2	58.2	2015
75.9	76.9	79.1	81.7	84.3	80.2	84.5	83.5	78.6	59.8	59.8	2016
77.2	81.5	80.3	82.5	86.7	80.4	85.3	85.1	78.7	59.1	59.1	2017
75.5	77.6	79.8	81.5	83.2	79.6	84.3	83.7	78.4	58.7	58.7	2016 Q3
76.0	81.3	79.9	82.1	85.1	80.3	85.4	84.1	79.1	59.6	59.6	Q4
76.5	82.6	79.3	81.4	85.1	79.8	87.1	84.5	78.8	58.1	58.1	2017 Q1
77.4	82.1	79.1	82.5	86.6	79.1	86.5	85.4	78.1	57.6	57.6	Q2
77.6	80.1	80.0	83.1	86.9	80.9	84.4	85.1	78.7	61.5	61.5	Q3
77.4	81.1	82.8	83.1	88.0	81.7	83.0	85.2	79.1	59.1	59.1	Q4
Standardised unemployment rate ⁵											
10.7	6.0	5.8	7.4	5.6	14.1	13.2	9.7	24.5	16.1	16.1	2014
9.1	6.5	5.4	6.9	5.7	12.6	11.5	9.0	22.1	15.0	15.0	2015
7.9	6.3	4.7	6.0	6.0	11.2	9.7	8.0	19.6	13.0	13.0	2016
7.0	5.9	4.0	4.9	5.4	9.1	7.9	6.6	17.0	10.9	10.9	2017 June
6.8	6.0	4.0	4.8	5.4	8.9	7.6	6.5	16.9	10.5	10.5	July
6.8	5.9	3.9	4.7	5.5	8.8	7.4	6.5	16.8	10.3	10.3	Aug
7.0	5.9	3.8	4.7	5.4	8.5	7.2	6.4	16.7	10.2	10.2	Sep
7.1	5.7	3.5	4.5	5.4	8.5	7.0	6.2	16.7	10.2	10.2	Oct
...	...	...	...	...	...	...	...	...	...	...	Nov
Harmonised Index of Consumer Prices ¹											
- 0.2	0.7	0.8	0.3	1.5	- 0.2	- 0.1	0.4	- 0.2	- 0.3	- 0.3	2014
0.7	0.1	1.2	0.2	0.8	0.5	- 0.3	- 0.8	- 0.6	- 1.5	- 1.5	2015
0.7	0.0	0.9	0.1	1.0	0.6	- 0.5	- 0.2	- 0.3	- 1.2	- 1.2	2016
3.5	1.5	1.0	1.0	2.0	1.0	1.0	0.9	1.6	0.9	0.9	2017 June
4.1	1.8	1.2	1.5	2.0	1.0	1.5	1.2	1.7	- 0.1	- 0.1	July
4.6	2.3	1.2	1.5	2.1	1.3	1.6	1.4	2.0	0.5	0.5	Aug
4.6	2.0	1.2	1.4	2.5	1.6	1.8	1.4	1.8	0.1	0.1	Sep
4.2	2.0	1.5	1.3	2.3	1.9	1.8	1.3	1.7	0.4	0.4	Oct
4.2	2.0	...	1.5	...	...	...	1.4	...	0.2	0.2	Nov
General government financial balance ⁸											
- 0.6	1.3	- 1.8	- 2.3	- 2.7	- 7.2	- 2.7	- 5.3	- 6.0	- 8.8	- 8.8	2014
- 0.2	1.4	- 1.1	- 2.1	- 1.0	- 4.4	- 2.7	- 2.9	- 5.3	- 1.2	- 1.2	2015
0.3	1.6	1.1	0.4	- 1.6	- 2.0	- 2.2	- 1.9	- 4.5	0.5	0.5	2016
General government debt ⁸											
40.5	22.7	63.8	68.0	83.8	130.6	53.5	80.3	100.4	107.5	107.5	2014
42.6	22.0	60.3	64.6	84.3	128.8	52.3	82.6	99.4	107.5	107.5	2015
40.1	20.8	57.6	61.8	83.6	130.1	51.8	78.5	99.0	107.1	107.1	2016

6 Including Latvia from 2014 onwards. 7 Including Lithuania from 2015 onwards.
 8 As a percentage of GDP (Maastricht Treaty definition). Euro area: 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) ²	Capital and reserves ³
		Total	of which Securities	Total	of which Securities								
2016 Mar	64.6	22.2	- 5.6	42.4	43.1	26.4	- 86.0	- 112.4	- 10.6	- 6.5	- 0.9	3.9	- 7.2
Apr	96.8	47.7	27.7	49.1	43.9	- 61.6	119.0	180.7	1.5	- 3.7	- 1.3	- 0.5	7.1
May	70.8	20.7	12.9	50.2	56.4	- 0.9	62.0	62.9	3.4	- 5.0	- 0.5	0.4	8.5
June	55.6	5.1	- 7.0	50.5	62.1	31.2	- 23.2	- 54.4	- 10.3	- 20.8	- 0.8	- 10.3	21.6
July	54.5	29.5	14.7	25.0	24.1	- 84.9	56.9	141.8	- 25.4	- 7.1	- 0.5	- 23.8	6.0
Aug	17.3	16.9	27.1	0.4	9.0	- 39.7	7.8	47.5	2.0	- 4.9	- 0.6	- 0.3	7.9
Sep	41.8	26.6	- 7.3	15.2	19.4	- 16.9	- 69.0	- 52.0	- 22.9	- 12.2	- 0.5	- 19.6	9.4
Oct	84.9	37.3	5.6	47.6	45.1	- 45.5	153.8	199.3	4.7	- 5.6	- 0.6	- 2.6	13.5
Nov	105.9	55.8	16.0	50.1	62.1	7.2	- 21.6	- 28.7	0.3	- 7.9	- 0.8	- 1.1	10.1
Dec	- 58.4	- 51.0	- 8.3	- 7.5	- 0.7	36.4	- 154.2	- 190.6	- 8.7	0.1	- 1.0	- 13.8	6.0
2017 Jan	131.2	43.6	31.3	87.6	69.7	- 12.8	233.5	246.4	- 18.3	- 9.9	- 0.2	- 3.7	- 4.6
Feb	45.8	30.6	4.0	15.2	35.3	- 45.6	53.4	99.0	13.4	- 6.1	- 0.5	- 3.4	23.3
Mar	151.6	92.8	25.3	58.8	62.6	- 8.8	- 51.7	- 43.0	- 13.6	1.8	- 0.5	- 22.1	7.2
Apr	54.9	24.7	20.2	30.1	27.6	- 39.4	77.6	117.0	- 22.2	- 12.2	- 0.3	- 0.7	- 9.0
May	50.6	26.0	16.3	24.6	35.1	- 1.7	- 5.7	- 4.0	17.9	- 5.9	- 2.4	16.9	9.3
June	23.5	28.7	0.3	- 5.3	- 5.3	58.2	- 108.4	- 166.6	- 5.9	- 12.4	- 0.1	- 6.7	13.4
July	7.1	0.1	15.3	7.0	9.4	7.9	105.1	97.2	- 6.4	- 7.8	- 0.9	- 2.7	5.0
Aug	12.7	- 19.7	- 15.0	32.4	38.4	- 29.6	- 2.4	27.1	9.0	- 5.9	- 0.8	- 2.8	18.4
Sep	58.2	46.5	- 13.9	11.7	17.1	7.6	- 34.2	- 41.8	- 19.5	- 8.6	- 0.9	- 29.3	19.2
Oct	73.1	62.4	- 9.1	10.7	10.5	- 67.8	101.6	169.3	- 16.8	- 18.8	- 0.6	- 7.3	10.0

(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) ²	Capital and reserves ³
		Total	of which Securities	Total	of which Securities								
2016 Mar	14.0	4.4	0.6	9.6	9.9	7.3	- 22.6	- 29.8	2.7	- 0.0	- 1.1	2.3	1.5
Apr	25.7	12.3	0.7	13.4	8.8	- 40.1	13.6	53.7	0.6	- 3.3	- 1.1	1.6	3.3
May	24.8	16.2	4.9	8.6	11.9	1.5	1.1	- 0.4	7.5	0.8	- 1.0	4.7	3.0
June	4.7	1.7	0.5	2.9	8.6	- 2.9	23.9	26.8	- 3.5	- 1.5	- 0.7	- 7.5	6.2
July	30.2	13.3	1.6	16.9	13.8	- 18.4	7.1	25.5	- 6.0	- 0.8	- 0.9	- 5.4	1.1
Aug	11.1	8.9	1.5	2.2	4.0	- 16.5	2.5	19.0	2.0	- 1.8	- 0.8	3.9	0.6
Sep	24.6	13.2	3.4	11.4	12.6	- 37.2	- 11.1	26.1	- 7.2	- 1.1	- 0.7	- 6.2	0.9
Oct	21.5	11.8	2.6	9.6	6.5	- 3.2	42.4	45.7	7.1	2.2	- 0.8	5.8	- 0.2
Nov	28.1	18.4	4.4	9.7	14.4	- 22.4	- 25.7	- 3.3	9.2	- 0.6	- 0.5	9.6	0.8
Dec	- 10.1	- 8.1	0.4	- 2.1	8.4	19.6	- 9.5	- 29.1	- 2.6	- 2.0	- 0.4	- 2.9	2.7
2017 Jan	23.6	15.0	2.3	8.6	8.5	- 24.4	31.8	56.2	9.8	- 3.1	- 0.7	15.9	- 2.3
Feb	17.3	12.5	3.9	4.9	5.5	- 30.2	7.5	37.8	- 1.4	- 1.4	- 0.6	- 0.1	0.8
Mar	18.2	12.7	1.8	5.5	9.5	- 3.6	6.3	9.9	2.7	- 1.0	- 0.5	- 1.3	5.5
Apr	14.9	7.8	- 1.5	7.1	5.4	- 19.0	- 7.3	11.6	9.3	- 3.5	- 0.5	1.3	11.9
May	13.8	13.3	3.5	0.6	7.9	7.1	- 13.0	- 20.1	2.7	- 0.1	- 0.4	1.8	1.4
June	11.8	11.5	6.2	0.4	2.6	22.7	16.2	- 6.4	6.0	- 2.0	- 0.4	2.8	5.6
July	18.1	12.8	1.8	5.3	3.5	- 10.3	- 23.0	- 12.7	- 4.0	- 1.3	- 0.8	- 1.4	- 0.5
Aug	13.6	10.2	- 0.6	3.4	8.3	14.7	- 13.8	- 28.5	4.5	0.1	- 0.8	3.5	1.7
Sep	17.8	14.1	- 1.8	3.7	8.0	- 22.3	9.2	31.5	- 5.9	- 0.2	- 0.6	- 7.3	2.3
Oct	15.9	8.6	0.4	7.3	6.5	5.9	- 11.4	- 17.4	- 11.3	- 1.0	- 0.8	- 9.5	- 0.0

* 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 cir- culation	Overnight deposits 5													
31.8	32.0	-	37.7	55.9	42.6	3.7	38.9	11.0	2.3	-	6.2	-	13.0	1.7	2016 Mar					
-	35.9	-	31.0	-	100.5	75.1	92.6	4.6	88.0	-	17.2	-	0.3	-	4.5	17.1	2.7	Apr		
20.1	12.9	-	33.6	35.0	47.4	2.3	45.1	-	20.2	7.9	-	9.5	-	0.1	-	2.0	2.0	May		
60.5	17.6	-	19.0	31.4	34.7	8.4	26.3	-	1.9	-	1.4	-	2.5	-	9.6	5.9	5.9	June		
-	29.0	-	72.4	-	96.5	73.5	66.9	10.1	56.9	-	6.1	-	0.5	-	22.7	15.6	5.0	July		
-	54.7	-	41.2	-	10.9	8.9	5.1	-	3.5	-	1.6	-	4.5	0.7	2.4	0.6	-	2.5	Aug	
2.7	42.6	-	2.4	18.3	23.7	2.2	21.5	1.4	-	6.7	-	4.8	-	1.8	-	5.9	5.9	Sep		
-	3.0	-	7.0	-	30.7	14.4	50.2	3.2	47.0	-	29.6	-	6.2	-	16.9	18.0	2.1	2.1	Oct	
-	5.1	-	20.3	-	87.4	82.7	95.0	1.2	93.7	-	10.3	-	1.9	-	2.2	7.0	1.2	1.2	Nov	
-	48.2	-	16.7	-	51.6	72.1	90.1	16.1	74.1	-	24.4	-	6.4	-	4.4	-	6.0	-	7.4	Dec
62.7	46.1	-	27.9	6.3	-	6.6	-	11.9	5.3	3.0	9.9	-	17.4	11.6	-	0.9	0.9	2017 Jan		
-	17.4	-	25.5	-	29.7	30.8	30.8	3.0	27.8	-	2.1	-	8.6	-	4.2	6.5	6.5	Feb		
24.2	25.4	-	106.8	92.4	92.7	4.3	88.5	-	5.6	5.3	14.8	-	12.0	-	0.6	0.6	Mar			
-	5.5	-	9.9	-	53.0	72.5	101.1	6.8	94.3	-	31.1	-	2.5	-	5.9	-	4.3	-	16.9	Apr
13.5	-	-	14.2	-	31.8	29.9	41.9	0.5	41.5	-	21.2	-	9.2	-	11.7	-	4.7	5.2	5.2	May
20.4	21.0	-	46.2	73.0	80.8	9.5	71.3	-	10.4	2.6	-	16.6	-	20.6	2.2	2.2	2.2	June		
-	7.7	-	17.4	-	46.5	31.7	35.4	5.7	29.8	-	6.2	-	2.4	-	24.1	13.6	-	0.7	0.7	July
-	18.3	-	59.8	-	52.3	45.9	31.8	-	2.0	33.8	-	8.1	-	6.0	2.6	9.1	-	9.0	9.0	Aug
41.3	25.7	-	18.3	22.8	47.6	0.5	47.1	-	21.6	-	3.1	7.0	-	3.9	8.5	8.5	8.5	Sep		
-	43.6	-	47.8	-	17.9	13.7	24.3	2.9	21.5	-	8.0	-	2.5	19.8	9.6	-	11.6	11.6	Oct	

(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 cir- culation	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								
				Total	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										
21.0	3.1	2.1	0.6	-	5.5	-	12.5	10.9	-	0.8	-	0.9	-	0.2	-	2.0	2.0	2016 Mar	
-	17.4	-	20.7	1.2	1.0	23.1	24.1	-	1.0	-	0.7	-	0.5	-	0.5	0.7	0.7	Apr	
18.7	-	19.8	2.9	-	0.5	19.9	21.5	0.3	-	0.6	-	0.2	-	0.4	-	0.7	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	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	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	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	0.5	Sep	
-	8.8	-	18.6	3.2	-	0.5	1.4	12.0	-	10.2	-	0.2	-	0.3	-	0.8	0.8	Oct	
6.9	-	48.2	1.9	0.3	37.8	36.2	3.3	0.1	-	0.2	-	0.0	-	0.0	-	1.7	1.7	Nov	
-	13.6	-	30.4	3.3	2.4	-	4.8	-	4.9	-	1.5	-	0.9	-	0.0	-	0.1	0.1	Dec
-	12.6	-	27.2	1.1	-	2.7	29.2	16.9	8.9	0.7	2.6	-	0.1	-	0.2	0.2	2017 Jan		
-	4.2	-	18.9	1.7	-	1.2	11.6	13.6	-	2.4	-	0.7	-	0.3	-	0.0	0.0	Feb	
14.2	-	2.7	1.8	1.1	0.5	2.4	3.5	-	1.4	-	1.9	-	0.1	-	2.0	2.0	Mar		
-	6.7	-	8.9	3.3	1.6	2.3	10.3	-	7.1	-	0.0	-	0.9	-	0.0	-	1.8	1.8	Apr
7.7	-	8.7	2.9	-	0.7	19.2	18.3	1.3	-	0.1	-	1.1	-	0.0	0.8	0.8	May		
7.1	0.7	4.7	0.9	20.7	20.6	0.7	-	0.7	-	0.6	-	0.1	-	0.6	0.6	0.6	June		
2.5	14.8	2.1	2.1	-	5.6	-	3.0	-	3.0	-	0.4	-	1.4	-	0.1	-	0.6	0.6	July
7.4	5.1	3.7	-	1.3	11.2	14.7	-	2.9	-	0.3	-	0.1	-	0.2	-	0.5	0.5	Aug	
9.6	-	14.2	3.5	-	0.3	5.9	5.6	0.8	0.0	-	0.8	-	0.8	-	0.0	-	0.3	0.3	Sep
-	14.2	-	43.0	2.1	0.8	4.4	14.3	-	9.3	0.5	-	0.3	-	0.3	-	0.7	0.7	Oct	

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 ²	Shares and other equities	Total	Loans	Debt securities ³			
Euro area (€ billion) ¹											
2015 Sep	26,145.1	16,526.0	12,714.3	10,639.8	1,303.0	771.4	3,811.8	1,121.0	2,690.7	5,164.7	4,454.4
Oct	26,337.3	16,576.0	12,732.6	10,661.8	1,288.0	782.8	3,843.4	1,125.0	2,718.5	5,251.2	4,510.1
Nov	26,653.5	16,691.8	12,803.5	10,716.5	1,295.5	791.5	3,888.3	1,117.1	2,771.2	5,314.1	4,647.6
Dec	25,850.7	16,541.4	12,703.0	10,627.4	1,296.3	779.3	3,838.4	1,110.2	2,728.2	5,034.5	4,274.8
2016 Jan	26,414.5	16,689.5	12,731.3	10,656.8	1,307.0	767.5	3,958.2	1,127.1	2,831.2	5,149.6	4,575.4
Feb	26,749.2	16,774.6	12,771.6	10,700.6	1,313.1	757.8	4,003.0	1,118.6	2,884.4	5,228.2	4,746.4
Mar	26,406.9	16,825.5	12,776.4	10,709.9	1,312.1	754.4	4,049.1	1,117.9	2,931.3	5,030.7	4,550.7
Apr	26,557.7	16,909.0	12,815.8	10,721.4	1,325.7	768.7	4,093.2	1,127.9	2,965.3	5,173.9	4,474.7
May	26,807.0	16,993.9	12,842.6	10,733.4	1,341.4	767.8	4,151.4	1,121.7	3,029.6	5,270.0	4,543.1
June	27,072.9	17,041.4	12,829.3	10,732.4	1,344.2	752.7	4,212.1	1,110.6	3,101.4	5,278.2	4,753.4
July	27,135.0	17,093.7	12,852.6	10,737.6	1,359.7	755.3	4,241.1	1,111.6	3,129.5	5,326.7	4,714.7
Aug	27,037.8	17,105.7	12,866.5	10,723.2	1,365.1	778.2	4,239.1	1,102.9	3,136.2	5,321.4	4,610.7
Sep	26,973.2	17,147.5	12,892.5	10,756.7	1,359.3	776.5	4,255.0	1,098.8	3,156.2	5,266.4	4,559.3
Oct	27,050.9	17,202.6	12,923.2	10,785.2	1,363.1	775.0	4,279.4	1,101.0	3,178.4	5,422.4	4,425.8
Nov	27,160.6	17,295.2	12,983.4	10,830.1	1,383.3	770.0	4,311.8	1,088.9	3,222.9	5,451.6	4,413.9
Dec	26,678.3	17,234.9	12,925.7	10,772.3	1,372.2	781.2	4,309.2	1,079.4	3,229.7	5,208.1	4,235.3
2017 Jan	26,758.5	17,317.9	12,957.0	10,777.1	1,393.4	786.4	4,360.9	1,097.4	3,263.6	5,377.4	4,063.3
Feb	27,020.5	17,378.7	12,994.7	10,807.3	1,398.4	789.0	4,384.0	1,076.2	3,307.8	5,497.8	4,144.0
Mar	26,971.6	17,511.2	13,077.2	10,863.6	1,423.7	789.9	4,434.0	1,072.8	3,361.2	5,418.0	4,042.4
Apr	27,060.7	17,556.3	13,092.0	10,859.1	1,429.8	803.0	4,464.3	1,075.4	3,388.9	5,450.3	4,054.1
May	26,977.3	17,596.0	13,108.9	10,859.4	1,451.1	798.3	4,487.1	1,062.4	3,424.7	5,359.1	4,022.1
June	26,657.4	17,573.9	13,095.6	10,858.2	1,441.3	796.1	4,478.3	1,063.0	3,415.2	5,194.5	3,889.0
July	26,612.0	17,568.3	13,083.0	10,830.5	1,460.1	792.4	4,485.3	1,060.2	3,425.1	5,226.6	3,817.1
Aug	26,645.5	17,574.6	13,051.5	10,817.6	1,444.2	789.7	4,523.2	1,054.5	3,468.6	5,197.6	3,873.3
Sep	26,527.6	17,622.5	13,097.4	10,873.2	1,433.2	791.0	4,525.1	1,045.9	3,479.2	5,170.8	3,734.3
Oct	26,747.7	17,708.8	13,166.4	10,945.1	1,423.3	798.0	4,542.4	1,046.2	3,496.3	5,305.7	3,733.3
German contribution (€ billion)											
2015 Sep	6,042.0	3,824.3	2,996.1	2,572.5	157.2	266.4	828.1	364.5	463.6	1,257.0	960.7
Oct	6,041.8	3,832.3	2,994.6	2,578.6	150.5	265.6	837.7	368.4	469.2	1,257.1	952.5
Nov	6,104.8	3,865.0	3,019.5	2,594.8	153.5	271.2	845.5	363.9	481.6	1,236.6	1,003.2
Dec	5,925.1	3,840.1	3,003.6	2,586.5	155.7	261.3	836.5	358.3	478.2	1,166.4	918.6
2016 Jan	6,057.8	3,858.2	3,004.8	2,592.8	154.8	257.3	853.4	362.0	491.4	1,191.2	1,008.3
Feb	6,155.3	3,874.9	3,014.0	2,607.0	151.1	255.9	860.9	362.0	498.9	1,209.7	1,070.8
Mar	6,060.6	3,885.5	3,015.6	2,607.8	151.8	256.0	869.9	361.6	508.3	1,163.7	1,011.4
Apr	6,050.2	3,908.3	3,026.3	2,617.8	152.2	256.3	882.1	366.1	515.9	1,181.7	960.2
May	6,091.2	3,934.7	3,043.0	2,629.7	153.3	260.0	891.7	362.8	528.9	1,187.1	969.4
June	6,221.2	3,939.7	3,042.5	2,629.1	152.9	260.5	897.2	357.3	540.0	1,221.3	1,060.1
July	6,245.6	3,968.5	3,054.3	2,639.3	155.3	259.7	914.2	360.3	553.8	1,228.3	1,048.8
Aug	6,218.9	3,977.8	3,062.7	2,646.2	155.3	261.2	915.1	358.5	556.6	1,226.9	1,014.2
Sep	6,202.1	4,001.8	3,075.1	2,655.3	157.6	262.1	926.8	357.2	569.5	1,215.0	985.4
Oct	6,208.1	4,019.0	3,087.3	2,664.9	161.9	260.5	931.7	360.3	571.4	1,260.2	928.9
Nov	6,186.1	4,046.1	3,107.1	2,680.4	165.0	261.7	939.0	355.5	583.5	1,243.2	896.8
Dec	6,131.1	4,037.0	3,099.2	2,671.7	164.0	263.6	937.8	345.2	592.6	1,234.7	859.4
2017 Jan	6,131.6	4,054.1	3,112.0	2,682.7	165.0	264.3	942.1	345.2	596.8	1,260.2	817.4
Feb	6,196.5	4,075.7	3,124.9	2,691.3	168.1	265.5	950.8	344.6	606.2	1,281.9	839.0
Mar	6,176.3	4,089.6	3,136.8	2,701.2	169.6	266.0	952.8	340.6	612.3	1,281.0	805.7
Apr	6,174.4	4,103.1	3,143.3	2,709.1	170.4	263.9	959.8	342.3	617.5	1,264.2	807.1
May	6,160.2	4,114.5	3,157.3	2,719.6	172.6	265.0	957.2	332.2	624.9	1,234.6	811.2
June	6,106.3	4,120.6	3,165.9	2,722.5	173.2	270.2	954.7	330.8	623.9	1,238.6	747.1
July	6,069.0	4,135.9	3,176.7	2,731.5	175.2	269.9	959.2	332.6	626.7	1,201.4	731.7
Aug	6,084.5	4,152.3	3,186.3	2,741.6	174.3	270.3	966.1	327.8	638.3	1,185.1	747.2
Sep	6,076.7	4,167.7	3,200.9	2,757.6	174.3	269.1	966.8	323.2	643.6	1,194.6	714.3
Oct	6,082.0	4,185.9	3,210.4	2,766.1	174.6	269.8	975.4	324.0	651.4	1,188.5	707.7

* 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). ¹ Source: ECB. ² Including money market paper of

enterprises. ³ Including Treasury bills and other money market paper issued by general government. ⁴ 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											
Currency in circulation ⁴	Deposits of non-banks (non-MFIs) in the euro area										
	Total	of which in euro ⁵	Enterprises and households							At agreed notice of ⁶	End of year/month
			Total	Overnight	With agreed maturities of			up to 3 months	over 3 months		
					up to 1 year	over 1 year and up to 2 years	over 2 years				
Euro area (€ billion) ¹											
1,026.5	11,410.8	10,694.6	10,796.5	5,162.7	977.4	350.6	2,110.9	2,116.6	78.3	2015 Sep	
1,028.8	11,498.7	10,739.6	10,848.6	5,244.8	972.9	349.1	2,092.0	2,112.5	77.3	Oct	
1,034.5	11,524.3	10,774.3	10,870.1	5,288.7	970.8	343.9	2,081.4	2,109.6	75.7	Nov	
1,048.9	11,486.9	10,813.9	10,922.8	5,326.1	981.5	343.8	2,083.3	2,112.9	75.2	Dec	
1,037.7	11,611.8	10,852.4	10,953.3	5,365.2	973.3	344.1	2,074.6	2,121.8	74.3	2016 Jan	
1,038.9	11,621.1	10,871.9	10,976.1	5,385.2	967.8	340.6	2,085.3	2,124.1	73.1	Feb	
1,042.5	11,686.5	10,916.7	11,007.2	5,418.9	973.3	339.8	2,076.3	2,126.7	72.3	Mar	
1,047.1	11,715.7	10,978.1	11,072.9	5,504.4	963.0	337.5	2,071.0	2,126.5	70.5	Apr	
1,049.3	11,766.9	11,005.9	11,092.6	5,545.2	945.2	331.9	2,066.3	2,134.0	70.0	May	
1,057.7	11,829.3	11,001.4	11,089.4	5,565.3	944.9	330.2	2,046.5	2,133.1	69.3	June	
1,067.8	11,849.6	11,053.7	11,133.7	5,615.1	952.1	325.6	2,039.3	2,132.9	68.8	July	
1,064.3	11,783.5	11,037.8	11,120.8	5,611.4	952.6	320.7	2,034.0	2,134.1	68.1	Aug	
1,066.5	11,788.9	11,032.4	11,130.6	5,637.1	960.1	315.0	2,021.8	2,129.2	67.4	Sep	
1,069.7	11,797.5	11,047.9	11,134.7	5,680.7	936.8	307.6	2,018.8	2,123.8	67.2	Oct	
1,071.0	11,882.2	11,107.7	11,212.2	5,780.1	926.6	303.3	2,013.9	2,121.8	66.4	Nov	
1,087.1	11,891.0	11,172.8	11,282.7	5,870.1	910.5	294.0	2,014.1	2,128.5	65.6	Dec	
1,075.1	11,946.4	11,152.8	11,267.6	5,867.2	912.9	286.6	1,997.7	2,138.2	65.0	2017 Jan	
1,078.1	11,955.2	11,171.6	11,291.2	5,891.9	917.9	284.5	1,992.1	2,140.2	64.6	Feb	
1,082.4	12,064.9	11,241.1	11,383.8	5,987.6	909.3	285.3	1,992.4	2,145.1	64.1	Mar	
1,089.2	12,102.7	11,284.6	11,417.8	6,064.0	885.3	278.6	1,978.6	2,147.6	63.7	Apr	
1,089.7	12,114.7	11,302.4	11,407.0	6,086.1	859.1	272.9	1,970.0	2,156.7	62.0	May	
1,099.1	12,176.7	11,346.6	11,446.2	6,153.5	852.6	265.6	1,953.2	2,159.5	61.9	June	
1,104.8	12,174.1	11,357.3	11,440.9	6,164.8	847.8	262.3	1,942.9	2,164.7	58.4	July	
1,102.8	12,191.2	11,387.2	11,469.6	6,188.3	856.8	260.1	1,936.0	2,170.7	57.7	Aug	
1,103.3	12,239.3	11,399.9	11,487.3	6,238.5	841.6	256.2	1,926.2	2,168.0	56.8	Sep	
1,106.2	12,192.1	11,386.8	11,482.5	6,258.2	844.5	250.5	1,907.5	2,165.5	56.2	Oct	
German contribution (€ billion)											
240.3	3,330.8	3,253.8	3,131.7	1,667.0	172.0	31.7	666.7	529.0	65.3	2015 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	3,536.5	3,424.0	3,288.1	1,857.7	171.0	37.4	636.6	533.7	51.7	Nov	
248.1	3,517.1	3,419.8	3,284.1	1,851.0	171.5	38.4	635.6	536.3	51.3	Dec	
245.4	3,526.3	3,439.3	3,306.3	1,873.8	174.0	38.7	632.1	537.1	50.6	2017 Jan	
246.6	3,532.6	3,448.3	3,313.4	1,881.5	175.3	38.8	630.0	537.9	50.0	Feb	
247.7	3,549.3	3,449.2	3,318.1	1,886.4	177.4	39.9	628.4	536.5	49.5	Mar	
249.3	3,540.9	3,447.5	3,317.0	1,895.9	170.7	40.0	624.7	536.6	49.0	Apr	
248.6	3,566.1	3,465.8	3,327.4	1,910.5	167.5	40.2	624.1	536.4	48.7	May	
249.5	3,590.5	3,482.0	3,339.9	1,928.7	165.5	40.3	621.4	535.7	48.3	June	
251.6	3,583.1	3,472.8	3,333.0	1,927.8	162.6	40.3	619.5	537.9	44.9	July	
250.4	3,600.7	3,483.1	3,338.6	1,938.3	159.0	40.3	619.3	537.5	44.1	Aug	
250.1	3,616.3	3,486.8	3,345.9	1,945.0	162.3	39.6	617.9	537.5	43.5	Sep	
250.9	3,606.5	3,490.8	3,353.0	1,958.5	158.8	38.6	616.2	538.0	42.7	Oct	

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"). ⁵ Excluding central governments' deposits. ⁶ In Germany, only savings deposits.

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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													
End of year/month	Other general government							Repo transactions with non-banks in the euro area		Money market fund shares (net) ³	Debt securities		
	Central governments	Total	Overnight	With agreed maturities of			At agreed notice of ²		Total		of which Enterprises and households	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					
Euro area (€ billion) ¹													
2015 Sep	280.6	333.7	153.5	101.4	13.2	39.4	21.5	4.8	304.5	296.9	459.3	2,344.0	1,660.4
Oct	315.5	334.6	157.4	98.6	13.2	39.6	20.9	4.7	297.6	288.1	481.2	2,337.6	1,640.5
Nov	298.5	355.7	168.0	108.4	13.0	39.7	21.9	4.7	301.4	296.2	497.1	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	475.1	2,319.4	1,634.3
2016 Jan	315.1	343.4	160.9	102.3	14.3	39.7	21.0	5.2	294.5	292.9	485.5	2,301.4	1,615.0
Feb	301.0	344.0	162.6	98.1	14.4	39.9	24.0	5.1	339.1	335.1	484.2	2,288.0	1,597.6
Mar	333.3	345.9	159.5	102.0	15.1	40.8	23.6	5.0	332.3	329.1	471.7	2,271.4	1,590.3
Apr	297.6	345.2	161.9	97.2	15.4	42.2	23.5	4.9	327.9	323.1	489.1	2,275.8	1,586.3
May	317.7	356.6	167.0	102.1	15.5	43.1	24.0	4.9	318.7	312.8	489.2	2,284.5	1,575.9
June	378.3	361.6	171.3	102.4	15.9	43.7	23.5	4.8	321.3	318.0	479.7	2,281.8	1,569.3
July	349.2	366.7	174.1	101.6	18.2	43.8	24.2	4.8	298.6	297.4	494.8	2,258.2	1,543.7
Aug	294.6	368.1	175.7	100.8	18.7	44.3	23.8	4.9	301.0	299.9	495.5	2,253.2	1,534.5
Sep	297.4	361.0	170.5	99.5	19.4	44.4	22.3	5.0	286.5	285.7	493.7	2,227.1	1,517.1
Oct	295.3	367.4	182.2	94.3	19.9	44.5	21.3	5.3	266.4	265.7	511.8	2,226.0	1,503.3
Nov	300.4	369.6	178.7	98.8	21.1	44.2	21.6	5.2	264.5	263.8	518.8	2,244.1	1,506.1
Dec	253.1	355.1	169.8	93.9	21.5	43.3	21.4	5.1	268.9	268.2	512.8	2,230.4	1,502.6
2017 Jan	316.8	362.0	170.7	99.5	21.3	43.4	21.7	5.5	250.1	249.5	524.3	2,209.7	1,487.5
Feb	300.0	364.1	176.2	96.2	20.2	44.1	21.9	5.4	241.7	241.0	520.1	2,221.0	1,493.4
Mar	324.1	357.0	166.6	96.5	21.5	44.6	22.3	5.4	256.5	255.8	532.1	2,194.0	1,480.5
Apr	318.6	366.2	177.7	92.4	23.7	44.7	22.2	5.5	250.4	249.7	527.8	2,164.8	1,466.1
May	332.2	375.5	182.9	94.5	25.3	45.2	22.9	4.7	238.4	237.7	523.0	2,171.8	1,490.1
June	352.5	378.0	182.5	95.7	26.6	45.8	22.7	4.7	221.7	221.0	502.2	2,154.7	1,478.3
July	344.8	388.4	192.2	95.3	26.7	46.2	23.1	4.8	197.4	196.8	516.0	2,135.9	1,473.0
Aug	326.5	395.1	198.4	94.9	27.8	46.2	23.2	4.7	199.6	198.9	525.0	2,119.2	1,465.2
Sep	362.5	389.5	194.4	91.9	28.1	47.5	22.8	4.7	206.6	205.9	521.1	2,098.6	1,448.2
Oct	318.8	390.9	199.1	87.6	28.3	48.3	22.9	4.7	226.5	225.8	530.7	2,087.8	1,429.2
German contribution (€ billion)													
2015 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	542.1	251.4
Dec	33.8	199.1	61.6	80.5	16.6	36.6	3.3	0.6	2.2	2.2	2.3	541.3	250.6
2017 Jan	21.2	198.8	55.1	86.6	16.4	36.9	3.2	0.6	4.8	4.8	2.2	553.4	261.4
Feb	17.5	201.8	61.5	83.2	15.7	37.7	3.1	0.6	4.5	4.5	2.2	556.7	262.6
Mar	31.6	199.5	58.7	82.5	16.5	38.2	3.1	0.6	2.6	2.6	2.1	551.8	263.6
Apr	25.0	198.9	59.0	79.4	18.8	38.2	3.0	0.6	3.5	3.5	2.1	546.7	264.9
May	32.7	206.1	61.6	81.6	20.6	38.7	3.1	0.6	2.4	2.4	2.1	542.6	263.2
June	39.8	210.9	63.4	82.6	22.0	39.3	3.0	0.6	1.8	1.8	2.1	542.7	266.0
July	42.3	207.8	60.3	81.5	22.6	39.8	3.0	0.7	3.3	3.3	2.1	534.5	264.9
Aug	49.7	212.4	64.0	81.0	23.6	40.1	3.0	0.7	3.4	3.4	2.3	534.4	267.8
Sep	59.5	210.9	63.2	78.5	24.3	41.2	3.0	0.7	2.6	2.6	2.3	529.1	264.0
Oct	45.3	208.2	64.4	73.5	24.7	41.9	3.0	0.7	2.3	2.3	2.0	521.7	252.3

* 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). ¹ Source: ECB. ² In Germany, only savings deposits. ³ Excluding holdings of MFIs; for the German contribution, excluding German MFIs' portfolios of securities issued by MFIs in the euro area. ⁴ In Germany, bank debt securities with maturities of up to one year are classed as money market

paper. ⁵ Excluding liabilities arising from securities issued. ⁶ After deduction of inter-MFI participations. ⁷ 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. ⁸ including DM banknotes still in circulation (see also footnote 4 on p 10). ⁹ For the German contribution, the difference between the volume of

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										Memo item				
issued (net) ³			Liabilities to non-euro-area residents ⁵	Capital and reserves ⁶	Excess of inter-MFI liabilities	Other liability items		Monetary aggregates ⁷ (From 2002, German contribution excludes currency in circulation)			Monetary capital formation ¹³	Monetary liabilities of central governments (Post Office, Treasury) ¹⁴	End of year/month	
With maturities of						Total ⁸	of which Intra-Eurosystem-liability/claim related to banknote issue ⁹	M1 ¹⁰	M2 ¹¹	M3 ¹²				
up to 1 year ⁴	over 1 year and up to 2 years	over 2 years												
Euro area (€ billion) ¹														
32.7	46.5	2,264.8	3,799.3	2,534.0	– 52.8	4,319.4	–	6,438.4	10,040.6	10,667.4	7,032.2	117.3	2015 Sep	
32.6	47.2	2,257.9	3,852.2	2,560.1	– 75.9	4,356.8	–	6,525.5	10,114.1	10,776.0	7,031.7	115.7	Oct	
31.1	49.2	2,286.9	3,905.8	2,565.3	– 77.1	4,534.8	–	6,592.5	10,180.7	10,841.5	7,053.7	121.9	Nov	
22.9	47.8	2,248.7	3,652.6	2,549.2	– 50.1	4,095.9	–	6,631.8	10,228.4	10,840.9	7,000.7	123.0	Dec	
28.9	50.6	2,221.8	3,800.3	2,573.0	– 77.2	4,387.6	–	6,666.0	10,264.2	10,908.5	6,988.6	123.6	2016 Jan	
33.4	54.2	2,200.4	3,912.2	2,609.9	– 98.7	4,554.5	–	6,688.4	10,278.4	10,942.5	7,013.7	122.8	Feb	
37.2	51.9	2,182.3	3,724.8	2,592.4	– 94.6	4,379.8	–	6,721.6	10,322.7	10,968.4	6,969.1	121.3	Mar	
41.7	50.0	2,184.2	3,912.4	2,604.3	– 99.6	4,285.0	–	6,815.4	10,399.2	11,070.5	6,977.2	122.7	Apr	
39.9	49.2	2,195.4	4,018.4	2,600.8	– 84.1	4,363.2	–	6,867.6	10,440.8	11,110.7	6,980.5	126.6	May	
49.8	47.2	2,184.8	3,941.0	2,664.9	– 62.9	4,560.1	–	6,901.6	10,472.1	11,131.7	7,014.0	127.7	June	
54.6	47.8	2,155.8	4,071.9	2,678.7	– 105.5	4,521.0	–	6,967.7	10,543.0	11,225.5	6,991.1	131.5	July	
53.9	46.2	2,153.1	4,113.9	2,676.2	– 85.2	4,435.5	–	6,962.0	10,533.4	11,214.3	6,980.4	131.4	Aug	
48.7	46.1	2,132.3	4,069.0	2,698.3	– 45.3	4,388.4	–	6,984.6	10,550.9	11,216.3	6,969.1	131.3	Sep	
53.5	43.6	2,129.0	4,278.6	2,683.3	– 28.9	4,246.4	–	7,043.6	10,568.0	11,250.0	6,948.0	131.8	Oct	
54.7	42.8	2,146.6	4,317.8	2,662.6	– 55.6	4,252.2	–	7,145.5	10,659.4	11,345.5	6,939.0	136.4	Nov	
48.1	42.0	2,140.3	4,039.0	2,658.0	– 42.5	4,033.6	–	7,238.4	10,732.3	11,397.9	6,926.4	135.4	Dec	
44.2	45.8	2,119.7	4,244.7	2,645.8	– 14.7	3,877.1	–	7,227.7	10,732.3	11,420.0	6,877.1	139.1	2017 Jan	
49.4	47.2	2,124.4	4,375.4	2,696.0	– 20.4	3,953.2	–	7,262.0	10,767.3	11,454.2	6,926.7	140.1	Feb	
48.5	47.2	2,098.3	4,315.5	2,676.4	– 4.4	3,854.2	–	7,352.5	10,856.7	11,557.7	6,881.3	140.0	Mar	
35.1	43.8	2,085.9	4,399.0	2,662.5	0.0	3,864.3	–	7,449.0	10,922.9	11,604.4	6,841.0	142.1	Apr	
42.2	42.8	2,086.9	4,332.7	2,659.0	2.0	3,845.9	–	7,479.8	10,935.2	11,619.1	6,827.8	145.0	May	
42.5	42.1	2,070.2	4,133.9	2,630.6	8.9	3,729.5	–	7,556.7	11,003.2	11,657.4	6,766.4	145.5	June	
40.8	41.2	2,054.0	4,177.5	2,615.5	8.7	3,682.2	–	7,585.9	11,029.9	11,696.8	6,721.8	148.0	July	
35.3	40.2	2,043.7	4,177.2	2,646.8	– 1.6	3,685.3	–	7,614.3	11,071.4	11,747.0	6,735.0	148.5	Aug	
43.6	39.9	2,015.0	4,154.6	2,650.5	16.7	3,537.0	–	7,662.7	11,095.2	11,765.7	6,700.8	150.4	Sep	
36.6	37.5	2,013.8	4,349.6	2,664.9	11.0	3,578.9	–	7,689.9	11,112.9	11,789.9	6,695.4	150.1	Oct	
German contribution (€ billion)														
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	–	2015 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	585.7	– 863.2	1,564.6	322.0	1,879.9	2,721.9	2,766.1	1,800.2	–	Oct	
22.7	14.6	504.7	905.9	578.4	– 918.6	1,536.5	323.9	1,917.2	2,762.9	2,805.6	1,809.3	–	Nov	
23.1	14.2	504.0	878.8	580.3	– 897.1	1,506.3	327.3	1,912.6	2,759.2	2,801.0	1,808.4	–	Dec	
22.8	14.4	516.2	930.2	575.5	– 926.5	1,465.7	328.3	1,928.9	2,784.9	2,829.2	1,811.9	–	2017 Jan	
22.2	15.2	519.2	972.2	587.9	– 944.3	1,484.8	330.1	1,943.0	2,797.0	2,841.1	1,825.3	–	Feb	
19.5	15.9	516.4	979.6	586.5	– 957.7	1,462.2	331.9	1,945.1	2,801.0	2,841.1	1,819.5	–	Mar	
17.7	16.9	512.1	985.8	597.9	– 965.5	1,463.1	335.2	1,954.8	2,803.4	2,843.5	1,822.6	–	Apr	
18.4	16.8	507.4	957.7	595.0	– 967.6	1,461.9	338.1	1,972.1	2,821.5	2,861.2	1,814.4	–	May	
19.3	16.4	507.0	946.6	591.5	– 981.1	1,412.1	342.8	1,992.1	2,841.2	2,880.9	1,808.1	–	June	
18.8	16.2	499.5	926.1	589.1	– 975.5	1,406.4	345.0	1,988.1	2,835.9	2,876.2	1,793.6	–	July	
18.5	15.8	500.0	894.5	597.2	– 970.2	1,422.2	348.6	2,002.3	2,846.8	2,886.8	1,801.4	–	Aug	
19.3	15.4	494.4	927.7	594.2	– 982.9	1,387.5	352.1	2,008.2	2,853.5	2,893.0	1,792.0	–	Sep	
18.4	15.8	487.6	913.7	596.3	– 946.7	1,386.2	354.2	2,023.0	2,859.6	2,898.1	1,785.4	–	Oct	

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.

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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
	Monetary policy operations of the Eurosystem					Deposit facility	Other liquidity-absorbing operations 4	Banknotes in circulation 5	Central government deposits	Other factors (net) 6		
	Net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations 3							
Eurosystem 2												
2015 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	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
Sep	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
Oct	612.2	66.1	459.3	0.0	730.7	173.1	0.0	1 056.5	93.5	51.5	493.8	1 723.4
Nov	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
Dec	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
2016 Jan	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
Feb	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
Mar	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
Apr	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
May	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
Jun	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
Jul	674.7	34.6	548.9	0.2	1 670.8	434.4	0.0	1 119.1	143.1	313.6	919.0	2 472.6
Aug	662.4	29.0	554.3	0.3	1 787.5	479.2	0.0	1 110.8	160.3	322.2	960.9	2 550.9
Sep	678.6	18.5	707.4	0.3	1 905.3	550.0	0.0	1 118.4	182.0	378.8	1 081.1	2 749.4
Oct	683.1	13.7	767.4	0.2	1 995.0	593.7	0.0	1 126.0	163.6	397.4	1 178.7	2 898.5
Nov	656.9	9.4	767.4	0.2	2 076.1	595.3	0.0	1 136.3	229.8	379.4	1 169.2	2 900.8
Dec	639.0	5.5	768.6	0.3	2 150.2	611.4	0.0	1 142.5	181.8	385.1	1 242.7	2 996.7
2017 Jan	635.0	6.7	765.3	0.2	2 239.2	648.1	0.0	1 142.8	218.3	383.9	1 253.3	3 044.2
Feb												
Mar												
Apr												
May												
Jun												
Jul												
Aug												
Sep												
Oct												
Nov												
Dec												
Deutsche Bundesbank												
2015 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	151.2	1.8	40.0	0.0	119.1	42.4	0.0	249.5	2.9	- 118.3	135.9	427.7
Sep	148.4	2.8	40.8	0.0	138.2	40.8	0.0	248.8	5.2	- 115.9	151.2	440.9
Oct	146.1	3.2	43.3	0.0	156.3	56.1	0.0	249.1	9.3	- 116.3	150.7	455.9
Nov	144.8	3.6	48.4	0.1	174.0	50.0	0.0	252.4	18.0	- 124.0	174.4	476.8
Dec	143.7	1.9	46.3	0.0	193.9	59.8	0.0	250.4	26.1	- 113.3	162.9	473.1
2016 Jan	152.2	3.1	45.0	0.0	214.1	67.6	0.0	252.1	37.3	- 105.1	162.4	482.1
Feb	156.4	3.3	45.3	0.0	237.2	87.3	0.0	254.7	41.1	- 127.2	186.5	528.4
Mar	163.3	2.7	44.7	0.0	263.4	89.8	0.0	257.4	47.2	- 117.0	196.6	543.9
Apr	168.3	1.9	44.0	0.0	288.2	90.8	0.0	258.7	36.2	- 112.6	229.3	578.9
May	168.7	1.5	50.6	0.0	311.9	105.2	0.0	258.6	50.5	- 125.2	243.6	607.4
Jun	167.7	0.9	54.0	0.0	339.2	129.7	0.0	260.3	43.7	- 141.9	270.0	660.0
Jul	163.8	0.9	62.0	0.0	361.5	132.7	0.0	264.2	35.4	- 146.1	302.0	698.9
Aug	159.4	0.8	63.5	0.0	386.6	153.7	0.0	262.3	23.1	- 169.8	341.0	757.0
Sep	164.4	1.0	86.0	0.1	412.4	181.4	0.0	264.1	29.7	- 185.3	374.0	819.5
Oct	165.8	0.3	95.0	0.0	431.8	181.2	0.0	266.2	32.4	- 204.9	418.0	865.4
Nov	159.6	0.5	95.0	0.0	447.9	170.1	0.0	269.0	52.7	- 201.6	412.7	851.9
Dec	155.2	0.3	94.9	0.0	463.2	165.5	0.0	269.9	52.4	- 192.6	418.5	853.9
2017 Jan	154.8	0.3	94.9	0.0	481.5	171.0	0.0	269.4	65.9	- 197.6	422.7	863.2
Feb												
Mar												
Apr												
May												
Jun												
Jul												
Aug												
Sep												
Oct												
Nov												
Dec												

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								
Eurosystem 2												
- 12.8	- 13.5	+ 36.6	+ 0.2	+ 88.7	+ 3.4	± 0.0	+ 15.3	+ 19.8	- 17.3	+ 78.0	+ 96.7	2015 July
- 15.5	- 10.0	+ 19.0	+ 0.3	+ 79.0	+ 44.9	± 0.0	+ 12.6	- 32.9	+ 0.9	+ 47.0	+ 104.6	Aug
- 8.3	- 2.2	- 0.1	- 0.5	+ 92.4	+ 4.8	± 0.0	- 2.9	+ 31.8	+ 10.8	+ 36.9	+ 38.7	Sep
- 6.9	- 4.1	- 2.8	± 0.0	+ 87.5	+ 20.3	± 0.0	+ 4.1	- 1.7	+ 22.6	+ 28.5	+ 52.9	Oct
- 0.6	+ 5.5	+ 7.6	+ 0.1	+ 81.1	+ 23.5	± 0.0	+ 16.3	- 11.0	+ 1.7	+ 63.3	+ 103.1	Nov
- 3.8	- 8.7	- 5.2	- 0.1	+ 95.8	+ 33.9	± 0.0	- 9.4	+ 33.1	+ 20.7	- 0.6	+ 23.9	Dec
+ 19.5	- 4.8	- 0.9	+ 0.1	+ 92.5	+ 31.5	± 0.0	+ 5.9	+ 31.8	+ 23.8	+ 13.5	+ 50.9	2016 Jan
+ 13.0	- 4.2	- 4.5	± 0.0	+ 105.2	+ 47.0	± 0.0	+ 7.3	- 23.5	+ 25.1	+ 53.8	+ 108.1	Feb
+ 25.8	- 6.3	+ 15.3	- 0.1	+ 121.8	+ 14.1	± 0.0	+ 10.5	+ 51.6	+ 46.6	+ 33.7	+ 58.3	Mar
+ 18.9	- 4.1	+ 12.1	- 0.1	+ 112.6	+ 32.0	± 0.0	+ 9.1	- 37.7	+ 44.6	+ 91.3	+ 132.5	Apr
+ 2.8	- 6.1	+ 19.8	+ 0.1	+ 107.3	+ 32.2	± 0.0	- 1.5	+ 30.5	+ 34.0	+ 28.6	+ 59.2	May
- 0.4	- 3.4	+ 8.3	+ 0.1	+ 123.2	+ 52.1	± 0.0	+ 8.4	- 8.6	+ 29.6	+ 46.5	+ 106.9	June
- 12.7	+ 0.6	+ 37.1	± 0.0	+ 100.6	- 5.0	± 0.0	+ 16.0	- 16.6	+ 36.0	+ 95.1	+ 106.3	July
- 12.3	- 5.6	+ 5.4	+ 0.1	+ 116.7	+ 44.8	± 0.0	- 8.3	+ 17.2	+ 8.6	+ 41.9	+ 78.3	Aug
+ 16.2	- 10.5	+ 153.1	± 0.0	+ 117.8	+ 70.8	± 0.0	+ 7.6	+ 21.7	+ 56.6	+ 120.2	+ 198.5	Sep
+ 4.5	- 4.8	+ 60.0	- 0.1	+ 89.7	+ 43.7	± 0.0	+ 7.6	- 18.4	+ 18.6	+ 97.6	+ 149.1	Oct
- 26.2	- 4.3	± 0.0	± 0.0	+ 81.1	+ 1.6	± 0.0	+ 10.3	+ 66.2	- 18.0	- 9.5	+ 2.3	Nov
- 17.9	- 3.9	+ 1.2	+ 0.1	+ 74.1	+ 16.1	± 0.0	+ 6.2	- 48.0	+ 5.7	+ 73.5	+ 95.9	2017 Jan
- 4.0	+ 1.2	- 3.3	- 0.1	+ 89.0	+ 36.7	± 0.0	+ 0.3	+ 36.5	- 1.2	+ 10.6	+ 47.5	Feb
Deutsche Bundesbank												
- 3.8	- 1.5	+ 7.6	- 0.0	+ 18.6	- 3.1	± 0.0	+ 3.7	+ 1.4	- 1.0	+ 19.9	+ 20.5	2015 July
- 4.1	- 0.3	+ 3.7	+ 0.0	+ 16.6	+ 16.9	± 0.0	+ 3.2	- 0.4	- 17.0	+ 13.1	+ 33.2	Aug
- 2.9	+ 0.9	+ 0.8	- 0.0	+ 19.1	- 1.5	± 0.0	- 0.6	+ 2.3	+ 2.4	+ 15.4	+ 13.2	Sep
- 2.3	+ 0.4	+ 2.5	- 0.0	+ 18.1	+ 15.2	± 0.0	+ 0.3	+ 4.1	- 0.4	- 0.6	+ 15.0	Oct
- 1.3	+ 0.5	+ 5.1	+ 0.1	+ 17.7	- 6.0	± 0.0	+ 3.3	+ 8.7	- 7.6	+ 23.7	+ 21.0	Nov
- 1.0	- 1.7	- 2.1	- 0.0	+ 19.9	+ 9.8	± 0.0	- 2.1	+ 8.1	+ 10.7	- 11.5	- 3.8	Dec
+ 8.4	+ 1.1	- 1.3	+ 0.0	+ 20.3	+ 7.8	± 0.0	+ 1.7	+ 11.3	+ 8.2	- 0.4	+ 9.0	2016 Jan
+ 4.3	+ 0.3	+ 0.4	- 0.0	+ 23.1	+ 19.7	± 0.0	+ 2.6	+ 3.8	- 22.1	+ 24.1	+ 46.3	Feb
+ 6.9	- 0.6	- 0.6	- 0.0	+ 26.2	+ 2.6	± 0.0	+ 2.8	+ 6.1	+ 10.2	+ 10.1	+ 15.4	Mar
+ 5.1	- 0.8	- 0.7	- 0.0	+ 24.8	+ 1.0	± 0.0	+ 1.3	- 11.0	+ 4.4	+ 32.7	+ 35.0	Apr
+ 0.4	- 0.5	+ 6.6	+ 0.0	+ 23.7	+ 14.4	± 0.0	- 0.1	+ 14.3	- 12.6	+ 14.2	+ 28.5	May
- 0.9	- 0.5	+ 3.3	+ 0.0	+ 27.3	+ 24.4	± 0.0	+ 1.7	- 6.8	- 16.7	+ 26.5	+ 52.6	June
- 4.0	- 0.1	+ 8.1	- 0.0	+ 22.3	+ 3.0	± 0.0	+ 3.9	- 8.3	- 4.3	+ 31.9	+ 38.8	July
- 4.4	- 0.0	+ 1.4	+ 0.0	+ 25.1	+ 21.0	± 0.0	- 1.9	- 12.2	- 23.6	+ 39.0	+ 58.1	Aug
+ 4.9	+ 0.1	+ 22.6	+ 0.0	+ 25.9	+ 27.7	± 0.0	+ 1.8	+ 6.6	- 15.6	+ 33.0	+ 62.5	Sep
+ 1.5	- 0.7	+ 9.0	- 0.1	+ 19.4	- 0.2	± 0.0	+ 2.1	+ 2.6	- 19.6	+ 44.0	+ 45.9	Oct
- 6.2	+ 0.2	+ 0.0	+ 0.0	+ 16.1	- 11.1	± 0.0	+ 2.8	+ 20.3	+ 3.3	- 5.3	- 13.6	Nov
- 4.4	- 0.2	- 0.1	+ 0.0	+ 15.4	- 4.6	± 0.0	+ 0.9	- 0.2	+ 9.0	+ 5.8	+ 2.1	2017 Jan
- 0.4	- 0.1	- 0.1	- 0.0	+ 18.3	+ 5.5	± 0.0	- 0.5	+ 13.5	- 5.0	+ 4.2	+ 9.2	Feb

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
Eurosystem ²									
2017 Mar 31	4,100.7	404.2	323.4	77.6	245.8	33.9	20.2	20.2	–
Apr 7	4,116.4	404.2	323.1	77.7	245.4	31.6	18.6	18.6	–
14	4,130.0	404.2	321.8	77.7	244.2	31.6	19.8	19.8	–
21	4,139.4	404.2	321.6	77.7	243.9	31.4	19.0	19.0	–
28	4,148.0	404.2	319.6	77.5	242.1	34.6	17.2	17.2	–
May 5	4,156.8	404.1	319.7	77.4	242.4	34.6	16.8	16.8	–
12	4,170.6	404.1	320.9	77.4	243.5	32.3	17.0	17.0	–
19	4,185.7	404.1	320.6	77.4	243.2	32.7	17.4	17.4	–
26	4,195.7	404.1	321.2	77.4	243.7	30.3	15.9	15.9	–
June 2	4,204.5	404.1	321.2	77.4	243.8	30.2	16.3	16.3	–
9	4,218.1	404.1	321.5	77.4	244.1	29.9	16.7	16.7	–
16	4,232.9	404.1	322.9	77.6	245.3	28.7	18.3	18.3	–
23	4,246.2	404.1	321.6	77.6	244.0	30.7	18.5	18.5	–
30	4,209.5	379.1	304.8	74.4	230.4	31.2	18.0	18.0	–
July 7	4,214.7	379.1	303.5	74.6	228.9	30.5	17.2	17.2	–
14	4,229.3	379.1	302.9	74.2	228.7	31.6	17.2	17.2	–
21	4,235.8	379.1	300.7	74.3	226.4	33.4	15.9	15.9	–
28	4,248.3	379.1	302.0	74.3	227.7	33.9	16.7	16.7	–
Aug 4	4,246.5	379.1	299.2	74.4	224.8	36.9	16.4	16.4	–
11	4,256.0	379.1	301.2	74.5	226.8	35.3	15.9	15.9	–
18	4,265.7	379.1	300.1	74.5	225.6	35.2	16.5	16.5	–
25	4,278.9	379.1	299.2	74.5	224.7	35.6	16.2	16.2	–
2017 Sep 1	4,283.7	379.1	298.8	74.5	224.3	34.2	16.4	16.4	–
8	4,299.8	379.1	302.0	74.5	227.4	33.7	15.1	15.1	–
15	4,308.9	379.1	302.9	74.5	228.4	31.0	16.6	16.6	–
22	4,328.2	379.1	302.5	74.5	228.0	33.4	16.8	16.8	–
29	4,318.6	379.0	296.9	73.0	223.8	30.8	17.7	17.7	–
Oct 6	4,337.7	379.0	295.9	73.0	222.8	33.4	16.9	16.9	–
13	4,371.6	379.0	297.2	73.0	224.2	32.1	16.7	16.7	–
20	4,363.4	379.0	297.4	73.0	224.4	32.8	17.3	17.3	–
27	4,371.2	379.0	295.5	72.9	222.5	34.6	15.5	15.5	–
Nov 3	4,373.2	379.0	296.4	72.9	223.5	33.9	15.0	15.0	–
10	4,387.7	379.0	297.4	72.7	224.6	32.4	14.8	14.8	–
17	4,411.9	379.0	297.6	72.2	225.3	34.6	15.7	15.7	–
24	4,427.5	379.0	298.3	72.2	226.1	33.0	15.8	15.8	–
Dec 1	4,440.8	379.0	299.9	72.3	227.5	32.9	16.0	16.0	–
Deutsche Bundesbank									
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	–
2017 Jan	1 449.7	119.3	56.4	21.5	34.9	0.1	1.8	1.8	–
Feb	1 484.8	119.3	56.2	21.2	35.0	0.1	1.5	1.5	–
Mar	1 558.0	126.2	55.7	21.1	34.7	2.7	1.7	1.7	–
Apr	1 582.8	126.1	55.7	21.0	34.7	0.0	2.4	2.4	–
May	1 608.2	118.2	53.1	20.0	33.0	1.3	2.1	2.1	–
June	1 616.4	118.2	53.5	20.0	33.6	0.0	2.8	2.8	–
July	1 621.0	118.2	52.6	19.9	32.7	0.0	2.8	2.8	–
Aug	1 625.1	118.2	51.7	19.6	32.2	1.4	3.1	3.1	–
Sep	1 663.9	118.2	52.9	19.5	33.4	0.0	1.9	1.9	–
Oct	1 644.4	118.2	52.6	19.3	33.4	0.0	2.0	2.0	–
Nov	1 665.0	118.2	52.6	19.3	33.4	0.0	2.0	2.0	–

* 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 1
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			
Eurosystem 2													
784.2	14.8	769.2	–	–	0.3	–	69.8	2 192.8	1 887.1	305.7	26.4	245.9	2017 Mar 31
782.5	13.2	769.2	–	–	0.1	–	81.4	2 211.3	1 906.3	305.0	26.4	237.4	Apr 7
783.1	13.2	769.2	–	–	0.7	–	80.7	2 225.9	1 921.4	304.5	26.4	236.5	14
784.2	14.8	769.2	–	–	0.2	–	82.0	2 236.2	1 933.0	303.2	26.4	234.5	21
782.1	14.4	767.3	–	–	0.4	–	78.2	2 247.4	1 946.9	300.5	26.4	238.4	28
782.0	14.4	767.3	–	–	0.3	–	78.6	2 257.5	1 959.9	297.6	26.4	237.1	May 5
781.2	13.7	767.3	–	–	0.2	–	79.6	2 271.4	1 974.7	296.8	26.4	237.6	12
781.5	14.0	767.3	–	–	0.2	–	78.6	2 285.2	1 989.0	296.2	26.4	239.3	19
783.5	15.9	767.3	–	–	0.2	–	75.9	2 299.1	2 002.4	296.7	26.4	239.3	26
780.1	12.1	767.8	–	–	0.3	–	74.5	2 311.0	2 015.2	295.8	26.4	240.7	June 2
780.0	12.1	767.8	–	–	0.1	–	73.7	2 325.6	2 029.8	295.9	26.4	240.3	9
779.1	11.0	767.8	–	–	0.3	–	75.5	2 338.7	2 045.0	293.7	26.4	239.2	16
779.6	11.5	767.8	–	–	0.3	–	73.1	2 352.1	2 058.4	293.7	26.4	240.1	23
779.3	11.6	767.3	–	–	0.3	–	70.9	2 358.6	2 064.4	294.2	25.8	241.9	30
775.7	8.3	767.3	–	–	0.1	–	69.5	2 374.4	2 081.3	293.1	25.7	239.0	July 7
774.6	7.1	767.3	–	–	0.2	–	69.0	2 390.4	2 097.5	292.9	25.7	238.8	14
774.3	6.8	767.3	–	–	0.2	–	67.7	2 400.0	2 108.3	291.7	25.7	239.0	21
776.3	7.4	768.7	–	–	0.2	–	63.3	2 411.3	2 119.2	292.1	25.7	240.0	28
773.1	4.3	768.7	–	–	0.2	–	63.6	2 414.8	2 128.2	286.6	25.7	237.5	Aug 4
773.5	4.6	768.7	–	–	0.2	–	61.4	2 426.0	2 139.7	286.3	25.7	237.8	11
773.7	4.8	768.7	–	–	0.2	–	62.2	2 435.4	2 149.3	286.1	25.7	237.7	18
776.3	7.3	768.7	–	–	0.3	–	60.4	2 446.2	2 160.1	286.1	25.7	240.2	25
774.7	5.9	768.6	–	–	0.2	–	59.2	2 456.1	2 170.4	285.8	25.7	239.4	2017 Sep 1
772.8	4.3	768.4	–	–	0.1	–	61.0	2 471.7	2 185.9	285.8	25.7	238.6	8
772.5	4.0	768.4	–	–	0.1	–	61.5	2 484.1	2 200.0	284.2	25.7	235.3	15
773.6	5.1	768.4	–	–	0.1	–	59.4	2 498.5	2 214.1	284.3	25.7	239.1	22
768.5	4.2	764.1	–	–	0.2	–	53.3	2 504.4	2 221.3	283.1	25.7	242.3	29
767.5	3.2	764.1	–	–	0.2	–	54.9	2 521.9	2 238.9	283.0	25.7	242.5	Oct 6
785.5	21.3	764.1	–	–	0.1	–	55.0	2 537.6	2 254.4	283.2	25.7	242.7	13
768.2	3.8	764.1	–	–	0.3	–	56.7	2 547.4	2 265.1	282.3	25.7	238.9	20
769.4	5.3	763.7	–	–	0.3	–	55.4	2 560.0	2 278.4	281.6	25.7	236.2	27
766.9	3.0	763.7	–	–	0.2	–	52.6	2 568.1	2 287.7	280.4	25.7	235.7	Nov 3
766.5	2.7	763.7	–	–	0.1	–	52.7	2 583.9	2 303.2	280.7	25.1	235.9	10
766.8	2.8	763.7	–	–	0.2	–	56.7	2 599.0	2 318.3	280.7	25.1	237.4	17
767.1	3.0	763.7	–	–	0.4	–	55.6	2 614.0	2 333.4	280.6	25.1	239.6	24
768.9	5.0	763.7	–	–	0.2	–	50.7	2 627.3	2 347.3	279.9	25.1	241.1	Dec 1
Deutsche Bundesbank													
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
64.0	0.6	63.4	–	–	0.0	–	4.1	375.7	375.7	–	4.4	823.9	2017 Jan
63.9	0.7	63.2	–	–	0.0	–	4.5	392.6	392.6	–	4.4	842.4	Feb
95.6	0.4	95.0	–	–	0.2	–	3.9	408.8	408.8	–	4.4	859.0	Mar
95.7	0.6	95.0	–	–	0.1	–	4.2	421.4	421.4	–	4.4	872.8	Apr
95.3	0.3	95.0	–	–	0.0	–	4.0	434.3	434.3	–	4.4	886.4	May
96.4	1.2	95.0	–	–	0.1	–	3.9	445.8	445.8	–	4.4	891.3	June
95.5	0.5	94.9	–	–	0.1	–	4.4	457.2	457.2	–	4.4	884.8	July
95.2	0.2	94.9	–	–	0.1	–	4.4	467.1	467.1	–	4.4	880.4	Aug
95.1	0.2	94.8	–	–	0.0	–	3.7	478.3	478.3	–	4.4	908.1	Sep
95.2	0.3	94.8	–	–	0.0	–	3.8	490.5	490.5	–	4.4	877.5	Oct
96.3	1.4	94.8	–	–	0.0	–	2.8	503.6	503.6	–	4.4	885.0	Nov

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

III Consolidated financial statement of the Eurosystem

2 Liabilities *

€ billion

On reporting date/ End of month 1	€ billion												
	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
Eurosystem 4													
2017 Mar 31	4,100.7	1,114.5	1,632.5	1,048.5	584.0	–	–	0.0	15.1	–	304.8	178.9	125.9
Apr 7	4,116.4	1,119.2	1,721.1	1,132.9	588.2	–	–	0.0	13.7	–	279.2	153.9	125.3
14	4,130.0	1,127.5	1,708.3	1,144.5	563.8	–	–	0.0	13.2	–	298.1	164.7	133.4
21	4,139.4	1,121.6	1,682.0	1,123.0	559.0	–	–	0.0	10.7	–	344.2	209.5	134.7
28	4,148.0	1,125.3	1,709.1	1,132.6	576.4	–	–	0.0	12.9	–	306.2	172.0	134.3
May 5	4,156.8	1,125.1	1,773.1	1,172.7	600.4	–	–	0.0	12.4	–	256.0	144.2	141.8
12	4,170.6	1,124.7	1,766.3	1,165.6	600.7	–	–	0.0	10.8	–	283.1	140.8	142.2
19	4,185.7	1,123.2	1,760.3	1,169.5	590.7	–	–	0.0	9.6	–	314.5	177.1	137.4
26	4,195.7	1,124.1	1,748.4	1,159.5	588.9	–	–	0.1	10.3	–	353.1	209.3	143.9
June 2	4,204.5	1,131.3	1,796.2	1,194.2	602.0	–	–	0.0	11.3	–	299.9	157.7	142.2
9	4,218.1	1,130.5	1,800.6	1,199.2	601.3	–	–	0.1	9.1	–	310.2	172.5	137.7
16	4,232.9	1,131.7	1,776.2	1,168.4	607.8	–	–	0.0	7.4	–	351.7	209.7	142.1
23	4,246.2	1,131.3	1,735.3	1,158.1	577.2	–	–	0.0	7.7	–	400.8	259.1	141.7
30	4,209.5	1,136.9	1,723.1	1,106.1	617.0	–	–	0.1	9.2	–	347.6	210.1	137.5
July 7	4,214.7	1,140.0	1,787.3	1,166.6	620.7	–	–	0.0	9.8	–	340.1	209.1	131.0
14	4,229.3	1,141.2	1,792.1	1,197.8	594.2	–	–	0.1	9.8	–	360.2	230.7	129.6
21	4,235.8	1,140.4	1,764.1	1,186.9	577.2	–	–	0.0	9.2	–	380.8	254.1	126.7
28	4,248.3	1,142.3	1,784.2	1,200.7	583.5	–	–	0.1	9.6	–	369.8	239.3	130.5
Aug 4	4,246.5	1,144.7	1,867.3	1,245.9	621.3	–	–	0.0	10.4	–	273.7	147.1	126.6
11	4,256.0	1,145.9	1,870.4	1,240.9	629.4	–	–	0.0	9.7	–	285.5	158.3	127.2
18	4,265.7	1,144.1	1,836.3	1,238.6	597.7	–	–	0.0	9.0	–	321.6	194.8	126.8
25	4,278.9	1,139.9	1,824.0	1,230.8	593.2	–	–	0.0	8.0	–	352.3	225.4	126.9
2017 Sep 1	4,283.7	1,142.1	1,891.7	1,263.4	628.3	–	–	0.0	8.4	–	286.7	158.8	128.0
8	4,299.8	1,142.7	1,900.0	1,264.2	635.8	–	–	0.0	14.5	–	292.4	162.5	129.9
15	4,308.9	1,142.0	1,888.0	1,238.9	649.0	–	–	0.0	6.7	–	324.3	198.1	126.2
22	4,328.2	1,140.2	1,865.2	1,217.6	647.6	–	–	0.0	10.7	–	362.3	236.2	126.1
29	4,318.6	1,143.5	1,824.3	1,175.2	649.0	–	–	0.1	9.7	–	351.9	229.6	122.3
Oct 6	4,337.7	1,144.9	1,920.2	1,257.3	662.9	–	–	0.0	9.2	–	321.4	200.2	121.2
13	4,371.6	1,145.2	1,942.5	1,283.7	658.8	–	–	0.0	8.1	–	333.7	210.4	123.3
20	4,363.4	1,143.0	1,913.7	1,261.7	652.0	–	–	0.0	6.8	–	357.1	233.5	123.6
27	4,371.2	1,145.3	1,950.4	1,312.1	638.3	–	–	0.0	8.3	–	327.6	205.1	122.5
Nov 3	4,373.2	1,147.3	1,982.6	1,312.0	670.6	–	–	0.0	6.4	–	279.8	158.6	121.2
10	4,387.7	1,143.2	1,982.6	1,303.4	679.0	–	–	0.2	8.6	–	296.3	174.6	121.7
17	4,411.9	1,141.3	1,972.6	1,274.8	697.8	–	–	0.0	7.5	–	337.3	208.6	128.7
24	4,427.5	1,140.0	1,972.9	1,270.4	702.4	–	–	0.0	6.5	–	360.2	232.0	128.1
Dec 1	4,440.8	1,146.7	2,034.8	1,340.0	694.9	–	–	0.0	6.5	–	292.9	170.3	122.5
Deutsche Bundesbank													
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
2017 Jan	1 449.7	260.9	499.0	348.3	150.7	–	–	–	2.2	–	92.9	17.1	75.8
Feb	1 484.8	261.3	507.1	347.0	160.1	–	–	–	1.7	–	97.3	12.4	84.9
Mar	1 558.0	262.1	543.2	353.8	189.3	–	–	–	1.7	–	115.4	26.8	88.6
Apr	1 582.8	264.7	591.2	402.7	188.5	–	–	–	4.1	–	88.9	20.0	68.9
May	1 608.2	264.9	607.1	433.6	173.5	–	–	–	2.5	–	102.9	27.8	75.1
June	1 616.4	267.4	586.1	418.6	167.5	–	–	–	3.4	–	112.9	40.0	72.9
July	1 621.0	268.8	597.0	422.3	174.7	–	–	0.0	3.8	–	112.2	40.8	71.4
Aug	1 625.1	268.4	585.6	422.9	162.7	–	–	0.0	4.1	–	114.7	47.0	67.7
Sep	1 663.9	269.0	613.2	411.1	202.1	–	–	0.0	3.8	–	121.5	59.3	62.2
Oct	1 644.4	269.8	624.6	478.1	146.5	–	–	0.0	3.6	–	100.7	45.1	55.6
Nov	1 665.0	269.3	665.2	458.0	207.2	–	–	0.0	2.8	–	103.9	48.5	55.4

* 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 ³	Intra-Eurosystem liability related to euro banknote issue ²	Revaluation accounts	Capital and reserves	On reporting date/ End of month ¹
		Total	Deposits, balances and other liabilities	Liabilities arising from the credit facility under ERM II						
Eurosystem ⁴										
218.8	3.0	10.4	10.4	–	59.0	229.4	–	412.0	101.1	2017 Mar 31
168.5	3.9	11.6	11.6	–	59.0	226.6	–	412.0	101.4	Apr 7
170.5	2.9	11.2	11.2	–	59.0	225.8	–	412.0	101.4	14
169.1	3.0	10.5	10.5	–	59.0	225.7	–	412.0	101.4	21
180.7	5.0	10.1	10.1	–	59.0	225.5	–	412.0	102.3	28
175.2	4.1	11.4	11.4	–	59.0	226.3	–	412.0	102.3	May 5
170.5	3.7	11.1	11.1	–	59.0	227.2	–	412.0	102.2	12
162.0	3.7	11.6	11.6	–	59.0	227.4	–	412.0	102.3	19
145.5	2.9	11.1	11.1	–	59.0	226.9	–	412.0	102.3	26
150.7	2.8	10.7	10.7	–	59.0	228.3	–	412.0	102.3	June 2
152.7	2.8	10.8	10.8	–	59.0	228.1	–	412.0	102.3	9
149.0	3.0	11.0	11.0	–	59.0	229.5	–	412.0	102.3	16
152.1	3.0	12.5	12.5	–	59.0	230.1	–	412.0	102.3	23
222.5	4.1	10.8	10.8	–	56.7	224.4	–	371.9	102.3	30
168.8	5.0	10.3	10.3	–	56.7	222.5	–	371.9	102.3	July 7
156.4	5.0	11.2	11.2	–	56.7	222.5	–	371.9	102.3	14
170.7	5.5	10.8	10.8	–	56.7	223.5	–	371.9	102.3	21
169.3	6.2	12.7	12.7	–	56.7	223.2	–	371.9	102.3	28
175.8	8.9	10.5	10.5	–	56.7	224.2	–	371.9	102.3	Aug 4
171.3	8.7	10.8	10.8	–	56.7	222.7	–	371.9	102.3	11
182.2	7.5	10.9	10.9	–	56.7	223.3	–	371.9	102.3	18
181.3	7.4	10.9	10.9	–	56.7	224.2	–	371.9	102.3	25
182.1	6.8	10.1	10.1	–	56.7	224.8	–	371.9	102.3	2017 Sep 1
175.2	8.5	11.0	11.0	–	56.7	224.7	–	371.9	102.3	8
175.5	7.7	9.8	9.8	–	56.7	224.1	–	371.9	102.3	15
173.6	8.7	10.8	10.8	–	56.7	225.9	–	371.9	102.3	22
231.1	5.9	10.4	10.4	–	55.6	218.9	–	364.9	102.3	29
177.8	9.0	10.8	10.8	–	55.6	221.5	–	364.9	102.3	Oct 6
176.5	8.6	11.4	11.4	–	55.6	222.7	–	364.9	102.3	13
175.1	8.9	12.4	12.4	–	55.6	223.5	–	364.9	102.3	20
171.6	9.5	11.3	11.3	–	55.6	224.3	–	364.9	102.3	27
186.8	9.8	10.9	10.9	–	55.6	226.5	–	364.9	102.3	Nov 3
186.4	8.2	11.8	11.8	–	55.6	227.7	–	364.9	102.3	10
174.4	10.1	11.6	11.6	–	55.6	234.3	–	364.9	102.3	17
170.2	8.7	11.2	11.2	–	55.6	235.0	–	364.9	102.3	24
185.5	9.2	11.4	11.4	–	55.6	230.9	–	364.9	102.3	Dec 1
Deutsche Bundesbank										
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
100.5	0.0	0.6	0.6	–	15.4	25.2	328.3	119.7	5.0	2017 Jan
121.3	0.0	0.9	0.9	–	15.4	24.5	330.1	119.7	5.6	Feb
131.3	0.0	0.5	0.5	–	15.3	25.1	331.9	126.0	5.6	Mar
125.9	0.0	0.7	0.7	–	15.3	25.3	335.2	126.0	5.6	Apr
119.4	0.0	0.7	0.7	–	15.3	25.8	338.1	126.0	5.6	May
140.4	0.0	1.1	1.1	–	14.7	26.2	342.8	115.8	5.6	June
130.0	0.0	1.7	1.7	–	14.7	26.4	345.0	115.8	5.6	July
139.9	0.0	1.1	1.1	–	14.7	26.6	348.6	115.8	5.6	Aug
140.9	0.0	1.7	1.7	–	14.4	27.1	352.1	114.6	5.6	Sep
127.4	0.0	2.2	2.2	–	14.4	27.3	354.2	114.6	5.6	Oct
103.8	0.0	2.2	2.2	–	14.4	27.7	355.5	114.6	5.6	Nov

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". ³ For the Deutsche Bundesbank: including DM banknotes still in circulation. ⁴ Source: ECB.

IV Banks

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

Assets

€ billion

Period	Balance sheet total ¹	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	Enterprises and house-holds	
												Total	Loans
End of year or month													
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
2016	7,792.6	26.0	2,101.4	1,670.9	1,384.2	286.7	430.5	295.0	135.5	3,762.9	3,344.5	2,805.6	2,512.0
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	7,911.6	22.9	2,154.7	1,712.1	1,421.7	290.5	442.6	306.3	136.2	3,785.7	3,361.6	2,810.0	2,518.4
Dec	7,792.6	26.0	2,101.4	1,670.9	1,384.2	286.7	430.5	295.0	135.5	3,762.9	3,344.5	2,805.6	2,512.0
2017 Jan	7,889.3	24.6	2,210.1	1,777.0	1,490.7	286.3	433.1	299.8	133.3	3,769.9	3,347.6	2,813.5	2,519.3
Feb	7,944.8	23.9	2,225.4	1,783.3	1,497.9	285.4	442.1	307.6	134.5	3,774.5	3,347.6	2,819.5	2,525.6
Mar	7,926.1	23.6	2,237.5	1,797.8	1,513.2	284.6	439.7	306.9	132.7	3,776.8	3,351.3	2,828.1	2,533.8
Apr	7,954.6	24.7	2,276.6	1,847.6	1,563.1	284.6	428.9	298.2	130.8	3,780.1	3,357.1	2,836.6	2,541.1
May	7,947.0	25.6	2,286.5	1,864.4	1,579.4	285.0	422.1	290.1	132.0	3,782.1	3,360.7	2,847.3	2,552.6
June	7,849.7	27.3	2,245.7	1,830.9	1,548.9	282.1	414.8	284.2	130.6	3,780.7	3,364.7	2,859.4	2,559.7
July	7,818.7	26.6	2,258.5	1,840.3	1,560.2	280.0	418.2	289.0	129.2	3,787.1	3,370.5	2,867.1	2,567.3
Aug	7,807.7	27.5	2,243.1	1,828.2	1,553.7	274.5	415.0	286.9	128.0	3,792.2	3,377.0	2,876.6	2,576.3
Sep	7,811.3	28.4	2,262.7	1,847.3	1,578.3	269.0	415.4	288.4	127.0	3,799.4	3,385.3	2,890.2	2,589.5
Oct	7,825.6	28.4	2,285.3	1,873.2	1,604.0	269.2	412.1	285.1	127.0	3,804.7	3,393.5	2,899.1	2,598.2
Changes ³													
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	- 191.4	0.3	- 18.2	- 12.1	66.1	- 78.2	- 6.1	6.6	- 12.8	64.8	64.1	68.1	56.6
2016	184.3	6.5	120.3	178.4	195.3	- 16.8	- 58.1	- 49.2	- 8.8	57.5	53.4	88.8	81.0
2016 Feb	94.5	- 0.3	16.5	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	- 29.0	- 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	35.2	1.5	8.4	20.2	21.4	- 1.2	- 11.7	- 10.1	- 1.6	11.4	5.3	10.6	10.0
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	- 31.5	- 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	- 0.5	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	25.9	0.1	72.2	69.4	71.4	- 2.0	2.8	3.4	- 0.5	11.6	11.3	15.8	15.2
Dec	- 121.7	3.1	- 53.6	- 41.3	- 37.8	- 3.5	- 12.3	- 11.7	- 0.6	- 23.1	- 17.0	- 4.4	- 6.1
2017 Jan	108.8	- 1.4	110.7	107.1	107.1	0.0	3.5	5.7	- 2.2	9.4	4.6	9.3	8.5
Feb	47.4	- 0.7	14.0	5.6	6.8	- 1.2	8.4	7.1	1.2	4.3	0.3	6.3	6.5
Mar	- 13.0	- 0.3	13.1	14.9	15.5	- 0.6	- 1.8	0.0	- 1.8	3.2	4.3	9.0	8.9
Apr	40.0	1.1	41.0	50.7	50.5	0.2	- 9.7	- 7.8	- 1.9	4.7	6.8	9.4	8.2
May	8.8	0.9	12.6	18.0	17.1	0.9	- 5.4	- 6.8	- 1.4	4.0	4.6	9.0	9.9
June	- 85.4	1.7	- 38.0	- 31.5	- 29.2	- 2.3	- 6.5	- 5.2	- 1.4	0.5	5.3	13.2	8.0
July	- 14.3	- 0.7	- 14.5	- 10.5	- 12.2	- 1.7	4.0	5.2	- 1.2	8.6	7.1	8.9	8.6
Aug	- 4.7	0.9	- 14.3	- 11.6	- 6.3	- 5.3	- 2.8	- 1.6	- 1.2	5.6	6.8	9.9	9.3
Sep	4.8	0.9	21.8	21.5	26.0	- 4.5	0.3	1.2	- 0.9	6.9	7.1	12.0	13.5
Oct	14.4	0.1	22.8	25.9	25.7	0.2	- 3.1	- 3.1	0.1	5.2	8.2	8.9	8.8

* 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. ¹ See footnote 1 in Table IV.2. ² 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 ¹	
General government				Enterprises and households			General government			Total	of which Loans		
Secur-ities	Total	Loans	Secur-ities ²	Total	Total	of which Loans	Total	Loans	Secur-ities				
End of year or month													
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
293.6	538.9	312.2	226.7	418.4	281.7	159.5	136.7	28.5	108.2	1,058.2	802.3	844.1	2016
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	883.2	Nov
293.6	538.9	312.2	226.7	418.4	281.7	159.5	136.7	28.5	108.2	1,058.2	802.3	844.1	Dec
294.2	534.1	312.2	221.9	422.4	284.6	163.1	137.7	28.6	109.2	1,080.8	826.0	803.9	2017 Jan
294.0	528.0	311.6	216.5	427.0	289.4	165.6	137.6	28.6	109.0	1,095.4	843.6	825.5	Feb
294.3	523.2	307.1	216.1	425.5	290.8	167.2	134.7	29.0	105.7	1,097.1	847.5	791.1	Mar
295.5	520.5	307.9	212.6	423.0	287.1	167.8	135.8	29.9	105.9	1,080.7	832.2	792.5	Apr
294.6	513.4	298.9	214.6	421.4	288.5	166.8	132.9	28.9	103.9	1,056.3	808.0	796.5	May
299.7	505.4	296.4	208.9	416.0	283.4	162.6	132.6	29.9	102.6	1,064.9	817.0	731.1	June
299.8	503.4	298.3	205.1	416.6	285.0	164.1	131.7	29.9	101.8	1,028.5	780.9	717.9	July
300.4	500.4	293.4	207.0	415.2	283.8	165.2	131.4	30.0	101.4	1,011.0	765.3	733.9	Aug
300.7	495.1	289.0	206.1	414.1	283.0	167.9	131.1	29.8	101.3	1,021.2	776.3	699.6	Sep
301.0	494.4	289.2	205.3	411.2	281.6	167.7	129.6	30.4	99.2	1,014.2	768.9	693.0	Oct
Changes ³													
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	0.7	4.4	1.8	- 3.7	- 1.0	- 2.8	- 88.3	- 101.0	- 150.1	2015
7.8	- 35.4	- 12.1	- 23.3	4.0	8.2	14.6	- 4.2	- 0.9	- 3.3	51.4	55.0	- 51.4	2016
- 0.3	- 0.7	- 0.4	- 0.2	- 1.6	- 0.2	3.7	- 1.4	0.3	- 1.8	5.8	3.1	63.5	2016 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	0.9	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	6.7	11.9	- 11.1	July
1.2	- 5.9	- 2.0	- 3.9	- 1.9	- 0.6	0.6	- 1.3	0.2	- 1.5	2.3	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	42.7	44.1	- 56.4	Oct
0.6	- 4.5	- 4.3	- 0.2	0.4	0.6	- 1.2	- 0.2	- 0.4	0.1	- 25.7	- 24.1	- 32.3	Nov
1.7	- 12.6	- 9.7	- 2.9	- 6.0	- 4.4	- 2.3	- 1.6	- 0.7	- 0.9	- 9.4	- 11.4	- 38.8	Dec
0.8	- 4.7	0.0	- 4.8	4.9	3.7	4.2	1.2	0.1	1.1	30.4	31.0	- 40.2	2017 Jan
- 0.2	- 6.1	- 0.6	- 5.4	4.0	4.2	2.1	- 0.2	0.0	- 0.2	8.2	11.7	21.6	Feb
0.2	- 4.7	- 4.4	- 0.3	- 1.2	1.7	2.1	- 2.9	0.4	- 3.3	5.5	7.5	- 34.5	Mar
1.2	- 2.6	0.8	- 3.4	- 2.1	- 3.3	1.1	1.2	0.9	0.3	- 8.2	- 7.4	1.4	Apr
- 0.8	- 4.4	- 6.4	2.0	- 0.6	2.3	- 0.1	- 3.0	- 1.0	- 2.0	- 12.7	- 13.1	4.0	May
5.2	- 7.9	- 2.3	- 5.6	- 4.8	- 3.5	- 2.7	- 1.3	0.1	- 1.3	15.6	15.3	- 65.2	June
0.3	- 1.7	2.0	- 3.7	1.4	2.4	- 1.0	- 0.2	- 0.2	- 0.8	- 24.4	- 24.9	- 12.3	July
0.6	- 3.0	- 4.9	1.9	- 1.2	- 0.8	1.5	- 0.4	0.0	- 0.4	- 12.9	- 11.3	16.0	Aug
- 1.5	- 4.9	- 4.2	- 0.7	- 0.2	0.2	2.4	- 0.4	- 0.2	- 0.2	8.3	9.0	- 33.1	Sep
0.1	- 0.7	0.2	- 0.9	- 3.0	- 1.5	- 0.1	- 1.6	0.6	- 2.2	- 7.0	- 7.3	- 6.6	Oct

exchange of equalisation claims. ³ 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	Balance sheet total ¹	Deposits of banks (MFIs) in the euro area			Deposits of non-banks (non-MFIs) in the euro area							Deposits of non-banks		
		Total	of banks		Total	Deposits of non-banks in the home country			At agreed notice		Total	Over-night		
			in the home country	in other member states		Total	Over-night	With agreed maturities	At agreed notice					
								of which up to 2 years		of which up to 3 months				
End of year or month														
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	3,032.4	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	
2016	7,792.6	1,205.2	1,033.2	172.0	3,411.3	3,318.5	1,794.8	935.3	291.2	588.5	537.0	84.2	37.2	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
Nov	7,911.6	1,205.6	1,042.2	163.4	3,420.0	3,320.5	1,795.0	939.3	292.8	586.1	534.4	89.8	43.4	
Dec	7,792.6	1,205.2	1,033.2	172.0	3,411.3	3,318.5	1,794.8	935.3	291.2	588.5	537.0	84.2	37.2	
2017 Jan	7,889.3	1,237.0	1,053.4	183.6	3,433.4	3,337.5	1,807.5	941.6	300.1	588.4	537.7	88.4	42.2	
Feb	7,944.8	1,245.6	1,055.3	190.3	3,435.3	3,336.9	1,812.7	935.8	295.0	588.5	538.3	89.6	41.7	
Mar	7,926.1	1,259.8	1,077.3	182.5	3,433.9	3,334.5	1,813.5	934.4	296.4	586.6	537.0	91.2	39.6	
Apr	7,954.6	1,254.1	1,075.4	178.8	3,452.0	3,352.3	1,840.8	925.4	290.7	586.2	536.9	91.2	41.7	
May	7,947.0	1,259.3	1,079.9	179.4	3,463.2	3,360.6	1,848.6	926.4	292.7	585.7	536.8	93.5	44.2	
June	7,849.7	1,235.2	1,054.2	181.0	3,477.7	3,362.0	1,865.6	911.8	290.3	584.6	536.2	107.1	44.8	
July	7,818.7	1,239.8	1,062.3	177.5	3,470.9	3,353.4	1,862.3	907.6	287.9	583.4	538.2	107.5	45.8	
Aug	7,807.7	1,243.3	1,065.8	177.4	3,486.1	3,368.4	1,880.5	905.5	285.7	582.4	537.9	108.3	47.5	
Sep	7,811.3	1,256.2	1,071.9	184.3	3,494.8	3,371.4	1,886.8	902.8	284.3	581.8	537.9	114.7	50.7	
Oct	7,825.6	1,272.0	1,081.9	190.1	3,505.8	3,388.0	1,912.7	893.9	277.3	581.5	538.4	109.2	46.3	
Changes ⁴														
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	- 191.4	- 61.1	- 50.3	- 11.9	104.1	104.8	153.2	- 37.0	- 10.1	- 11.3	4.2	- 0.4	- 0.3	
2016	184.3	- 32.6	- 2.2	- 29.4	105.7	105.2	124.3	- 11.1	1.4	- 8.0	2.4	2.7	1.9	
2016 Feb	94.5	- 0.6	- 3.3	2.7	4.3	4.2	7.4	- 3.5	- 1.8	0.3	1.6	0.7	1.0	
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	
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	
May	35.2	- 1.4	- 5.7	4.2	14.8	12.0	11.7	1.8	1.4	- 1.5	- 0.6	2.4	3.2	
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	
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	
Aug	- 31.5	- 15.0	- 7.1	- 7.9	7.0	7.0	11.5	- 3.8	- 2.4	- 0.7	0.1	0.1	- 0.3	
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	
Oct	- 0.5	- 8.4	- 3.7	- 4.7	6.2	11.2	19.8	- 8.1	- 8.9	- 0.6	0.2	- 4.3	- 4.4	
Nov	25.9	17.3	15.9	1.4	39.7	32.7	30.1	3.0	4.0	- 0.4	0.1	5.8	6.1	
Dec	- 121.7	- 0.9	- 9.3	8.4	- 9.0	- 2.2	- 0.4	- 4.1	- 1.3	2.3	2.7	- 5.7	- 6.2	
2017 Jan	108.8	32.8	20.7	12.1	23.0	19.7	13.3	- 6.4	9.1	- 0.0	0.7	4.4	5.1	
Feb	47.4	7.6	1.6	6.1	1.2	- 0.7	4.7	- 5.5	- 4.8	0.1	0.7	1.1	- 0.5	
Mar	- 13.0	14.8	22.2	- 7.4	- 1.0	- 2.1	1.1	- 1.3	1.5	- 1.9	- 1.4	1.6	- 2.1	
Apr	40.0	- 4.4	- 1.3	- 3.1	19.1	18.7	27.8	- 8.7	- 5.5	- 0.5	- 0.0	0.2	2.2	
May	8.8	6.7	5.3	1.5	12.7	9.5	8.7	1.3	2.2	- 0.5	- 0.1	2.5	2.6	
June	- 85.4	- 22.2	- 24.3	2.1	15.3	11.1	17.5	- 5.4	- 2.3	- 1.0	- 0.7	4.7	0.7	
July	- 14.3	5.3	8.9	- 3.5	- 5.3	- 7.4	- 2.4	- 3.9	- 2.1	- 1.2	- 0.4	0.7	1.1	
Aug	- 4.7	4.1	3.8	0.3	15.8	15.5	18.5	- 1.9	- 2.1	- 1.1	- 0.3	0.9	1.7	
Sep	4.8	3.0	- 3.8	6.7	8.4	2.9	6.1	- 2.6	- 1.5	- 0.6	0.0	6.4	3.2	
Oct	14.4	15.8	10.1	5.8	11.0	16.6	25.9	- 9.0	- 7.0	- 0.3	0.5	- 5.5	- 4.4	

* 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. ¹ See footnote 1 in Table IV.2. ² Excluding deposits of central

IV Banks

in other member states ²				Deposits of central governments		Liabilities arising from repos with non-banks in the euro area	Money market fund shares issued ³	Debt securities issued ³		Liabilities to non-euro-area residents	Capital and reserves	Other Liabilities ¹	Period
With agreed maturities		At agreed notice		Total	of which domestic central governments			Total	of which with maturities of up to 2 years ³				
Total	of which up to 2 years	Total	of which up to 3 months										
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
43.9	15.8	3.1	2.6	8.6	7.9	2.2	2.4	1,030.3	47.2	643.4	591.5	906.3	2016
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	1,035.2	48.4	711.7	591.2	942.6	Nov
43.9	15.8	3.1	2.6	8.6	7.9	2.2	2.4	1,030.3	47.2	643.4	591.5	906.3	Dec
43.2	15.6	3.0	2.6	7.5	6.9	4.8	2.3	1,043.2	47.5	716.8	585.0	866.9	2017 Jan
44.8	18.0	3.0	2.6	8.8	7.7	4.5	2.3	1,050.8	48.0	734.1	588.5	883.7	Feb
48.6	19.9	3.0	2.6	8.3	7.9	2.6	2.2	1,045.7	45.9	730.2	594.1	857.6	Mar
46.6	18.3	3.0	2.6	8.5	7.6	3.5	2.2	1,042.1	43.9	749.0	598.3	853.4	Apr
46.4	17.2	3.0	2.6	9.1	7.8	2.4	2.1	1,042.5	44.6	724.9	603.2	849.4	May
59.3	20.1	3.0	2.6	8.6	7.9	1.8	2.2	1,039.2	44.8	689.8	610.2	793.5	June
58.8	19.1	3.0	2.6	10.0	7.9	3.3	2.2	1,029.2	43.9	684.2	606.2	782.9	July
57.8	18.3	3.0	2.6	9.4	7.9	3.4	2.4	1,024.7	42.6	643.1	608.1	796.7	Aug
61.0	20.5	2.9	2.6	8.7	8.0	2.6	2.4	1,015.2	42.2	669.5	612.4	758.2	Sep
59.9	18.3	2.9	2.6	8.6	7.9	2.3	2.2	1,008.8	40.6	667.9	612.8	753.9	Oct
Changes ⁴													
- 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
- 0.1	0.0	0.0	0.1	- 0.4	- 1.9	- 1.0	- 0.0	- 86.8	- 7.7	- 30.3	28.0	- 143.2	2015
1.1	0.0	- 0.3	- 0.1	- 2.2	- 1.2	- 0.3	- 1.1	8.6	- 1.3	116.1	26.4	- 39.5	2016
- 0.3	- 0.1	- 0.0	- 0.0	- 0.6	0.1	- 1.4	- 0.1	- 1.2	- 1.6	- 11.7	- 13.1	- 65.8	2016 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	49.3	7.2	- 48.8	Apr
- 0.8	- 1.1	- 0.0	- 0.0	0.4	0.3	- 0.2	- 0.4	4.8	- 0.7	1.0	4.3	- 12.3	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	- 53.5	Oct
- 0.3	- 0.7	- 0.0	- 0.0	1.2	0.6	- 0.2	0.1	7.3	- 2.6	- 5.1	- 6.2	- 27.0	Nov
0.5	- 0.2	- 0.0	- 0.0	- 1.1	- 0.3	- 0.8	- 0.0	- 6.8	- 1.3	- 69.7	- 0.2	- 34.3	Dec
- 0.6	- 0.1	- 0.0	- 0.0	- 1.1	- 1.0	2.6	- 0.1	17.9	0.5	76.7	- 5.1	- 38.9	2017 Jan
1.6	2.3	0.0	0.0	0.8	0.3	- 0.3	- 0.1	3.4	0.3	14.4	2.4	18.7	Feb
3.7	2.0	- 0.0	- 0.0	- 0.6	0.3	- 1.9	- 0.1	- 2.8	- 2.0	- 2.2	6.2	- 26.1	Mar
- 1.9	- 1.6	- 0.0	- 0.0	0.2	- 0.3	- 0.9	- 0.0	1.4	- 1.8	22.7	5.6	- 5.3	Apr
- 0.1	- 1.0	0.0	0.0	0.6	0.2	- 1.1	- 0.0	7.8	0.9	- 18.5	7.0	- 5.7	May
4.0	2.9	- 0.0	- 0.0	- 0.5	0.1	- 0.6	0.1	1.0	0.3	- 31.9	8.9	- 56.0	June
- 0.5	- 0.9	- 0.0	- 0.0	1.4	- 0.0	1.4	- 0.0	- 3.1	- 0.7	- 0.1	- 1.9	- 10.6	July
- 0.9	- 0.8	- 0.0	- 0.0	- 0.6	- 0.1	0.1	0.2	- 1.7	- 1.2	- 39.0	2.7	- 13.0	Aug
3.2	2.2	- 0.0	- 0.0	- 0.8	0.0	- 0.7	0.0	- 10.2	- 0.5	25.3	4.7	- 25.6	Sep
- 1.1	- 2.2	- 0.0	0.0	- 0.1	- 0.2	- 0.3	- 0.3	- 5.4	- 0.5	- 1.5	- 0.4	- 4.6	Oct

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

published together with money market fund shares. ⁴ 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 ¹	Cash in hand and credit balances with central banks	Lending to banks (MFIs)			Lending to non-banks (non-MFIs)					Participating interests	Other assets ¹	
				Total	of which		Total	of which						
					Balances and loans	Securities issued by banks		Loans	Bills	Securities issued by non-banks	for up to and including 1 year			
											for more than 1 year			
All categories of banks														
2017 May	1,692	7,993.3	466.1	2,452.9	1,956.5	493.1	4,064.6	359.2	2,967.5	0.6	730.4	113.6	896.0	
June	1,689	7,897.2	465.0	2,434.6	1,942.6	488.4	4,053.0	351.9	2,965.4	0.6	727.7	113.1	831.6	
July	1,673	7,865.5	464.7	2,416.5	1,927.6	485.1	4,053.9	350.4	2,972.5	0.6	723.4	113.2	817.2	
Aug	1,668	7,854.3	470.1	2,384.7	1,903.7	477.3	4,052.8	345.5	2,977.9	0.5	722.1	113.6	833.0	
Sep	1,651	7,857.6	462.5	2,423.1	1,948.3	471.5	4,060.9	352.9	2,982.9	0.6	717.2	113.1	798.0	
Oct	1,639	7,871.7	526.4	2,375.1	1,900.0	472.3	4,066.0	351.5	2,993.2	0.5	713.6	113.0	791.2	
Commercial banks ⁶														
2017 Sep	265	3,163.2	299.9	1,035.8	959.2	75.6	1,207.4	195.6	790.7	0.5	217.4	51.1	569.0	
Oct	264	3,165.7	356.9	985.0	908.2	76.3	1,203.7	192.7	793.5	0.4	213.7	51.0	569.1	
Big banks ⁷														
2017 Sep	4	1,749.2	145.9	527.1	496.4	30.6	500.9	111.3	289.1	0.1	99.2	44.8	530.5	
Oct	4	1,756.9	169.9	516.1	485.0	31.1	494.3	107.2	289.2	0.1	95.9	44.7	531.9	
Regional banks and other commercial banks														
2017 Sep	154	985.1	74.0	250.4	207.5	42.2	625.6	60.2	455.9	0.2	107.7	5.0	30.0	
Oct	153	1,001.3	87.7	251.8	209.2	42.1	628.1	61.5	458.0	0.2	107.2	5.0	28.7	
Branches of foreign banks														
2017 Sep	107	428.9	80.0	258.3	255.4	2.8	80.8	24.1	45.7	0.1	10.6	1.3	8.5	
Oct	107	407.5	99.4	217.1	214.0	3.1	81.2	24.0	46.2	0.1	10.6	1.3	8.6	
Landesbanken														
2017 Sep	8	899.0	52.1	265.7	200.8	64.2	473.4	51.0	347.2	0.1	73.2	10.1	97.8	
Oct	8	904.4	56.9	268.3	202.6	64.9	477.2	53.4	348.4	0.1	73.6	9.9	92.1	
Savings banks														
2017 Sep	393	1,183.0	32.9	174.9	60.9	113.9	944.7	47.9	740.4	0.0	156.2	14.2	16.4	
Oct	391	1,186.5	33.8	175.5	62.0	113.4	947.0	48.2	742.2	0.0	156.4	14.2	16.0	
Credit cooperatives														
2017 Sep	931	875.9	15.8	166.0	60.3	105.3	658.5	32.2	518.5	0.0	107.7	16.5	19.1	
Oct	922	880.3	15.3	168.6	62.6	105.5	661.3	31.8	521.5	0.0	108.0	16.6	18.5	
Mortgage banks														
2017 Sep	14	255.0	1.9	40.3	29.1	11.1	205.2	3.1	169.5	-	32.7	0.1	7.5	
Oct	14	255.6	4.0	39.9	28.8	11.2	204.1	3.1	169.5	-	31.6	0.1	7.3	
Building and loan associations														
2017 Sep	20	229.9	1.3	58.6	41.9	16.7	165.0	1.2	138.9	.	24.8	0.3	4.8	
Oct	20	230.6	1.4	58.7	41.8	16.9	165.5	1.5	139.2	.	24.8	0.3	4.7	
Banks with special, development and other central support tasks														
2017 Sep	20	1,251.6	58.6	681.9	596.2	84.8	406.8	21.9	277.7	-	105.1	20.8	83.5	
Oct	20	1,248.6	58.0	679.0	594.0	84.2	407.2	20.9	278.9	-	105.6	20.8	83.5	
Memo item: Foreign banks ⁸														
2017 Sep	142	1,126.3	122.2	437.8	398.6	38.2	473.5	68.5	300.2	0.4	102.1	4.5	88.3	
Oct	142	1,109.2	152.3	388.1	348.6	39.0	474.3	68.2	301.9	0.3	101.5	4.6	89.9	
of which: Banks majority-owned by foreign banks ⁹														
2017 Sep	35	697.4	42.2	179.4	143.2	35.4	392.7	44.4	254.5	0.3	91.6	3.3	79.8	
Oct	35	701.7	52.9	171.0	134.7	35.9	393.1	44.2	255.7	0.2	90.9	3.3	81.4	

* 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. ¹ 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 (Handelsgesetzbuch) 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. ² 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
All categories of banks														
1,811.9	606.0	1,205.9	3,637.8	1,986.3	307.4	694.9	83.3	593.5	543.7	55.6	1,140.2	505.2	898.2	2017 May
1,774.3	588.8	1,185.5	3,630.1	1,992.9	295.3	694.3	54.7	592.4	542.9	55.1	1,139.6	509.6	843.7	June
1,754.1	566.0	1,188.0	3,644.0	2,003.7	300.8	694.0	79.8	591.2	545.0	54.3	1,124.7	510.5	832.4	July
1,713.2	510.4	1,202.8	3,662.5	2,017.4	305.8	695.7	83.6	590.0	544.6	53.6	1,120.5	512.0	846.1	Aug
1,763.0	550.7	1,212.3	3,659.8	2,025.2	296.3	695.5	71.5	589.4	544.6	53.5	1,116.1	511.3	807.4	Sep
1,768.6	556.3	1,212.2	3,679.3	2,049.1	294.0	694.0	78.4	589.0	545.0	53.2	1,110.1	511.2	802.5	Oct
Commercial banks 6														
858.0	397.0	460.9	1,450.5	901.3	172.8	250.8	53.8	101.5	92.9	24.0	161.0	177.6	516.1	2017 Sep
857.3	394.6	462.8	1,460.0	910.1	173.6	251.1	57.3	101.2	92.9	24.0	153.2	177.6	517.6	Oct
Big banks 7														
409.4	152.4	257.0	633.3	367.7	109.5	88.5	53.8	61.5	60.2	6.2	129.8	103.9	472.7	2017 Sep
415.8	163.6	252.2	642.0	374.0	112.2	88.1	57.3	61.4	60.1	6.3	121.3	103.9	473.9	Oct
Regional banks and other commercial banks														
198.9	59.8	139.0	656.8	423.8	41.4	136.0	–	39.4	32.4	16.3	30.9	65.2	33.3	2017 Sep
211.3	62.1	149.2	659.7	426.9	40.6	136.7	–	39.3	32.5	16.1	31.6	65.2	33.5	Oct
Branches of foreign banks														
249.7	184.8	64.9	160.3	109.8	22.0	26.4	–	0.5	0.3	1.6	0.3	8.4	10.1	2017 Sep
230.2	168.8	61.4	158.4	109.1	20.8	26.3	–	0.5	0.3	1.6	0.3	8.5	10.1	Oct
Landesbanken														
254.4	59.3	195.1	296.8	122.7	62.1	98.9	15.1	12.5	12.1	0.6	198.3	50.9	98.6	2017 Sep
261.8	69.1	192.7	301.3	130.7	59.5	97.9	18.7	12.5	12.1	0.7	195.4	50.9	95.1	Oct
Savings banks														
131.4	7.4	124.0	888.5	547.4	14.8	14.9	–	290.2	265.0	21.2	14.3	108.3	40.5	2017 Sep
130.1	6.1	124.0	892.5	552.1	14.5	14.9	–	290.1	265.2	20.9	14.3	108.3	41.3	Oct
Credit cooperatives														
113.8	3.4	110.4	649.1	411.4	32.4	14.6	–	184.8	174.2	6.0	7.9	74.1	31.0	2017 Sep
113.1	1.7	111.4	653.5	415.8	32.5	14.4	–	184.8	174.5	5.9	8.3	74.3	31.2	Oct
Mortgage banks														
51.9	3.5	48.4	96.3	3.4	5.8	87.1	–	–	–	–	88.3	9.6	8.9	2017 Sep
52.0	3.3	48.7	95.2	3.5	5.2	86.5	–	–	–	–	90.1	9.6	8.7	Oct
Building and loan associations														
27.3	4.9	22.4	175.5	3.5	1.5	170.0	–	0.4	0.4	0.1	2.9	11.0	13.3	2017 Sep
28.6	4.8	23.8	175.7	3.4	1.4	170.3	–	0.4	0.4	0.1	2.8	11.0	12.7	Oct
Banks with special, development and other central support tasks														
326.3	75.3	251.1	103.1	35.5	6.8	59.2	2.7	–	–	–	643.3	79.8	99.1	2017 Sep
325.8	76.8	248.9	101.2	33.6	7.1	58.9	2.4	–	–	–	646.2	79.5	96.0	Oct
Memo item: Foreign banks 8														
417.9	255.0	162.9	543.8	380.5	54.7	78.5	8.2	21.0	20.5	9.0	22.4	49.7	92.6	2017 Sep
401.6	240.6	161.0	540.5	379.8	51.8	78.9	8.6	20.9	20.4	9.0	22.9	49.7	94.4	Oct
of which: Banks majority-owned by foreign banks 9														
168.2	70.2	98.0	383.5	270.6	32.8	52.2	8.2	20.5	20.2	7.5	22.0	41.2	82.5	2017 Sep
171.4	71.8	99.7	382.2	270.7	31.0	52.7	8.6	20.4	20.1	7.4	22.6	41.2	84.3	Oct

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 ¹
End of year or month *													
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
2016	25.8	284.0	1,364.9	1,099.8	0.0	0.8	264.3	2.0	3,274.3	2,823.8	0.3	0.4	449.8
2016 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
Dec	25.8	284.0	1,364.9	1,099.8	0.0	0.8	264.3	2.0	3,274.3	2,823.8	0.3	0.4	449.8
2017 Jan	24.3	346.9	1,407.0	1,142.5	0.0	1.0	263.5	1.7	3,277.7	2,831.2	0.3	0.8	445.4
Feb	23.6	346.6	1,413.8	1,150.2	0.0	1.1	262.5	1.8	3,279.0	2,836.8	0.3	0.8	441.1
Mar	23.4	352.1	1,423.3	1,160.4	0.0	1.3	261.6	1.7	3,283.0	2,840.6	0.3	1.0	441.1
Apr	24.4	400.2	1,424.8	1,161.7	0.0	1.1	262.0	1.7	3,288.9	2,848.6	0.3	1.1	438.9
May	25.4	426.0	1,415.5	1,152.3	0.0	1.1	262.1	1.7	3,292.9	2,851.3	0.2	1.8	439.6
June	27.0	417.8	1,391.1	1,130.4	0.0	1.2	259.4	1.7	3,296.8	2,855.9	0.2	1.1	439.6
July	26.4	420.0	1,398.0	1,139.4	0.0	1.4	257.2	1.7	3,302.5	2,865.2	0.3	1.0	436.0
Aug	27.3	421.3	1,384.2	1,131.4	0.0	1.4	251.3	1.7	3,308.9	2,869.4	0.2	0.8	438.5
Sep	28.1	409.2	1,416.1	1,168.3	0.0	1.3	246.5	1.7	3,317.6	2,878.2	0.3	0.7	438.4
Oct	28.1	472.7	1,378.5	1,130.6	0.0	0.9	247.0	1.7	3,326.1	2,887.0	0.3	0.8	438.0
Changes *													
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
2016	+ 6.5	+129.1	+ 48.1	+ 66.9	–	– 0.9	– 17.9	+ 0.4	+ 43.7	+ 62.8	– 0.1	– 0.1	– 18.9
2016 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
Dec	+ 3.1	– 7.7	– 32.7	– 29.0	–	– 0.3	– 3.3	+ 0.3	– 19.0	– 16.4	+ 0.1	– 0.9	– 1.8
2017 Jan	– 1.4	+ 62.9	+ 42.1	+ 42.6	–	+ 0.2	– 0.8	– 0.3	+ 3.3	+ 7.3	– 0.0	+ 0.5	– 4.4
Feb	– 0.7	– 0.3	+ 6.8	+ 7.7	–	+ 0.1	– 1.0	+ 0.1	+ 1.4	+ 5.7	– 0.0	– 0.0	– 4.2
Mar	– 0.3	+ 5.5	+ 9.5	+ 10.2	–	+ 0.2	– 0.9	– 0.0	+ 3.9	+ 3.7	+ 0.0	+ 0.2	– 0.0
Apr	+ 1.1	+ 48.1	+ 1.7	+ 1.3	–	–	+ 0.4	– 0.0	+ 5.9	+ 8.1	+ 0.0	+ 0.1	– 2.3
May	+ 0.9	+ 25.8	– 9.4	– 9.5	–	– 0.0	+ 0.1	– 0.0	+ 3.9	+ 2.6	– 0.1	+ 0.7	+ 0.7
June	+ 1.7	– 8.2	– 23.5	– 20.9	–	+ 0.1	– 2.7	– 0.0	+ 4.0	+ 4.6	+ 0.0	– 0.6	– 0.0
July	– 0.7	+ 2.2	+ 6.9	+ 9.0	–	+ 0.2	– 2.2	–	+ 5.6	+ 9.4	+ 0.0	– 0.2	– 3.6
Aug	+ 0.9	+ 1.3	– 13.8	– 8.0	–	+ 0.0	– 5.9	+ 0.0	+ 6.4	+ 4.1	– 0.0	– 0.2	+ 2.6
Sep	+ 0.8	– 12.1	+ 34.1	+ 38.3	– 0.0	– 0.1	– 4.1	– 0.0	+ 7.3	+ 8.8	+ 0.1	– 0.0	– 1.5
Oct	+ 0.1	+ 63.5	– 37.6	– 37.6	+ 0.0	– 0.4	+ 0.5	+ 0.0	+ 8.6	+ 8.8	– 0.0	+ 0.0	– 0.3

* 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. **3** Including liabilities arising from registered debt securities, registered money market paper and non-negotiable bearer debt securities; including subordinated liabilities. **4** 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 de-positions 6	Time deposits 6	Savings de-positions 7	Bank savings bonds 8		Memo item Fiduciary loans
End of year or month *														
-	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
-	19.1	91.0	1,032.9	129.5	903.3	0.1	5.6	3,326.7	1,798.2	889.6	588.5	50.4	28.8	2016
-	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	2016 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	2016 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	2016 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	2016 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	2016 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	2016 Oct
-	19.1	89.3	1,041.1	145.9	895.1	0.0	5.6	3,328.9	1,799.3	892.5	586.2	50.9	28.6	2016 Nov
-	19.1	91.0	1,032.9	129.5	903.3	0.1	5.6	3,326.7	1,798.2	889.6	588.5	50.4	28.8	2016 Dec
-	20.3	90.8	1,052.6	136.9	915.6	0.1	5.5	3,346.3	1,812.5	895.8	588.5	49.5	30.6	2017 Jan
-	20.3	89.4	1,054.6	141.4	913.1	0.0	5.6	3,345.5	1,816.6	891.4	588.5	49.0	30.5	2017 Feb
-	20.1	89.1	1,077.0	137.4	939.6	0.0	5.5	3,342.8	1,817.0	890.9	586.7	48.2	30.4	2017 Mar
-	20.1	88.8	1,074.8	140.7	934.2	0.0	5.5	3,360.3	1,844.4	881.9	586.2	47.8	30.3	2017 Apr
-	20.0	88.7	1,079.5	142.0	937.5	-	5.5	3,368.4	1,852.2	883.4	585.7	47.0	30.4	2017 May
-	19.7	88.4	1,053.9	125.6	928.3	0.0	5.5	3,370.3	1,869.2	869.8	584.7	46.6	29.8	2017 June
-	19.6	88.5	1,061.7	125.0	936.6	0.0	5.4	3,361.5	1,866.0	866.0	583.5	46.0	29.9	2017 July
-	19.6	88.9	1,065.1	121.2	943.9	0.0	5.4	3,376.5	1,884.2	864.4	582.4	45.4	30.0	2017 Aug
-	19.5	88.1	1,071.5	120.2	951.3	0.0	5.3	3,380.7	1,891.7	861.9	581.8	45.3	30.0	2017 Sep
-	19.4	87.9	1,081.0	122.8	958.2	0.0	5.3	3,396.5	1,916.8	853.3	581.5	44.8	29.9	2017 Oct
Changes *														
-	- 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
-	- 1.3	+ 1.5	- 1.7	+ 0.3	- 2.0	+ 0.0	- 0.5	+ 104.7	+ 124.5	- 6.9	- 7.9	- 5.0	- 0.5	2016
-	- 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	2016 May
-	- 0.1	+ 0.0	+ 12.8	+ 10.8	+ 2.0	-	+ 0.2	- 2.5	+ 0.9	- 1.7	- 1.1	- 0.5	- 0.3	2016 June
-	- 0.1	- 0.0	- 15.8	- 12.5	- 3.3	-	- 0.1	+ 15.8	+ 14.5	+ 2.7	- 0.9	- 0.5	- 0.0	2016 July
-	- 0.1	+ 0.2	- 7.1	- 2.7	- 4.4	-	- 0.0	+ 6.4	+ 11.4	- 3.8	- 0.7	- 0.5	+ 0.0	2016 Aug
-	- 0.1	- 0.5	+ 13.0	- 5.3	+ 18.3	-	- 0.1	+ 1.6	- 0.4	+ 3.6	- 1.2	- 0.3	- 0.0	2016 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	2016 Oct
-	- 0.0	- 0.4	+ 16.0	+ 8.8	+ 7.3	- 0.0	- 0.0	+ 34.2	+ 31.3	+ 3.7	- 0.4	- 0.4	-	2016 Nov
-	+ 0.0	+ 1.6	- 8.2	- 16.4	+ 8.2	+ 0.0	- 0.0	- 2.2	- 1.2	- 2.8	+ 2.3	- 0.5	+ 0.2	2016 Dec
-	+ 1.2	- 0.2	+ 19.7	+ 7.4	+ 12.3	-	- 0.1	+ 19.6	+ 14.4	+ 6.2	- 0.1	- 0.9	+ 1.0	2017 Jan
-	- 0.1	- 1.4	+ 2.0	+ 4.6	- 2.5	- 0.0	+ 0.1	- 0.8	+ 4.1	- 4.5	+ 0.1	- 0.5	- 0.1	2017 Feb
-	- 0.1	- 0.3	+ 22.4	- 4.1	+ 26.5	- 0.0	- 0.1	- 2.7	+ 0.4	- 0.5	- 1.9	- 0.7	- 0.1	2017 Mar
-	- 0.1	- 0.3	- 2.2	+ 3.3	- 5.5	- 0.0	- 0.0	+ 17.5	+ 27.3	- 9.0	- 0.5	- 0.4	- 0.1	2017 Apr
-	- 0.0	- 0.0	+ 4.6	+ 1.3	+ 3.3	- 0.0	+ 0.0	+ 8.1	+ 7.8	+ 1.6	- 0.5	- 0.8	+ 0.0	2017 May
-	- 0.4	+ 0.0	- 24.6	- 16.1	- 8.5	+ 0.0	- 0.0	+ 10.9	+ 17.0	- 4.6	- 1.0	- 0.4	- 0.6	2017 June
-	- 0.0	+ 0.1	+ 7.8	- 0.5	+ 8.3	-	- 0.0	- 8.8	- 3.1	- 3.8	- 1.2	- 0.7	+ 0.2	2017 July
-	- 0.0	+ 0.4	+ 3.5	- 3.9	+ 7.3	+ 0.0	- 0.1	+ 15.0	+ 18.2	- 1.6	- 1.1	- 0.6	+ 0.1	2017 Aug
-	- 0.1	- 0.3	- 3.3	- 1.0	- 2.3	-	- 0.1	+ 4.3	+ 7.5	- 2.5	- 0.6	- 0.1	- 0.1	2017 Sep
-	- 0.1	- 0.1	+ 9.5	+ 2.6	+ 6.9	-	+ 0.0	+ 15.7	+ 25.1	- 8.6	- 0.3	- 0.4	- 0.0	2017 Oct

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		
End of year or month *														
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
2016	0.3	1,055.9	820.6	519.8	300.7	0.5	234.9	1.0	756.2	451.6	90.1	361.4	5.0	299.6
2016 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	1,074.3	837.9	541.7	296.2	1.7	234.7	1.0	765.2	459.4	103.6	355.9	5.5	300.3
Dec	0.3	1,055.9	820.6	519.8	300.7	0.5	234.9	1.0	756.2	451.6	90.1	361.4	5.0	299.6
2017 Jan	0.3	1,069.4	836.4	537.3	299.0	0.8	232.2	1.7	772.9	468.4	109.0	359.4	5.3	299.1
Feb	0.3	1,088.4	854.7	552.1	302.6	1.3	232.5	1.7	782.0	474.4	110.6	363.8	6.2	301.3
Mar	0.3	1,086.7	854.7	548.7	306.0	1.9	230.0	1.7	777.5	475.7	110.9	364.9	4.1	297.7
Apr	0.3	1,063.7	833.7	529.7	304.0	1.9	228.0	1.7	774.4	477.4	114.5	362.9	4.8	292.2
May	0.3	1,037.5	804.3	506.9	297.4	2.2	231.0	1.9	771.7	475.9	112.3	363.6	5.1	290.8
June	0.3	1,043.5	812.2	515.4	296.8	2.3	229.0	1.9	756.2	461.8	102.5	359.3	6.3	288.1
July	0.3	1,018.5	788.2	493.2	295.0	2.3	227.9	2.1	751.5	458.0	102.6	355.4	6.1	287.4
Aug	0.2	1,000.5	772.3	478.4	293.9	2.2	226.0	2.1	743.9	454.3	104.0	350.3	6.0	283.6
Sep	0.3	1,007.0	780.1	484.7	295.4	1.9	225.1	2.1	743.3	457.8	107.9	349.9	6.7	278.8
Oct	0.3	996.7	769.4	473.5	295.9	1.9	225.3	2.1	739.9	457.9	104.8	353.1	6.5	275.6
Changes *														
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
2016	+ 0.0	- 25.5	- 14.5	- 38.2	+ 23.7	- 0.7	- 10.3	- 0.0	+ 17.4	+ 28.9	+ 10.1	+ 18.8	- 3.0	- 8.5
2016 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
Dec	+ 0.0	- 20.7	- 19.9	- 23.1	+ 3.2	- 1.2	+ 0.4	- 0.0	- 10.7	- 9.1	- 13.4	+ 4.3	- 0.5	- 1.2
2017 Jan	+ 0.0	+ 18.9	+ 21.1	+ 19.8	+ 1.3	+ 0.3	- 2.5	+ 0.0	+ 19.9	+ 19.5	+ 19.3	+ 0.2	+ 0.3	+ 0.1
Feb	- 0.0	+ 14.0	+ 13.5	+ 12.3	+ 1.2	+ 0.4	+ 0.1	+ 0.0	+ 6.2	+ 3.5	+ 1.0	+ 2.5	+ 0.9	+ 1.8
Mar	- 0.0	+ 1.3	+ 3.0	- 1.8	+ 4.8	+ 0.4	- 2.1	- 0.0	- 2.7	+ 2.7	+ 0.6	+ 2.1	- 0.7	- 4.7
Apr	+ 0.0	- 16.1	- 14.2	- 15.4	+ 1.2	+ 0.0	- 1.9	+ 0.0	- 0.1	+ 4.2	+ 3.8	+ 0.4	+ 0.6	- 4.9
May	- 0.0	- 17.3	- 20.9	- 18.6	- 2.3	+ 0.3	+ 3.3	+ 0.2	+ 2.8	+ 3.0	- 0.3	+ 3.4	+ 0.4	- 0.6
June	- 0.0	+ 11.0	+ 12.7	+ 10.9	+ 1.9	+ 0.1	- 1.9	+ 0.0	- 12.8	- 11.8	- 9.3	- 2.5	+ 1.2	- 2.2
July	- 0.0	- 16.8	- 16.1	- 18.2	+ 2.1	+ 0.0	- 0.7	+ 0.1	+ 0.1	+ 0.2	+ 0.7	- 0.6	- 0.2	+ 0.1
Aug	- 0.0	- 19.5	- 17.7	- 15.3	- 2.4	- 0.1	- 1.8	+ 0.0	- 0.5	+ 3.0	+ 3.8	- 0.7	- 0.0	- 3.5
Sep	+ 0.1	+ 5.0	+ 6.5	+ 5.6	+ 0.8	- 0.4	- 1.1	- 0.0	- 0.8	+ 2.1	+ 3.4	- 1.4	+ 0.7	- 3.5
Oct	+ 0.0	- 13.4	- 13.6	- 12.3	- 1.3	+ 0.1	+ 0.2	+ 0.0	- 5.3	- 1.5	- 3.4	+ 2.0	- 0.2	- 3.6

* 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			
End of year or month *															
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	
13.1	28.7	696.1	374.4	321.6	234.2	87.5	0.0	206.2	100.3	105.9	55.2	50.8	0.7	2016	
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	2016 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	129.3	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	
13.1	28.7	696.1	374.4	321.6	234.2	87.5	0.0	206.2	100.3	105.9	55.2	50.8	0.7	Dec	
13.0	28.4	746.1	452.6	293.5	206.4	87.1	0.0	246.7	125.6	121.1	71.1	50.0	0.7	2017 Jan	
13.0	24.8	765.2	480.7	284.5	197.4	87.1	0.0	254.0	129.5	124.5	74.8	49.7	0.7	Feb	
12.9	24.7	768.8	488.1	280.7	192.1	88.6	0.0	237.6	113.7	124.0	72.2	51.8	0.7	Mar	
12.9	24.8	751.4	429.4	322.0	234.2	87.7	0.0	271.9	132.3	139.7	89.0	50.6	0.7	Apr	
12.8	24.6	732.4	464.0	268.4	181.8	86.5	0.0	269.4	134.1	135.3	85.0	50.3	0.6	May	
12.5	24.4	720.3	463.2	257.1	170.1	87.0	0.0	259.9	123.7	136.1	75.7	60.4	0.6	June	
12.5	24.4	692.4	441.0	251.4	165.5	85.9	0.0	282.5	137.7	144.8	84.4	60.5	0.6	July	
12.4	24.4	648.0	389.2	258.9	174.0	84.9	0.0	286.0	133.1	152.9	92.5	60.4	0.5	Aug	
12.4	24.8	691.5	430.5	261.0	176.6	84.3	0.0	279.1	133.5	145.7	84.3	61.4	0.5	Sep	
12.3	24.8	687.6	433.6	254.0	169.4	84.7	0.0	282.8	132.3	150.5	87.9	62.6	0.4	Oct	
Changes *															
+ 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	
- 0.1	- 1.5	+ 82.7	+ 51.0	+ 31.7	+ 27.0	+ 4.7	- 0.0	+ 3.5	- 3.1	+ 6.7	+ 5.9	+ 0.8	- 0.0	2016	
+ 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	2016 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	
- 0.1	- 0.3	- 9.2	- 42.7	+ 33.5	+ 30.2	+ 3.3	- 0.0	- 60.5	- 38.2	- 22.3	- 24.1	+ 1.8	+ 0.0	Dec	
- 0.0	- 0.2	+ 52.9	+ 79.0	- 26.1	- 26.2	+ 0.1	-	+ 41.2	+ 25.6	+ 15.6	+ 16.2	- 0.6	- 0.0	2017 Jan	
- 0.1	- 3.6	+ 15.9	+ 26.6	- 10.7	- 10.3	- 0.4	-	+ 6.6	+ 3.7	+ 2.9	+ 3.4	- 0.4	+ 0.0	Feb	
- 0.0	- 0.0	+ 5.5	+ 8.3	- 2.8	- 4.5	+ 1.7	-	- 15.9	- 15.7	- 0.2	- 2.4	+ 2.2	- 0.0	Mar	
- 0.0	+ 0.1	- 12.8	- 56.2	+ 43.4	+ 43.7	- 0.4	-	+ 34.4	+ 18.2	+ 16.2	+ 17.1	- 0.9	-	Apr	
- 0.1	- 0.1	- 13.8	+ 36.5	- 50.3	- 49.8	- 0.5	-	- 0.9	+ 2.4	- 3.3	- 3.3	- 0.0	- 0.0	May	
- 0.3	- 0.2	- 9.0	+ 0.6	- 9.6	- 10.5	+ 0.9	-	- 17.8	- 10.0	- 7.8	- 9.0	+ 1.2	- 0.0	June	
- 0.0	+ 0.0	- 23.9	- 19.7	- 4.2	- 3.7	- 0.5	+ 0.0	+ 24.0	+ 14.4	+ 9.6	+ 9.3	+ 0.3	- 0.0	July	
- 0.1	+ 0.0	- 42.9	- 51.2	+ 8.3	+ 9.1	- 0.8	- 0.0	+ 4.6	- 4.0	+ 8.6	+ 8.5	+ 0.0	- 0.1	Aug	
- 0.0	+ 0.4	+ 42.4	+ 41.0	+ 1.5	+ 2.1	- 0.7	-	- 7.2	+ 0.2	- 7.4	- 8.4	+ 0.9	+ 0.0	Sep	
- 0.1	- 0.0	- 5.9	+ 2.4	- 8.3	- 8.3	+ 0.0	-	+ 3.0	- 1.4	+ 4.4	+ 3.4	+ 1.1	- 0.1	Oct	

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			
												End of year or month *
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	
2016	3,274.3	2,824.2	248.6	205.7	205.4	0.3	42.9	42.8	0.1	3,025.8	2,530.0	
2016 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	
Dec	3,274.3	2,824.2	248.6	205.7	205.4	0.3	42.9	42.8	0.1	3,025.8	2,530.0	
2017 Jan	3,277.7	2,831.5	252.1	208.6	208.0	0.6	43.5	43.3	0.2	3,025.6	2,535.3	
Feb	3,279.0	2,837.1	252.8	209.7	209.1	0.7	43.1	42.9	0.1	3,026.2	2,541.5	
Mar	3,283.0	2,840.9	252.7	212.6	211.8	0.8	40.0	39.8	0.2	3,030.4	2,547.5	
Apr	3,288.9	2,849.0	253.7	210.6	209.8	0.8	43.1	42.8	0.3	3,035.2	2,558.1	
May	3,292.9	2,851.5	249.3	211.0	210.0	0.9	38.4	37.5	0.8	3,043.5	2,568.8	
June	3,296.8	2,856.1	251.1	214.1	213.5	0.6	37.0	36.5	0.5	3,045.7	2,577.7	
July	3,302.5	2,865.5	249.4	210.2	209.5	0.7	39.2	38.8	0.3	3,053.1	2,589.2	
Aug	3,308.9	2,869.6	242.8	207.6	207.0	0.6	35.2	35.0	0.2	3,066.1	2,601.2	
Sep	3,317.6	2,878.5	246.2	214.1	213.5	0.6	32.2	32.0	0.2	3,071.3	2,608.7	
Oct	3,326.1	2,887.3	248.0	215.3	214.7	0.6	32.7	32.6	0.2	3,078.1	2,616.7	
												Changes *
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	
2016	+ 43.7	+ 62.7	- 5.2	- 0.3	- 0.4	+ 0.1	- 4.9	- 4.8	- 0.2	+ 48.9	+ 79.8	
2016 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	
Dec	- 19.0	- 16.2	- 19.0	- 10.1	- 9.9	- 0.2	- 8.9	- 8.2	- 0.7	+ 0.0	+ 3.8	
2017 Jan	+ 3.3	+ 7.3	+ 3.5	+ 2.9	+ 2.5	+ 0.3	+ 0.6	+ 0.5	+ 0.1	- 0.2	+ 5.3	
Feb	+ 1.4	+ 5.6	+ 0.7	+ 1.2	+ 1.1	+ 0.1	- 0.4	- 0.3	- 0.1	+ 0.6	+ 6.2	
Mar	+ 3.9	+ 3.7	- 0.2	+ 2.8	+ 2.7	+ 0.1	- 3.0	- 3.1	+ 0.1	+ 4.1	+ 5.9	
Apr	+ 5.9	+ 8.1	+ 1.0	- 2.0	- 2.0	- 0.0	+ 3.0	+ 2.9	+ 0.1	+ 4.9	+ 10.6	
May	+ 3.9	+ 2.5	- 4.0	+ 0.7	+ 0.5	+ 0.1	- 4.7	- 5.2	+ 0.5	+ 8.0	+ 7.8	
June	+ 4.0	+ 4.6	+ 1.9	+ 3.3	+ 3.6	- 0.3	- 1.4	- 1.1	- 0.3	+ 2.1	+ 8.8	
July	+ 5.6	+ 9.4	- 1.8	- 3.9	- 4.0	+ 0.1	+ 2.2	+ 2.4	- 0.2	+ 7.4	+ 11.4	
Aug	+ 6.4	+ 4.1	- 6.6	- 2.6	- 2.5	- 0.1	- 4.0	- 3.8	- 0.1	+ 13.0	+ 12.0	
Sep	+ 7.3	+ 8.9	+ 3.5	+ 6.5	+ 6.5	- 0.0	- 3.0	- 3.0	- 0.0	+ 3.9	+ 5.8	
Oct	+ 8.6	+ 8.8	+ 1.8	+ 1.2	+ 1.2	+ 0.0	+ 0.6	+ 0.6	+ 0.0	+ 6.8	+ 8.0	

* 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					
End of year or month *													
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	
2,306.5	264.1	2,042.4	223.4	17.3	495.8	269.4	23.9	245.5	226.4	–	1.8	2016	
2,255.8	258.0	1,997.8	216.9	17.7	516.0	275.1	27.1	247.9	240.9	–	2.0	2016 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	2016 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	2016 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	2016 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	2016 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	2016 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	2016 Nov	
2,306.5	264.1	2,042.4	223.4	17.3	495.8	269.4	23.9	245.5	226.4	–	1.8	2016 Dec	
2,311.3	264.5	2,046.8	224.0	18.6	490.3	268.9	24.2	244.7	221.4	–	1.7	2017 Jan	
2,316.5	263.2	2,053.3	225.1	18.5	484.7	268.6	25.0	243.7	216.1	–	1.7	2017 Feb	
2,322.0	264.4	2,057.6	225.5	18.4	482.9	267.3	24.6	242.7	215.6	–	1.7	2017 Mar	
2,331.2	265.4	2,065.9	226.8	18.4	477.2	265.1	23.6	241.5	212.0	–	1.7	2017 Apr	
2,342.6	266.2	2,076.4	226.2	18.3	474.8	261.3	23.4	238.0	213.4	–	1.7	2017 May	
2,346.1	267.4	2,078.7	231.6	18.0	468.0	260.0	23.0	237.0	208.1	–	1.6	2017 June	
2,357.7	268.3	2,089.4	231.5	18.0	463.9	259.4	23.1	236.3	204.5	–	1.6	2017 July	
2,369.2	269.4	2,099.8	232.0	18.0	464.9	258.4	22.9	235.5	206.5	–	1.6	2017 Aug	
2,376.0	269.6	2,106.3	232.7	17.9	462.7	257.0	22.4	234.6	205.7	–	1.6	2017 Sep	
2,383.4	270.9	2,112.5	233.2	17.8	461.4	256.6	22.7	234.0	204.8	–	1.6	2017 Oct	
Changes *													
+ 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	
+ 75.1	+ 9.7	+ 65.4	+ 4.7	– 0.9	– 30.9	– 7.3	– 4.0	– 3.3	– 23.6	–	– 0.4	2016	
+ 7.4	+ 0.8	+ 6.6	+ 0.3	– 0.1	– 4.2	– 1.1	– 0.4	– 0.8	– 3.1	–	– 0.0	2016 May	
+ 1.2	+ 0.7	+ 0.5	– 0.9	+ 0.1	– 5.6	– 1.6	– 0.2	– 1.4	– 4.0	–	– 0.2	2016 June	
+ 10.8	+ 0.8	+ 10.1	+ 1.1	– 0.1	+ 1.3	– 0.8	– 1.0	+ 0.2	+ 2.1	–	– 0.0	2016 July	
+ 12.0	+ 2.1	+ 9.9	+ 1.3	– 0.1	– 5.1	– 1.2	– 0.0	– 1.2	– 3.9	–	– 0.0	2016 Aug	
+ 4.6	+ 0.3	+ 4.2	+ 0.9	– 0.1	– 3.8	– 1.8	– 0.5	– 1.3	– 2.0	–	– 0.0	2016 Sep	
+ 6.8	+ 0.5	+ 6.2	+ 2.7	– 0.2	– 3.6	+ 0.7	– 0.9	+ 1.7	– 4.3	–	– 0.0	2016 Oct	
+ 11.9	+ 2.4	+ 9.4	+ 1.1	– 0.1	+ 0.7	+ 0.9	– 0.1	+ 1.0	– 0.1	–	+ 0.0	2016 Nov	
+ 3.4	– 0.5	+ 3.9	+ 0.5	+ 0.0	– 3.8	– 1.5	– 0.4	– 1.1	– 2.3	–	– 0.0	2016 Dec	
+ 4.8	+ 0.3	+ 4.5	+ 0.5	+ 1.3	– 5.5	– 0.5	+ 0.3	– 0.8	– 5.0	–	– 0.0	2017 Jan	
+ 5.1	– 1.3	+ 6.4	+ 1.1	– 0.1	– 5.6	– 0.2	+ 0.8	– 1.0	– 5.3	–	– 0.0	2017 Feb	
+ 5.5	+ 1.2	+ 4.3	+ 0.4	– 0.1	– 1.8	– 1.4	– 0.3	– 1.0	– 0.4	–	– 0.0	2017 Mar	
+ 9.3	+ 1.0	+ 8.3	+ 1.3	– 0.1	– 5.7	– 2.2	– 1.0	– 1.1	– 3.6	–	– 0.0	2017 Apr	
+ 8.5	+ 0.8	+ 7.7	– 0.7	– 0.0	+ 0.1	– 1.3	– 0.2	– 1.1	+ 1.4	–	– 0.0	2017 May	
+ 3.4	+ 1.2	+ 2.2	+ 5.4	– 0.3	– 6.7	– 1.3	– 0.3	– 1.0	– 5.4	–	– 0.1	2017 June	
+ 11.4	+ 1.0	+ 10.4	– 0.1	– 0.0	– 4.0	– 0.4	+ 0.1	– 0.5	– 3.6	–	+ 0.0	2017 July	
+ 11.5	+ 1.1	+ 10.4	+ 0.5	– 0.0	+ 1.0	– 1.1	– 0.3	– 0.8	+ 2.0	–	– 0.0	2017 Aug	
+ 6.6	+ 0.2	+ 6.4	– 0.8	– 0.1	– 2.0	– 1.2	– 0.4	– 0.8	– 0.8	–	– 0.0	2017 Sep	
+ 7.4	+ 1.3	+ 6.1	+ 0.6	– 0.1	– 1.2	– 0.3	+ 0.2	– 0.5	– 0.9	–	– 0.0	2017 Oct	

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) ¹														
Period	of which													
	Total	Housing loans			Lending to enterprises and self-employed persons									
		Mortgage loans, total	Total	Mortgage loans secured by residential real estate	Other 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
Lending, total														
2015	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 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
2016 Dec	2,512.0	1,259.7	1,276.6	1,016.5	260.1	1,347.5	354.1	125.1	104.7	62.2	128.2	50.6	57.0	139.7
2017 Mar	2,533.8	1,267.0	1,283.2	1,022.4	260.8	1,364.4	356.6	129.4	105.2	66.9	131.5	50.5	55.9	141.0
2017 Jun	2,559.7	1,280.1	1,297.8	1,033.7	264.1	1,377.8	360.9	131.5	108.3	65.7	130.8	51.0	54.7	141.5
2017 Sep	2,589.5	1,296.7	1,315.7	1,046.9	268.8	1,392.7	366.5	131.8	109.7	67.1	133.3	50.9	53.0	146.0
Short-term lending														
2015	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 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
2016 Dec	205.5	–	6.9	–	6.9	174.3	3.7	29.7	4.4	11.8	43.2	3.6	4.4	29.3
2017 Mar	211.8	–	6.9	–	6.9	181.3	3.7	33.6	4.5	13.6	44.8	3.8	4.2	28.6
2017 Jun	213.6	–	6.7	–	6.7	183.3	3.5	34.7	4.7	13.7	43.3	4.0	4.6	28.1
2017 Sep	213.5	–	6.5	–	6.5	183.5	3.6	33.8	4.0	14.0	45.2	3.9	4.3	28.1
Medium-term lending														
2015	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 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
2016 Dec	264.1	–	34.5	–	34.5	186.4	13.5	23.6	5.5	10.5	17.2	4.5	11.2	41.8
2017 Mar	264.4	–	34.0	–	34.0	186.8	13.4	23.3	4.9	11.4	17.9	4.4	10.8	43.0
2017 Jun	267.4	–	33.8	–	33.8	188.7	13.3	23.3	5.0	10.9	18.2	4.4	10.7	44.3
2017 Sep	269.6	–	33.9	–	33.9	190.2	13.6	23.1	5.1	11.2	18.2	4.4	10.4	45.6
Long-term lending														
2015	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 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
2016 Dec	2,042.4	1,259.7	1,235.1	1,016.5	218.6	986.8	336.9	71.8	94.8	39.9	67.7	42.5	41.4	68.6
2017 Mar	2,057.6	1,267.0	1,242.4	1,022.4	220.0	996.2	339.6	72.5	95.8	41.9	68.7	42.3	40.9	69.4
2017 Jun	2,078.7	1,280.1	1,257.3	1,033.7	223.6	1,005.8	344.0	73.5	98.6	41.1	69.3	42.6	39.4	69.2
2017 Sep	2,106.3	1,296.7	1,275.3	1,046.9	228.3	1,018.9	349.3	74.9	100.5	41.9	69.9	42.6	38.3	72.2
Lending, total														
Change during quarter *														
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
2016 Q4	+ 14.4	+ 9.1	+ 12.4	+ 8.4	+ 4.0	+ 6.0	+ 3.8	– 5.2	+ 1.4	– 1.0	+ 1.3	– 0.6	– 0.3	+ 3.2
2017 Q1	+ 21.7	+ 7.3	+ 6.6	+ 5.8	+ 0.7	+ 16.8	+ 2.6	+ 4.3	+ 0.5	+ 2.0	+ 3.3	– 0.1	– 1.1	+ 1.2
2017 Q2	+ 23.3	+ 12.7	+ 13.8	+ 11.2	+ 2.6	+ 11.1	+ 4.1	+ 2.1	+ 0.4	– 1.1	– 0.6	+ 0.7	– 1.3	+ 0.4
2017 Q3	+ 29.5	+ 15.3	+ 17.8	+ 12.6	+ 5.2	+ 14.5	+ 5.7	+ 0.1	+ 1.1	+ 1.2	+ 2.4	+ 0.4	– 1.7	+ 2.0
Short-term lending														
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
2016 Q4	– 7.6	–	– 0.7	–	– 0.7	– 6.6	– 0.5	– 4.6	– 0.2	– 1.2	+ 0.7	– 0.5	– 0.3	+ 0.9
2017 Q1	+ 6.3	–	– 0.0	–	– 0.0	+ 7.0	+ 0.0	+ 4.0	+ 0.1	+ 1.0	+ 1.6	+ 0.2	– 0.2	– 0.7
2017 Q2	+ 2.1	–	– 0.1	–	– 0.1	+ 2.3	– 0.1	+ 1.1	+ 0.2	+ 0.1	– 1.4	+ 0.3	+ 0.3	– 0.4
2017 Q3	– 0.1	–	– 0.2	–	– 0.2	+ 0.2	+ 0.0	– 0.9	– 0.7	+ 0.3	+ 1.8	– 0.2	– 0.3	+ 0.0
Medium-term lending														
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
2016 Q4	+ 2.4	–	– 0.3	–	– 0.3	+ 2.3	+ 0.0	– 0.6	– 0.3	– 0.0	+ 0.7	– 0.0	+ 0.2	+ 0.7
2017 Q1	+ 0.2	–	– 0.6	–	– 0.6	+ 0.4	– 0.1	– 0.4	– 0.5	+ 0.5	+ 0.7	– 0.1	– 0.4	+ 1.1
2017 Q2	+ 3.0	–	– 0.1	–	– 0.1	+ 1.9	– 0.0	–	+ 0.0	– 0.4	+ 0.2	– 0.1	– 0.1	+ 1.3
2017 Q3	+ 2.4	–	+ 0.2	–	+ 0.2	+ 1.5	+ 0.3	– 0.2	+ 0.2	+ 0.3	+ 0.0	+ 0.1	– 0.3	+ 1.3
Long-term lending														
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
2016 Q4	+ 19.6	+ 9.1	+ 13.3	+ 8.4	+ 4.9	+ 10.4	+ 4.3	+ 0.1	+ 1.8	+ 0.2	– 0.1	+ 0.0	– 0.2	+ 1.6
2017 Q1	+ 15.1	+ 7.3	+ 7.2	+ 5.8	+ 1.4	+ 9.4	+ 2.6	+ 0.7	+ 0.9	+ 0.5	+ 0.9	– 0.2	– 0.5	+ 0.8
2017 Q2	+ 18.2	+ 12.7	+ 14.0	+ 11.2	+ 2.9	+ 6.9	+ 4.2	+ 1.0	+ 0.2	– 0.8	+ 0.6	+ 0.5	– 1.5	– 0.5
2017 Q3	+ 27.2	+ 15.3	+ 17.8	+ 12.6	+ 5.2	+ 12.8	+ 5.4	+ 1.3	+ 1.7	+ 0.7	+ 0.5	+ 0.4	– 1.2	+ 0.7

* 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 ²	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 ³								
End of year or quarter *													Lending, total	
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	2015	
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	2016 Sep	
680.0	204.7	36.3	181.6	401.3	46.0	1,150.1	919.0	231.2	163.3	9.2	14.4	3.6	Dec	
684.0	206.2	38.8	179.7	403.8	46.3	1,154.8	922.9	231.9	165.5	9.2	14.6	3.7	2017 Mar	
694.3	209.8	39.6	183.6	408.2	48.5	1,167.3	933.2	234.2	168.0	8.9	14.5	3.8	June	
700.9	211.2	41.1	185.7	410.4	48.3	1,182.2	945.4	236.7	170.4	8.9	14.6	3.7	Sep	
													Short-term lending	
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	2015	
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	2016 Sep	
47.9	8.4	5.7	10.2	23.9	5.1	30.6	3.2	27.4	1.8	9.2	0.6	0.0	Dec	
48.2	8.4	6.6	9.1	24.5	5.7	29.8	3.2	26.7	1.8	9.2	0.6	0.0	2017 Mar	
50.1	9.0	6.5	9.7	24.5	5.7	29.7	3.1	26.6	1.8	8.9	0.5	0.0	June	
50.2	9.6	6.7	10.0	23.7	5.5	29.4	2.9	26.5	1.7	8.9	0.5	0.0	Sep	
													Medium-term lending	
68.4	10.1	7.3	19.3	32.4	3.5	74.2	21.9	52.3	47.4	-	0.6	0.0	2015	
69.7	10.7	7.3	18.9	33.0	3.7	77.1	21.4	55.7	50.3	-	0.5	0.0	2016 Sep	
72.1	11.1	8.2	19.3	32.9	3.6	77.3	21.1	56.2	51.0	-	0.5	0.0	Dec	
71.1	11.3	8.6	17.8	32.7	3.6	77.1	20.6	56.5	51.7	-	0.5	0.0	2017 Mar	
72.1	11.5	8.8	18.6	32.8	3.6	78.1	20.5	57.7	52.9	-	0.5	0.0	June	
72.2	11.9	9.1	18.3	32.9	3.6	78.9	20.2	58.6	54.0	-	0.5	0.0	Sep	
													Long-term lending	
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	2015	
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	2016 Sep	
560.0	185.2	22.4	152.2	344.5	37.3	1,042.3	894.7	147.6	110.5	-	13.3	3.5	Dec	
564.7	186.5	23.6	152.7	346.5	37.1	1,047.9	899.2	148.8	112.1	-	13.4	3.7	2017 Mar	
572.2	189.2	24.3	155.3	350.8	39.2	1,059.4	909.6	149.9	113.3	-	13.5	3.7	June	
578.5	189.8	25.3	157.4	353.8	39.3	1,073.8	922.3	151.6	114.8	-	13.6	3.7	Sep	
Change during quarter *													Lending, total	
+ 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	2016 Q3	
+ 7.1	+ 3.3	+ 1.5	+ 0.8	+ 0.2	- 0.8	+ 8.2	+ 8.5	- 0.4	+ 1.1	- 0.6	+ 0.2	+ 0.0	Q4	
+ 6.8	+ 1.4	+ 2.3	+ 0.8	+ 2.3	+ 0.3	+ 4.9	+ 4.1	+ 0.8	+ 2.3	- 0.0	+ 0.1	- 0.0	2017 Q1	
+ 10.5	+ 3.5	+ 0.8	+ 4.0	+ 3.4	+ 0.1	+ 12.2	+ 9.7	+ 2.6	+ 2.8	- 0.3	- 0.1	+ 0.1	Q2	
+ 8.9	+ 3.0	+ 1.7	+ 2.7	+ 2.2	- 0.1	+ 14.9	+ 12.1	+ 2.8	+ 2.5	- 0.0	+ 0.1	- 0.0	Q3	
													Short-term lending	
- 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	2016 Q3	
- 1.4	+ 0.1	- 0.3	- 0.5	- 0.8	- 0.6	- 1.1	- 0.2	- 0.9	+ 0.1	- 0.6	+ 0.0	+ 0.0	Q4	
+ 1.0	+ 0.0	+ 0.9	- 0.2	+ 0.7	+ 0.6	- 0.7	- 0.0	- 0.7	+ 0.0	- 0.0	+ 0.1	- 0.0	2017 Q1	
+ 2.2	+ 0.6	- 0.0	+ 0.8	-	- 0.0	- 0.1	- 0.1	- 0.0	- 0.0	- 0.3	- 0.1	+ 0.0	Q2	
+ 0.1	+ 0.6	+ 0.2	+ 0.3	- 0.9	- 0.2	- 0.3	- 0.2	- 0.1	- 0.1	- 0.0	- 0.0	- 0.0	Q3	
													Medium-term lending	
+ 0.4	+ 0.2	+ 0.1	- 0.1	+ 0.0	+ 0.0	+ 0.8	- 0.1	+ 0.9	+ 0.9	-	- 0.1	+ 0.0	2016 Q3	
+ 1.7	+ 0.2	+ 1.0	- 0.0	- 0.1	- 0.1	+ 0.2	- 0.3	+ 0.5	+ 0.6	-	- 0.0	- 0.0	Q4	
- 0.5	+ 0.2	+ 0.2	- 0.9	- 0.1	- 0.0	- 0.2	- 0.5	+ 0.3	+ 0.7	-	+ 0.0	- 0.0	2017 Q1	
+ 1.0	+ 0.2	+ 0.1	+ 0.8	+ 0.1	+ 0.0	+ 1.1	- 0.1	+ 1.2	+ 1.3	-	+ 0.0	+ 0.0	Q2	
+ 0.1	+ 0.3	+ 0.3	- 0.3	+ 0.1	- 0.0	+ 0.9	- 0.1	+ 1.0	+ 1.0	-	+ 0.0	+ 0.0	Q3	
													Long-term lending	
+ 7.4	+ 2.5	+ 0.4	+ 2.8	+ 2.5	+ 0.1	+ 13.3	+ 12.0	+ 1.3	+ 1.6	-	+ 0.2	+ 0.1	2016 Q3	
+ 6.8	+ 3.1	+ 0.8	+ 1.3	+ 1.1	- 0.1	+ 9.1	+ 9.0	+ 0.0	+ 0.4	-	+ 0.1	+ 0.0	Q4	
+ 6.2	+ 1.2	+ 1.1	+ 2.0	+ 1.8	- 0.2	+ 5.8	+ 4.6	+ 1.2	+ 1.6	-	- 0.0	- 0.0	2017 Q1	
+ 7.4	+ 2.7	+ 0.7	+ 2.4	+ 3.3	+ 0.0	+ 11.3	+ 9.8	+ 1.4	+ 1.6	-	+ 0.0	+ 0.0	Q2	
+ 8.6	+ 2.0	+ 1.2	+ 2.7	+ 3.0	+ 0.1	+ 14.3	+ 12.4	+ 1.9	+ 1.6	-	+ 0.2	- 0.0	Q3	

are not specially marked. ¹ Excluding fiduciary loans. ² Including sole proprietors.
³ 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							
Domestic non-banks, total													End of year or month*	
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		
2016	3,326.7	1,798.2	889.6	232.4	657.3	47.2	610.1	588.5	50.4	28.8	18.3	0.9		
2016 Nov	3,328.9	1,799.3	892.5	233.6	658.8	46.5	612.4	586.2	50.9	28.6	18.6	0.8		
2016 Dec	3,326.7	1,798.2	889.6	232.4	657.3	47.2	610.1	588.5	50.4	28.8	18.3	0.9		
2017 Jan	3,346.3	1,812.5	895.8	241.0	654.9	46.8	608.0	588.5	49.5	30.6	18.1	2.5		
2017 Feb	3,345.5	1,816.6	891.4	237.3	654.1	46.5	607.6	588.5	49.0	30.5	17.6	1.5		
2017 Mar	3,342.8	1,817.0	890.9	237.8	653.1	47.8	605.3	586.7	48.2	30.4	17.2	0.9		
2017 Apr	3,360.3	1,844.4	881.9	229.2	652.6	50.3	602.3	586.2	47.8	30.3	17.3	0.8		
2017 May	3,368.4	1,852.2	883.4	229.3	654.1	52.3	601.8	585.7	47.0	30.4	17.1	0.4		
2017 June	3,370.3	1,869.2	869.8	226.4	643.4	53.5	589.9	584.7	46.6	29.8	16.9	0.9		
2017 July	3,361.5	1,866.0	866.0	223.2	642.8	54.1	588.6	583.5	46.0	29.9	16.7	0.7		
2017 Aug	3,376.5	1,884.2	864.4	220.0	644.4	55.2	589.2	582.4	45.4	30.0	16.7	0.7		
2017 Sep	3,380.7	1,891.7	861.9	218.7	643.2	55.3	587.9	581.8	45.3	30.0	15.8	1.8		
2017 Oct	3,396.5	1,916.8	853.3	212.7	640.6	54.5	586.1	581.5	44.8	29.9	15.7	1.1		
													Changes*	
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		
2016	+ 104.7	+ 124.5	- 6.9	- 8.9	+ 2.0	+ 10.2	- 8.2	- 7.9	- 5.0	- 0.5	- 2.1	+ 0.3		
2016 Nov	+ 34.2	+ 31.3	+ 3.7	+ 3.7	+ 0.0	+ 0.7	- 0.7	- 0.4	- 0.4	-	- 0.2	- 0.3		
2016 Dec	- 2.2	- 1.2	- 2.8	- 0.8	- 2.0	+ 0.5	- 2.5	+ 2.3	+ 0.5	+ 0.2	- 0.2	+ 0.1		
2017 Jan	+ 19.6	+ 14.4	+ 6.2	+ 8.6	- 2.4	- 0.4	- 2.1	- 0.1	- 0.9	+ 1.0	- 0.2	+ 1.7		
2017 Feb	- 0.8	+ 4.1	- 4.5	- 3.7	- 0.8	- 0.4	- 0.4	+ 0.1	- 0.5	- 0.1	- 0.5	- 1.1		
2017 Mar	- 2.7	+ 0.4	- 0.5	+ 0.5	- 1.0	+ 1.3	- 2.3	- 1.9	- 0.7	- 0.1	- 0.4	- 0.6		
2017 Apr	+ 17.5	+ 27.3	- 9.0	- 8.5	- 0.5	+ 2.5	- 3.0	- 0.5	- 0.4	- 0.1	+ 0.0	- 0.1		
2017 May	+ 8.1	+ 7.8	+ 1.6	+ 0.1	+ 1.5	+ 2.0	- 0.5	- 0.5	- 0.8	+ 0.0	- 0.2	- 0.4		
2017 June	+ 10.9	+ 17.0	- 4.6	- 2.9	- 1.7	+ 1.2	- 2.9	- 1.0	- 0.4	- 0.6	- 0.1	+ 0.4		
2017 July	- 8.8	- 3.1	- 3.8	- 3.2	- 0.6	+ 0.7	- 1.3	- 1.2	- 0.7	+ 0.2	- 0.2	- 0.1		
2017 Aug	+ 15.0	+ 18.2	- 1.6	- 3.2	+ 1.6	+ 1.1	+ 0.6	- 1.1	- 0.6	+ 0.1	- 0.1	- 0.0		
2017 Sep	+ 4.3	+ 7.5	- 2.5	- 1.3	- 1.2	+ 0.1	- 1.3	- 0.6	- 0.1	- 0.1	- 0.9	+ 1.1		
2017 Oct	+ 15.7	+ 25.1	- 8.6	- 6.0	- 2.6	- 0.8	- 1.8	- 0.3	- 0.4	- 0.0	- 0.1	- 0.6		
Domestic government													End of year or month*	
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		
2016	199.8	57.9	133.5	79.5	54.0	16.6	37.4	3.9	4.5	27.1	2.5	-		
2016 Nov	207.0	61.7	137.0	82.6	54.4	16.2	38.3	3.9	4.4	27.2	2.6	-		
2016 Dec	199.8	57.9	133.5	79.5	54.0	16.6	37.4	3.9	4.5	27.1	2.5	-		
2017 Jan	202.2	55.1	138.7	84.7	54.1	16.4	37.7	3.8	4.5	26.7	2.5	-		
2017 Feb	205.7	61.4	136.0	81.8	54.2	15.8	38.4	3.7	4.6	26.8	2.5	-		
2017 Mar	204.0	58.9	136.8	81.4	55.4	16.5	38.9	3.7	4.7	26.7	2.5	-		
2017 Apr	203.1	59.1	135.6	77.9	57.7	18.7	39.0	3.6	4.7	26.7	2.5	-		
2017 May	209.7	61.1	140.3	80.4	59.9	20.4	39.5	3.7	4.6	26.4	2.5	-		
2017 June	209.9	58.1	143.5	81.8	61.8	21.8	40.0	3.7	4.7	25.8	2.4	-		
2017 July	207.2	55.6	143.2	80.4	62.8	22.4	40.4	3.7	4.7	25.8	2.4	-		
2017 Aug	213.6	61.2	144.2	79.9	64.3	23.4	40.8	3.7	4.5	25.9	2.5	-		
2017 Sep	210.5	58.8	143.4	77.5	66.0	24.1	41.9	3.7	4.5	25.9	2.3	-		
2017 Oct	207.6	60.0	139.5	72.6	66.9	24.4	42.6	3.7	4.5	25.8	2.3	0.0		
													Changes*	
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		
2016	+ 3.1	+ 0.3	+ 2.0	- 6.7	+ 8.7	+ 6.4	+ 2.3	+ 0.1	+ 0.7	- 0.8	- 0.2	- 0.5		
2016 Nov	+ 7.8	+ 2.9	+ 5.0	+ 3.7	+ 1.3	+ 1.3	- 0.0	- 0.1	+ 0.0	- 0.0	- 0.1	-		
2016 Dec	- 7.2	- 3.8	- 3.5	- 2.5	- 1.0	+ 0.2	- 1.1	+ 0.0	+ 0.1	- 0.1	- 0.1	-		
2017 Jan	+ 2.4	- 2.7	+ 5.2	+ 5.1	+ 0.1	- 0.2	+ 0.3	- 0.1	+ 0.1	- 0.4	- 0.0	-		
2017 Feb	+ 3.5	+ 6.3	- 2.8	- 2.9	+ 0.2	- 0.6	+ 0.8	- 0.1	+ 0.1	+ 0.0	+ 0.0	-		
2017 Mar	- 1.7	- 2.5	+ 0.8	- 0.3	+ 1.1	+ 0.6	+ 0.5	- 0.0	+ 0.1	- 0.1	- 0.0	-		
2017 Apr	- 1.0	+ 0.3	- 1.2	- 3.5	+ 2.4	+ 2.3	+ 0.1	- 0.1	+ 0.1	- 0.0	+ 0.0	-		
2017 May	+ 6.7	+ 1.9	+ 4.7	+ 2.5	+ 2.2	+ 1.7	+ 0.5	+ 0.1	- 0.1	- 0.1	+ 0.0	-		
2017 June	- 0.1	- 3.0	+ 2.9	+ 1.3	+ 1.5	+ 1.4	+ 0.2	- 0.0	+ 0.0	- 0.4	- 0.0	-		
2017 July	- 2.8	- 2.5	- 0.4	- 1.3	+ 0.9	+ 0.5	+ 0.4	-	+ 0.0	- 0.0	+ 0.0	-		
2017 Aug	+ 6.4	+ 5.6	+ 0.9	- 0.5	+ 1.4	+ 1.1	+ 0.3	+ 0.1	- 0.2	+ 0.1	+ 0.0	-		
2017 Sep	- 3.8	- 2.4	- 1.5	- 2.7	+ 1.2	+ 0.6	+ 0.6	+ 0.0	+ 0.0	+ 0.0	- 0.2	-		
2017 Oct	- 3.5	+ 1.1	- 4.6	- 5.0	+ 0.4	+ 0.2	+ 0.2	- 0.1	- 0.0	- 0.1	- 0.0	+ 0.0		

* 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 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							
Domestic enterprises and households													End of year or month*	
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	-		
2016	3,127.0	1,740.3	756.2	152.8	603.3	30.6	572.7	584.6	45.9	1.7	15.8	0.9		
2016 Nov	3,121.9	1,737.6	755.5	151.1	604.4	30.3	574.1	582.3	46.5	1.5	15.9	0.8		
2016 Dec	3,127.0	1,740.3	756.2	152.8	603.3	30.6	572.7	584.6	45.9	1.7	15.8	0.9		
2017 Jan	3,144.2	1,757.4	757.1	156.3	600.8	30.4	570.3	584.7	45.0	3.8	15.6	2.5		
2017 Feb	3,139.8	1,755.2	755.4	155.5	599.9	30.6	569.2	584.8	44.4	3.7	15.1	1.5		
2017 Mar	3,138.8	1,758.1	754.1	156.3	597.8	31.3	566.4	583.0	43.6	3.7	14.8	0.9		
2017 Apr	3,157.2	1,785.2	746.3	151.4	594.9	31.6	563.3	582.6	43.1	3.7	14.8	0.8		
2017 May	3,158.7	1,791.1	743.1	148.9	594.2	31.9	562.4	582.0	42.4	4.0	14.6	0.4		
2017 June	3,160.3	1,811.1	726.2	144.6	581.6	31.7	549.9	581.0	41.9	3.9	14.5	0.9		
2017 July	3,154.3	1,810.5	722.7	142.8	580.0	31.8	548.2	579.8	41.3	4.1	14.3	0.7		
2017 Aug	3,162.8	1,823.0	720.2	140.1	580.1	31.8	548.3	578.7	40.9	4.1	14.2	0.7		
2017 Sep	3,170.2	1,832.9	718.5	141.2	577.2	31.2	546.1	578.1	40.8	4.1	13.5	1.8		
2017 Oct	3,188.8	1,856.9	713.8	140.1	573.7	30.1	543.5	577.8	40.3	4.1	13.4	1.1		
													Changes*	
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		
2016	+ 101.7	+ 124.2	- 8.9	- 2.2	- 6.7	+ 3.8	- 10.5	- 8.0	- 5.7	+ 0.3	- 1.9	+ 0.9		
2016 Nov	+ 26.4	+ 28.4	- 1.3	- 0.0	- 1.2	- 0.5	- 0.7	- 0.3	- 0.5	+ 0.0	- 0.1	- 0.3		
2016 Dec	+ 5.0	+ 2.7	+ 0.7	+ 1.7	- 1.1	+ 0.3	- 1.4	+ 2.3	- 0.6	+ 0.3	- 0.1	+ 0.1		
2017 Jan	+ 17.2	+ 17.1	+ 1.0	+ 3.5	- 2.5	- 0.2	- 2.3	+ 0.1	- 1.0	+ 1.4	- 0.2	+ 1.7		
2017 Feb	- 4.3	- 2.2	- 1.7	- 0.8	- 0.9	+ 0.2	- 1.1	+ 0.2	- 0.6	- 0.1	- 0.5	- 1.1		
2017 Mar	- 1.0	+ 2.9	+ 1.3	+ 0.8	- 2.1	+ 0.7	- 2.8	- 1.9	- 0.8	+ 0.0	- 0.3	- 0.6		
2017 Apr	+ 18.4	+ 27.0	- 7.8	- 5.0	- 2.8	+ 0.2	- 3.1	- 0.4	- 0.5	- 0.0	+ 0.0	- 0.1		
2017 May	+ 1.4	+ 5.9	- 3.2	- 2.5	- 0.7	+ 0.3	- 0.9	- 0.6	- 0.7	+ 0.1	- 0.2	- 0.4		
2017 June	+ 11.0	+ 19.9	- 7.5	- 4.2	- 3.3	- 0.2	- 3.1	- 1.0	- 0.4	- 0.2	- 0.1	+ 0.4		
2017 July	- 5.9	- 0.7	- 3.4	- 1.9	- 1.5	+ 0.1	- 1.6	- 1.2	- 0.7	+ 0.2	- 0.2	- 0.1		
2017 Aug	+ 8.6	+ 12.6	- 2.5	- 2.7	+ 0.2	- 0.0	+ 0.2	- 1.1	- 0.3	+ 0.0	- 0.1	- 0.0		
2017 Sep	+ 8.1	+ 9.9	- 1.0	+ 1.4	- 2.4	- 0.6	- 1.9	- 0.6	- 0.2	- 0.0	- 0.7	+ 1.1		
2017 Oct	+ 19.2	+ 23.9	- 4.0	- 1.0	- 3.0	- 1.0	- 2.0	- 0.2	- 0.4	+ 0.0	- 0.1	- 0.7		
of which: Domestic enterprises													End of year or month*	
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	-		
2016	1,032.4	518.3	494.1	98.3	395.8	17.4	378.4	6.9	13.2	1.6	13.0	0.9		
2016 Nov	1,043.0	527.1	495.6	96.6	399.0	17.0	382.0	6.9	13.3	1.3	13.0	0.8		
2016 Dec	1,032.4	518.3	494.1	98.3	395.8	17.4	378.4	6.9	13.2	1.6	13.0	0.9		
2017 Jan	1,048.4	532.9	495.6	102.1	393.6	17.6	376.0	6.9	13.0	2.9	12.8	2.5		
2017 Feb	1,033.8	520.4	493.6	100.5	393.1	18.0	375.1	6.8	13.0	2.8	12.4	1.5		
2017 Mar	1,034.5	522.7	492.1	101.3	390.8	18.4	372.4	6.8	12.9	2.8	12.1	0.9		
2017 Apr	1,035.4	530.1	485.4	97.5	387.9	18.6	369.2	6.9	13.0	2.8	12.1	0.8		
2017 May	1,033.4	531.1	482.6	95.8	386.8	18.8	368.1	6.8	12.9	2.9	12.0	0.4		
2017 June	1,032.3	545.0	467.6	92.9	374.7	18.8	355.9	6.8	12.9	2.8	11.9	0.9		
2017 July	1,022.6	537.7	465.4	91.5	373.9	19.1	354.8	6.8	12.8	2.8	11.8	0.7		
2017 Aug	1,026.6	543.9	463.2	89.1	374.1	19.2	354.8	6.8	12.7	2.8	11.7	0.7		
2017 Sep	1,028.0	546.3	462.0	90.9	371.1	18.7	352.4	6.9	12.9	2.8	11.0	1.8		
2017 Oct	1,038.4	561.0	457.7	90.0	367.7	17.8	349.8	6.9	12.9	2.8	10.9	1.1		
													Changes*	
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		
2016	+ 4.6	+ 15.9	- 11.2	- 1.2	- 10.1	+ 3.2	- 13.2	- 0.2	+ 0.1	+ 0.2	- 0.9	+ 0.9		
2016 Nov	+ 3.0	+ 3.6	- 0.5	+ 0.0	- 0.5	- 0.3	- 0.2	- 0.2	+ 0.1	+ 0.0	- 0.1	- 0.3		
2016 Dec	- 10.6	- 8.8	- 1.5	+ 1.7	- 3.2	+ 0.4	- 3.6	- 0.1	- 0.1	+ 0.3	- 0.1	+ 0.1		
2017 Jan	+ 16.0	+ 14.6	+ 1.6	+ 3.8	- 2.2	+ 0.2	- 2.4	-	- 0.2	+ 1.4	- 0.1	+ 1.7		
2017 Feb	- 14.2	- 12.6	- 1.6	- 1.1	- 0.5	+ 0.4	- 0.9	- 0.0	- 0.0	- 0.1	- 0.5	- 1.1		
2017 Mar	+ 0.7	+ 2.4	- 1.5	+ 0.8	- 2.3	+ 0.4	- 2.7	- 0.1	- 0.2	- 0.0	- 0.3	- 0.6		
2017 Apr	+ 0.9	+ 7.3	- 6.6	- 3.8	- 2.8	+ 0.2	- 3.1	+ 0.1	+ 0.2	- 0.0	+ 0.1	- 0.1		
2017 May	+ 2.0	+ 1.0	- 2.7	- 1.7	- 1.0	+ 0.1	- 1.2	- 0.1	- 0.1	-	- 0.1	- 0.4		
2017 June	- 8.3	+ 14.0	- 5.7	- 2.9	- 2.8	- 0.0	- 2.8	+ 0.0	- 0.0	- 0.2	- 0.1	+ 0.4		
2017 July	- 9.7	- 7.4	- 2.2	- 1.5	- 0.7	+ 0.4	- 1.1	- 0.0	- 0.1	-	- 0.2	- 0.1		
2017 Aug	+ 4.2	+ 6.2	- 2.0	- 2.4	+ 0.3	+ 0.1	+ 0.2	+ 0.1	- 0.1	- 0.0	- 0.0	- 0.0		
2017 Sep	+ 2.1	+ 2.4	- 0.6	+ 2.0	- 2.6	- 0.5	- 2.1	+ 0.1	+ 0.2	- 0.0	- 0.7	+ 1.1		
2017 Oct	+ 11.0	+ 14.7	- 3.7	- 0.8	- 2.9	- 0.8	- 2.0	- 0.0	- 0.0	-	- 0.1	- 0.7		

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.

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

€ billion

Period	Sight deposits						Time deposits 1,2						
	Deposits of domestic households and non-profit institutions, total	Total	by creditor group				Total	Total	by creditor group				
			Domestic households						Domestic non-profit institutions	Domestic households			
			Total	Self-employed persons	Employees	Other individuals				Total	Self-employed persons	Employees	Other individuals
End of year or month*													
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	2,094.5	1,222.0	1,186.9	206.0	828.6	152.3	35.1	262.1	248.6	25.0	182.0	41.5	
2017 May	2,125.3	1,260.1	1,223.9	213.8	857.9	152.2	36.2	260.5	245.5	24.4	180.6	40.5	
June	2,128.0	1,266.1	1,230.1	211.0	866.2	152.9	36.0	258.6	244.3	24.1	180.2	39.9	
July	2,131.7	1,272.8	1,237.7	216.2	868.7	152.8	35.1	257.4	242.8	23.5	179.5	39.7	
Aug	2,136.3	1,279.2	1,243.6	219.1	871.3	153.3	35.5	257.0	242.2	23.8	181.5	36.9	
Sep	2,142.2	1,286.6	1,250.8	216.0	880.5	154.3	35.8	256.5	241.8	23.7	181.4	36.7	
Oct	2,150.4	1,295.9	1,260.1	221.4	884.8	153.9	35.7	256.1	241.6	23.6	181.4	36.6	
Changes*													
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	+ 97.1	+ 108.4	+ 105.3	+ 17.5	+ 78.7	+ 9.0	+ 3.0	+ 2.4	+ 1.8	+ 0.1	+ 1.9	- 0.3	
2017 May	+ 3.4	+ 4.9	+ 3.7	+ 2.2	+ 1.3	+ 0.1	+ 1.3	- 0.4	- 0.6	- 0.3	- 0.0	- 0.2	
June	+ 2.7	+ 6.0	+ 6.3	- 2.7	+ 8.0	+ 0.9	- 0.3	- 1.9	- 1.3	- 0.3	- 0.6	- 0.4	
July	+ 3.7	+ 6.7	+ 7.6	+ 5.1	+ 2.6	- 0.1	- 0.9	- 1.2	- 1.5	- 0.6	- 0.7	- 0.2	
Aug	+ 4.4	+ 6.4	+ 5.9	+ 2.9	+ 2.6	+ 0.5	+ 0.4	- 0.4	- 0.6	- 0.0	- 0.4	- 0.1	
Sep	+ 6.0	+ 7.5	+ 7.2	- 3.0	+ 9.2	+ 1.0	+ 0.3	- 0.5	- 0.3	- 0.1	- 0.0	- 0.3	
Oct	+ 8.3	+ 9.2	+ 9.4	+ 5.4	+ 4.3	- 0.3	- 0.1	- 0.3	- 0.3	- 0.2	- 0.1	- 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		
End of year or month*													
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	199.8	7.9	3.6	2.0	2.2	0.1	13.5	42.3	13.4	11.2	16.6	1.1	13.2
2017 May	209.7	7.8	3.7	1.6	2.4	0.1	13.5	48.3	11.2	18.8	17.1	1.1	12.7
June	209.9	7.9	3.5	2.0	2.3	0.1	13.2	50.7	11.5	20.6	17.4	1.1	12.6
July	207.2	7.9	3.8	1.6	2.4	0.1	13.2	49.9	11.3	19.6	17.8	1.2	12.6
Aug	213.6	7.9	3.9	1.4	2.6	0.1	13.2	49.9	11.1	19.8	17.9	1.2	12.7
Sep	210.5	8.0	4.1	1.3	2.6	0.1	13.2	49.8	11.7	19.2	17.7	1.2	12.7
Oct	207.6	7.9	4.0	1.3	2.4	0.1	13.2	46.9	11.8	16.1	17.7	1.2	12.6
Changes*													
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	+ 3.1	- 1.2	+ 0.5	- 1.4	- 0.3	+ 0.0	- 0.5	- 1.8	+ 0.1	- 1.8	- 0.3	+ 0.1	- 0.3
2017 May	+ 6.7	+ 0.2	+ 0.0	+ 0.2	+ 0.0	+ 0.0	- 0.1	- 0.9	- 1.1	- 0.3	+ 0.6	- 0.0	- 0.1
June	- 0.1	+ 0.1	- 0.2	+ 0.4	- 0.0	-	- 0.3	+ 2.4	+ 0.3	+ 1.8	+ 0.3	+ 0.0	- 0.1
July	- 2.8	- 0.0	+ 0.3	- 0.4	+ 0.1	- 0.0	- 0.0	- 0.9	- 0.3	- 1.0	+ 0.3	+ 0.1	- 0.0
Aug	+ 6.4	- 0.1	+ 0.0	- 0.3	+ 0.2	+ 0.0	+ 0.0	- 0.1	- 0.2	+ 0.2	- 0.1	- 0.0	+ 0.1
Sep	- 3.8	+ 0.0	+ 0.2	- 0.1	- 0.1	+ 0.0	- 0.0	- 0.2	+ 0.6	- 0.7	- 0.1	+ 0.0	- 0.0
Oct	- 3.5	- 0.2	- 0.1	+ 0.0	- 0.1	+ 0.0	+ 0.0	- 3.0	+ 0.1	- 3.0	- 0.0	+ 0.0	- 0.1

* 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 ³			Memo item				Period
by maturity					Total	Domestic households	Domestic non-profit institutions	Bank savings bonds ⁴	Fiduciary loans	Subordinated liabilities (excluding negotiable debt securities) ⁵	Liabilities arising from repos	
Domestic non-profit institutions	up to and including 1 year	more than 1 year ²		Total								
		Total	up to and including 2 years		more than 2 years							
End of year or month*												
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
13.5	54.5	207.5	13.3	194.3	577.7	569.3	8.4	32.7	0.1	2.9	–	2016
14.9	53.1	207.4	13.1	194.3	575.3	567.0	8.3	29.5	1.1	2.6	–	2017 May
14.3	51.7	206.9	12.9	194.0	574.2	566.0	8.2	29.0	1.1	2.5	–	June
14.6	51.3	206.1	12.7	193.4	573.1	565.0	8.1	28.5	1.3	2.5	–	July
14.8	51.0	206.0	12.5	193.5	571.8	563.8	8.0	28.2	1.3	2.5	–	Aug
14.7	50.3	206.2	12.5	193.7	571.2	563.1	8.0	27.9	1.3	2.5	–	Sep
14.6	50.1	206.0	12.3	193.7	571.0	563.0	8.0	27.5	1.3	2.5	–	Oct
Changes*												
– 1.8	– 12.8	+ 2.9	+ 1.4	+ 1.4	– 11.5	– 11.1	– 0.5	– 9.8	+ 0.0	– 1.2	–	2015
+ 0.6	– 1.0	+ 3.4	+ 0.7	+ 2.7	– 7.9	– 7.3	– 0.5	– 5.8	+ 0.1	– 0.9	–	2016
+ 0.1	– 0.8	+ 0.4	+ 0.1	+ 0.2	– 0.5	– 0.4	– 0.1	– 0.6	+ 0.1	– 0.1	–	2017 May
– 0.6	– 1.4	– 0.5	– 0.2	– 0.3	– 1.0	– 1.0	– 0.1	– 0.4	+ 0.0	– 0.0	–	June
+ 0.3	– 0.4	– 0.8	– 0.2	– 0.6	– 1.2	– 1.1	– 0.1	– 0.5	+ 0.2	– 0.0	–	July
+ 0.2	– 0.3	– 0.1	– 0.1	+ 0.0	– 1.2	– 1.2	– 0.0	– 0.3	+ 0.0	– 0.0	–	Aug
– 0.1	– 0.6	+ 0.2	– 0.0	+ 0.2	– 0.7	– 0.7	– 0.0	– 0.3	– 0.0	– 0.0	–	Sep
– 0.0	– 0.2	– 0.1	– 0.1	+ 0.0	– 0.2	– 0.2	– 0.0	– 0.4	+ 0.0	– 0.0	–	Oct

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

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

Local government and local government associations (including municipal special-purpose associations)						Social security funds						Period
Total	Sight deposits	Time deposits ³		Savings deposits and bank savings bonds ^{2,4}	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			
End of year or month*												
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
56.0	31.5	8.7	10.1	5.7	0.4	93.6	9.4	57.6	25.1	1.5	–	2016
57.0	31.6	8.4	11.3	5.8	0.2	96.5	14.5	51.5	29.1	1.4	–	2017 May
54.4	28.8	8.3	11.5	5.8	0.0	96.9	14.2	50.8	30.5	1.4	–	June
51.4	26.0	8.1	11.6	5.7	0.0	97.9	14.5	51.1	31.0	1.3	–	July
57.7	31.2	8.8	11.9	5.8	0.0	98.2	15.1	50.0	31.9	1.2	–	Aug
55.5	28.0	9.0	12.7	5.8	0.0	97.1	15.0	48.0	33.0	1.2	–	Sep
54.1	27.0	8.7	12.7	5.7	0.0	98.8	17.2	46.4	34.1	1.1	–	Oct
Changes*												
+ 4.1	+ 3.8	– 1.5	+ 1.1	+ 0.7	+ 0.0	+ 4.0	+ 1.2	+ 0.6	+ 1.9	+ 0.2	–	2015
+ 3.7	+ 2.4	– 0.8	+ 1.6	+ 0.5	– 0.0	+ 2.4	– 2.6	– 2.8	+ 7.7	+ 0.2	–	2016
+ 5.3	+ 4.1	+ 0.5	+ 0.5	+ 0.1	– 0.0	+ 2.0	– 1.1	+ 2.2	+ 1.1	– 0.1	–	2017 May
– 2.6	– 2.7	– 0.1	+ 0.3	– 0.0	– 0.0	+ 0.0	– 0.3	– 0.7	+ 1.0	+ 0.0	–	June
– 2.9	– 2.9	– 0.2	+ 0.1	– 0.0	–	+ 1.0	+ 0.3	+ 0.3	+ 0.4	– 0.1	–	July
+ 6.3	+ 5.2	+ 0.7	+ 0.3	+ 0.0	–	+ 0.3	+ 0.5	– 1.1	+ 1.0	– 0.2	–	Aug
– 2.5	– 3.2	+ 0.2	+ 0.4	+ 0.0	–	– 1.2	– 0.1	– 2.2	+ 1.0	+ 0.0	–	Sep
– 1.4	– 1.1	– 0.3	+ 0.0	– 0.1	–	+ 1.1	+ 2.2	– 1.6	+ 0.5	– 0.0	–	Oct

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

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

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

€ billion

Period	Savings deposits ¹								Memo item Interest credited on savings deposits	Bank savings bonds ³ , 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 ²	Total	of which Special savings facilities ²							
End of year or month*													
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	596.5	588.5	537.1	361.6	51.5	37.7	8.0	6.9	3.3	59.1	50.4	35.8	8.7
2017 June	592.4	584.7	536.2	347.5	48.5	34.9	7.7	6.7	0.1	55.1	46.6	33.3	8.5
July	591.2	583.5	538.3	353.8	45.2	34.1	7.7	6.7	0.1	54.3	46.0	32.8	8.3
Aug	590.0	582.4	538.0	352.6	44.4	33.2	7.6	6.7	0.1	53.6	45.4	32.5	8.2
Sep	589.4	581.8	538.0	350.7	43.9	32.6	7.6	6.6	0.1	53.5	45.3	32.5	8.2
Oct	589.0	581.5	538.5	349.8	43.0	31.9	7.5	6.6	0.1	53.2	44.8	32.3	8.3
Changes*													
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	- 8.8	- 7.9	+ 2.5	- 18.4	- 10.4	- 10.3	- 0.9	- 0.5	.	- 5.0	- 5.0	- 4.7	- 0.0
2017 June	- 1.1	- 1.0	- 0.7	- 1.6	- 0.4	- 0.4	- 0.1	- 0.1	.	- 0.5	- 0.4	- 0.3	- 0.1
July	- 1.3	- 1.2	- 0.4	+ 6.3	- 0.8	- 0.8	- 0.1	- 0.0	.	- 0.9	- 0.7	- 0.5	- 0.2
Aug	- 1.1	- 1.1	- 0.3	- 1.0	- 0.8	- 0.9	- 0.1	- 0.0	.	- 0.7	- 0.6	- 0.3	- 0.1
Sep	- 0.6	- 0.6	+ 0.0	- 2.0	- 0.6	- 0.6	- 0.1	- 0.0	.	- 0.1	- 0.1	- 0.0	+ 0.0
Oct	- 0.4	- 0.3	+ 0.5	- 0.8	- 0.8	- 0.8	- 0.1	- 0.0	.	- 0.3	- 0.4	- 0.2	+ 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. ¹ Excluding deposits under savings and loan contracts, which are classified

as time deposits. ² Savings deposits bearing interest at a rate which exceeds the minimum or basic rate of interest. ³ 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 ⁶		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 ¹	Zero coupon bonds ^{1,2}	Foreign currency bonds ^{3,4}	Certificates of deposit	up to and including 1 year		more than 1 year up to and including 2 years		more than 2 years				
						Total	of which without a nominal guarantee ⁵	Total	of which without a nominal guarantee ⁵					
End of year or month*														
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	1,098.1	177.0	28.1	407.1	90.9	111.3	4.1	37.4	5.8	949.4	0.6	0.2	33.8	0.5
2017 June	1,107.1	172.3	25.8	390.3	85.9	105.3	4.8	39.8	6.3	962.0	0.3	0.2	32.5	0.5
July	1,092.4	169.3	26.1	378.5	79.9	99.9	5.0	39.4	6.3	953.1	0.4	0.2	32.2	0.5
Aug	1,088.4	166.5	27.8	375.5	79.0	100.5	5.1	37.9	6.5	950.0	0.4	0.2	32.2	0.5
Sep	1,084.0	161.5	28.2	378.8	84.4	106.0	5.0	37.0	6.5	941.0	0.3	0.2	32.1	0.5
Oct	1,079.1	149.6	28.0	383.2	86.6	106.4	5.1	35.5	6.5	937.1	0.3	0.2	31.1	0.5
Changes*														
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	+ 22.1	- 12.0	- 2.1	+ 23.0	+ 2.2	+ 1.6	+ 2.0	+ 8.8	+ 0.1	+ 11.7	+ 0.3	- 0.1	+ 1.9	- 0.0
2017 June	- 0.2	- 0.6	- 0.9	- 0.9	+ 1.9	+ 2.0	+ 0.0	+ 0.8	- 0.2	- 3.1	- 0.2	- 0.0	- 0.4	-
July	- 14.7	- 3.0	+ 0.3	- 11.8	- 6.0	- 5.4	+ 0.2	- 0.4	+ 0.0	- 8.9	+ 0.1	+ 0.0	- 0.2	-
Aug	- 4.1	- 2.8	+ 1.7	- 2.9	- 0.9	+ 0.5	+ 0.1	- 1.5	+ 0.2	- 3.1	- 0.0	- 0.0	- 0.1	-
Sep	- 3.6	- 5.0	+ 0.4	+ 3.3	+ 5.5	+ 5.5	- 0.1	- 0.9	+ 0.0	- 8.2	- 0.1	+ 0.0	- 0.1	-
Oct	- 4.9	- 11.9	- 0.1	+ 4.4	+ 2.1	+ 0.5	+ 0.1	- 1.5	+ 0.0	- 3.9	- 0.0	+ 0.0	- 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. ¹ Including debt securities denominated in foreign currencies. ² Issue value when floated. ³ Including floating rate notes and zero

coupon bonds denominated in foreign currencies. ⁴ Bonds denominated in non-euro-area currencies. ⁵ Negotiable bearer debt securities respectively money market paper with a nominal guarantee of less than 100%. ⁶ 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 13	Lending to banks (MFIs)			Lending to non-banks (non-MFIs)				Deposits of banks (MFIs) 5		Deposits of non-banks (non-MFIs)		Bearer debt securities outstanding	Capital (including published reserves) 7	Memo item New contracts entered into in year or month 8
			Credit balances and loans (excluding building loans) 1	Building loans 2	Bank debt securities 3	Building loans			Securities (including Treasury bills and Treasury discount paper) 4	Deposits under savings and loan contracts	Sight and time deposits	Deposits under savings and loan contracts	Sight and time deposits 6			
						Loans under savings and loan contracts	Interim and bridging loans	Other building loans								
All building and loan associations																
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	20	218.8	43.6	0.0	16.6	13.8	98.6	18.1	23.4	2.5	21.4	163.8	5.5	2.0	10.2	89.2
2017 Aug	20	228.8	42.6	0.0	16.6	12.8	102.1	24.6	24.9	2.6	24.3	165.4	9.6	2.9	11.0	6.7
Sep	20	229.9	43.2	0.0	16.7	12.7	102.9	24.6	24.8	2.5	24.7	165.8	9.7	2.9	11.0	6.7
Oct	20	230.6	43.2	0.0	16.9	12.6	103.2	24.9	24.8	2.5	26.0	166.1	9.6	2.8	11.0	6.8
Private building and loan associations																
2017 Aug	12	160.4	27.1	–	7.5	9.6	79.1	21.7	11.3	1.7	21.8	107.8	9.4	2.9	7.4	4.3
Sep	12	161.4	27.7	–	7.4	9.5	79.8	21.7	11.3	1.7	22.2	108.1	9.4	2.9	7.4	4.2
Oct	12	161.9	27.7	–	7.6	9.5	79.9	22.0	11.3	1.7	23.5	108.3	9.3	2.8	7.4	4.3
Public building and loan associations																
2017 Aug	8	68.3	15.5	0.0	9.1	3.2	23.0	2.9	13.5	0.9	2.5	57.5	0.3	–	3.6	2.4
Sep	8	68.5	15.5	0.0	9.3	3.2	23.1	2.9	13.5	0.9	2.5	57.7	0.3	–	3.6	2.4
Oct	8	68.7	15.6	0.0	9.3	3.1	23.2	2.9	13.5	0.9	2.5	57.8	0.3	–	3.6	2.4

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 10		Memo item Housing bonuses received 12	
	Amounts paid into savings and loan accounts 9	Interest credited on deposits under savings and loan contracts	Repayments of deposits under cancelled savings and loan contracts	Total	of which Net allocations 11	Total	Allocations				Newly granted interim and bridging loans and other building loans	Total	of which Under allocated contracts	Total		of which Repayments during quarter
							Deposits under savings and loan contracts		Loans under savings and loan contracts 9							
							Total	of which Applied to settlement of interim and bridging loans	Total	of which Applied to settlement of interim and bridging loans						
All building and loan associations																
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	27.5	2.2	7.6	46.8	27.4	40.9	17.2	4.4	4.9	3.7	18.8	16.3	8.0	8.0	7.2	0.2
2017 Aug	2.1	0.0	0.6	4.0	2.3	3.5	1.5	0.4	0.4	0.3	1.6	17.3	8.0	0.7		0.0
Sep	2.2	0.0	0.6	3.1	1.7	3.0	1.1	0.3	0.3	0.2	1.6	17.0	7.8	0.6	1.5	0.0
Oct	2.0	0.0	0.6	3.5	2.1	3.2	1.2	0.4	0.4	0.3	1.6	16.9	7.8	0.6		0.0
Private building and loan associations																
2017 Aug	1.4	0.0	0.3	2.9	1.5	2.7	1.1	0.3	0.3	0.3	1.3	12.4	4.7	0.5		0.0
Sep	1.4	0.0	0.4	2.2	1.1	2.2	0.8	0.2	0.2	0.2	1.2	12.3	4.6	0.5	1.1	0.0
Oct	1.3	0.0	0.3	2.6	1.4	2.5	0.9	0.3	0.3	0.2	1.2	12.2	4.6	0.5		0.0
Public building and loan associations																
2017 Aug	0.7	0.0	0.3	1.1	0.7	0.7	0.3	0.1	0.1	0.0	0.3	4.9	3.3	0.1		0.0
Sep	0.7	0.0	0.2	1.0	0.7	0.8	0.3	0.1	0.1	0.1	0.3	4.7	3.2	0.1	0.4	0.0
Oct	0.7	0.0	0.3	0.9	0.6	0.7	0.3	0.1	0.1	0.1	0.3	4.7	3.2	0.1		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		Balance sheet total ⁷	Lending to banks (MFIs)					Lending to non-banks (non-MFIs)				Other assets ⁷		
	German banks (MFIs) with foreign branches and/or foreign subsidiaries	foreign branches and/or foreign subsidiaries ¹		Total	Credit balances and loans			Money market paper, securities ^{2,3}	Total	Loans			Money market paper, securities ²	Total	of which Derivative financial instruments in the trading portfolio
					Total	German banks	Foreign banks			Total	to German non-banks	to foreign non-banks			
Foreign branches															
End of year or month *															
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	51	191	1,873.3	584.2	570.5	205.0	365.5	13.8	580.5	489.8	14.5	475.3	90.8	708.5	485.3
2016 Dec	51	191	1,873.3	584.2	570.5	205.0	365.5	13.8	580.5	489.8	14.5	475.3	90.8	708.5	485.3
2017 Jan	51	192	1,877.2	603.8	590.4	215.5	375.0	13.4	586.0	492.4	14.1	478.4	93.6	687.4	461.8
Feb	51	193	1,920.0	617.9	604.9	227.3	377.5	13.1	600.4	505.3	13.8	491.4	95.1	701.7	467.6
Mar	51	193	1,918.1	616.1	602.7	228.2	374.5	13.4	609.0	513.0	14.1	499.0	95.9	693.0	452.2
Apr	51	192	1,931.5	631.8	618.6	224.4	394.2	13.3	597.8	503.9	13.7	490.3	93.9	701.8	460.3
May	51	192	1,894.2	629.7	616.8	215.1	401.8	12.8	565.5	478.3	13.2	465.1	87.2	699.0	459.0
June	51	192	1,828.5	589.4	576.9	212.5	364.4	12.5	565.1	475.9	13.3	462.5	89.2	674.1	434.1
July	51	192	1,787.7	564.8	552.6	199.5	353.1	12.1	546.9	463.7	13.3	450.4	83.1	676.1	438.4
Aug	51	191	1,752.1	537.7	526.1	171.1	355.0	11.6	545.3	461.7	13.2	448.5	83.7	669.1	432.2
Sep	51	190	1,746.8	549.5	537.6	176.8	360.8	11.9	568.1	481.8	13.5	468.3	86.3	629.2	408.3
Changes *															
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	± 0	- 7	+ 29.1	+ 49.3	+ 52.9	+ 43.7	+ 9.2	- 3.5	- 56.4	- 24.6	+ 0.5	- 25.1	- 31.8	+ 24.9	- 14.8
2017 Jan	-	+ 1	+ 5.1	+ 24.7	+ 25.0	+ 10.5	+ 14.5	- 0.2	+ 11.3	+ 7.9	- 0.4	+ 8.3	+ 3.5	- 20.0	- 20.0
Feb	-	+ 1	+ 41.4	+ 9.6	+ 10.1	+ 11.8	- 1.8	- 0.4	+ 8.8	+ 7.9	- 0.2	+ 8.1	+ 0.9	+ 13.0	+ 2.9
Mar	-	-	- 1.2	+ 0.7	+ 0.4	+ 0.9	- 0.5	+ 0.4	+ 11.7	+ 10.6	+ 0.3	+ 10.3	+ 1.2	- 7.9	- 13.7
Apr	-	- 1	+ 14.9	+ 22.0	+ 22.0	- 3.8	+ 25.8	+ 0.1	- 4.5	- 3.1	- 0.4	- 2.6	- 1.4	+ 10.3	+ 11.7
May	-	-	- 35.2	+ 6.6	+ 6.8	- 9.3	+ 16.1	- 0.2	- 22.3	- 16.9	- 0.5	- 16.4	- 5.4	- 0.8	+ 4.0
June	-	-	- 64.4	- 34.7	- 34.4	- 2.5	- 31.9	- 0.2	+ 5.1	+ 2.5	+ 0.1	+ 2.3	+ 2.6	- 23.6	- 21.9
July	-	-	- 39.1	- 16.8	- 16.7	- 13.0	- 3.7	- 0.1	- 9.6	- 4.5	- 0.0	- 4.5	- 5.1	+ 3.7	+ 8.9
Aug	-	- 1	- 34.9	- 24.2	- 23.7	- 28.4	+ 4.7	- 0.5	+ 2.3	+ 1.1	- 0.2	+ 1.3	+ 1.2	- 6.3	- 4.3
Sep	-	- 1	- 5.5	+ 10.6	+ 10.3	+ 5.6	+ 4.6	+ 0.3	+ 20.5	+ 18.6	+ 0.3	+ 18.3	+ 1.9	- 40.0	- 25.1
Foreign subsidiaries															
End of year or month *															
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	20	53	320.5	82.1	72.2	21.4	50.8	9.9	161.4	130.3	22.6	107.7	31.2	76.9	-
2016 Dec	20	53	320.5	82.1	72.2	21.4	50.8	9.9	161.4	130.3	22.6	107.7	31.2	76.9	-
2017 Jan	20	53	314.1	81.3	71.7	22.0	49.7	9.6	161.5	130.5	22.9	107.6	31.0	71.3	-
Feb	20	53	315.4	80.7	71.2	30.9	40.4	9.5	162.0	130.8	23.1	107.7	31.2	72.7	-
Mar	20	53	309.8	79.8	70.7	31.1	39.7	9.1	162.7	131.5	23.0	108.5	31.2	67.2	-
Apr	20	53	303.2	73.1	64.1	24.8	39.3	9.0	160.8	130.9	22.8	108.0	29.9	69.3	-
May	20	53	295.9	72.1	64.6	26.7	38.0	7.5	157.0	128.3	23.0	105.3	28.7	66.8	-
June	20	51	285.2	72.4	65.2	27.0	38.2	7.2	155.5	126.6	22.9	103.7	28.9	57.2	-
July	20	53	280.7	79.2	72.5	26.6	45.9	6.8	147.0	119.2	22.7	96.5	27.8	54.5	-
Aug	20	52	279.0	74.8	67.8	28.8	39.0	6.9	153.1	125.7	23.0	102.7	27.5	51.1	-
Sep	20	52	284.6	77.0	70.2	30.2	39.9	6.8	155.2	127.1	23.0	104.1	28.1	52.4	-
Changes *															
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	- 4	- 5	- 56.8	- 45.9	- 42.6	- 28.7	- 13.9	- 3.3	- 22.7	- 22.1	+ 0.4	- 22.4	- 0.6	+ 11.8	-
2017 Jan	-	-	- 4.8	+ 0.2	+ 0.4	+ 0.5	- 0.2	- 0.2	+ 0.6	+ 0.8	+ 0.3	+ 0.5	- 0.2	- 5.6	-
Feb	-	-	+ 0.0	- 1.4	- 1.1	+ 8.9	- 10.0	- 0.2	+ 0.0	- 0.2	+ 0.2	- 0.4	+ 0.2	+ 1.4	-
Mar	-	-	- 4.9	- 0.4	- 0.1	+ 0.2	- 0.3	- 0.3	+ 1.0	+ 1.0	- 0.1	+ 1.1	+ 0.0	- 5.5	-
Apr	-	-	- 4.9	- 5.7	- 5.7	- 6.3	+ 0.5	+ 0.1	- 1.3	- 0.0	- 0.2	+ 0.1	- 1.3	+ 2.1	-
May	-	-	- 4.9	+ 0.5	+ 1.7	+ 1.9	- 0.1	- 1.3	- 2.9	- 1.7	+ 0.2	- 1.9	- 1.2	- 2.5	-
June	-	- 2	- 9.4	+ 1.1	+ 1.2	+ 0.3	+ 0.9	- 0.1	- 0.9	- 1.2	- 0.1	- 1.1	+ 0.2	- 9.6	-
July	-	+ 2	- 2.0	+ 8.3	+ 8.5	- 0.4	+ 8.9	- 0.2	- 7.6	- 6.5	- 0.2	- 6.3	- 1.1	- 2.7	-
Aug	-	- 1	- 0.9	- 4.0	- 4.2	+ 2.3	- 6.4	+ 0.2	+ 6.4	+ 6.7	+ 0.2	+ 6.5	- 0.3	- 3.4	-
Sep	-	-	+ 5.2	+ 2.0	+ 2.2	+ 1.4	+ 0.8	- 0.2	+ 1.9	+ 1.3	+ 0.1	+ 1.2	+ 0.6	+ 1.4	-

* 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. ¹ Several branches in a given

IV Banks

Deposits										Money market paper and debt securities outstanding ⁵	Working capital and own funds	Other liabilities ^{6,7}		Period
Total	of banks (MFIs)			of non-banks (non-MFIs)				Total	of which Derivative financial instruments in the trading portfolio					
	Total	German banks	Foreign banks	Total	German non-banks ⁴									
					Total	Short-term	Medium and long-term					Foreign non-banks		
End of year or month *													Foreign branches	
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	
1,136.5	800.9	424.9	376.0	335.6	15.4	11.8	3.6	320.2	100.6	51.2	585.1	481.0	2016	
1,136.5	800.9	424.9	376.0	335.6	15.4	11.8	3.6	320.2	100.6	51.2	585.1	481.0	2016 Dec	
1,161.3	804.3	417.6	386.7	357.0	15.2	11.7	3.5	341.8	111.2	50.9	553.9	456.6	2017 Jan	
1,190.7	816.8	423.2	393.6	373.9	16.5	13.2	3.4	357.4	114.0	51.2	564.0	462.0	Feb	
1,197.9	825.3	436.0	389.3	372.6	15.2	11.8	3.4	357.4	106.9	51.6	561.7	448.3	Mar	
1,210.4	846.5	422.0	424.5	363.9	15.3	12.0	3.3	348.7	104.7	51.3	565.0	455.4	Apr	
1,178.6	830.8	406.4	424.4	347.8	15.5	12.3	3.2	332.2	100.5	50.7	564.3	458.6	May	
1,151.2	801.4	424.5	377.0	349.7	14.9	11.6	3.3	334.9	93.4	50.3	533.6	429.5	June	
1,105.0	780.2	399.6	380.6	324.7	14.4	11.6	2.8	310.4	97.0	49.8	536.0	434.9	July	
1,075.3	739.6	372.0	367.5	335.7	13.8	11.1	2.8	321.8	98.3	49.7	528.9	431.3	Aug	
1,094.2	760.6	385.6	375.0	333.6	14.3	11.4	2.9	319.3	95.6	49.2	507.7	401.6	Sep	
Changes *													Foreign subsidiaries	
- 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	
+ 66.8	+ 76.8	+ 65.6	+ 11.2	- 10.1	- 5.7	- 4.4	- 1.2	- 4.4	- 29.6	+ 1.2	- 18.1	- 17.3	2016	
+ 30.0	+ 8.5	- 7.3	+ 15.8	+ 21.5	- 0.2	- 0.1	- 0.1	+ 21.7	+ 11.7	- 0.3	- 31.2	- 20.5	2017 Jan	
+ 24.8	+ 8.0	+ 5.6	+ 2.4	+ 16.8	+ 1.3	+ 1.5	- 0.1	+ 15.4	+ 1.6	+ 0.3	+ 10.2	+ 2.3	Feb	
+ 9.9	+ 11.1	+ 12.8	- 1.7	- 1.2	- 1.3	- 1.3	- 0.0	+ 0.1	- 6.4	+ 0.4	- 2.4	- 11.9	Mar	
+ 19.0	+ 27.4	- 14.1	+ 41.5	- 8.5	+ 0.1	+ 0.2	- 0.1	- 8.6	- 0.7	- 0.3	+ 3.4	+ 11.1	Apr	
- 22.7	- 6.8	- 15.5	+ 8.7	- 15.9	+ 0.3	+ 0.3	- 0.1	- 16.2	- 2.1	- 0.6	- 0.8	+ 8.7	May	
- 21.7	- 23.8	+ 18.1	- 41.8	+ 2.1	- 0.7	- 0.7	+ 0.0	+ 2.8	- 5.9	- 0.4	- 30.6	- 25.8	June	
- 38.5	- 13.8	- 24.8	+ 11.1	- 24.8	- 0.5	- 0.0	- 0.5	- 24.3	+ 5.3	- 0.5	+ 2.3	+ 10.2	July	
- 26.8	- 37.9	- 27.6	- 10.2	+ 11.0	- 0.5	- 0.5	- 0.0	+ 11.6	+ 2.0	- 0.1	- 7.1	- 1.7	Aug	
+ 18.1	+ 20.2	+ 13.6	+ 6.6	- 2.1	+ 0.5	+ 0.3	+ 0.2	- 2.6	- 2.8	- 0.5	- 21.2	- 30.7	Sep	
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	
247.0	134.3	71.8	62.5	112.7	12.2	6.7	5.5	100.5	13.6	23.8	36.0	-	2016	
247.0	134.3	71.8	62.5	112.7	12.2	6.7	5.5	100.5	13.6	23.8	36.0	-	2016 Dec	
240.0	131.4	70.5	61.0	108.5	12.2	6.8	5.4	96.3	13.5	24.0	36.7	-	2017 Jan	
239.3	129.5	70.4	59.1	109.8	13.0	7.6	5.4	96.8	13.9	24.1	38.2	-	Feb	
237.1	126.8	68.1	58.6	110.3	13.8	8.4	5.4	96.5	13.8	23.7	35.2	-	Mar	
229.6	116.9	57.7	59.1	112.7	12.9	7.2	5.7	99.8	13.8	23.6	36.2	-	Apr	
224.9	114.1	55.8	58.3	110.8	13.4	7.7	5.7	97.4	13.7	23.5	33.7	-	May	
216.3	105.1	53.8	51.3	111.2	13.4	7.6	5.8	97.8	13.1	23.0	32.8	-	June	
213.2	104.2	55.0	49.2	109.0	13.9	8.0	5.9	95.1	13.0	23.0	31.5	-	July	
211.8	103.9	56.6	47.3	108.0	13.4	7.7	5.7	94.6	13.0	23.1	31.1	-	Aug	
217.0	105.9	58.1	47.9	111.1	12.6	7.1	5.6	98.5	12.9	23.2	31.5	-	Sep	
Changes *													Foreign branches	
- 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	
- 46.2	- 33.5	- 27.8	- 5.7	- 12.7	- 0.9	- 3.8	+ 2.9	- 11.9	- 0.8	- 2.5	- 7.3	-	2016	
- 5.8	- 2.1	- 1.3	- 0.8	- 3.7	+ 0.0	+ 0.1	- 0.1	- 3.8	- 0.1	+ 0.1	+ 1.0	-	2017 Jan	
- 1.6	- 2.5	- 0.1	- 2.4	+ 0.9	+ 0.8	+ 0.8	- 0.0	+ 0.1	+ 0.4	+ 0.1	+ 1.1	-	Feb	
- 1.7	- 2.4	- 2.2	- 0.2	+ 0.7	+ 0.7	+ 0.8	- 0.0	- 0.0	- 0.1	- 0.4	- 2.7	-	Mar	
- 6.3	- 9.1	- 10.4	+ 1.3	+ 2.8	- 0.9	- 1.2	+ 0.3	+ 3.7	+ 0.0	- 0.1	+ 1.5	-	Apr	
- 3.0	- 1.8	- 2.0	+ 0.2	- 1.2	+ 0.5	+ 0.5	+ 0.0	- 1.6	- 0.1	- 0.1	- 1.8	-	May	
- 7.7	- 8.4	- 2.0	- 6.4	+ 0.7	- 0.0	- 0.1	+ 0.1	+ 0.7	- 0.6	- 0.5	- 0.6	-	June	
- 1.7	- 0.2	+ 1.1	- 1.3	- 1.5	+ 0.5	+ 0.4	+ 0.1	- 2.0	- 0.1	+ 0.0	- 0.3	-	July	
- 0.8	+ 0.0	+ 1.6	- 1.6	- 0.8	- 0.5	- 0.3	- 0.2	- 0.3	- 0.0	+ 0.0	- 0.1	-	Aug	
+ 4.9	+ 1.9	+ 1.5	+ 0.4	+ 3.0	- 0.7	- 0.6	- 0.1	+ 3.7	- 0.1	+ 0.2	+ 0.3	-	Sep	

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 ¹	Reserve base ²	Required reserves before deduction of lump-sum allowance ³	Required reserves after deduction of lump-sum allowance ⁴	Current accounts ⁵	Excess reserves ⁶	Deficiencies ⁷
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	11,918.5	119.2	118.8	919.0	800.3	0.0
2017 Sep	12,270.1	122.7	122.3	1,253.3	1,131.0	0.0
Oct	.	.	.	.	.	.
Nov ^P	12,326.7	123.3	122.9	...	...	...

2 Reserve maintenance in Germany

€ million

Maintenance period beginning in ¹	Reserve base ²	German share of euro-area reserve base in per cent	Required reserves before deduction of lump-sum allowance ³	Required reserves after deduction of lump-sum allowance ⁴	Current accounts ⁵	Excess reserves ⁶	Deficiencies ⁷
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	3,371,095	28.3	33,711	33,546	301,989	268,443	0
2017 Sep	3,433,275	28.0	34,333	34,173	422,740	388,567	0
Oct	.	.	.	.	.	.	.
Nov ^P	3,457,522	28.0	34,575	34,417	...	...	...

(a) Required reserves of individual categories of banks

€ million

Maintenance period beginning in ¹	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 ³	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	6,384	5,390	2,812	10,905	5,960	236	1,859
2017 Sep	6,446	5,640	3,180	11,009	6,136	148	1,613
Oct	.	.	.	.	.	.	.
Nov	6,227	5,666	3,352	11,088	6,210	138	1,737

(b) Reserve base by subcategories of liabilities

€ million

Maintenance period beginning in ¹	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	2,203,100	1,595	447,524	585,099	133,776
2017 Sep	2,298,713	1,467	431,190	583,225	118,682
Oct	.	.	.	.	.
Nov	2,324,352	1,102	428,683	581,651	121,741

¹ 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. ² 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)). ³ 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%. ⁴ Article 5 (2) of the Regulation of the European Central Bank on the application of minimum reserves. ⁵ Average credit balances of credit institutions at national central banks. ⁶ Average credit balances less required reserves after deduction of the lump-sum allowance. ⁷ 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					

1 Pursuant to section 247 of the Civil Code.

2 Base rates

% per annum

Applicable from	Base rate as per Civil Code 1	Applicable from	Base rate as per Civil Code 1
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 Jan 1	–0.88
2007 Jan 1	2.70	2016 July 1	–0.88
July 1	3.19		
2008 Jan 1	3.32		
July 1	3.19		

3 Eurosystem monetary policy operations allotted through tenders *

Date of settlement	Bid amount € million	Allotment amount	Fixed rate tenders		Variable rate tenders		Running for ... days
			Fixed rate	Minimum bid rate	Marginal rate 1	Weighted average rate	
			% per annum				
Main refinancing operations							
2017 Nov 1	2,995	2,995	0.00	–	–	–	7
Nov 8	2,703	2,703	0.00	–	–	–	7
Nov 15	2,844	2,844	0.00	–	–	–	7
Nov 22	2,976	2,976	0.00	–	–	–	7
Nov 29	4,994	4,994	0.00	–	–	–	7
Dec 6	2,256	2,256	0.00	–	–	–	7
Dec 13	1,919	1,919	0.00	–	–	–	7
Long-term refinancing operations							
2017 Sep 28	2,531	2,531	2 ...	–	–	–	84
Oct 26	2,498	2,498	2 ...	–	–	–	98
Nov 30	2,883	2,883	2 ...	–	–	–	91

* Source: ECB. 1 Lowest or highest interest rate at which funds were allotted or collected. 2 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 1	EURIBOR 2					
		One-week funds	One-month funds	Three-month funds	Six-month funds	Nine-month funds	Twelve-month funds
2017 May	–0.36	–0.38	–0.37	–0.33	–0.25	–0.18	–0.13
June	–0.36	–0.38	–0.37	–0.33	–0.27	–0.20	–0.15
July	–0.36	–0.38	–0.37	–0.33	–0.27	–0.21	–0.15
Aug	–0.36	–0.38	–0.37	–0.33	–0.27	–0.21	–0.16
Sep	–0.36	–0.38	–0.37	–0.33	–0.27	–0.22	–0.17
Oct	–0.36	–0.38	–0.37	–0.33	–0.27	–0.22	–0.18
Nov	–0.35	–0.38	–0.37	–0.33	–0.27	–0.22	–0.19

* 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. 1 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. 2 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 °

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 1 % pa	Volume 2 € million	Effective interest rate 1 % pa	Volume 2 € million	Effective interest rate 1 % pa	Volume 2 € million	Effective interest rate 1 % pa	Volume 2 € million
2016 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	82,888	1.56	19,037
Dec	0.38	74,227	1.48	220,035	0.10	81,192	1.54	19,097
2017 Jan	0.37	73,435	1.46	219,585	0.10	82,672	1.53	19,293
Feb	0.35	73,708	1.45	219,045	0.10	83,514	1.52	19,144
Mar	0.34	73,460	1.44	218,575	0.09	84,520	1.49	19,649
Apr	0.33	72,221	1.42	218,122	0.09	82,082	1.44	20,074
May	0.33	71,503	1.41	217,847	0.08	82,646	1.41	20,471
June	0.33	69,952	1.40	217,154	0.08	80,018	1.35	20,770
July	0.32	69,365	1.39	216,115	0.08	78,396	1.31	21,529
Aug	0.31	69,014	1.37	215,909	0.09	78,517	1.30	22,146
Sep	0.31	67,904	1.36	215,817	0.08	77,405	1.25	22,356
Oct	0.30	67,398	1.35	215,503	0.08	76,089	1.18	23,106

End of month	Housing loans to households 3						Loans for consumption and other purposes to households 4, 5					
	with a maturity of											
	up to 1 year 6		over 1 year and up to 5 years		over 5 years		up to 1 year 6		over 1 year and up to 5 years		over 5 years	
	Effective interest rate 1 % pa	Volume 2 € million	Effective interest rate 1 % pa	Volume 2 € million	Effective interest rate 1 % pa	Volume 2 € million	Effective interest rate 1 % pa	Volume 2 € million	Effective interest rate 1 % pa	Volume 2 € million	Effective interest rate 1 % pa	Volume 2 € million
2016 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
Dec	2.42	4,380	2.11	26,777	2.99	1,090,316	7.18	51,459	4.07	83,809	4.16	310,013
2017 Jan	2.43	4,463	2.10	26,399	2.96	1,090,663	7.21	51,134	4.04	83,791	4.13	310,789
Feb	2.41	4,314	2.09	26,272	2.94	1,093,062	7.24	50,975	4.02	83,726	4.11	311,206
Mar	2.47	4,342	2.07	26,205	2.91	1,097,148	7.32	51,515	4.01	84,063	4.09	311,220
Apr	2.45	4,296	2.05	26,173	2.88	1,102,315	7.10	50,383	3.99	84,268	4.08	310,696
May	2.44	4,356	2.04	26,187	2.85	1,106,601	7.13	50,320	3.96	84,963	4.06	312,176
June	2.44	4,253	2.03	26,205	2.83	1,113,177	7.17	51,412	3.95	85,256	4.04	311,592
July	2.46	4,128	2.01	26,016	2.80	1,118,677	7.15	50,266	3.93	85,648	4.03	312,427
Aug	2.45	4,083	2.00	25,936	2.77	1,123,854	7.17	49,529	3.92	86,101	4.01	313,807
Sep	2.42	3,979	2.00	25,995	2.75	1,129,577	7.12	50,538	3.91	86,330	4.00	313,232
Oct	2.38	4,257	1.99	25,924	2.73	1,133,366	7.14	49,847	3.89	86,778	3.98	313,552

End of month	Loans to non-financial corporations with a maturity of					
	up to 1 year 6		over 1 year and up to 5 years		over 5 years	
	Effective interest rate 1 % pa	Volume 2 € million	Effective interest rate 1 % pa	Volume 2 € million	Effective interest rate 1 % pa	Volume 2 € million
2016 Oct	2.53	132,273	2.04	134,868	2.50	615,105
Nov	2.54	131,980	2.02	136,298	2.48	620,104
Dec	2.57	125,998	2.01	136,477	2.45	623,831
2017 Jan	2.52	130,773	2.00	136,921	2.42	628,271
Feb	2.55	132,264	1.99	136,362	2.41	631,862
Mar	2.54	132,741	1.98	136,980	2.39	632,484
Apr	2.51	133,262	1.98	137,137	2.37	637,174
May	2.45	133,371	1.97	137,779	2.35	643,570
June	2.51	134,741	1.95	138,252	2.33	639,615
July	2.45	134,305	1.95	138,763	2.31	644,816
Aug	2.44	133,164	1.94	139,374	2.30	648,618
Sep	2.45	137,868	1.93	138,872	2.28	649,416
Oct	2.39	139,480	1.92	139,644	2.26	652,077

* 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 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 nonfinancial 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 / Money and capital markets / Interest rates and yields / Interest rates on deposits and loans). ° The statistics on outstanding amounts are collected at the end of the month. 1 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. 2 Data based on monthly balance sheet statistics. 3 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. 4 Loans for consumption are defined as loans granted for the purpose of personal use in the consumption of goods and services. 5 For the purpose of these statistics, other loans are loans granted for other purposes such as business, debt consolidation, education etc. 6 Including overdrafts (see also footnotes 12 to 14 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 ⁸				
		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 ¹ % pa	Volume ² € 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 ² € million	Effective interest rate ¹ % pa	Volume ² € million
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
Nov	0.07	1,208,967	0.30	5,075	0.58	523	0.77	907	0.24	533,406	0.32	51,649
Dec	0.07	1,220,413	0.23	5,583	0.51	621	0.68	967	0.24	536,031	0.32	51,299
2017 Jan	0.07	1,222,852	0.28	6,002	0.59	715	0.61	999	0.23	536,834	0.31	50,563
Feb	0.06	1,233,193	0.31	4,688	0.47	617	0.70	773	0.22	537,566	0.31	49,971
Mar	0.05	1,233,631	0.26	4,918	0.51	676	0.69	820	0.21	536,136	0.31	49,493
Apr	0.05	1,253,497	0.19	4,926	0.37	729	0.63	741	0.21	536,260	0.31	49,013
May	0.05	1,258,521	0.20	4,724	0.43	719	0.87	726	0.21	536,046	0.30	48,646
June	0.04	1,264,791	0.22	4,078	0.27	947	0.73	633	0.21	535,416	0.30	48,253
July	0.04	1,271,823	0.17	5,276	0.31	653	0.70	617	0.20	537,553	0.31	44,902
Aug	0.03	1,278,289	0.14	5,198	0.41	492	0.65	716	0.19	537,173	0.30	44,119
Sep	0.03	1,285,601	0.15	3,992	0.31	598	0.65	636	0.19	537,108	0.30	43,509
Oct	0.03	1,294,797	0.18	3,750	0.28	800	0.65	696	0.19	537,699	0.28	42,722

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 ¹ % pa	Volume ² € 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
2016 Oct	0.00	399,216	- 0.03	10,736	0.14	577	0.36	521
Nov	- 0.00	400,064	- 0.11	13,017	0.24	951	0.39	1,490
Dec	- 0.00	401,493	- 0.12	15,159	0.22	1,205	0.36	538
2017 Jan	- 0.00	400,475	- 0.05	11,356	0.22	754	0.40	314
Feb	- 0.00	397,363	- 0.07	10,802	0.13	631	0.54	336
Mar	- 0.01	395,640	- 0.09	12,614	0.19	450	0.79	309
Apr	- 0.01	397,203	- 0.07	9,275	0.08	899	0.33	1,039
May	- 0.01	401,652	- 0.05	10,212	0.13	912	0.30	837
June	- 0.02	415,078	- 0.14	14,661	0.07	525	0.24	586
July	- 0.01	402,113	- 0.09	11,516	0.19	859	0.26	1,382
Aug	- 0.02	409,698	- 0.04	9,710	0.21	185	0.52	666
Sep	- 0.02	414,461	- 0.08	10,040	0.09	351	0.37	704
Oct	- 0.02	425,806	- 0.10	9,134	0.04	412	0.26	1,456

Loans to households												
Loans for consumption with an initial rate fixation of ⁴												
Reporting period	Total (including charges)		<i>of which</i> renegotiated loans ⁹				floating rate or up to 1 year ⁹		over 1 year and up to 5 years		over 5 years	
	Annual percentage rate of charge ¹⁰ % 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	
2016 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	7,595	7.12	1,674	6.05	316	4.51	3,312	6.91	3,967	
Dec	5.69	5.67	6,552	7.06	1,399	6.09	320	4.40	3,026	6.83	3,206	
2017 Jan	6.06	6.04	8,603	7.16	1,886	6.15	330	4.59	3,242	6.97	5,031	
Feb	5.82	5.80	8,187	6.92	1,619	6.15	273	4.37	3,094	6.69	4,820	
Mar	5.62	5.60	9,849	6.88	1,761	6.12	341	4.15	4,041	6.64	5,467	
Apr	5.66	5.65	8,222	6.91	1,544	6.17	287	4.32	3,415	6.61	4,520	
May	5.89	5.87	9,372	7.22	1,814	6.41	337	4.49	3,846	6.87	5,189	
June	5.90	5.88	8,683	7.24	1,685	6.28	308	4.49	3,574	6.89	4,801	
July	5.99	5.97	8,940	7.32	1,872	6.22	299	4.57	3,561	6.95	5,080	
Aug	5.88	5.86	8,827	7.20	1,724	6.51	312	4.54	3,703	6.84	4,812	
Sep	5.67	5.65	8,212	7.11	1,465	6.09	305	4.31	3,579	6.72	4,328	
Oct	5.67	5.65	8,338	7.07	1,495	6.06	302	4.30	3,758	6.81	4,278	

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. ⁷ Estimated. The volume of new business is extrapolated to form the underlying total using a grossing-up procedure. ⁸ Including non-financial corporations' deposits; including fidelity and growth premia. ⁹ Excluding overdrafts. ¹⁰ 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 +

Loans to households (cont'd)										
Loans for other purposes to households with an initial rate fixation of 5										
Reporting period	Total		of which renegotiated loans 9		floating rate or up to 1 year 9		over 1 year and up to 5 years		over 5 years	
	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
Loans to households										
2016 Oct	1.89	6,445	1.72	2,522	1.70	3,408	2.63	928	1.87	2,109
Nov	1.92	6,305	1.89	2,070	1.79	3,051	2.71	837	1.81	2,417
Dec	1.93	7,774	1.89	2,343	1.86	3,262	2.61	1,085	1.79	3,427
2017 Jan	1.94	6,698	1.84	2,651	1.78	3,024	2.52	915	1.92	2,759
Feb	1.94	5,484	1.86	1,916	1.69	2,540	2.56	803	1.99	2,141
Mar	2.01	7,097	1.88	2,130	1.80	3,237	2.72	1,032	1.99	2,828
Apr	2.00	6,030	1.86	2,229	1.75	2,826	2.67	853	2.05	2,351
May	2.02	5,890	1.81	1,930	1.83	2,535	2.61	941	1.99	2,414
June	2.06	5,933	1.89	1,852	1.95	2,722	2.73	859	1.93	2,352
July	1.96	6,388	1.75	2,282	1.76	2,873	2.48	964	1.99	2,551
Aug	1.99	5,667	1.74	1,625	1.81	2,171	2.66	814	1.92	2,682
Sep	1.99	5,275	1.80	1,455	1.79	2,341	2.60	804	1.99	2,130
Oct	2.08	5,682	1.91	1,915	1.91	2,646	2.64	854	2.07	2,182
of which: loans to sole proprietors										
2016 Oct	2.00	4,227	.	.	1.86	2,096	2.78	728	1.82	1,403
Nov	2.03	4,139	.	.	2.00	1,920	2.78	647	1.76	1,572
Dec	2.01	5,393	.	.	1.98	2,257	2.71	881	1.76	2,255
2017 Jan	1.99	4,694	.	.	1.92	2,084	2.61	712	1.83	1,898
Feb	2.07	3,613	.	.	1.95	1,579	2.75	568	1.93	1,466
Mar	2.11	4,783	.	.	2.01	2,120	2.84	767	1.93	1,896
Apr	2.09	4,280	.	.	1.95	1,931	2.77	670	1.97	1,679
May	2.12	4,033	.	.	2.04	1,667	2.84	689	1.92	1,677
June	2.15	4,197	.	.	2.13	1,964	2.84	681	1.88	1,552
July	2.06	4,142	.	.	1.89	1,917	2.82	688	1.94	1,537
Aug	2.08	3,640	.	.	1.95	1,445	2.79	629	1.92	1,566
Sep	2.04	3,411	.	.	1.84	1,436	2.81	598	1.90	1,377
Oct	2.13	3,707	.	.	1.98	1,694	2.82	628	2.00	1,385

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		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 10 % 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
Total loans													
2016 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	20,223	1.72	4,687	1.88	2,611	1.66	1,614	1.43	7,008	1.68	8,990
Dec	1.72	1.66	21,400	1.80	4,757	1.98	2,347	1.67	1,800	1.49	8,054	1.73	9,199
2017 Jan	1.82	1.77	19,804	1.84	5,711	2.08	2,283	1.66	1,780	1.59	7,454	1.86	8,287
Feb	1.87	1.81	17,838	1.89	4,291	2.17	1,784	1.65	1,567	1.64	6,556	1.90	7,931
Mar	1.87	1.82	22,196	1.86	4,945	2.08	2,428	1.69	1,932	1.67	7,609	1.89	10,227
Apr	1.91	1.85	18,087	1.89	4,620	2.10	2,001	1.73	1,672	1.71	6,456	1.92	7,958
May	1.88	1.83	20,484	1.92	4,136	2.17	2,288	1.77	1,731	1.66	7,308	1.88	9,157
June	1.87	1.82	19,294	1.92	3,767	2.02	2,265	1.70	1,541	1.68	6,573	1.89	8,915
July	1.88	1.82	20,405	1.88	4,612	2.04	2,389	1.68	1,726	1.66	7,420	1.92	8,870
Aug	1.94	1.87	20,228	2.00	3,743	2.05	2,340	1.89	1,888	1.67	7,199	1.98	8,801
Sep	1.92	1.86	17,363	1.91	3,289	2.04	2,025	1.71	1,571	1.71	5,950	1.96	7,817
Oct	1.90	1.85	18,128	1.90	3,955	2.08	2,134	1.70	1,634	1.68	6,611	1.96	7,749
of which: collateralised loans 11													
2016 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
Dec	.	1.57	9,705	.	.	1.85	863	1.55	878	1.41	3,968	1.66	3,996
2017 Jan	.	1.67	8,932	.	.	1.90	835	1.50	925	1.52	3,632	1.81	3,540
Feb	.	1.71	7,964	.	.	2.06	643	1.50	796	1.57	3,181	1.82	3,344
Mar	.	1.72	9,905	.	.	1.96	855	1.53	939	1.59	3,565	1.82	4,546
Apr	.	1.75	8,413	.	.	1.98	795	1.53	838	1.60	3,204	1.89	3,576
May	.	1.73	9,110	.	.	2.09	843	1.59	900	1.58	3,370	1.81	3,997
June	.	1.72	8,374	.	.	1.87	865	1.53	726	1.61	3,030	1.82	3,753
July	.	1.72	9,062	.	.	1.84	896	1.53	891	1.60	3,529	1.84	3,746
Aug	.	1.79	8,461	.	.	1.96	821	1.87	996	1.59	3,204	1.92	3,440
Sep	.	1.78	7,701	.	.	1.97	711	1.53	797	1.63	2,707	1.92	3,486
Oct	.	1.77	8,217	.	.	1.97	780	1.53	782	1.62	3,095	1.92	3,560

For footnotes * and 1 to 6, see p 44•. For footnotes +, 7 to 10, see p 45•. For footnote 11, see 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 +

Reporting period	Loans to households (cont'd)						Loans to non-financial corporations					
	Revolving loans 12 and overdrafts 13 credit card debt 14		of which				Revolving loans 12 and overdrafts 13 credit card debt 14		of which			
			Revolving loans 12 and overdrafts 13		Extended credit card debt				Revolving loans 12 and overdrafts 13		Extended credit card debt	
	Effective interest rate 1 % pa	Volume 2 € million	Effective interest rate 1 % pa	Volume 2 € million	Effective interest rate 1 % pa	Volume 2 € million	Effective interest rate 1 % pa	Volume 2 € million	Effective interest rate 1 % pa	Volume 2 € million	Effective interest rate 1 % pa	Volume 2 € million
2016 Oct	8.59	40,657	8.60	32,988	15.13	4,328	3.67	64,202	3.68	63,931		
Nov	8.50	39,342	8.51	31,782	15.13	4,222	3.61	64,064	3.63	63,786		
Dec	8.50	40,103	8.54	32,351	15.06	4,286	3.69	61,612	3.71	61,357		
2017 Jan	8.55	39,784	8.54	32,190	15.12	4,309	3.61	64,182	3.63	63,925		
Feb	8.65	39,345	8.62	31,953	15.14	4,291	3.68	65,697	3.70	65,431		
Mar	8.66	40,215	8.61	32,949	15.13	4,273	3.67	65,990	3.68	65,698		
Apr	8.50	38,972	8.49	31,353	15.13	4,295	3.64	65,154	3.66	64,865		
May	8.46	39,394	8.50	31,647	15.13	4,259	3.53	65,353	3.54	65,067		
June	8.44	40,606	8.47	32,739	15.13	4,328	3.59	67,282	3.61	66,992		
July	8.45	39,300	8.46	31,374	15.11	4,423	3.52	65,979	3.54	65,695		
Aug	8.48	38,663	8.47	30,914	15.12	4,364	3.48	66,012	3.49	65,718		
Sep	8.44	39,630	8.48	31,635	15.09	4,393	3.52	67,886	3.54	67,559		
Oct	8.47	39,133	8.48	31,101	15.10	4,493	3.41	67,481	3.42	67,162		

Reporting period	Loans to non-financial corporations (cont'd)															
	Total		of which				Loans up to €1 million with an initial rate fixation of 15				Loans over €1 million with an initial rate fixation of 15					
			renegotiated loans 9		floating rate or up to 1 year 9		over 1 year and up to 5 years		over 5 years		floating rate or up to 1 year 9		over 1 year and up to 5 years		over 5 years	
	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	Effective interest rate 1 % pa	Volume 7 € million		
Total loans																
2016 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	58,860	1.52	15,959	2.48	8,095	2.64	1,497	1.69	1,361	1.16	36,792	1.32	2,628	1.49	8,487
Dec	1.53	78,985	1.63	22,509	2.50	8,638	2.57	1,829	1.77	1,881	1.27	48,315	1.64	3,444	1.62	14,878
2017 Jan	1.33	64,819	1.54	18,857	2.42	8,119	2.60	1,328	1.86	1,423	1.01	43,339	1.40	2,830	1.57	7,780
Feb	1.33	56,958	1.55	13,746	2.55	7,309	2.58	1,326	1.83	1,209	0.99	37,140	1.29	2,001	1.54	7,973
Mar	1.50	71,530	1.60	22,647	2.51	9,245	2.59	1,733	1.85	1,665	1.20	45,163	1.41	2,977	1.67	10,747
Apr	1.43	57,323	1.46	19,903	2.44	7,699	2.54	1,493	1.81	1,371	1.14	38,649	1.41	2,188	1.67	5,923
May	1.35	65,177	1.53	18,706	2.54	8,000	2.58	1,661	1.82	1,423	0.99	41,638	1.55	3,072	1.58	9,383
June	1.41	71,950	1.50	21,083	2.51	8,904	2.57	1,681	1.84	1,442	1.13	46,903	1.08	3,655	1.61	9,365
July	1.39	67,430	1.48	20,770	2.42	8,497	2.57	1,583	1.87	1,403	1.08	43,495	1.28	3,021	1.61	9,431
Aug	1.38	59,046	1.52	13,769	2.39	7,401	2.58	1,441	1.82	1,335	1.08	37,547	1.38	2,627	1.57	8,695
Sep	1.38	66,182	1.52	19,843	2.50	8,124	2.60	1,446	1.86	1,236	1.08	43,731	1.24	2,419	1.63	9,226
Oct	1.35	66,679	1.47	19,173	2.48	8,209	2.59	1,490	1.81	1,214	1.05	45,005	1.25	2,354	1.59	8,407
of which: collateralised loans 11																
2016 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
Dec	1.55	16,083	.	.	1.91	662	2.46	176	1.57	569	1.39	8,076	1.96	1,310	1.62	5,290
2017 Jan	1.57	8,742	.	.	1.80	692	2.24	141	1.81	505	1.41	4,626	2.05	518	1.60	2,260
Feb	1.46	8,259	.	.	2.07	464	2.44	158	1.78	399	1.33	4,051	1.73	512	1.40	2,675
Mar	1.48	11,857	.	.	1.87	643	2.52	166	1.72	493	1.37	7,040	1.30	519	1.60	2,996
Apr	1.42	8,360	.	.	1.81	570	2.23	164	1.69	413	1.29	5,640	1.59	299	1.62	1,274
May	1.61	8,671	.	.	2.06	545	2.54	191	1.70	401	1.45	4,558	2.04	646	1.63	2,330
June	1.55	11,011	.	.	1.85	632	2.60	150	1.75	444	1.44	6,484	1.64	625	1.66	2,676
July	1.52	9,023	.	.	1.78	661	2.46	155	1.77	415	1.34	5,050	1.74	464	1.68	2,278
Aug	1.47	9,188	.	.	1.99	480	2.39	153	1.69	431	1.30	4,961	1.94	560	1.50	2,603
Sep	1.52	9,811	.	.	1.83	535	2.50	132	1.77	351	1.41	5,743	1.64	370	1.62	2,680
Oct	1.46	9,398	.	.	1.90	557	2.61	131	1.77	349	1.25	5,480	2.19	304	1.64	2,577

For footnotes * and 1 to 6, see p 44*. For footnotes + and 7 to 10, see p 45*. **11** 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. **12** 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. **13** 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. **14** 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. **15** 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	Total	Currency and deposits ²	Debt securities	Loans ³	Shares and other equity	Investment funds shares/units	Financial derivatives	Insurance technical reserves	Non-financial assets	Remaining assets
Insurance corporations										
2011	1,584.6	419.8	186.0	246.0	210.4	361.4	5.4	58.4	41.7	55.5
2012	1,694.4	405.1	240.1	251.7	211.4	425.1	6.1	59.0	43.3	52.7
2013	1,742.1	386.3	262.0	257.1	211.1	462.3	6.0	59.8	46.4	51.0
2014	1,892.0	371.6	321.0	271.4	215.9	542.3	6.4	63.9	49.3	50.2
2015	1,954.1	344.4	344.7	278.9	228.7	578.3	4.5	71.9	51.8	50.8
2016 Q1	2,007.8	343.6	374.1	280.2	230.0	596.3	5.2	73.7	53.1	51.7
Q2	2,034.6	336.1	395.8	281.9	229.6	607.7	4.8	73.5	53.2	52.0
2016 Q3 ¹	2,219.7	383.4	396.9	389.6	280.7	604.9	5.3	47.3	31.8	79.7
Q4	2,186.1	361.5	370.9	374.6	308.6	620.1	3.3	44.1	32.4	70.6
2017 Q1	2,189.3	347.1	391.8	364.9	298.6	631.6	2.8	50.4	32.5	69.7
Q2	2,177.9	335.5	392.3	362.3	302.3	641.2	3.1	49.1	32.6	59.6
Life insurance										
2011	859.9	273.3	90.7	146.7	31.6	252.5	2.6	17.8	25.1	19.6
2012	927.6	261.4	120.0	148.0	31.7	299.2	3.0	18.0	26.1	20.1
2013	956.9	247.8	131.4	148.7	31.5	329.1	3.0	17.7	28.3	19.5
2014	1,044.1	237.2	161.2	153.4	32.3	390.3	3.2	17.8	29.7	19.1
2015	1,063.7	219.7	169.8	158.0	34.9	414.6	2.2	16.3	30.7	17.4
2016 Q1	1,097.8	219.0	187.3	159.0	35.3	428.4	2.5	16.5	32.0	17.6
Q2	1,118.8	214.6	202.2	160.2	35.6	437.4	2.4	16.6	32.1	17.7
2016 Q3 ¹	1,246.9	246.5	204.2	243.1	47.5	437.2	4.1	11.3	19.1	33.8
Q4	1,194.2	231.3	182.7	223.0	50.7	453.8	2.1	9.6	19.1	21.9
2017 Q1	1,170.4	217.6	196.1	215.1	38.6	458.6	1.7	8.2	19.1	15.3
Q2	1,172.7	209.4	199.6	215.3	39.3	464.7	2.0	8.0	19.1	15.3
Non-life insurance										
2011	400.1	133.1	43.7	46.9	42.2	82.7	1.2	24.5	11.7	14.0
2012	427.3	130.4	59.9	48.9	40.3	97.7	1.5	24.8	12.3	11.4
2013	448.1	126.0	70.9	51.1	42.8	105.9	1.6	25.1	12.7	12.0
2014	486.4	122.8	89.4	53.9	44.3	122.5	1.8	26.5	13.7	11.5
2015	511.0	113.9	97.6	55.6	48.5	134.8	1.3	32.9	14.5	11.9
2016 Q1	530.4	113.3	108.3	55.8	49.6	140.6	1.5	34.4	14.6	12.4
Q2	535.4	109.5	113.8	56.0	49.3	144.5	1.4	34.0	14.6	12.3
2016 Q3 ¹	592.2	125.0	101.7	94.0	50.9	153.9	0.5	28.7	8.7	29.0
Q4	583.3	118.9	98.5	91.8	56.8	152.0	0.5	26.8	9.0	29.0
2017 Q1	606.5	118.0	105.8	91.4	56.9	156.8	0.3	34.0	9.1	34.2
Q2	603.4	114.5	107.1	90.6	58.5	159.9	0.4	33.2	9.1	30.1
Reinsurance ⁴										
2011	324.7	13.5	51.5	52.5	136.6	26.2	1.5	16.1	4.8	22.0
2012	339.5	13.2	60.2	54.7	139.4	28.2	1.6	16.2	4.8	21.2
2013	337.1	13.3	59.0	57.4	136.8	27.2	1.4	17.1	5.4	19.5
2014	361.4	12.4	69.7	64.1	139.2	29.5	1.4	19.6	5.9	19.6
2015	379.4	10.8	77.3	65.3	145.4	28.9	1.1	22.7	6.5	21.4
2016 Q1	379.7	11.3	78.5	65.4	145.1	27.3	1.1	22.8	6.5	21.7
Q2	380.3	12.0	79.8	65.6	144.8	25.8	1.0	22.8	6.5	22.0
2016 Q3 ¹	380.6	12.0	91.0	52.5	182.3	13.8	0.8	7.3	4.0	16.9
Q4	408.6	11.3	89.7	59.7	201.0	14.3	0.7	7.7	4.3	19.7
2017 Q1	412.5	11.5	89.9	58.4	203.0	16.2	0.8	8.1	4.3	20.2
Q2	401.9	11.6	85.6	56.4	204.4	16.6	0.7	7.9	4.4	14.2
Pension funds ⁵										
2011	426.6	156.5	34.9	25.9	11.5	160.8	–	3.8	21.7	11.6
2012	468.4	155.1	40.9	26.2	12.4	194.4	–	4.1	23.8	11.5
2013	494.6	154.3	42.5	27.6	13.0	216.2	–	4.4	25.1	11.7
2014	552.5	151.7	57.1	29.1	16.7	247.8	–	4.9	27.8	17.4
2015	579.5	145.5	60.2	28.8	19.1	268.5	–	5.4	31.5	20.4
2016 Q1	588.8	143.1	66.0	29.0	19.4	273.4	–	5.5	31.9	20.5
Q2	601.7	142.7	69.1	29.2	20.0	281.9	–	5.5	32.5	20.7
Q3	611.6	144.4	69.2	29.3	20.1	289.0	–	5.6	33.2	20.9
Q4	613.5	144.7	67.8	29.8	20.6	288.9	–	5.7	34.5	21.4
2017 Q1	619.9	146.2	66.1	30.3	21.2	293.9	–	5.8	34.9	21.6
Q2	623.7	144.6	67.8	30.4	21.3	297.0	–	5.8	35.2	21.6

¹ Data as of 2016 Q3 are based on Solvency II supervisory data, valuation of listed securities at the corresponding consistent price from the ESCB's securities database. Up to and including 2016 Q2 data are based on Solvency I supervisory data from the Federal Financial Supervisory Authority (BaFin), supplemented by estimates and own calculations. ² Accounts receivable to monetary financial institutions, including registered bonds, borrowers' note loans and registered Pfandbriefe. ³ Including deposits retain-

ed on assumed reinsurance as well as registered bonds, borrowers' note loans and registered Pfandbriefe. ⁴ Not including the reinsurance business conducted by primary insurers, which is included there. ⁵ The term "pension funds" refers to the institutional sector "pension funds" of the European System of Accounts. Pension funds thus comprise company pension schemes 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	Total	Debt securities issued	Loans ²	Shares and other equity	Insurance technical reserves			Financial derivatives	Remaining liabilities	Net worth ⁷
					Total	Life / Claims on pension funds reserves ³	Non-life ⁴			
Insurance corporations										
2011	1,584.6	17.0	68.3	107.0	1,224.3	960.1	264.2	0.0	69.6	98.3
2012	1,694.4	22.4	73.1	152.0	1,280.0	1,009.2	270.8	0.0	69.5	97.4
2013	1,742.1	16.9	77.7	188.7	1,340.7	1,061.4	279.3	0.0	68.8	49.2
2014	1,892.0	17.3	84.3	193.0	1,411.6	1,113.8	297.8	0.0	70.5	115.3
2015	1,954.1	18.3	91.7	214.8	1,474.7	1,160.6	314.1	0.0	70.2	84.4
2016 Q1	2,007.8	17.7	92.9	220.4	1,501.0	1,179.8	321.2	0.0	71.5	104.3
Q2	2,034.6	17.6	93.0	191.1	1,508.4	1,188.4	320.1	0.0	71.6	152.9
2016 Q3 ¹	2,219.7	30.7	73.7	383.0	1,579.3	1,396.7	182.5	1.5	151.4	–
Q4	2,186.1	30.7	70.3	441.0	1,494.4	1,313.3	181.1	2.3	147.5	–
2017 Q1	2,189.3	30.5	57.2	448.5	1,511.7	1,309.5	202.3	1.8	139.5	–
Q2	2,177.9	28.6	57.0	450.7	1,505.2	1,308.3	196.9	2.1	134.3	–
Life insurance										
2011	859.9	0.0	22.1	11.2	779.7	766.6	13.1	0.0	36.0	10.9
2012	927.6	0.0	23.1	16.3	814.9	801.2	13.7	0.0	34.9	38.5
2013	956.9	0.0	23.8	20.2	853.2	839.4	13.8	0.0	34.1	25.6
2014	1,044.1	0.0	24.7	21.6	891.8	877.4	14.4	0.0	32.8	73.3
2015	1,063.7	0.0	24.5	24.8	926.0	911.0	15.0	0.0	30.9	57.5
2016 Q1	1,097.8	0.0	24.9	25.4	941.0	925.8	15.2	0.0	31.4	75.0
Q2	1,118.8	0.0	25.1	22.2	946.6	931.3	15.3	0.0	31.6	93.4
2016 Q3 ¹	1,246.9	3.8	25.9	96.0	1,066.1	1,066.1	–	0.7	54.4	–
Q4	1,194.2	4.1	25.0	116.3	993.7	993.7	–	1.2	53.9	–
2017 Q1	1,170.4	4.0	12.5	116.3	991.7	991.7	–	0.9	44.8	–
Q2	1,172.7	4.0	12.1	119.8	989.5	989.5	–	1.0	46.2	–
Non-life insurance										
2011	400.1	0.0	9.9	31.5	311.4	193.5	117.9	0.0	15.3	31.9
2012	427.3	0.0	11.5	44.4	329.9	208.0	122.0	0.0	14.9	26.6
2013	448.1	0.0	9.2	55.9	351.6	222.0	129.6	0.0	15.3	16.1
2014	486.4	0.0	10.5	58.2	369.8	236.5	133.4	0.0	15.6	32.3
2015	511.0	0.0	14.2	64.2	390.5	249.6	140.9	0.0	17.1	25.0
2016 Q1	530.4	0.0	14.8	67.6	401.3	254.0	147.3	0.0	17.8	28.8
Q2	535.4	0.0	14.7	58.3	403.0	257.1	145.9	0.0	17.7	41.7
2016 Q3 ¹	592.2	0.9	6.6	120.0	407.4	310.1	97.3	0.0	57.3	–
Q4	583.3	1.1	6.3	130.4	390.1	300.4	89.7	0.2	55.3	–
2017 Q1	606.5	1.1	7.3	134.0	408.9	300.7	108.2	0.1	55.0	–
Q2	603.4	1.1	6.8	135.6	406.7	302.4	104.3	0.1	53.0	–
Reinsurance ⁵										
2011	324.7	17.0	36.3	64.2	133.2	–	133.2	0.0	18.4	55.5
2012	339.5	22.4	38.5	91.3	135.1	–	135.1	0.0	19.8	32.4
2013	337.1	16.9	44.7	112.7	135.9	–	135.9	0.0	19.4	7.5
2014	361.4	17.3	49.1	113.3	150.0	–	150.0	0.0	22.1	9.6
2015	379.4	18.3	53.0	125.8	158.2	–	158.2	0.0	22.2	1.9
2016 Q1	379.7	17.7	53.1	127.4	158.6	–	158.6	0.0	22.3	0.6
Q2	380.3	17.6	53.2	110.7	158.8	–	158.8	0.0	22.3	17.7
2016 Q3 ¹	380.6	26.0	41.3	167.0	105.8	20.5	85.3	0.8	39.8	–
Q4	408.6	25.5	39.0	194.3	110.5	19.1	91.4	0.9	38.3	–
2017 Q1	412.5	25.3	37.4	198.2	111.1	17.0	94.1	0.8	39.7	–
Q2	401.9	23.5	38.1	195.2	109.1	16.4	92.6	1.1	35.0	–
Pension funds ⁶										
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	579.5	–	4.9	11.3	518.3	517.9	0.4	–	6.1	38.9
2016 Q1	588.8	–	5.0	11.4	522.7	522.2	0.5	–	5.8	44.1
Q2	601.7	–	5.0	10.0	529.6	529.1	0.5	–	5.8	51.3
Q3	611.6	–	5.1	10.3	535.2	535.2	–	–	5.8	55.3
Q4	613.5	–	5.2	11.3	544.7	544.7	–	–	6.0	46.4
2017 Q1	619.9	–	5.2	11.9	552.4	552.4	–	–	6.0	44.3
Q2	623.7	–	5.3	11.8	555.3	555.3	–	–	6.1	45.3

¹ Data as of 2016 Q3 are based on Solvency II supervisory data. Up to and including 2016 Q2 data are based on Solvency I supervisory data from the Federal Financial Supervisory Authority (BaFin), supplemented by estimates and own calculations. ² Including deposits retained on ceded business as well as registered bonds, borrowers' note loans and registered Pfandbriefe. ³ As of 2016 Q3 insurance technical reserves "life" pursuant to Solvency II taking account of transitional measures. Up to and including 2016 Q2: Long-term net equity of households in life insurance (including ageing provisions of health insurance schemes and premium reserves of accident insurance schemes with guaranteed premium refund) and pension fund reserves pursuant to

ESA 1995. ⁴ As of 2016 Q3 insurance technical reserves "non-life" pursuant to Solvency II. Up to and including 2016 Q2 unearned premiums and reserves for outstanding claims pursuant to ESA 1995. ⁵ Not including the reinsurance business conducted by primary insurers, which is included there. ⁶ The term "pension funds" refers to the institutional sector "pension funds" of the European System of Accounts. Pension funds thus comprise company pension schemes and occupational pension schemes for the self-employed. Social security funds are not included. ⁷ Own funds correspond to the sum of net worth and the liability item „Shares and other equity“.

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 ¹					Residents					
		Total	Bank debt securities	Corporate bonds (non-MFIs) ²	Public debt securities ³	Foreign debt securities ⁴	Total ⁵	Credit institutions including building and loan associations ⁶	Deutsche Bundesbank	Other sectors ⁷	Non-residents ⁸	
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	57,526	
2012	51,813	- 21,419	- 98,820	- 8,701	86,103	73,231	- 3,767	- 42,017	- 3,573	41,823	55,580	
2013	- 15,969	- 101,616	- 117,187	153	15,415	85,646	16,409	- 25,778	- 12,708	54,895	- 32,380	
2014	64,027	- 31,962	- 47,404	- 1,330	16,776	95,988	53,068	- 12,124	- 11,951	77,143	10,961	
2015	31,809	- 36,010	- 65,778	26,762	3,006	67,819	123,820	- 66,330	121,164	68,986	- 92,012	
2016	69,798	27,069	19,177	17,905	- 10,012	42,728	173,193	- 58,012	187,500	43,705	- 103,395	
2016 Dec	- 30,541	- 21,892	- 10,590	1,125	- 12,426	- 8,649	557	- 9,459	13,554	- 3,538	- 31,098	
2017 Jan	24,212	22,588	12,008	4,673	5,908	1,624	20,521	- 7,443	18,146	9,818	3,692	
Feb	4,188	- 2,177	12,413	1,756	- 16,346	6,365	21,814	- 5,044	16,715	10,143	- 17,626	
Mar	9,225	8,713	1,179	- 131	7,665	512	17,676	- 8,293	17,769	8,200	- 8,451	
Apr	- 12,590	- 15,170	- 5,909	- 276	- 8,985	2,580	3,520	- 5,737	12,817	- 3,560	- 16,110	
May	39,706	28,463	10,800	1,096	16,567	11,243	17,325	3,906	12,751	668	22,381	
June	3,582	- 1,090	2,876	- 5,769	1,802	4,672	10,890	- 11,745	12,871	9,764	- 7,309	
July	- 7,719	- 17,251	- 7,196	8,174	- 18,228	9,532	9,807	- 6,471	11,565	4,713	- 17,526	
Aug	13,913	- 12,771	- 1,814	- 1,581	16,166	1,143	7,547	- 8,730	9,902	6,375	6,366	
Sep	- 13,841	- 18,254	- 8,577	- 3,456	- 6,221	4,413	1,397	- 8,357	12,865	- 3,111	- 15,238	
Oct	- 12,083	- 10,152	- 9,775	- 2,760	2,383	- 1,931	15,195	- 4,892	12,199	7,888	- 27,278	

€ million

Period	Shares									
	Sales = total purchases	Sales			Purchases					
		Domestic shares ⁹		Foreign shares ¹⁰	Residents					
		Total	Residual	Foreign shares ¹⁰	Total ¹¹	Credit institutions ⁶	Other sectors ¹²	Non-residents ¹³		
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	-	55,606	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	20,187	10,106	10,081	17,336	11,991	5,345	2,851			
2014	39,903	18,778	21,125	34,148	17,203	16,945	5,755			
2015	40,293	7,668	32,625	26,058	- 5,421	31,479	14,235			
2016	33,504	4,409	29,095	32,324	- 5,143	37,467	1,180			
2016 Dec	3,021	861	2,160	- 12	1,291	- 1,303	3,033			
2017 Jan	2,154	148	2,006	1,369	- 247	1,616	785			
Feb	2,436	852	1,584	2,985	1,866	1,119	- 549			
Mar	13,985	10,136	3,849	11,531	506	11,025	2,454			
Apr	- 1,261	95	- 1,356	- 3,599	- 2,589	- 1,010	2,338			
May	3,434	107	3,327	2,137	475	1,662	1,297			
June	- 5,794	920	- 6,714	64	5,220	- 5,156	- 5,858			
July	2,728	509	2,219	3,894	- 690	4,584	- 1,166			
Aug	2,241	155	2,086	4,758	- 603	5,361	- 2,517			
Sep	5,522	1,482	4,040	4,101	- 1,738	5,839	1,421			
Oct	2,283	572	1,711	- 595	735	- 1,330	2,878			

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	Total	Bank debt securities ¹				Debt securities issued by special purpose credit institutions	Other bank debt securities	Corporate bonds (non-MFIs) ²	Public debt securities ³
		Total	Mortgage Pfandbriefe	Public Pfandbriefe					
Gross sales ⁴									
2005	988,911	692,182	28,217	103,984	160,010	399,969	24,352	272,380	
2006	925,863	622,055	24,483	99,628	139,193	358,750	29,975	273,834	
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 ⁵	1,206,483	717,002	29,059	7,621	511,222	169,103	73,370	416,110	
2017 Mar	95,842	47,729	3,548	756	31,244	12,182	4,691	43,421	
Apr	87,097	55,296	2,170	58	45,233	7,836	2,707	29,094	
May	88,568	55,536	1,700	238	41,685	11,913	5,015	28,016	
June	73,438	42,842	5,005	364	25,324	12,148	4,284	26,312	
July	81,160	47,165	292	562	38,013	8,298	11,105	22,889	
Aug	83,236	47,675	2,476	20	36,804	8,374	1,462	34,100	
Sep	80,958	48,059	1,940	76	34,328	11,716	3,712	29,186	
Oct	91,104	50,410	2,420	1,150	34,514	12,326	5,299	35,396	

of which: Debt securities with maturities of more than four years ⁶

2005	425,523	277,686	20,862	63,851	49,842	143,129	16,360	131,479
2006	337,969	190,836	17,267	47,814	47,000	78,756	14,422	132,711
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 ⁵	375,859	173,900	24,741	5,841	78,859	64,460	47,818	154,144
2017 Mar	34,636	15,895	2,772	462	6,186	6,474	3,396	15,345
Apr	27,201	15,693	2,055	23	11,781	1,834	1,547	9,962
May	29,215	12,669	1,165	136	6,045	5,322	3,142	13,404
June	24,255	10,611	3,011	54	3,390	4,156	1,784	11,860
July	31,503	12,687	111	62	9,523	2,991	7,388	11,428
Aug	24,629	10,217	2,245	20	5,283	2,670	521	13,890
Sep	26,426	13,324	1,395	24	8,649	3,256	2,765	10,337
Oct	31,980	14,680	2,129	1,145	7,480	3,926	2,837	14,463

Net sales ⁷

2005	141,715	65,798	2,151	34,255	37,242	64,962	10,099	65,819
2006	129,423	58,336	12,811	20,150	44,890	46,410	15,605	55,482
2007	86,579	58,168	10,896	46,629	42,567	73,127	3,683	32,093
2008	119,472	8,517	15,052	65,773	25,165	34,074	82,653	28,302
2009	76,441	75,554	858	80,646	25,579	21,345	48,508	103,482
2010	21,566	87,646	3,754	63,368	28,296	48,822	23,748	85,464
2011	22,518	54,582	1,657	44,290	32,904	44,852	3,189	80,289
2012	85,298	100,198	4,177	41,660	3,259	51,099	6,401	21,298
2013	140,017	125,932	17,364	37,778	4,027	66,760	1,394	15,479
2014	34,020	56,899	6,313	23,856	862	25,869	10,497	12,383
2015	65,147	77,273	9,271	9,754	2,758	74,028	25,300	13,174
2016 ⁵	21,951	10,792	2,176	12,979	16,266	5,327	18,177	7,020
2017 Mar	11,887	4,049	1,520	839	3,038	330	705	8,543
Apr	15,906	5,239	1,191	1,613	1,034	3,781	1,836	8,832
May	26,524	10,344	1,329	1,105	13,027	250	226	16,406
June	6,370	1,035	2,036	245	4,667	5,423	2,704	4,701
July	12,190	6,664	2,176	209	1,958	2,738	8,539	14,065
Aug	13,424	1,646	975	94	2,334	4,861	934	16,004
Sep	11,050	6,065	749	1,959	779	4,137	1,796	3,189
Oct	1,501	179	1,342	229	1,165	227	1,952	272

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

initial sales of newly issued securities. ⁵ Sectoral reclassification of debt securities. ⁶ Maximum maturity according to the terms of issue. ⁷ 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						Corporate bonds (non-MFIs)	Public debt securities
	Total	Total	Mortgage Pfandbriefe	Public Pfandbriefe	Debt securities issued by special purpose credit institutions	Other bank debt securities		
2005	2,914,723	1,751,563	157,209	519,674	323,587	751,093	83,942	1,079,218
2006	3,044,145	1,809,899	144,397	499,525	368,476	797,502	99,545	1,134,701
2007	3,130,723	1,868,066	133,501	452,896	411,041	870,629	95,863	1,166,794
2008	3,250,195	1,876,583	150,302	377,091	490,641	858,550	178,515	1,195,097
2009	3,326,635	1,801,029	151,160	296,445	516,221	837,203	227,024	1,298,581
2010	3,348,201	1,570,490	147,529	232,954	544,517	645,491	250,774	1,526,937
2011	3,370,721	1,515,911	149,185	188,663	577,423	600,640	247,585	1,607,226
2012	3,285,422	1,414,349	145,007	147,070	574,163	548,109	220,456	1,650,617
2013	3,145,329	1,288,340	127,641	109,290	570,136	481,273	221,851	1,635,138
2014	3,111,308	1,231,445	121,328	85,434	569,409	455,274	232,342	1,647,520
2015	3,046,162	1,154,173	130,598	75,679	566,811	381,085	257,612	1,634,377
2016	3,068,111	1,164,965	132,775	62,701	633,578	335,910	275,789	1,627,358
2017 Apr	3,067,464	1,190,584	142,097	61,174	644,126	343,188	275,317	1,601,563
May	3,093,988	1,200,928	140,768	60,069	657,153	342,938	275,091	1,617,969
June	3,087,618	1,201,963	142,804	59,824	661,820	337,515	272,387	1,613,268
July	3,075,428	1,195,300	140,628	60,033	659,861	334,777	280,925	1,599,203
Aug	3,088,852	1,193,654	141,603	59,939	662,196	329,917	279,992	1,615,207
Sep	3,097,730	1,187,589	140,854	57,980	662,975	325,780	298,123	1,612,018
Oct	3,096,229	1,187,768	142,196	58,210	661,809	325,553	296,171	1,612,290

Breakdown by remaining period to maturity ³

	Total	Mortgage Pfandbriefe	Public Pfandbriefe	Debt securities issued by special purpose credit institutions	Other bank debt securities	Corporate bonds (non-MFIs)	Public debt securities
less than 2	1,004,733	456,162	42,992	22,557	278,564	112,048	491,449
2 to less than 4	668,241	286,020	32,867	13,891	163,106	76,157	328,835
4 to less than 6	451,978	168,574	27,142	8,777	88,019	44,636	243,778
6 to less than 8	315,542	113,496	20,807	5,976	60,550	26,161	171,137
8 to less than 10	228,510	74,608	14,088	4,170	34,384	21,967	140,856
10 to less than 15	128,561	37,665	3,364	1,348	18,102	14,851	70,620
15 to less than 20	81,881	17,454	213	1,241	12,767	3,233	8,285
20 and more	216,787	33,790	723	250	6,317	26,501	109,474

Position at end-October 2017

* Including debt securities temporarily held in the issuers' portfolios. **1** Sectoral reclassification of debt securities. **2** Increase due to change in issuers' country of residence. **3** 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 capita- lisation) level at end of period under review ²
			cash payments and ex- change of convertible bonds ¹	issue of bonus shares	contribution of claims and other real assets	contribution of shares, GmbH shares, etc	merger and transfer of assets	change of legal form	reduction of capital and liquidation	
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	0	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	0	478	594	2,411	1,150,188
2013	171,741	6,879	2,971	718	476	0	1,432	619	8,992	1,432,658
2014	177,097	5,356	5,332	1,265	1,714	0	465	1,044	1,446	1,478,063
2015	177,416	319	4,634	397	599	0	1,394	1,385	2,535	1,614,442
2016	176,355	1,062	3,272	319	337	0	953	2,165	1,865	1,676,397
2017 Apr	178,328	54	93	20	2	0	0	13	47	1,828,445
May	178,326	2	78	48	50	0	0	17	162	1,845,930
June	178,620	294	64	202	218	0	0	6	184	1,811,817
July	179,467	847	493	485	8	0	3	18	125	1,800,324
Aug	179,207	260	155	2	6	0	167	173	83	1,787,670
Sep	179,448	241	165	18	119	0	13	7	41	1,888,218
Oct	179,294	154	230	0	121	0	1	1	504	1,957,699

* Excluding shares of public limited investment companies. **1** Including shares issued out of company profits. **2** All marketplaces. 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 ¹							Price indices ^{2,3}			
	Public debt securities				Bank debt securities			Debt securities		Shares	
	Total	Total	Listed Federal securities		Total	With a residual maturity of 9 and including 10 years ⁴	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 ⁴							
% 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
2017 June	0.2	0.1	0.1	0.3	0.4	0.9	1.7	140.79	109.60	557.50	12,325.12
July	0.4	0.3	0.3	0.5	0.5	1.0	1.7	140.78	108.71	552.08	12,118.25
Aug	0.3	0.2	0.2	0.4	0.4	0.9	1.6	141.85	110.01	551.25	12,055.84
Sep	0.3	0.2	0.2	0.4	0.4	0.9	1.7	141.21	109.06	585.63	12,828.86
Oct	0.3	0.3	0.2	0.4	0.4	0.9	1.6	141.63	109.70	603.37	13,229.57
Nov	0.3	0.2	0.2	0.3	0.4	0.8	1.6	141.23	109.62	597.74	13,023.98

¹ 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. ² End of year or month. ³ Source: Deutsche Börse AG. ⁴ 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 = total purchases	Sales							Purchases						
		Open-end domestic mutual funds ¹ (sales receipts)							Residents						
		Total	Mutual funds open to the general public			Specialised funds			Total	Credit institutions including building and loan associations ²		Other sectors ³		Non-residents ⁵	
		of which							of which		of which				
		Money market funds	Securities-based funds	Real estate funds	Specialised funds	Foreign funds ⁴			Foreign mutual fund shares		Foreign mutual fund shares				
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	46,512	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	123,736	91,337	9,184	574	5,596	3,376	82,153	32,400	117,028	771	100	116,257	32,300	6,709	
2014	139,768	97,711	3,998	473	862	1,000	93,713	42,057	143,560	819	1,745	142,741	43,802	3,790	
2015	180,762	146,136	30,420	318	22,345	3,636	115,716	34,626	173,417	7,362	494	166,055	34,131	7,345	
2016	155,955	119,369	21,301	342	11,131	7,384	98,068	36,586	162,883	2,877	3,172	160,006	39,757	6,928	
2017 Apr	10,284	6,496	2,607	51	1,878	450	3,890	3,788	11,594	302	193	11,292	3,981	1,309	
May	6,140	5,658	3,113	12	2,492	238	2,545	481	5,515	422	250	5,093	231	625	
June	4,858	4,745	1,831	66	874	488	2,915	113	5,512	556	662	4,956	549	654	
July	14,039	9,699	4,537	35	4,033	353	5,162	4,340	13,152	545	230	12,607	4,110	887	
Aug	9,664	6,458	408	238	1,450	1,493	6,050	3,206	9,686	517	47	9,169	3,253	22	
Sep	6,275	3,246	3,996	31	2,849	709	750	3,029	6,499	102	224	6,397	3,253	224	
Oct	18,126	10,973	906	285	501	322	10,068	7,153	17,155	414	176	16,741	7,329	971	

¹ Including public limited investment companies. ² Book values. ³ Residual. ⁴ Net purchases or net sales (-) of foreign fund shares by residents; transaction values. ⁵ 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	2014	2015	2016	2016				2017	
				Q1	Q2	Q3	Q4	Q1	Q2
Acquisition of financial assets									
Currency and deposits	- 10.29	34.47	34.39	3.31	7.11	18.90	5.06	6.15	13.41
Debt securities	- 5.38	- 0.93	- 3.22	0.87	- 3.32	0.17	- 0.94	- 0.89	- 0.76
short-term debt securities	1.62	- 0.77	- 0.57	0.98	- 0.70	- 0.02	- 0.82	0.23	- 1.89
long-term debt securities	- 7.00	- 0.15	- 2.65	- 0.10	- 2.62	0.19	- 0.11	- 1.13	1.13
Memo item									
Debt securities of domestic sectors	- 1.88	- 0.73	- 2.60	0.51	- 2.54	- 0.04	- 0.52	- 0.52	- 0.06
Non-financial corporations	- 0.05	- 0.79	0.69	0.66	- 0.12	0.01	0.15	0.85	- 0.71
Financial corporations	- 1.26	- 1.93	- 2.49	0.31	- 1.80	- 0.53	- 0.47	- 0.34	0.64
General government	- 0.57	- 0.41	- 0.81	- 0.46	- 0.62	0.47	- 0.20	- 1.03	0.01
Debt securities of the rest of the world	- 3.50	- 1.66	- 0.62	0.37	- 0.78	0.21	- 0.41	- 0.38	- 0.71
Loans	18.48	26.96	12.62	5.41	- 6.83	0.18	13.86	28.72	4.64
short-term loans	33.19	25.81	8.63	0.47	- 1.52	- 3.94	13.62	17.82	0.63
long-term loans	- 14.71	1.16	3.98	4.94	- 5.31	4.11	0.24	10.90	5.27
Memo item									
to domestic sectors	14.11	8.75	- 1.45	4.62	- 5.36	- 2.11	1.39	10.74	- 1.20
Non-financial corporations	- 0.42	0.84	- 6.06	6.17	- 11.07	- 1.74	0.57	2.75	2.51
Financial corporations	14.46	7.88	4.47	- 1.59	5.67	- 0.40	0.78	7.99	- 3.71
General government	0.08	0.03	0.14	0.04	0.04	0.04	0.04	0.00	0.00
to the rest of the world	4.37	18.22	14.06	0.79	- 1.47	2.28	12.47	17.98	5.84
Equity and investment fund shares	- 1.85	44.58	60.71	9.56	3.86	12.27	35.03	17.14	- 0.96
Equity	8.53	28.24	54.89	9.11	4.61	8.18	32.99	18.39	1.22
Listed shares of domestic sectors	- 1.62	- 10.41	20.66	- 6.00	- 0.77	6.72	20.70	- 5.54	- 2.10
Non-financial corporations	- 5.39	- 8.04	20.34	- 6.17	- 0.94	6.83	20.62	- 5.45	- 2.26
Financial corporations	3.78	- 2.37	0.31	0.17	0.17	- 0.11	0.08	- 0.09	0.16
Listed shares of the rest of the world	- 4.85	12.45	10.13	0.66	- 0.59	1.37	8.69	3.23	11.64
Other equity ¹	15.00	26.20	24.10	14.45	5.97	0.09	3.60	20.70	- 8.32
Investment fund shares	- 10.38	16.35	5.82	0.45	- 0.75	4.08	2.04	- 1.25	- 2.18
Money market fund shares	- 0.23	0.21	0.36	- 0.30	- 0.10	- 0.03	0.79	- 0.28	0.00
Non-MMF investment fund shares	- 10.61	16.13	5.46	0.75	- 0.65	4.11	1.25	- 0.97	- 2.18
Insurance technical reserves	- 0.06	2.97	2.50	0.57	0.76	0.71	0.45	0.50	0.97
Financial derivatives	- 1.23	0.56	4.93	- 2.09	0.84	- 1.08	7.25	- 1.29	1.18
Other accounts receivable	- 78.98	28.63	- 14.06	7.06	- 6.66	- 5.84	- 8.61	78.67	- 18.76
Total	- 79.29	137.24	97.86	24.70	- 4.23	25.30	52.10	128.98	- 0.29
External financing									
Debt securities	1.26	7.78	23.71	10.40	4.60	2.88	5.82	7.57	- 0.52
short-term securities	- 11.63	1.96	- 0.15	2.04	0.18	- 0.57	- 1.79	5.47	- 0.42
long-term securities	12.89	5.82	23.85	8.36	4.43	3.45	7.61	2.11	- 0.10
Memo item									
Debt securities of domestic sectors	- 4.27	- 1.77	10.93	4.97	- 1.27	1.59	3.10	3.30	0.95
Non-financial corporations	- 0.05	- 0.79	0.69	0.66	- 0.12	0.01	0.15	0.85	- 0.71
Financial corporations	- 4.12	- 2.08	10.11	3.59	- 1.56	1.56	3.00	3.14	1.77
General government	0.00	0.02	0.01	- 0.00	0.00	0.01	0.00	- 0.01	0.02
Households	0.20	0.46	0.12	0.73	- 0.57	0.01	- 0.05	- 0.69	- 0.13
Debt securities of the rest of the world	- 3.01	6.02	12.78	5.43	3.33	1.29	2.73	4.28	- 1.48
Loans	- 7.42	46.85	43.12	30.54	7.75	17.31	- 12.48	39.59	19.13
short-term loans	0.55	29.77	14.65	15.46	- 1.70	3.27	- 2.37	7.74	2.75
long-term loans	- 7.97	17.08	28.47	15.08	9.45	14.05	- 10.11	31.85	16.38
Memo item									
from domestic sectors	10.74	19.99	19.71	26.37	- 6.43	11.41	- 11.63	20.61	14.35
Non-financial corporations	- 0.42	0.84	- 6.06	6.17	- 11.07	- 1.74	0.57	2.75	2.51
Financial corporations	22.30	26.00	25.42	12.07	3.79	15.42	- 5.86	11.41	10.53
General government	- 11.15	- 6.85	0.35	8.12	0.85	- 2.28	- 6.35	6.45	1.31
from the rest of the world	- 18.16	26.86	23.41	4.17	14.18	5.91	- 0.85	18.98	4.78
Equity	31.11	16.63	8.95	3.60	2.05	2.18	1.12	2.83	3.52
Listed shares of domestic sectors	- 0.34	7.36	21.96	- 2.67	3.30	4.33	17.00	- 6.70	2.68
Non-financial corporations	- 5.39	- 8.04	20.34	- 6.17	- 0.94	6.83	20.62	- 5.45	- 2.26
Financial corporations	2.22	11.75	- 2.31	- 1.14	3.22	- 2.25	- 2.13	- 0.88	6.21
General government	0.03	0.11	0.07	0.04	0.05	0.01	- 0.02	0.07	0.13
Households	2.80	3.55	3.85	4.61	0.98	- 0.26	- 1.47	- 0.44	- 1.40
Quoted shares of the rest of the world	9.09	- 1.34	- 20.44	2.71	- 2.89	- 4.10	- 16.16	7.03	- 1.28
Other equity ¹	22.37	10.61	7.43	3.56	1.64	1.95	0.29	2.51	2.12
Insurance technical reserves	6.41	5.60	3.60	0.90	0.90	0.90	0.90	0.90	0.90
Financial derivatives and employee stock options	- 0.21	- 10.81	- 0.13	5.34	- 5.71	8.05	- 7.81	0.67	0.43
Other accounts payable	- 1.73	15.92	28.53	6.15	0.20	- 1.61	23.79	28.70	- 24.87
Total	29.41	81.96	107.77	56.94	9.78	29.71	11.34	80.26	- 1.42

¹ 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	2014	2015	2016	2016				2017	
				Q1	Q2	Q3	Q4	Q1	Q2
Financial assets									
Currency and deposits	407.0	464.5	516.2	457.3	467.8	504.3	516.2	517.9	526.5
Debt securities	49.6	47.8	44.8	48.8	45.7	46.0	44.8	43.9	42.8
short-term debt securities	6.8	6.0	5.5	7.0	6.3	6.3	5.5	5.8	3.9
long-term debt securities	42.9	41.7	39.3	41.7	39.3	39.6	39.3	38.1	39.0
Memo item									
Debt securities of domestic sectors	22.9	23.3	20.8	23.8	21.4	21.4	20.8	20.3	20.2
Non-financial corporations	4.6	3.6	4.4	4.3	4.2	4.3	4.4	5.3	4.6
Financial corporations	12.7	14.5	12.0	14.8	13.0	12.5	12.0	11.6	12.3
General government	5.7	5.2	4.4	4.8	4.2	4.6	4.4	3.4	3.3
Debt securities of the rest of the world	26.7	24.4	24.0	24.9	24.3	24.5	24.0	23.6	22.7
Loans	455.3	485.1	496.7	488.2	481.6	480.8	496.7	526.0	527.3
short-term loans	356.2	383.7	392.4	383.1	381.9	377.6	392.4	410.8	408.4
long-term loans	99.1	101.4	104.2	105.2	99.7	103.1	104.2	115.2	118.9
Memo item									
to domestic sectors	303.6	312.4	310.9	317.0	311.6	309.5	310.9	321.7	320.5
Non-financial corporations	212.4	213.3	207.2	219.5	208.4	206.7	207.2	210.0	212.5
Financial corporations	84.9	92.8	97.2	91.2	96.8	96.4	97.2	105.2	101.5
General government	6.3	6.3	6.5	6.4	6.4	6.4	6.5	6.5	6.5
to the rest of the world	151.7	172.7	185.7	171.2	170.0	171.2	185.7	204.3	206.8
Equity and investment fund shares	1,698.6	1,872.9	1,916.3	1,789.4	1,747.6	1,805.2	1,916.3	1,997.8	1,985.6
Equity	1,563.1	1,721.0	1,756.4	1,638.3	1,595.9	1,647.0	1,756.4	1,837.0	1,827.5
Listed shares of domestic sectors	262.2	273.0	292.3	248.1	239.4	265.1	292.3	304.1	304.1
Non-financial corporations	252.2	266.6	286.2	242.0	233.7	259.3	286.2	298.6	297.9
Financial corporations	10.0	6.3	6.1	6.1	5.7	5.8	6.1	5.5	6.2
Listed shares of the rest of the world	50.0	62.5	73.9	62.9	62.1	64.5	73.9	79.7	89.3
Other equity ¹	1,250.8	1,385.5	1,390.2	1,327.3	1,294.3	1,317.4	1,390.2	1,453.2	1,434.1
Investment fund shares	135.5	151.9	159.9	151.1	151.7	158.2	159.9	160.8	158.2
Money market fund shares	1.2	1.4	1.9	1.0	1.1	1.0	1.9	1.7	1.7
Non-MMF investment fund shares	134.4	150.6	158.0	150.1	150.6	157.2	158.0	159.1	156.4
Insurance technical reserves	46.1	48.8	51.6	49.5	50.2	50.9	51.6	52.3	53.1
Financial derivatives	22.8	24.1	27.3	23.3	25.3	22.0	27.3	23.6	22.7
Other accounts receivable	883.4	913.5	931.6	905.3	904.9	905.6	931.6	1,016.5	965.4
Total	3,562.8	3,856.7	3,984.6	3,761.8	3,723.1	3,814.7	3,984.6	4,178.0	4,123.4
Liabilities									
Debt securities	150.9	156.8	183.8	173.1	179.0	183.0	183.8	189.7	188.1
short-term securities	1.8	3.0	2.9	5.1	5.3	4.7	2.9	8.3	7.9
long-term securities	149.1	153.7	180.9	168.0	173.7	178.3	180.9	181.4	180.2
Memo item									
Debt securities of domestic sectors	60.2	58.7	72.2	65.9	68.2	71.3	72.2	74.7	75.1
Non-financial corporations	4.6	3.6	4.4	4.3	4.2	4.3	4.4	5.3	4.6
Financial corporations	39.8	40.0	51.9	46.0	49.1	50.9	51.9	54.3	55.6
General government	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Households	15.8	15.0	15.7	15.6	14.9	15.9	15.7	15.0	14.8
Debt securities of the rest of the world	90.7	98.1	111.7	107.1	110.8	111.8	111.7	115.0	113.0
Loans	1,390.6	1,438.6	1,476.2	1,463.8	1,467.8	1,486.1	1,476.2	1,515.2	1,529.8
short-term loans	486.6	515.6	528.8	529.2	527.6	532.0	528.8	536.6	536.2
long-term loans	904.0	923.0	947.5	934.6	940.2	954.1	947.5	978.6	993.7
Memo item									
from domestic sectors	1,093.9	1,110.5	1,123.9	1,134.1	1,123.2	1,134.7	1,123.9	1,143.8	1,157.0
Non-financial corporations	212.4	213.3	207.2	219.5	208.4	206.7	207.2	210.0	212.5
Financial corporations	822.2	845.5	863.5	856.1	856.2	870.5	863.5	875.0	883.7
General government	59.2	51.7	53.1	58.5	58.6	57.5	53.1	58.8	60.8
from the rest of the world	296.7	328.0	352.4	329.7	344.6	351.4	352.4	371.4	372.8
Equity	2,543.6	2,673.9	2,749.3	2,570.6	2,490.5	2,665.4	2,749.3	2,870.5	2,889.4
Listed shares of domestic sectors	570.8	626.4	664.0	585.2	569.6	616.9	664.0	696.5	697.8
Non-financial corporations	252.2	266.6	286.2	242.0	233.7	259.3	286.2	298.6	297.9
Financial corporations	134.7	150.1	154.7	140.3	139.2	147.8	154.7	161.3	166.4
General government	35.2	43.4	44.4	41.5	40.4	40.8	44.4	47.0	46.7
Households	148.7	166.2	178.7	161.5	156.3	168.9	178.7	189.7	186.8
Quoted shares of the rest of the world	719.1	756.3	803.7	724.7	684.7	782.2	803.7	865.4	879.1
Other equity ¹	1,253.7	1,291.2	1,281.6	1,260.8	1,236.2	1,266.4	1,281.6	1,308.5	1,312.4
Insurance technical reserves	250.3	255.9	259.5	256.8	257.7	258.6	259.5	260.4	261.3
Financial derivatives and employee stock options	51.8	42.0	38.2	49.6	46.5	50.4	38.2	35.4	32.7
Other accounts payable	981.3	1,004.1	1,038.2	985.2	989.1	996.7	1,038.2	1,062.6	1,008.1
Total	5,368.5	5,571.1	5,745.2	5,499.1	5,430.5	5,640.2	5,745.2	5,933.8	5,909.4

¹ Including unlisted shares.

IX Financial accounts

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

€ billion

Item	2014	2015	2016	2016				2017	
				Q1	Q2	Q3	Q4	Q1	Q2
Acquisition of financial assets									
Currency and deposits	85.82	96.67	115.04	8.73	29.08	24.74	52.50	12.32	25.59
Currency	15.64	25.51	21.37	3.03	4.82	7.11	6.41	3.60	1.00
Deposits	70.18	71.16	93.68	5.70	24.26	17.63	46.09	8.72	24.59
Transferable deposits	73.84	100.96	105.26	7.24	28.09	23.41	46.52	13.26	29.95
Time deposits	8.74	– 9.22	1.28	0.83	2.16	– 1.73	0.02	– 1.59	– 2.32
Savings deposits (including savings certificates)	– 12.41	– 20.58	– 12.87	– 2.37	– 5.99	– 4.05	– 0.45	– 2.96	– 3.04
Debt securities	– 18.00	– 17.40	– 12.20	– 1.76	– 4.10	– 3.16	– 3.18	– 1.19	– 1.57
short-term debt securities	– 0.67	0.75	– 0.10	0.10	– 0.62	0.10	0.33	0.38	0.20
long-term debt securities	– 17.33	– 18.16	– 12.10	– 1.86	– 3.48	– 3.26	– 3.50	– 1.57	– 1.77
Memo item									
Debt securities of domestic sectors	– 15.08	– 9.34	– 3.81	1.08	– 1.57	– 1.74	– 1.58	0.11	– 0.72
Non-financial corporations	0.02	0.39	0.02	0.67	– 0.59	0.03	– 0.09	– 0.65	– 0.20
Financial corporations	– 12.52	– 6.80	– 2.22	0.74	– 0.36	– 1.29	– 1.31	1.08	– 0.23
General government	– 2.58	– 2.93	– 1.61	– 0.33	– 0.63	– 0.48	– 0.18	– 0.33	– 0.28
Debt securities of the rest of the world	– 2.93	– 8.06	– 8.39	– 2.84	– 2.53	– 1.42	– 1.60	– 1.30	– 0.86
Equity and investment fund shares	36.87	46.39	42.23	15.67	11.57	10.20	4.79	10.62	12.07
Equity	12.17	15.03	18.16	10.26	5.22	3.35	– 0.67	1.86	1.96
Listed Shares of domestic sectors	4.61	4.06	6.49	6.59	2.69	0.25	– 3.03	– 0.70	– 0.67
Non-financial corporations	2.69	3.77	3.22	4.52	0.69	– 0.30	– 1.69	– 0.36	– 1.43
Financial corporations	1.93	0.28	3.28	2.07	2.00	0.55	– 1.33	– 0.33	0.76
Quoted shares of the rest of the world	3.70	6.75	6.83	1.65	1.21	2.08	1.88	1.78	1.96
Other equity ¹	3.86	4.22	4.83	2.02	1.32	1.02	0.47	0.77	0.66
Investment fund shares	24.70	31.36	24.07	5.41	6.35	6.86	5.46	8.76	10.12
Money market fund shares	– 0.34	– 0.57	– 0.52	– 0.30	– 0.15	0.10	– 0.17	– 0.22	0.04
Non-MMF investment fund shares	25.04	31.93	24.60	5.71	6.50	6.76	5.63	8.98	10.08
Non-life insurance technical reserves and provision for calls under standardised guarantees	22.85	20.09	17.36	4.68	4.18	4.32	4.18	3.38	3.40
Life insurance and annuity entitlements	31.89	31.36	39.88	19.62	7.56	8.98	3.73	13.26	10.77
Pension entitlement, claims of pension funds on pension managers, entitlements to non-pension benefits	36.84	30.85	26.39	2.94	6.39	5.52	11.54	7.60	4.31
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 ²	– 34.45	– 16.59	– 27.21	11.40	– 5.10	– 7.06	– 26.46	14.09	– 1.78
Total	161.82	191.36	201.49	61.26	49.58	43.55	47.10	60.08	52.78
External financing									
Loans	20.59	38.20	47.13	5.98	15.82	15.98	9.35	6.36	16.99
short-term loans	– 1.98	– 3.17	– 4.31	– 0.42	– 0.91	– 0.93	– 2.05	– 0.35	– 0.34
long-term loans	22.57	41.36	51.44	6.40	16.73	16.92	11.39	6.71	17.33
Memo item									
Mortgage loans	24.87	35.63	41.59	4.26	12.13	14.30	10.91	4.57	13.66
Consumer loans	1.21	5.44	9.78	2.11	3.93	2.86	0.88	2.41	3.25
Entrepreneurial loans	– 5.49	– 2.88	– 4.24	– 0.38	– 0.24	– 1.17	– 2.44	– 0.62	0.07
Memo item									
Loans from monetary financial institutions	18.87	39.35	42.87	5.24	13.81	15.74	8.08	7.10	15.54
Loans from other financial institutions	1.72	– 1.16	4.26	0.74	2.01	0.25	1.27	– 0.74	1.45
Loans from general government and rest of the world	0.00	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	0.78	– 1.14	0.34	0.19	0.03	0.11	0.01	– 0.16	0.05
Total	21.37	37.06	47.47	6.17	15.85	16.09	9.35	6.20	17.03

¹ Including unlisted shares. ² 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	2014	2015	2016	2016				2017	
				Q1	Q2	Q3	Q4	Q1	Q2
Financial assets									
Currency and deposits	1,998.1	2,094.8	2,208.9	2,103.6	2,132.7	2,157.6	2,208.9	2,222.0	2,247.6
Currency	127.7	153.2	174.6	156.2	161.0	168.1	174.6	178.2	179.2
Deposits	1,870.4	1,941.6	2,034.4	1,947.4	1,971.6	1,989.5	2,034.4	2,043.8	2,068.4
Transferable deposits	981.4	1,082.4	1,188.0	1,089.8	1,117.9	1,141.5	1,188.0	1,201.2	1,231.2
Time deposits	256.4	246.8	248.7	248.3	250.4	248.7	248.7	247.9	245.6
Savings deposits (including savings certificates)	632.7	612.4	597.7	609.3	603.4	599.3	597.7	594.7	591.7
Debt securities	162.2	139.8	127.4	137.1	133.5	130.6	127.4	126.7	125.4
short-term debt securities	2.1	2.9	2.7	2.9	2.3	2.4	2.7	3.1	3.2
long-term debt securities	160.1	136.9	124.7	134.2	131.2	128.3	124.7	123.6	122.2
Memo item									
Debt securities of domestic sectors	102.4	89.4	85.6	89.6	87.8	87.1	85.6	86.1	86.2
Non-financial corporations	14.1	13.4	13.9	13.9	13.1	14.1	13.9	13.3	13.0
Financial corporations	78.7	69.5	66.7	69.4	69.0	67.8	66.7	68.2	68.9
General government	9.6	6.5	5.0	6.3	5.7	5.2	5.0	4.6	4.3
Debt securities of the rest of the world	59.8	50.3	41.8	47.6	45.7	43.5	41.8	40.6	39.3
Equity and investment fund shares	951.4	1,040.7	1,107.7	1,023.0	1,028.6	1,068.8	1,107.7	1,155.5	1,158.1
Equity	508.9	555.9	589.9	543.6	540.8	563.7	589.9	614.6	610.9
Listed Shares of domestic sectors	169.7	188.9	200.8	181.8	174.6	187.9	200.8	213.0	211.1
Non-financial corporations	142.1	158.7	169.8	154.1	148.6	160.6	169.8	180.4	177.5
Financial corporations	27.6	30.3	31.0	27.6	26.0	27.3	31.0	32.6	33.6
Quoted shares of the rest of the world	64.0	74.8	86.8	73.1	76.8	80.7	86.8	93.1	92.7
Other equity ¹	275.3	292.2	302.4	288.8	289.4	295.1	302.4	308.5	307.1
Investment fund shares	442.5	484.8	517.8	479.3	487.8	505.1	517.8	540.9	547.2
Money market fund shares	4.0	3.4	2.8	3.1	3.0	3.0	2.8	2.7	2.8
Non-MMF investment fund shares	438.5	481.4	515.0	476.3	484.7	502.1	515.0	538.2	544.4
Non-life insurance technical reserves and provision for calls under standardised guarantees	307.2	324.3	337.7	327.6	331.0	334.4	337.7	341.0	344.4
Life insurance and annuity entitlements	885.6	919.5	963.1	940.4	948.7	958.5	963.1	976.3	987.1
Pension entitlement, claims of pension funds on pension managers, entitlements to non-pension benefits	752.1	786.6	813.0	789.6	796.0	801.5	813.0	820.6	824.9
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 ²	35.8	37.1	35.6	36.8	36.5	36.0	35.6	35.3	35.1
Total	5,092.5	5,342.8	5,593.4	5,358.1	5,406.9	5,487.4	5,593.4	5,677.5	5,722.6
Liabilities									
Loans	1,570.5	1,606.6	1,654.4	1,613.0	1,628.8	1,645.0	1,654.4	1,660.7	1,679.0
short-term loans	64.6	60.9	56.6	60.5	59.6	58.6	56.6	56.3	55.9
long-term loans	1,505.9	1,545.8	1,597.7	1,552.5	1,569.2	1,586.3	1,597.7	1,604.5	1,623.1
Memo item									
Mortgage loans	1,118.0	1,153.8	1,195.5	1,158.1	1,170.3	1,184.6	1,195.5	1,200.1	1,216.8
Consumer loans	188.9	191.9	201.8	194.0	197.8	200.9	201.8	204.2	207.4
Entrepreneurial loans	263.6	260.9	257.0	260.9	260.7	259.5	257.0	256.4	254.8
Memo item									
Loans from monetary financial institutions	1,477.6	1,514.9	1,558.3	1,520.5	1,534.3	1,550.2	1,558.3	1,565.4	1,582.3
Loans from other financial institutions	92.9	91.8	96.0	92.5	94.5	94.8	96.0	95.3	96.8
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	16.5	15.1	16.0	16.0	16.1	16.6	16.0	16.8	16.3
Total	1,587.0	1,621.7	1,670.4	1,629.0	1,644.9	1,661.6	1,670.4	1,677.5	1,695.3

¹ Including unlisted shares. ² 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				
Deficit/surplus¹										
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	- 4.0	- 7.4	- 2.5	+ 0.5	+ 5.4	- 0.1	- 0.3	- 0.1	+ 0.0	+ 0.2
2014 P	+ 9.5	+ 8.7	- 1.1	- 1.2	+ 3.2	+ 0.3	+ 0.3	- 0.0	- 0.0	+ 0.1
2015 P	+ 19.4	+ 9.7	+ 3.8	+ 3.1	+ 2.7	+ 0.6	+ 0.3	+ 0.1	+ 0.1	+ 0.1
2016 P	+ 25.7	+ 7.4	+ 4.9	+ 5.2	+ 8.2	+ 0.8	+ 0.2	+ 0.2	+ 0.2	+ 0.3
2015 H1 P	+ 12.5	+ 1.5	+ 3.5	+ 4.6	+ 3.0	+ 0.8	+ 0.1	+ 0.2	+ 0.3	+ 0.2
H2 P	+ 6.9	+ 8.2	+ 0.4	- 1.4	- 0.2	+ 0.4	+ 0.5	+ 0.0	- 0.1	- 0.0
2016 H1 P	+ 17.5	+ 5.0	+ 4.1	+ 1.9	+ 6.6	+ 1.1	+ 0.3	+ 0.3	+ 0.1	+ 0.4
H2 P	+ 8.1	+ 2.4	+ 0.8	+ 3.3	+ 1.6	+ 0.5	+ 0.2	+ 0.0	+ 0.2	+ 0.1
2017 H1 P ^{pe}	+ 21.2	- 1.5	+ 9.3	+ 6.4	+ 7.0	+ 1.3	- 0.1	+ 0.6	+ 0.4	+ 0.4
Debt level²										
End of year or quarter										
2011	2,125.0	1,344.1	653.8	143.5	1.3	78.6	49.7	24.2	5.3	0.0
2012	2,202.2	1,387.9	683.5	147.5	1.2	79.8	50.3	24.8	5.3	0.0
2013	2,186.6	1,390.4	661.7	150.6	1.3	77.4	49.2	23.4	5.3	0.0
2014 P	2,187.0	1,396.5	655.0	152.0	1.4	74.6	47.6	22.3	5.2	0.0
2015 P	2,156.6	1,372.6	651.3	152.2	1.4	70.9	45.1	21.4	5.0	0.0
2016 P	2,140.0	1,366.8	634.0	153.4	1.1	68.1	43.5	20.2	4.9	0.0
2015 Q1 P	2,192.6	1,398.0	663.1	152.4	1.4	74.2	47.3	22.4	5.2	0.0
Q2 P	2,158.4	1,380.6	642.7	152.2	1.4	72.3	46.3	21.5	5.1	0.0
Q3 P	2,160.2	1,374.7	650.2	153.1	1.5	71.7	45.6	21.6	5.1	0.0
Q4 P	2,156.6	1,372.6	651.3	152.2	1.4	70.9	45.1	21.4	5.0	0.0
2016 Q1 P	2,164.8	1,382.5	644.2	154.4	1.2	70.6	45.1	21.0	5.0	0.0
Q2 P	2,168.1	1,391.1	640.6	154.0	1.1	69.9	44.8	20.7	5.0	0.0
Q3 P	2,161.3	1,381.1	640.8	154.8	1.0	69.2	44.2	20.5	5.0	0.0
Q4 P	2,140.0	1,366.8	634.0	153.4	1.1	68.1	43.5	20.2	4.9	0.0
2017 Q1 P	2,113.3	1,350.9	624.1	152.1	1.2	66.5	42.5	19.6	4.8	0.0
Q2 P	2,107.7	1,353.5	617.5	151.5	0.9	65.9	42.3	19.3	4.7	0.0

Sources: Federal Statistical Office and Bundesbank calculations. **1** The deficit/surplus in accordance with ESA 2010 corresponds to the Maastricht definition. **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 ¹	
	Total	of which			Total	of which							
	Taxes	Social contributions	Other	Social benefits	Compensation of employees	Intermediate consumption	Gross capital formation	Interest	Other				
€ billion													
2011	1,182.7	598.8	442.3	141.7	1,208.6	633.9	208.6	124.1	61.4	67.5	113.1	- 25.9	1,045.6
2012	1,220.9	624.9	454.3	141.7	1,221.8	645.5	212.3	126.5	61.5	63.1	112.8	- 0.9	1,083.7
2013	1,259.0	651.0	465.0	143.0	1,263.0	666.4	217.8	133.0	60.1	55.5	130.2	- 4.0	1,120.3
2014 P	1,308.3	674.1	482.0	152.3	1,298.8	691.0	224.0	137.4	60.0	51.2	135.2	+ 9.5	1,160.7
2015 P	1,354.3	704.3	500.8	149.2	1,334.9	722.3	229.2	142.2	64.2	46.4	130.6	+ 19.4	1,212.2
2016 P	1,414.2	739.0	523.8	151.5	1,388.6	754.9	236.5	150.0	66.8	41.6	138.8	+ 25.7	1,269.6
as a percentage of GDP													
2011	43.8	22.2	16.4	5.2	44.7	23.4	7.7	4.6	2.3	2.5	4.2	- 1.0	38.7
2012	44.3	22.7	16.5	5.1	44.3	23.4	7.7	4.6	2.2	2.3	4.1	- 0.0	39.3
2013	44.5	23.0	16.5	5.1	44.7	23.6	7.7	4.7	2.1	2.0	4.6	- 0.1	39.6
2014 P	44.6	23.0	16.4	5.2	44.3	23.6	7.6	4.7	2.0	1.7	4.6	+ 0.3	39.6
2015 P	44.5	23.1	16.5	4.9	43.9	23.7	7.5	4.7	2.1	1.5	4.3	+ 0.6	39.8
2016 P	45.0	23.5	16.7	4.8	44.2	24.0	7.5	4.8	2.1	1.3	4.4	+ 0.8	40.4
Percentage growth rates													
2011	+ 6.5	+ 7.7	+ 3.8	+ 10.7	- 0.9	- 0.1	+ 2.5	+ 5.1	+ 3.3	+ 5.7	- 19.2	.	+ 6.0
2012	+ 3.2	+ 4.4	+ 2.7	+ 0.0	+ 1.1	+ 1.8	+ 1.8	+ 2.0	+ 0.2	- 6.5	- 0.3	.	+ 3.6
2013	+ 3.1	+ 4.2	+ 2.4	+ 1.0	+ 3.4	+ 3.2	+ 2.6	+ 5.1	- 2.2	- 12.0	+ 15.4	.	+ 3.4
2014 P	+ 3.9	+ 3.6	+ 3.6	+ 6.4	+ 2.8	+ 3.7	+ 2.9	+ 3.3	- 0.3	- 7.7	+ 3.9	.	+ 3.6
2015 P	+ 3.5	+ 4.5	+ 3.9	- 2.0	+ 2.8	+ 4.5	+ 2.3	+ 3.5	+ 7.0	- 9.3	- 3.4	.	+ 4.4
2016 P	+ 4.4	+ 4.9	+ 4.6	+ 1.6	+ 4.0	+ 4.5	+ 3.2	+ 5.5	+ 4.1	- 10.4	+ 6.2	.	+ 4.7

Source: Federal Statistical Office. * Figures in accordance with ESA 2010. **1** Taxes and social contributions plus customs duties and levies from banks to the Single Reso-

lution Fund established at the European level.

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

€ billion

Period	Central, state and local government ¹									Social security funds ²			General government, total			
	Revenue			Expenditure						Deficit / surplus	Revenue ⁶	Expenditure	Deficit / surplus	Revenue	Expenditure	Deficit / surplus
	Total ⁴	of which		Total ⁴	of which ³											
		Taxes	Financial transactions ⁵		Personnel expenditure	Current grants	Interest	Fixed asset formation	Financial transactions ⁵							
2010	634.7	530.6	7.9	713.6	190.7	308.5	57.7	39.7	11.4	- 78.9	516.5	512.7	+ 3.8	1,033.7	1,108.8	- 75.1
2011	689.6	573.4	22.8	711.6	194.3	301.3	56.8	38.5	13.7	- 22.0	526.3	511.2	+ 15.1	1,104.2	1,111.1	- 6.9
2012 P	745.0	600.0	14.7	770.2	218.8	285.2	69.9	42.6	25.5	- 25.2	536.2	518.8	+ 17.4	1,171.1	1,178.8	- 7.8
2013 P	761.8	619.7	14.7	773.6	225.3	286.9	65.7	42.8	23.5	- 11.8	536.7	531.9	+ 4.9	1,198.1	1,205.0	- 6.9
2014 P	791.8	643.6	11.3	786.7	236.0	292.9	57.1	45.9	17.6	+ 5.1	554.5	551.1	+ 3.5	1,245.3	1,236.7	+ 8.6
2015 P	829.5	673.3	10.4	804.1	244.1	302.6	49.8	46.4	12.5	+ 25.5	575.0	573.1	+ 1.9	1,300.8	1,273.4	+ 27.4
2016 P	862.1	705.8	9.0	844.5	251.3	320.5	43.4	49.0	11.8	+ 17.6	601.5	594.6	+ 6.9	1,354.7	1,330.2	+ 24.5
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	178.2	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	205.7	169.9	1.4	206.5	60.2	81.5	17.7	8.4	2.2	- 0.8	143.0	146.6	- 3.6	321.8	326.2	- 4.5
Q2 P	216.7	176.6	2.4	194.1	60.7	77.7	5.4	10.4	2.4	+ 22.7	148.7	147.0	+ 1.7	338.5	314.2	+ 24.3
Q3 P	207.1	169.3	2.9	210.9	62.0	79.3	14.5	12.3	2.4	- 3.8	148.3	149.7	- 1.4	328.2	333.4	- 5.2
Q4 P	233.1	189.2	2.1	233.4	68.0	82.3	7.7	17.2	4.8	- 0.3	160.1	152.2	+ 7.8	365.7	358.2	+ 7.5
2017 Q1 P	215.6	180.4	0.9	200.9	63.1	80.9	13.8	10.2	1.9	+ 14.6	150.3	155.1	- 4.8	337.5	327.7	+ 9.8
Q2 P	217.9	177.3	1.2	206.7	63.9	83.6	6.6	8.8	3.6	+ 11.3	156.4	154.3	+ 2.1	346.1	332.8	+ 13.4

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 contain numerous off-budget entities which are assigned to the general government sector as defined in the national accounts but are not yet included in the annual calculations. From 2012, also including the bad bank FMSW. ² 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 changeovers. 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 ^{2,3}			Local government ³		
	Revenue ¹	Expenditure	Deficit / surplus	Revenue	Expenditure	Deficit / surplus	Revenue	Expenditure	Deficit / surplus
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	338.3	326.5	+ 11.8	355.1	350.6	+ 4.5	232.7	229.1	+ 3.6
2016 P	344.7	338.4	+ 6.2	381.1	373.5	+ 7.6	248.9	243.1	+ 5.8
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	91.5	83.4	+ 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
Q4 P	90.9	92.5	- 1.6	104.3	105.5	- 1.2	76.3	68.0	+ 8.3
2017 Q1 P	88.2	84.6	+ 3.5	95.6	90.0	+ 5.6	52.7	57.7	- 4.9
Q2 P	81.5	80.1	+ 1.4	96.3	93.6	+ 2.7	65.0	59.5	+ 5.5

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 Quarterly data of core budgets and off-budget entities which are

assigned to the general government sector. 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.

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5 Central, state and local government: tax revenue

€ million

Period	Central and state government and European Union							Balance of untransferred tax shares ⁴	Memo item Amounts deducted in the federal budget ⁵
	Total	Total	Central government ¹	State government ¹	European Union ²	Local government ³			
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
2016	705,791	606,965	316,854	260,837	29,273	98,679	+	148	27,836
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
Q4	189,180	164,382	83,919	72,608	7,855	32,513	-	7,715	7,253
2017 Q1	181,506	154,154	85,256	66,704	2,194	17,950	+	9,403	6,606
Q2	177,090	149,915	76,387	66,605	6,922	27,631	-	456	6,825
Q3	...	155,250	82,576	66,718	5,957	...	...	...	7,467
2016 Oct	.	41,809	21,680	17,511	2,618	.	.	.	2,154
2017 Oct	.	41,842	21,824	17,819	2,199	.	.	.	2,157

Sources: Federal Ministry of Finance, Federal Statistical Office and Bundesbank calculations. **1** Before deducting or adding supplementary central government grants, regionalisation funds (local public transport), compensation for the transfer of motor vehicle tax to central government and consolidation assistance, 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. **2** Custom duties and shares in VAT and gross national income accruing to the EU from central

government tax revenue. **3** Including local government taxes in the city-states Berlin, Bremen and Hamburg. Including revenue from offshore wind farms. **4** 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. **5** Volume of the positions mentioned under footnote 1.

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

€ million

Period	Joint taxes											EU customs duties	Memo item Local government share in joint taxes			
	Total ¹	Income taxes ²					Turnover taxes ⁵				Local business tax transfers ⁶			Central government taxes ⁷	State government taxes ⁷	
		Total	Wage tax ³	Assessed income tax	Corporation tax	Investment income tax ⁴	Total	Turnover tax	Turnover tax on imports							
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		
2016	648,309	291,492	184,826	53,833	27,442	25,391	217,090	165,932	51,157	7,831	104,441	22,342	5,113	41,345		
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		
Q4	175,797	78,076	52,275	14,422	6,134	5,245	56,071	42,593	13,478	3,656	31,247	5,454	1,293	11,415		
2017 Q1	165,352	76,990	45,309	17,009	8,511	6,161	57,502	44,196	13,306	438	23,364	5,834	1,224	11,198		
Q2	161,036	78,178	48,256	14,825	7,872	7,225	54,243	39,885	14,358	2,059	19,868	5,407	1,281	11,121		
Q3	165,923	75,218	47,253	12,720	6,034	9,211	56,481	42,571	13,911	2,214	25,114	5,580	1,315	10,673		
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
2017 Oct	44,597	14,525	14,880	-	191	-	1,404	1,240	18,478	13,928	4,550	1,704	7,779	1,689	423	2,756

Source: Federal Ministry of Finance and Bundesbank calculations. **1** 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. **2** 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 50:50:0, final withholding tax on interest income and capital gains, non-assessed taxes on earnings 44:44:12. **3** After

deducting child benefit and subsidies for supplementary private pension plans. **4** Final withholding tax on interest income and capital gains, non-assessed taxes on earnings. **5** 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 2016: 49.4:48.3:2.2. The EU share is deducted from central government's share. **6** Respective percentage share of central and state government for 2016: 22.4:77.6. **7** For the breakdown, see Table X. 7.

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7 Central, state and local government: individual taxes

€ million

Period	Central government taxes ¹								State government taxes ¹				Local government taxes		
	Energy tax	Solidarity surcharge	Tobacco tax	Insurance tax	Motor vehicle tax	Electricity tax	Spirits tax	Other	Tax on the acquisition of land and buildings	Inheritance tax	Betting and lottery tax	Other	Total	of which	
														Local business tax ²	Real property taxes
2010	39,838	11,713	13,492	10,284	8,488	6,171	1,990	1,449	5,290	4,404	1,412	1,039	47,780	35,712	11,315
2011	40,036	12,781	14,414	10,755	8,422	7,247	2,149	3,329	6,366	4,246	1,420	1,064	52,984	40,424	11,674
2012	39,305	13,624	14,143	11,138	8,443	6,973	2,121	4,047	7,389	4,305	1,432	1,076	55,398	42,345	12,017
2013	39,364	14,378	13,820	11,553	8,490	7,009	2,102	3,737	8,394	4,633	1,635	1,060	56,549	43,027	12,377
2014	39,758	15,047	14,612	12,046	8,501	6,638	2,060	3,143	9,339	5,452	1,673	1,091	57,728	43,763	12,691
2015	39,594	15,930	14,921	12,419	8,805	6,593	2,070	3,872	11,249	6,290	1,712	1,088	60,396	45,752	13,215
2016	40,091	16,855	14,186	12,763	8,952	6,569	2,070	2,955	12,408	7,006	1,809	1,119	65,313	50,097	13,654
2015 Q1	4,704	3,783	2,223	5,825	2,454	1,806	570	904	2,760	1,668	426	353	14,288	10,912	2,982
Q2	9,512	4,278	3,683	2,187	2,361	1,465	470	937	2,561	1,617	433	227	16,368	12,383	3,636
Q3	10,159	3,714	3,981	2,436	2,108	1,643	496	1,102	3,021	1,335	401	272	15,180	11,118	3,697
Q4	15,220	4,155	5,034	1,972	1,883	1,678	534	930	2,906	1,670	452	236	14,561	11,339	2,899
2016 Q1	4,620	3,979	2,722	5,946	2,489	1,685	565	547	3,217	1,668	451	336	15,639	12,090	3,121
Q2	9,860	4,470	4,139	2,269	2,366	1,515	473	691	2,952	2,283	451	267	16,740	12,635	3,715
Q3	10,149	3,938	3,010	2,510	2,198	1,641	499	911	3,050	1,501	446	266	15,896	11,699	3,794
Q4	15,461	4,468	4,315	2,038	1,899	1,728	532	806	3,189	1,554	460	251	17,039	13,673	3,024
2017 Q1	4,812	4,324	2,637	6,178	2,536	1,746	578	553	3,359	1,641	490	343	16,593	12,905	3,228
Q2	10,091	4,809	3,634	2,353	2,374	1,784	476	-5,652	3,129	1,538	474	265	18,113	13,881	3,832
Q3	10,497	4,144	3,867	2,669	2,132	1,628	502	-324	3,394	1,497	417	273	...	...	...
2016 Oct	3,576	903	1,238	578	619	573	171	295	978	492	140	89	.	.	.
2017 Oct	3,636	918	1,010	594	647	573	177	224	1,056	410	148	75	.	.	.

Sources: Federal Ministry of Finance, Federal Statistical Office and Bundesbank calculations. ¹ For the sum total, see Table X. 6. ² Including revenue from offshore wind farms.

8 German pension insurance scheme: budgetary development and assets*

€ million

Period	Revenue ^{1,2}			Expenditure ^{1,2}			Deficit/surplus	Assets ^{1,4}					Memo item Administrative assets
	Total	of which		Total	of which			Total	Deposits ⁵	Securities	Equity interests, mortgages and other loans ⁶	Real estate	
		Contributions ³	Payments from central government		Pension payments	Pensioners' health insurance							
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
2016	286,399	202,249	83,154	288,641	246,118	17,387	- 2,242	34,094	31,524	2,315	203	52	4,147
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
Q4	76,136	55,171	20,733	74,016	63,117	4,450	+ 2,120	34,088	31,529	2,315	192	53	4,161
2017 Q1	71,301	49,388	21,715	73,731	63,263	4,460	- 2,430	31,660	29,133	2,270	205	52	4,140
Q2	74,581	52,739	21,632	73,785	63,016	4,440	+ 796	32,535	30,372	1,901	210	52	4,136
Q3	73,295	51,374	21,738	75,569	64,628	4,560	- 2,274	30,801	28,831	1,701	214	54	4,115

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. ¹ The final annual figures do not tally with the quarterly figures, as the latter are all provisional. ² Including financial compensation payments. Ex-

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

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9 Federal Employment Agency: budgetary development*

€ million

Period	Revenue				Expenditure							Deficit/ surplus	Deficit offsetting grant or loan from central govern- ment
	Total ¹	of which			Total	of which							
		Contri- butions	Insolvency compen- sation levy	Central government subscriptions		Unemploy- ment benefit ²	Short-time working benefits ³	Job promotion ⁴	Re- integration payment ⁵	Insolvency benefit payment	Adminis- trative expendi- ture ⁶		
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	-
2016	36,352	31,186	1,114	-	30,889	14,435	749	7,035	.	595	5,314	+ 5,463	-
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	-
Q4	10,108	8,569	299	-	7,750	3,276	77	1,841	.	134	1,642	+ 2,358	-
2017 Q1	8,859	7,564	204	-	8,834	3,973	478	1,772	.	146	1,749	+ 26	-
Q2	9,355	8,112	227	-	7,964	3,529	173	1,802	.	155	1,577	+ 1,391	-
Q3	9,159	7,897	210	-	7,281	3,360	63	1,646	.	171	1,402	+ 1,878	-

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

encourage job take-up, rehabilitation, compensation top-up payments and promotion of business start-ups. ⁵ Until 2012. From 2005 to 2007: compensatory amount. ⁶ 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 ¹			Expenditure ¹							Deficit/ surplus	
	Total	of which		Total	of which							
		Contri- butions ²	Central govern- ment funds ³		Hospital treatment	Pharma- ceuticals	Medical treatment	Dental treatment ⁴	Thera- peutical treatment and aids	Sickness benefits		Adminis- trative expendi- ture ⁵
2010	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
2016	223,692	206,830	14,000	222,936	70,450	35,981	37,300	13,790	14,256	11,677	11,032	+ 757
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
Q4	59,552	55,146	3,500	56,832	17,342	9,194	9,351	3,526	3,698	2,912	3,291	+ 2,720
2017 Q1	55,809	51,632	3,625	57,716	18,632	9,215	9,807	3,559	3,516	3,173	2,514	- 1,907
Q2	57,801	53,621	3,625	57,502	17,973	9,239	9,822	3,614	3,748	3,043	2,589	+ 298
Q3	57,617	53,442	3,625	57,202	17,802	9,330	9,629	3,374	3,679	2,980	2,731	+ 415

Source: Federal Ministry of Health. ¹ 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. ² Including contri-

butions from subsidised low-paid part-time employment. ³ Federal grant and liquidity assistance. ⁴ Including dentures. ⁵ Net, ie after deducting reimbursements for expenses for levying contributions incurred by other social insurance funds.

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

€ million

Period	Revenue ¹		Expenditure ¹					Deficit/ surplus		
	Total	of which Contributions ²	Total	of which						
				Non-cash care benefits	In-patient care	Nursing benefit	Contributions to pension insur- ance scheme ³		Administrative expenditure	
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
2016	32,171	32,100	30,936	3,846	10,918	6,673	983	1,422	+	1,235
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
Q4	8,550	8,535	7,941	975	2,741	1,877	250	322	+	608
2017 Q1	8,558	8,538	9,092	1,046	3,194	2,261	289	405	-	534
Q2	8,978	8,962	9,379	1,080	3,230	2,440	347	397	-	400
Q3	8,945	8,932	9,944	1,210	3,289	2,562	422	411	-	999

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

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

12 Central government: borrowing in the market

€ million

Period	Total new borrowing ¹		of which Change in money market loans	of which Change in money market deposits ³
	Gross ²	Net		
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
2016	+ 182,486	- 11,331	- 2,332	- 16,791
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
Q4	+ 26,890	- 12,297	+ 3,872	+ 3,333
2017 Q1	+ 47,749	- 5,700	+ 6,178	- 2,428
Q2	+ 42,941	+ 5,281	+ 318	+ 4,289
Q3	+ 44,338	+ 3,495	+ 587	+ 941

Source: Federal Republic of Germany – Finance Agency. ¹ Including the Financial Market Stabilisation Fund, the Investment and Repayment Fund and the Restructuring Fund for Credit Institutions. ² After deducting repurchases. ³ 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 ^{pe}
		Bundes- bank	Domestic MFIs ^{pe}	Other do- mestic fi- nancial cor- porations ^{pe}	Other domestic creditors ¹	
2011	2,125,032	4,440	613,186	206,631	53,974	1,246,801
2012	2,202,242	4,440	637,133	199,132	60,140	1,301,397
2013	2,186,643	4,440	644,067	190,555	43,969	1,303,612
2014	2,186,954	4,440	613,794	190,130	44,915	1,333,675
2015	2,156,645	77,220	601,629	186,661	44,977	1,246,158
2016 P	2,140,009	196,320	578,865	179,755	41,352	1,143,717
2015 Q1	2,192,594	12,335	622,160	189,048	44,414	1,324,637
Q2	2,158,420	34,310	602,743	187,280	44,792	1,289,295
Q3	2,160,212	54,990	607,882	188,165	44,785	1,264,390
Q4	2,156,645	77,220	601,629	186,661	44,977	1,246,158
2016 Q1 P	2,164,801	100,051	616,144	183,160	41,334	1,224,112
Q2 P	2,168,052	133,297	604,796	181,372	39,529	1,209,058
Q3 P	2,161,325	163,636	591,243	179,359	38,827	1,188,260
Q4 P	2,140,009	196,320	578,865	179,755	41,352	1,143,717
2017 Q1 P	2,113,322	230,505	564,984	178,219	39,361	1,100,254
Q2 P	2,107,734	255,879	551,214	176,810	38,641	1,085,190

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

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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
Central, state and local government												
2011	1,751,730	60,272	414,250	214,211	8,208	644,894	2,154	289,426	102	113,773	4,440	2
2012	1,791,656	57,172	417,470	234,355	6,818	667,198	1,725	288,133	70	114,272	4,440	2
2013	1,815,991	50,129	423,442	245,372	4,488	684,951	1,397	289,725	41	112,005	4,440	2
2014	1,817,244	27,951	429,633	259,186	2,375	703,812	1,187	275,582	42	113,035	4,440	2
2015 Q1	1,821,383	28,317	425,257	250,432	2,271	707,905	1,155	289,247	42	112,315	4,440	2
Q2	1,806,631	29,575	421,582	243,299	2,031	722,562	1,133	269,992	42	111,974	4,440	2
Q3	1,810,827	26,213	424,534	256,613	1,677	715,763	1,106	268,390	42	112,046	4,440	2
Q4	1,804,522	19,431	429,818	246,940	1,305	725,285	1,070	261,189	59	114,983	4,440	2
2016 Q1	1,813,655	21,804	427,090	240,281	1,205	730,533	1,051	275,378	100	111,771	4,440	2
Q2	1,812,131	29,543	427,813	235,389	1,108	727,922	1,033	275,038	40	109,804	4,440	2
Q3	1,804,296	31,237	433,493	245,945	922	717,358	1,021	260,003	39	109,835	4,440	2
Q4	1,786,609	24,509	430,701	236,136	737	724,528	1,010	254,273	21	110,251	4,440	2
2017 Q1 P	1,771,555	16,098	424,930	227,906	619	730,531	995	257,179	25	108,830	4,440	2
Q2 P	1,771,215	15,759	422,682	219,668	487	745,792	986	252,629	32	108,737	4,440	2
Central government^{7,8}												
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	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
Q4	1,102,410	23,609	95,727	236,136	737	722,124	1,010	11,761	-	6,866	4,440	2
2017 Q1	1,096,711	14,910	95,148	227,906	619	727,887	995	17,829	-	6,976	4,440	2
Q2	1,101,991	14,431	93,795	219,668	487	743,120	986	18,076	-	6,986	4,440	2
Q3	1,105,486	11,851	91,893	229,519	398	741,039	977	18,420	-	6,949	4,440	2
State government												
2011	536,696	1,975	283,601	-	-	-	-	150,631	62	100,426	-	1
2012	541,237	950	299,751	-	-	-	-	137,068	51	103,416	-	1
2013	545,788	125	313,412	-	-	-	-	131,302	30	100,918	-	1
2014	544,612	0	326,188	-	-	-	-	117,451	5	100,967	-	1
2015 Q1	546,975	1,821	323,055	-	-	-	-	121,130	5	100,964	-	1
Q2	537,947	2,040	320,492	-	-	-	-	114,816	5	100,593	-	1
Q3	543,477	2,056	326,447	-	-	-	-	114,081	5	100,887	-	1
Q4	543,003	895	333,429	-	-	-	-	106,720	5	101,953	-	1
2016 Q1	541,653	1,278	328,858	-	-	-	-	113,286	5	98,225	-	1
Q2	536,101	1,173	328,397	-	-	-	-	109,680	6	96,845	-	1
Q3	541,288	611	331,441	-	-	-	-	112,558	6	96,672	-	1
Q4	537,009	900	334,975	-	-	-	-	103,071	6	98,056	-	1
2017 Q1 P	529,520	1,188	329,782	-	-	-	-	101,940	3	96,607	-	1
Q2 P	524,473	1,327	328,887	-	-	-	-	97,768	3	96,487	-	1
Local government⁹												
2011	133,730	-	-	-	-	381	-	129,412	40	3,897	-	-
2012	137,386	-	-	-	-	423	-	134,872	18	2,073	-	-
2013	137,698	-	-	-	-	646	-	134,606	11	2,435	-	-
2014	142,505	-	-	-	-	1,297	-	137,622	37	3,549	-	-
2015 Q1	147,366	-	-	-	-	1,597	-	142,829	37	2,903	-	-
Q2	147,047	-	-	-	-	1,847	-	142,155	37	3,008	-	-
Q3	147,680	-	-	-	-	1,997	-	142,534	37	3,112	-	-
Q4	147,778	-	-	-	-	2,047	-	140,644	54	5,033	-	-
2016 Q1	147,611	-	-	-	-	2,076	-	139,559	94	5,882	-	-
Q2	147,435	-	-	-	-	2,453	-	139,122	34	5,826	-	-
Q3	148,300	-	-	-	-	2,455	-	139,651	33	6,161	-	-
Q4	147,190	-	-	-	-	2,404	-	139,441	15	5,330	-	-
2017 Q1 P	145,325	-	-	-	-	2,645	-	137,410	23	5,247	-	-
Q2 P	144,751	-	-	-	-	2,672	-	136,785	29	5,265	-	-

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** Including the Financial Market Stabilisation Fund, the Investment and Repayment Fund and 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	2016			2017			2016			2017						
	2014	2015	2016	2014	2015	2016	Q1	Q2	Q3	Q4	Q1	Q2	Q3			
	Index 2010=100			Annual percentage change												
At constant prices, chained																
I Origin of domestic product																
Production sector (excluding construction)	110.3	112.8	114.9	5.3	2.2	1.9	2.2	1.1	4.5	1.2	0.6	4.5	- 0.4			
Construction	102.9	102.9	104.9	2.8	0.0	1.9	2.5	1.4	5.3	1.7	- 0.4	6.4	- 0.6			
Wholesale/retail trade, transport and storage, hotel and restaurant services	107.8	108.5	111.1	1.7	0.7	2.4	0.5	1.1	4.2	1.6	2.5	4.3	1.6			
Information and communication	125.2	128.5	132.0	4.7	2.6	2.7	4.5	3.1	2.7	3.5	1.6	4.5	3.8			
Financial and insurance activities	105.1	104.3	107.4	- 4.9	- 0.7	3.0	0.3	2.1	3.7	4.1	2.3	0.6	- 0.5			
Real estate activities	103.1	103.3	103.9	- 1.2	0.2	0.6	0.1	0.5	0.9	0.4	0.5	1.7	0.8			
Business services ¹	106.1	108.1	110.0	2.4	1.9	1.8	1.8	1.0	3.1	1.7	1.5	3.9	0.9			
Public services, education and health	103.0	105.3	107.7	0.7	2.2	2.2	2.2	1.7	2.6	2.3	2.4	2.5	1.8			
Other services	98.6	99.3	100.2	- 0.3	0.7	0.9	1.1	- 0.4	1.9	1.2	1.0	2.5	0.0			
Gross value added	106.7	108.3	110.4	1.9	1.5	1.9	1.8	1.2	3.3	1.7	1.4	3.5	0.8			
Gross domestic product ²	106.7	108.6	110.7	1.9	1.7	1.9	2.1	1.5	3.3	1.7	1.3	3.4	1.0			
II Use of domestic product																
Private consumption ³	104.3	106.1	108.3	1.0	1.7	2.1	2.1	2.0	2.9	1.7	1.7	2.3	2.2			
Government consumption	105.0	108.0	111.9	1.5	2.9	3.7	3.2	4.1	4.3	3.4	3.0	1.7	1.1			
Machinery and equipment	106.9	111.1	113.4	5.9	3.9	2.2	7.3	4.7	6.4	1.4	- 2.6	3.5	1.5			
Premises	109.9	108.3	111.3	2.3	- 1.4	2.7	1.7	3.1	5.4	2.1	0.4	6.4	2.0			
Other investment ⁴	111.2	117.3	123.8	4.0	5.5	5.5	6.8	6.8	6.8	6.1	2.6	3.9	3.4			
Changes in inventories ^{5, 6}	.	.	.	- 0.3	- 0.3	- 0.2	- 0.3	- 0.6	- 0.7	0.2	0.4	- 0.2	0.3			
Domestic demand	104.4	106.1	108.7	1.3	1.6	2.4	2.7	2.2	3.2	2.4	1.9	2.5	2.3			
Net exports ⁶	.	.	.	0.7	0.2	- 0.3	- 0.4	- 0.5	0.4	- 0.5	- 0.5	1.1	- 1.1			
Exports	118.5	124.7	128.0	4.6	5.2	2.6	4.1	1.7	4.9	1.3	2.6	7.0	1.4			
Imports	114.1	120.5	125.2	3.6	5.6	3.9	5.8	3.4	5.1	2.8	4.3	5.4	4.5			
Gross domestic product ²	106.7	108.6	110.7	1.9	1.7	1.9	2.1	1.5	3.3	1.7	1.3	3.4	1.0			
At current prices (€ billion)																
III Use of domestic product																
Private consumption ³	1,593.2	1,630.5	1,674.4	1.9	2.3	2.7	2.8	2.6	3.2	2.2	2.8	4.2	3.8			
Government consumption	563.9	587.1	615.4	3.9	4.1	4.8	4.5	5.5	5.4	4.5	4.1	3.6	3.3			
Machinery and equipment	191.7	200.8	205.8	6.5	4.7	2.5	8.2	5.2	6.7	1.7	- 2.3	3.7	1.8			
Premises	289.7	291.0	304.5	4.5	0.4	4.6	3.4	4.6	7.3	4.1	2.5	9.2	5.1			
Other investment ⁴	105.1	112.5	119.7	5.6	7.0	6.4	8.2	7.8	7.4	6.9	3.7	4.9	4.8			
Changes in inventories ⁵	- 14.2	- 21.5	- 26.4	.	.	.	.	.	.	.	.	.	.
Domestic use	2,729.5	2,800.3	2,893.4	2.7	2.6	3.3	3.7	3.0	3.9	3.2	3.2	4.3	4.4			
Net exports	203.0	243.3	250.6	.	.	.	.	.	.	.	.	.	.
Exports	1,340.3	1,426.7	1,450.0	4.5	6.4	1.6	4.7	1.2	3.1	- 0.0	2.3	8.7	3.5			
Imports	1,137.3	1,183.4	1,199.4	2.0	4.1	1.4	3.7	0.4	1.0	0.2	3.9	9.6	8.0			
Gross domestic product ²	2,932.5	3,043.7	3,144.1	3.8	3.8	3.3	4.2	3.1	4.7	2.9	2.5	4.3	2.6			
IV Prices (2010=100)																
Private consumption	105.6	106.2	106.9	0.9	0.6	0.6	0.7	0.6	0.3	0.5	1.1	1.8	1.6			
Gross domestic product	106.5	108.7	110.1	1.8	2.0	1.3	2.1	1.6	1.3	1.2	1.2	0.9	1.6			
Terms of trade	99.5	102.1	103.7	1.4	2.7	1.5	2.7	2.5	2.2	1.3	0.2	- 2.3	- 1.2			
V Distribution of national income																
Compensation of employees	1,485.1	1,542.3	1,600.3	3.9	3.9	3.8	4.1	4.2	3.4	3.7	3.9	4.3	4.4			
Entrepreneurial and property income	696.2	722.6	737.7	3.3	3.8	2.1	4.6	0.8	9.5	- 0.2	- 1.2	4.0	- 1.0			
National income	2,181.3	2,264.9	2,338.0	3.7	3.8	3.2	4.2	3.0	5.2	2.3	2.5	4.2	2.7			
<i>Memo item:</i> Gross national income	2,990.4	3,099.8	3,197.2	3.5	3.7	3.1	4.1	3.1	4.7	2.4	2.5	4.1	2.9			

Source: Federal Statistical Office; figures computed in November 2017. ¹ Professional, scientific, technical, administration and support service activities. ² Gross value added plus taxes on products (netted with subsidies on products). ³ Including

non-profit institutions serving households. ⁴ Intellectual property rights (inter alia, computer software and entertainment, literary or artistic originals) and cultivated assets. ⁵ Including net increase in valuables. ⁶ 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					of which: by economic sector				
			Total	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	
2010=100												
% of total ¹	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												
2013	106.4	106.4	96.4	107.7	104.4	114.0	100.1	100.6	108.3	106.0	113.7	114.7
2014	108.1	109.5	92.7	109.8	106.2	116.6	100.5	102.2	111.3	108.7	115.1	119.5
2015	108.6	107.0	97.5	110.3	106.1	117.6	102.8	101.9	111.4	109.4	114.8	119.3
2016	109.8	109.6	96.2	111.7	107.3	119.3	105.9	103.0	113.0	111.4	114.8	121.6
2016 Q3	110.1	117.9	91.8	111.4	108.3	117.6	103.0	104.0	112.6	113.5	113.2	119.4
Q4	112.9	120.5	101.6	113.3	104.8	124.1	109.6	106.1	111.7	114.1	124.1	117.8
2017 Q1	108.4	90.8	101.8	111.7	109.3	117.7	110.0	101.8	115.3	112.9	110.6	125.4
Q2	113.0	118.0	91.4	115.0	112.4	122.4	109.4	102.4	119.2	116.5	117.0	126.2
Q3	114.8	123.3	89.6	116.9	114.2	123.3	109.5	107.3	119.5	121.6	118.5	126.2
2016 Oct	115.7	122.4	99.5	116.8	111.9	124.0	114.5	109.9	118.6	116.6	114.2	132.2
Nov	118.7	123.6	102.2	120.2	111.8	131.6	115.9	111.3	121.8	120.4	127.3	131.0
Dec	104.3	115.4	103.1	102.9	90.6	116.7	98.4	97.2	94.6	105.3	130.9	90.1
2017 Jan	99.8	68.9	108.2	103.1	104.3	103.8	102.7	98.2	108.3	106.0	94.9	112.6
Feb	106.1	90.7	97.2	109.5	106.1	116.8	108.8	98.0	112.4	109.5	110.1	126.0
Mar	119.2	112.8	100.0	122.6	117.5	132.4	118.5	109.3	125.1	123.1	126.7	137.5
Apr	111.7	116.4	93.3	113.4	112.1	119.2	109.3	101.1	117.9	115.0	112.0	127.0
May	111.8	116.5	92.2	113.6	111.3	120.3	107.0	102.4	118.5	113.4	114.2	125.1
June	115.5	121.2	88.8	118.1	113.8	127.7	111.9	103.8	121.1	121.1	124.7	126.5
July	115.0	126.3	88.6	116.8	115.4	122.8	104.6	105.8	120.7	121.1	117.2	124.9
Aug	109.3	118.4	89.2	110.6	110.0	113.9	101.5	105.0	113.4	115.9	109.5	115.0
Sep	120.1	125.1	90.9	123.2	117.1	133.3	122.3	111.1	124.4	127.9	128.7	138.7
Oct	118.8	127.6	102.4	119.7	116.8	125.5	117.4	111.5	124.8	120.5	118.7	129.4
Annual percentage change												
2013	+ 0.1	± 0.0	- 1.0	+ 0.3	- 0.2	+ 0.6	- 0.4	+ 0.9	+ 0.9	- 1.7	- 1.3	+ 1.8
2014	+ 1.6	+ 2.9	- 3.8	+ 1.9	+ 1.7	+ 2.3	+ 0.4	+ 1.6	+ 2.8	+ 2.5	+ 1.2	+ 4.2
2015	+ 0.5	- 2.3	+ 5.2	+ 0.5	- 0.1	+ 0.9	+ 2.3	- 0.3	+ 0.1	+ 0.6	- 0.3	- 0.2
2016	+ 1.1	+ 2.4	- 1.3	+ 1.3	+ 1.1	+ 1.4	+ 3.0	+ 1.1	+ 1.4	+ 1.8	± 0.0	+ 1.9
2016 Q3	+ 0.9	+ 2.7	- 1.4	+ 0.9	+ 0.8	+ 0.9	+ 2.8	+ 0.8	+ 0.4	+ 2.3	- 0.3	+ 1.6
Q4	+ 1.4	+ 1.3	+ 0.9	+ 1.5	+ 1.5	+ 1.2	+ 4.0	+ 1.7	+ 1.8	+ 2.5	+ 1.4	+ 1.1
2017 Q1	+ 1.1	+ 2.1	- 0.6	+ 1.2	+ 1.5	+ 0.9	+ 3.1	+ 1.2	+ 2.0	+ 3.7	+ 1.3	+ 0.2
Q2	+ 3.5	+ 6.5	+ 2.7	+ 3.1	+ 3.8	+ 2.9	+ 5.0	+ 1.4	+ 4.0	+ 6.6	+ 3.6	+ 1.7
Q3	+ 4.3	+ 4.5	- 2.4	+ 4.9	+ 5.4	+ 4.9	+ 6.2	+ 3.2	+ 6.1	+ 7.2	+ 4.7	+ 5.7
2016 Oct	+ 1.6	+ 2.2	+ 0.5	+ 1.6	+ 1.6	+ 0.8	+ 4.8	+ 3.1	+ 0.9	+ 3.7	- 1.6	+ 1.6
Nov	+ 2.5	+ 1.6	+ 0.9	+ 2.8	+ 2.1	+ 3.6	+ 2.2	+ 2.4	+ 4.0	+ 4.0	+ 4.9	+ 1.2
Dec	± 0.0	+ 0.1	+ 1.4	- 0.2	+ 0.4	- 0.9	+ 5.4	- 0.6	+ 0.2	- 0.3	+ 0.6	+ 0.2
2017 Jan	- 0.4	- 5.1	+ 0.7	- 0.1	+ 1.3	- 1.1	+ 3.3	- 1.1	+ 1.0	+ 4.3	- 0.3	- 2.2
Feb	+ 1.4	+ 4.3	± 0.0	+ 1.4	+ 0.7	+ 1.7	+ 3.0	+ 2.0	+ 1.9	+ 2.6	+ 3.7	+ 0.6
Mar	+ 2.1	+ 5.2	- 2.3	+ 2.3	+ 2.4	+ 2.0	+ 3.0	+ 2.5	+ 3.0	+ 4.1	+ 0.6	+ 1.9
Apr	+ 2.9	+ 7.3	+ 2.3	+ 2.3	+ 3.9	+ 1.0	+ 4.4	+ 1.2	+ 3.3	+ 7.3	+ 1.9	- 1.0
May	+ 5.0	+ 6.6	+ 2.6	+ 4.9	+ 4.0	+ 6.6	+ 10.1	+ 1.3	+ 5.5	+ 7.5	+ 6.5	+ 8.1
June	+ 2.8	+ 5.6	+ 3.3	+ 2.3	+ 3.6	+ 1.4	+ 1.2	+ 1.6	+ 3.3	+ 5.1	+ 2.6	- 1.5
July	+ 4.2	+ 4.6	- 3.4	+ 4.8	+ 5.7	+ 4.5	+ 5.3	+ 3.0	+ 6.3	+ 8.2	+ 5.5	+ 2.5
Aug	+ 4.6	+ 4.2	- 1.5	+ 5.2	+ 5.6	+ 5.7	+ 7.9	+ 2.5	+ 6.0	+ 7.1	+ 3.5	+ 9.9
Sep	+ 4.1	+ 4.7	- 2.4	+ 4.7	+ 5.0	+ 4.5	+ 5.7	+ 3.9	+ 6.1	+ 6.3	+ 5.0	+ 5.3
Oct	+ 2.7	+ 4.2	+ 2.9	+ 2.5	+ 4.4	+ 1.2	+ 2.5	+ 1.5	+ 5.2	+ 3.3	+ 3.9	- 2.1

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. ¹ Share of gross value added at factor cost of the production sector in the base year 2010. ² Influenced by

a change in holiday dates. x Provisional; estimated and adjusted in advance by the Federal Statistical Office to the results of the Quarterly Production Survey and 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:				Consumer goods		of which:			
	2010=100	Annual percentage change	Intermediate goods		Capital goods		2010=100	Annual percentage change	Durable goods		Non-durable goods	
			2010=100	Annual percentage change	2010=100	Annual percentage change			2010=100	Annual percentage change	2010=100	Annual percentage change
Total												
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	103.2	- 1.0	114.3	+ 4.7	105.9	+ 2.0	101.8	+ 2.4	107.4	+ 2.0
2014	112.4	+ 2.7	103.9	+ 0.7	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
2016	115.7	+ 0.8	102.1	- 0.9	125.3	+ 1.7	115.3	+ 0.9	112.6	+ 5.5	116.2	- 0.6
2016 Oct	118.7	+ 4.4	105.0	+ 2.2	128.4	+ 6.6	117.9	- 1.8	129.5	+ 12.9	113.8	- 6.6
Nov	119.0	+ 2.1	107.5	+ 2.1	127.1	+ 1.8	118.3	+ 2.5	119.1	+ 8.7	118.0	+ 0.5
Dec	121.1	+ 9.5	93.6	+ 3.7	143.0	+ 13.9	104.1	- 2.1	103.5	+ 4.9	104.2	- 4.4
2017 Jan	115.1	+ 1.1	107.0	+ 2.6	120.7	+ 1.1	116.9	- 4.1	115.6	- 0.7	117.4	- 5.2
Feb	119.0	+ 6.0	111.8	+ 10.4	123.8	+ 3.7	121.7	+ 4.1	116.6	+ 11.9	123.4	+ 1.7
Mar	133.6	+ 4.3	119.5	+ 10.0	143.8	+ 0.8	131.1	+ 8.2	134.9	+ 14.7	129.9	+ 6.0
Apr	119.4	+ 5.5	111.0	+ 5.9	125.3	+ 4.9	118.7	+ 7.8	121.0	+ 2.4	117.9	+ 10.0
May	118.3	+ 5.7	109.2	+ 7.6	125.1	+ 4.9	116.4	+ 4.4	119.3	+ 18.5	115.4	+ 0.1
June	126.7	+ 6.7	114.2	+ 10.9	136.4	+ 4.6	120.9	+ 6.0	129.6	+ 16.8	117.8	+ 2.3
July	121.5	+ 6.5	112.3	+ 10.0	127.8	+ 4.7	123.7	+ 5.5	116.8	+ 6.1	126.0	+ 5.1
Aug	113.4	+ 9.9	108.7	+ 17.0	115.2	+ 5.7	124.3	+ 8.6	121.3	+ 19.0	125.4	+ 5.4
Sep	126.6	+ 11.2	112.4	+ 11.8	137.1	+ 11.2	123.1	+ 6.7	134.3	+ 12.7	119.1	+ 4.4
Oct P	129.0	+ 8.7	116.3	+ 10.8	138.4	+ 7.8	125.8	+ 6.7	136.5	+ 5.4	122.2	+ 7.4
From the domestic market												
2012	103.9	- 5.3	103.3	- 5.8	105.4	- 4.9	99.1	- 4.3	101.9	- 7.5	98.2	- 2.9
2013	104.4	+ 0.5	101.9	- 1.4	107.6	+ 2.1	100.4	+ 1.3	102.8	+ 0.9	99.5	+ 1.3
2014	105.6	+ 1.1	100.8	- 1.1	110.9	+ 3.1	102.4	+ 2.0	102.8	± 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	- 0.7	106.3	+ 4.0
2016	107.4	± 0.0	96.8	- 2.2	118.7	+ 2.1	103.4	- 1.7	105.6	+ 3.4	102.6	- 3.5
2016 Oct	111.0	+ 3.1	100.5	+ 1.8	122.2	+ 4.7	107.0	- 1.1	120.6	+ 6.8	102.2	- 4.1
Nov	111.3	+ 0.8	102.4	+ 0.4	120.9	+ 1.4	107.5	- 0.7	114.6	+ 5.7	105.0	- 3.0
Dec	107.3	+ 9.6	86.4	+ 2.7	131.0	+ 16.1	91.0	+ 0.2	88.9	+ 6.3	91.7	- 1.8
2017 Jan	106.2	+ 0.5	100.8	+ 2.1	112.0	- 1.0	103.6	+ 0.2	104.6	+ 1.6	103.2	- 0.3
Feb	113.5	+ 7.5	108.4	+ 13.9	119.3	+ 3.2	109.9	+ 1.9	104.3	+ 3.8	111.9	+ 1.4
Mar	122.5	+ 4.9	111.5	+ 9.2	135.3	+ 1.9	111.3	+ 2.1	117.6	+ 1.0	109.1	+ 2.5
Apr	111.8	+ 3.2	104.8	+ 2.7	120.7	+ 4.0	99.9	+ 0.6	106.3	+ 0.1	97.6	+ 0.8
May	107.8	+ 2.7	102.7	+ 7.2	114.0	- 0.5	101.7	- 0.7	102.9	+ 8.2	101.3	- 3.5
June	116.4	+ 7.4	104.4	+ 7.6	130.3	+ 7.6	104.7	+ 4.0	106.4	+ 4.9	104.1	+ 3.7
July	115.2	+ 9.1	107.2	+ 9.8	123.9	+ 9.1	110.7	+ 5.3	106.1	+ 3.1	112.3	+ 6.0
Aug	109.0	+ 9.3	106.5	+ 17.0	110.7	+ 2.7	114.0	+ 10.7	112.4	+ 11.0	114.5	+ 10.5
Sep	115.7	+ 10.8	105.2	+ 13.4	126.8	+ 9.3	111.6	+ 7.3	123.5	+ 6.6	107.4	+ 7.5
Oct P	119.4	+ 7.6	111.9	+ 11.3	127.6	+ 4.4	115.6	+ 8.0	132.4	+ 9.8	109.7	+ 7.3
From abroad												
2012	109.2	- 0.7	105.2	- 3.0	111.6	+ 0.2	107.8	+ 3.6	97.3	- 3.7	111.3	+ 5.8
2013	113.5	+ 3.9	104.8	- 0.4	118.4	+ 6.1	110.7	+ 2.7	100.8	+ 3.6	114.1	+ 2.5
2014	117.9	+ 3.9	107.4	+ 2.5	123.4	+ 4.2	118.0	+ 6.6	102.1	+ 1.3	123.5	+ 8.2
2015	120.7	+ 2.4	107.7	+ 0.3	127.4	+ 3.2	122.1	+ 3.5	110.7	+ 8.4	126.0	+ 2.0
2016	122.4	+ 1.4	108.3	+ 0.6	129.4	+ 1.6	125.5	+ 2.8	118.8	+ 7.3	127.8	+ 1.4
2016 Oct	124.9	+ 5.4	110.3	+ 2.6	132.3	+ 7.7	127.2	- 2.2	137.3	+ 18.1	123.7	- 8.3
Nov	125.2	+ 2.9	113.6	+ 4.0	130.9	+ 1.9	127.6	+ 5.0	123.1	+ 11.2	129.1	+ 3.1
Dec	132.4	+ 9.4	102.0	+ 4.5	150.4	+ 12.7	115.3	- 3.6	116.3	+ 4.0	114.9	- 6.1
2017 Jan	122.4	+ 1.7	114.3	+ 3.2	126.0	+ 2.2	128.3	- 6.8	125.1	- 2.3	129.4	- 8.2
Feb	123.5	+ 4.9	115.9	+ 6.8	126.6	+ 4.0	131.7	+ 5.6	127.4	+ 18.5	133.2	+ 2.1
Mar	142.6	+ 3.9	129.0	+ 10.9	149.1	+ 0.2	148.1	+ 12.5	150.0	+ 26.4	147.5	+ 8.4
Apr	125.5	+ 7.2	118.2	+ 9.4	128.2	+ 5.4	134.8	+ 13.0	133.8	+ 4.0	135.1	+ 16.4
May	126.9	+ 8.0	116.9	+ 8.0	131.9	+ 8.0	128.9	+ 8.1	133.6	+ 26.6	127.3	+ 2.7
June	135.1	+ 6.3	125.8	+ 14.3	140.1	+ 2.9	134.7	+ 7.2	149.9	+ 25.5	129.4	+ 1.3
July	126.7	+ 4.7	118.2	+ 10.1	130.2	+ 2.2	134.8	+ 5.5	126.2	+ 8.5	137.7	+ 4.5
Aug	116.9	+ 10.2	111.2	+ 16.9	118.0	+ 7.5	133.2	+ 7.1	129.0	+ 26.0	134.7	+ 2.0
Sep	135.5	+ 11.3	120.9	+ 10.4	143.4	+ 12.2	132.9	+ 6.2	143.8	+ 17.7	129.1	+ 2.3
Oct P	136.8	+ 9.5	121.4	+ 10.1	145.1	+ 9.7	134.6	+ 5.8	140.0	+ 2.0	132.8	+ 7.4

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 ¹					
	Building										Civil engineering					
	Total		Housing construction		Industrial construction		Public sector construction				Industry		Public sector ²			
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	
2013	119.2	+ 3.9	126.5	+ 4.2	140.6	+ 6.3	128.0	+ 3.1	93.9	+ 2.3	111.9	+ 3.7	121.9	+ 2.7	107.7	+ 4.2
2014	118.5	- 0.6	127.2	+ 0.6	146.6	+ 4.3	126.7	- 1.0	90.6	- 3.5	109.9	- 1.8	121.7	- 0.2	104.1	- 3.3
2015	124.2	+ 4.8	133.6	+ 5.0	165.4	+ 12.8	124.4	- 1.8	98.5	+ 8.7	114.8	+ 4.5	122.6	+ 0.7	109.2	+ 4.9
2016	142.2	+ 14.5	153.7	+ 15.0	193.4	+ 16.9	143.0	+ 15.0	107.5	+ 9.1	130.7	+ 13.9	137.1	+ 11.8	126.9	+ 16.2
2016 Sep	144.5	+ 7.6	161.6	+ 6.8	225.4	+ 11.5	133.2	- 0.5	120.3	+ 16.7	127.4	+ 8.6	129.7	+ 1.1	127.1	+ 12.3
Oct	145.2	+ 23.4	156.9	+ 22.6	194.4	+ 22.8	147.8	+ 26.9	110.3	+ 7.3	133.6	+ 24.4	144.7	+ 20.1	126.1	+ 27.9
Nov	127.1	+ 7.0	139.7	+ 1.9	189.4	+ 24.4	121.8	- 15.8	95.1	+ 12.0	114.5	+ 13.9	124.4	- 11.5	104.8	+ 26.0
Dec	131.1	+ 6.2	149.9	+ 10.9	171.8	+ 2.8	153.8	+ 22.6	95.4	- 5.7	112.2	+ 0.4	141.0	+ 22.8	104.6	- 8.7
2017 Jan	113.5	+ 4.7	125.0	+ 6.3	154.5	+ 4.7	122.5	+ 15.2	74.4	- 19.1	102.1	+ 2.9	124.5	+ 11.9	85.9	- 4.1
Feb	130.2	+ 7.9	144.2	+ 14.4	176.0	+ 11.6	139.0	+ 20.3	97.4	+ 2.9	116.2	+ 0.7	127.3	+ 16.1	114.8	- 2.0
Mar	179.1	+ 8.8	190.5	+ 13.2	243.7	+ 7.2	172.4	+ 17.7	139.7	+ 19.4	167.7	+ 4.2	165.2	+ 10.2	167.3	+ 8.3
Apr	165.1	+ 9.3	170.3	+ 9.6	204.4	+ 4.4	166.4	+ 16.7	114.7	+ 0.6	160.0	+ 9.0	153.8	+ 9.4	160.9	+ 11.8
May	155.5	- 1.2	162.6	- 7.7	202.3	- 3.5	143.2	- 17.5	142.1	+ 20.8	148.4	+ 7.0	138.6	- 11.2	154.0	+ 11.7
June	173.0	+ 4.7	187.6	+ 3.5	237.9	+ 6.6	164.1	- 6.2	158.6	+ 35.8	158.4	+ 6.1	155.9	- 3.5	164.5	+ 13.0
July	164.0	+ 7.5	167.6	+ 2.5	203.9	+ 4.6	159.5	+ 0.8	120.4	+ 2.6	160.4	+ 13.2	155.1	+ 7.7	157.1	+ 8.8
Aug	145.3	+ 4.6	153.0	+ 2.9	184.9	+ 0.4	142.4	+ 0.5	121.5	+ 22.0	137.7	+ 6.6	139.0	+ 5.0	135.9	+ 6.7
Sep	151.8	+ 5.1	163.6	+ 1.2	200.0	- 11.3	148.1	+ 11.2	138.2	+ 14.9	140.0	+ 9.9	144.9	+ 11.7	139.5	+ 9.8

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. ¹ Excluding housing construction orders. ² Including road construction.

5 Retail trade turnover *

Adjusted for calendar variations ◦

Period	of which													
	in stores by enterprises main product range													
	Food, beverages, tobacco ¹		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		Retail sale via mail order houses or via internet as well as other retail sale ²			
At current prices		At prices in year 2010		At current prices		At current prices		At current prices		At current prices		At current prices		
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	
2013	106.3	+ 1.7	101.3	+ 0.4	109.0	+ 3.6	103.0	+ 0.7	95.4	- 3.6	102.3	- 2.1	103.4	+ 2.7
2014	108.2	+ 1.8	102.7	+ 1.4	111.6	+ 2.4	104.9	+ 1.8	94.6	- 0.8	101.9	- 0.4	110.7	+ 7.1
2015	³ 112.2	+ 3.7	³ 106.7	+ 3.9	114.8	+ 2.9	105.2	+ 0.3	95.5	+ 1.0	104.6	+ 2.6	116.6	+ 5.3
2016	⁴ 114.9	+ 2.4	108.8	+ 2.0	117.0	+ 1.9	104.8	- 0.4	95.5	± 0.0	106.1	+ 1.4	121.4	+ 4.1
2016 Oct	120.6	+ 4.1	113.3	+ 3.5	118.8	+ 2.9	131.6	+ 9.4	101.9	+ 4.1	112.7	+ 1.8	124.4	+ 4.2
Nov	121.3	+ 2.8	114.1	+ 1.9	118.8	+ 2.1	111.2	+ 6.7	109.7	- 0.7	112.2	- 2.0	126.8	+ 3.4
Dec	139.9	+ 3.9	131.9	+ 2.2	138.4	+ 3.4	128.7	+ 3.5	151.2	+ 2.0	116.0	+ 2.3	137.3	+ 5.0
2017 Jan	107.9	+ 3.1	101.8	+ 1.1	108.8	+ 1.3	91.3	+ 1.9	107.3	+ 9.9	91.1	- 1.5	119.0	+ 3.0
Feb	105.8	+ 4.6	99.0	+ 2.3	109.2	+ 3.8	83.5	+ 6.6	88.4	+ 3.8	93.1	- 0.6	116.1	+ 2.7
Mar	122.4	+ 6.6	113.8	+ 4.6	122.1	+ 4.7	113.4	+ 18.0	98.7	+ 8.7	117.4	+ 4.4	127.8	+ 3.2
Apr	120.2	+ 5.5	111.4	+ 3.8	124.2	+ 6.4	113.1	+ 2.6	89.3	+ 8.5	113.0	+ 1.1	123.7	+ 4.0
May	120.0	+ 5.0	111.3	+ 3.4	123.3	+ 4.2	109.5	+ 2.8	85.0	+ 6.9	110.9	+ 0.9	124.5	+ 5.2
June	118.6	+ 6.4	110.5	+ 4.6	122.0	+ 5.2	109.2	+ 8.4	90.8	+ 6.3	106.5	+ 3.1	123.9	+ 5.8
July	120.2	+ 4.3	112.7	+ 2.9	123.6	+ 4.0	109.1	+ 2.7	97.5	+ 10.2	108.4	+ 2.1	127.5	+ 2.7
Aug	116.0	+ 4.4	108.4	+ 2.6	120.1	+ 3.7	102.8	+ 6.6	93.3	+ 9.8	101.9	+ 0.5	121.9	+ 3.5
Sep	118.4	+ 6.8	109.7	+ 4.9	118.9	+ 5.5	121.7	+ 19.8	97.3	+ 9.9	103.7	+ 3.0	123.1	+ 2.9
Oct	123.5	+ 2.4	114.1	+ 0.7	123.2	+ 3.7	123.3	- 6.3	105.5	+ 3.5	113.6	+ 0.8	126.1	+ 1.4

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. ¹ Including stalls and markets. ² Not in stores, stalls or markets. ³ As of May 2015,

integration of a larger online retail sales based enterprise that founded a business establishment in Germany in May 2015. ⁴ As of January 2016, figures are provisional, in some cases revised, and particularly uncertain in recent months due 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:			Solely jobs exempt from social contri- butions 2	Total	of which: Cyclically induced	Total	of which: Recipients of insured unem- plovment benefits		
			Thou- sands	Annual percentage change	Produc- tion sector	Services exclud- ing tempo- rary employ- ment	Tempo- rary employ- ment								Thousands
2012	42,062	+ 1.2	29,341	+ 2.3	8,739	19,604	773	4,981	171	67	2,897	902	6.8	478
2013	42,319	+ 0.6	29,713	+ 1.3	8,783	19,958	743	5,017	191	77	2,950	970	6.9	457
2014	42,672	+ 0.8	30,197	+ 1.6	8,860	20,332	770	5,029	134	49	2,898	933	6.7	490
2015	43,069	+ 0.9	30,822	+ 2.1	8,937	20,839	806	4,856	130	44	2,795	859	6.4	569
2016	43,638	+ 1.3	31,485	+ 2.2	9,022	21,390	834	4,805	128	42	2,691	822	6.1	655
2014 Q3	42,861	+ 0.8	30,284	+ 1.7	8,896	20,344	800	5,065	50	37	2,860	909	6.6	512
Q4	42,965	+ 0.8	30,614	+ 1.6	8,956	20,625	796	5,018	110	46	2,738	846	6.3	510
2015 Q1	42,517	+ 0.7	30,360	+ 1.8	8,833	20,551	756	4,863	310	51	2,993	1,011	6.9	515
Q2	42,998	+ 0.8	30,671	+ 2.0	8,895	20,740	792	4,863	61	47	2,772	822	6.3	560
Q3	43,286	+ 1.0	30,927	+ 2.1	8,974	20,864	840	4,868	47	33	2,759	827	6.3	595
Q4	43,476	+ 1.2	31,329	+ 2.3	9,049	21,201	837	4,828	101	46	2,655	775	6.0	604
2016 Q1	43,096	+ 1.4	31,064	+ 2.3	8,927	21,120	793	4,786	312	50	2,892	932	6.6	610
Q2	43,557	+ 1.3	31,326	+ 2.1	8,983	21,279	820	4,824	59	47	2,674	782	6.1	653
Q3	43,832	+ 1.3	31,536	+ 2.0	9,039	21,391	858	4,827	46	35	2,651	808	6.0	682
Q4	44,066	+ 1.4	32,015	+ 2.2	9,137	21,772	866	4,782	93	36	2,547	766	5.8	677
2017 Q1	43,750	+ 1.5	31,791	+ 2.3	9,040	21,698	830	4,729	307	41	2,734	987	6.2	671
Q2	44,225	+ 1.5	32,067	+ 2.4	9,111	21,859	852	4,763	...	25	2,513	822	10	717
Q3	44,500	+ 1.5	32,332	+ 2.5	9,175	22,017	892	4,771	...	17	2,504	833	5.6	763
2014 July	42,792	+ 0.9	30,121	+ 1.8	8,860	20,219	800	5,100	54	40	2,871	909	6.6	502
Aug	42,815	+ 0.8	30,312	+ 1.6	8,904	20,362	802	5,046	44	32	2,902	934	6.7	515
Sep	42,976	+ 0.8	30,663	+ 1.7	8,992	20,608	813	5,013	51	39	2,808	885	6.5	518
Oct	43,065	+ 0.8	30,676	+ 1.6	8,980	20,645	808	5,021	61	49	2,733	836	6.3	517
Nov	43,017	+ 0.7	30,636	+ 1.6	8,960	20,645	798	5,020	63	52	2,717	834	6.3	515
Dec	42,813	+ 0.8	30,398	+ 1.7	8,864	20,565	753	5,012	204	39	2,764	867	6.4	498
2015 Jan	42,444	+ 0.7	30,276	+ 1.8	8,815	20,498	747	4,846	327	50	3,032	1,043	7.0	485
Feb	42,470	+ 0.7	30,342	+ 1.9	8,819	20,546	756	4,821	352	52	3,017	1,034	6.9	519
Mar	42,638	+ 0.8	30,528	+ 2.0	8,865	20,651	777	4,829	251	50	2,932	955	6.8	542
Apr	42,832	+ 0.8	30,645	+ 1.9	8,895	20,723	784	4,850	67	54	2,843	868	6.5	552
May	43,013	+ 0.8	30,718	+ 2.0	8,901	20,776	794	4,875	57	44	2,762	815	6.3	557
June	43,150	+ 0.9	30,771	+ 2.0	8,915	20,788	819	4,902	59	45	2,711	782	6.2	572
July	43,190	+ 0.9	30,744	+ 2.1	8,934	20,724	840	4,908	49	35	2,773	830	6.3	589
Aug	43,245	+ 1.0	30,986	+ 2.2	8,993	20,899	846	4,841	40	26	2,796	851	6.4	597
Sep	43,422	+ 1.0	31,330	+ 2.2	9,076	21,150	850	4,810	51	39	2,708	799	6.2	600
Oct	43,508	+ 1.0	31,365	+ 2.2	9,067	21,203	846	4,813	61	47	2,649	764	6.0	612
Nov	43,545	+ 1.2	31,384	+ 2.4	9,059	21,243	842	4,845	66	52	2,633	764	6.0	610
Dec	43,374	+ 1.3	31,145	+ 2.5	8,963	21,163	798	4,843	177	39	2,681	798	6.1	591
2016 Jan	43,005	+ 1.3	30,967	+ 2.3	8,904	21,060	784	4,775	343	48	2,920	961	6.7	581
Feb	43,059	+ 1.4	31,055	+ 2.3	8,921	21,116	793	4,771	343	50	2,911	947	6.6	614
Mar	43,224	+ 1.4	31,195	+ 2.2	8,951	21,205	804	4,783	252	52	2,845	888	6.5	635
Apr	43,388	+ 1.3	31,299	+ 2.1	8,980	21,267	809	4,808	67	55	2,744	817	6.3	640
May	43,577	+ 1.3	31,395	+ 2.2	8,997	21,324	826	4,839	57	45	2,664	774	6.0	655
June	43,707	+ 1.3	31,374	+ 2.0	8,991	21,289	846	4,864	54	42	2,614	754	5.9	665
July	43,689	+ 1.2	31,258	+ 1.7	8,974	21,188	852	4,861	43	31	2,661	805	6.0	674
Aug	43,807	+ 1.3	31,658	+ 2.2	9,070	21,475	864	4,805	50	38	2,684	830	6.1	685
Sep	43,999	+ 1.3	32,009	+ 2.2	9,157	21,731	869	4,770	46	35	2,608	787	5.9	687
Oct	44,086	+ 1.3	32,046	+ 2.2	9,154	21,775	871	4,768	50	39	2,540	756	5.8	691
Nov	44,131	+ 1.3	32,070	+ 2.2	9,147	21,809	876	4,795	52	40	2,532	756	5.7	681
Dec	43,982	+ 1.4	31,849	+ 2.3	9,062	21,732	835	4,795	178	30	2,568	785	5.8	658
2017 Jan	43,662	+ 1.5	31,709	+ 2.4	9,017	21,649	825	4,720	370	43	2,777	1,010	6.3	647
Feb	43,714	+ 1.5	31,775	+ 2.3	9,032	21,691	828	4,707	335	42	2,762	1,014	6.3	675
Mar	43,874	+ 1.5	31,931	+ 2.4	9,078	21,778	838	4,723	216	40	2,662	935	6.0	692
Apr	44,049	+ 1.5	32,014	+ 2.3	9,101	21,832	838	4,748	39	27	2,569	861	5.8	706
May	44,238	+ 1.5	32,132	+ 2.3	9,124	21,900	859	4,776	36	25	2,498	810	5.6	714
June	44,387	+ 1.6	32,180	+ 2.6	9,138	21,914	880	4,808	...	9	2,473	796	5.5	731
July	44,372	+ 1.6	32,129	+ 2.8	9,124	21,870	889	4,808	...	9	2,518	842	5.6	750
Aug	44,474	+ 1.5	32,408	+ 2.4	9,193	22,070	896	4,747	...	9	2,545	855	5.7	765
Sep	44,654	+ 1.5	32,737	+ 2.3	9,276	22,307	901	4,707	...	9	2,449	800	5.5	773
Oct	44,736	+ 1.5	...	...	...	...	...	...	...	...	2,389	772	5.4	780
Nov	...	...	...	...	...	...	...	...	...	...	2,368	772	5.3	772

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 January 2017, persons receiving additional income assistance (unemployment benefit and unemployment benefit II at the same time) shall be

assigned to the legal category of the Third Book of the Social Security Code (SGB III). 9 Unadjusted figures estimated by the Federal Employment Agency. In 2015 and 2016, the estimated values for Germany deviated from the final data by a maximum of 1.1 % for employees subject to social contributions, by a maximum of 0.5 % for persons solely in jobs exempt from social contributions, and by a maximum of 33.9 % for cyclically induced short-time work. 10 From May 2017 calculated on the basis of new labour force figures. 11 Initial preliminary estimate by the Federal Statistical Office.

XI Economic conditions in Germany

7 Prices

Period	Harmonised Index of Consumer Prices						Memo item: Consumer price index (national concept)	Con- struction price index	Index of producer prices of industrial products sold on the domestic market 5	Index of producer- prices agricultural products 5	Indices of foreign trade prices		HWWI Index of World Market Prices of Raw Materials 6	
	Total	of which 1				Housing rents 4					Exports	Imports	Energy 7	Other raw materials 8
		Food 2	Non- energy industrial goods	Energy 3	Services									
	2015 = 100						2010 = 100						2015 = 100	
Index level														
2012	⁹ 97.5	⁹ 94.2	98.1	107.8	95.9	96.1	⁹ 104.1	105.7	107.0	119.4	104.9	108.7	166.8	128.7
2013	99.1	97.4	98.7	109.8	97.4	97.3	105.7	107.9	106.9	120.7	104.3	105.9	160.2	117.6
2014	99.9	98.8	99.2	107.5	98.8	98.8	106.6	109.7	105.8	111.1	104.0	103.6	142.8	108.3
2015	100.0	100.0	100.0	100.0	100.0	100.0	106.9	111.3	103.9	106.9	104.9	100.9	100.0	100.0
2016	100.4	101.3	101.0	94.6	101.2	101.2	107.4	113.4	102.1	¹⁰ 106.6	104.0	97.8	83.2	98.4
2016 Jan	99.1	100.4	99.7	92.7	99.9	100.6	106.1		101.7	106.8	103.9	96.4	64.5	88.2
Feb	99.5	100.8	99.9	91.8	100.6	100.7	106.5	112.5	101.2	106.0	103.4	95.8	64.0	88.6
Mar	100.3	101.2	101.0	92.7	101.5	100.8	107.3		101.2	106.6	103.6	96.5	72.3	93.6
Apr	99.8	101.6	101.5	93.6	99.7	100.9	106.9		101.3	105.9	103.5	96.4	75.1	95.5
May	100.2	101.3	101.4	95.0	100.5	101.0	107.2	113.1	101.7	106.0	103.7	97.3	82.6	97.2
June	100.3	101.0	100.7	96.2	100.9	101.1	107.3		102.1	106.4	103.9	97.8	87.9	98.9
July	100.7	101.3	100.0	95.1	102.2	101.2	107.6		102.3	110.0	104.1	97.9	84.4	100.2
Aug	100.6	100.9	100.3	94.3	102.3	101.4	107.6	113.7	102.2	106.7	104.0	97.7	83.9	98.6
Sep	100.6	101.2	101.5	94.9	101.4	101.5	107.7		102.0	¹⁰ 104.7	104.0	97.8	83.9	97.0
Oct	100.8	101.2	102.0	96.2	101.2	101.7	107.9		102.7	108.8	104.3	98.4	96.2	99.8
Nov	100.8	102.0	102.0	95.2	101.1	101.8	108.0	114.1	103.0	111.2	104.8	99.7	95.4	108.5
Dec	101.8	102.6	101.6	97.3	102.8	102.0	108.8		103.4	113.1	105.2	101.3	106.6	114.0
2017 Jan	101.0	103.2	100.7	98.2	101.0	102.2	108.1		104.1	114.8	105.8	102.2	108.9	115.9
Feb	101.7	104.6	101.0	98.4	101.9	102.3	108.8	115.5	104.3	116.2	106.0	102.2	110.2	118.9
Mar	101.8	103.4	102.6	97.5	102.0	102.4	109.0		104.3	117.6	106.0	102.4	99.7	116.4
Apr	101.8	103.4	102.7	98.3	101.5	102.6	109.0		104.7	119.9	106.2	102.3	100.4	110.1
May	101.6	103.5	102.7	96.9	101.5	102.8	108.8	116.6	104.5	120.9	106.0	101.3	93.1	104.2
June	101.8	103.6	102.0	96.1	102.5	102.9	109.0		104.5	121.2	105.8	100.2	85.7	100.4
July	102.2	103.8	101.4	95.9	103.8	103.0	109.4		104.7	120.2	105.7	99.8	86.5	102.9
Aug	102.4	103.8	101.8	96.3	103.8	103.1	109.5	117.5	104.9	121.1	105.6	99.8	90.1	103.3
Sep	102.4	104.1	102.9	97.5	102.8	103.2	109.6		105.2	116.1	105.8	100.7	96.3	102.8
Oct	102.3	104.8	103.2	97.4	102.2	103.3	109.6		105.5	114.5	105.9	101.3	101.6	102.7
Nov	102.6	104.8	103.2	98.7	102.6	103.5	109.9	...	...	...	...	...	110.3	103.8
Annual percentage change														
2012	⁹ + 2.1	⁹ + 3.2	+ 1.3	+ 5.6	+ 1.3	+ 1.2	⁹ + 2.0	+ 2.7	+ 1.6	+ 5.3	+ 1.5	+ 2.2	+ 7.5	- 5.3
2013	+ 1.6	+ 3.4	+ 0.7	+ 1.8	+ 1.5	+ 1.3	+ 1.5	+ 2.1	- 0.1	+ 1.1	- 0.6	- 2.6	- 4.0	- 8.6
2014	+ 0.8	+ 1.5	+ 0.5	- 2.1	+ 1.4	+ 1.6	+ 0.9	+ 1.7	- 1.0	- 8.0	- 0.3	- 2.2	- 10.9	- 7.9
2015	+ 0.1	+ 1.2	+ 0.8	- 7.0	+ 1.2	+ 1.2	+ 0.3	+ 1.5	- 1.8	- 3.8	+ 0.9	- 2.6	- 30.0	- 7.7
2016	+ 0.4	+ 1.3	+ 1.0	- 5.4	+ 1.2	+ 1.2	+ 0.5	+ 1.9	- 1.7	¹⁰ - 0.3	- 0.9	- 3.1	- 16.8	- 1.6
2016 Jan	+ 0.4	+ 1.2	+ 1.2	- 5.7	+ 1.2	+ 1.1	+ 0.5		- 2.4	+ 4.3	- 0.5	- 3.8	- 30.0	- 17.4
Feb	- 0.2	+ 1.1	+ 1.0	- 8.6	+ 0.7	+ 1.1	± 0.0	+ 1.5	- 3.0	+ 1.1	- 1.2	- 5.7	- 40.7	- 16.3
Mar	+ 0.1	+ 1.4	+ 0.8	- 8.9	+ 1.6	+ 1.1	+ 0.3		- 3.1	+ 1.4	- 1.6	- 5.9	- 33.7	- 12.6
Apr	- 0.3	+ 1.2	+ 1.1	- 8.5	+ 0.5	+ 1.1	- 0.1		- 3.1	- 0.1	- 2.0	- 6.6	- 35.0	- 9.6
May	± 0.0	+ 0.9	+ 1.2	- 8.0	+ 1.1	+ 1.1	+ 0.1	+ 1.8	- 2.7	+ 1.1	- 1.6	- 5.5	- 29.3	- 7.2
June	+ 0.2	+ 0.9	+ 0.9	- 6.4	+ 1.4	+ 1.1	+ 0.3		- 2.2	+ 0.9	- 1.3	- 4.6	- 22.4	- 4.4
July	+ 0.4	+ 1.5	+ 0.9	- 7.0	+ 1.4	+ 1.1	+ 0.4		- 2.0	+ 5.3	- 1.2	- 3.8	- 20.4	- 1.4
Aug	+ 0.3	+ 1.2	+ 0.7	- 5.9	+ 1.3	+ 1.3	+ 0.4	+ 2.0	- 1.6	+ 4.5	- 0.9	- 2.6	- 8.3	+ 2.7
Sep	+ 0.5	+ 1.2	+ 0.8	- 3.6	+ 1.3	+ 1.3	+ 0.7		- 1.4	¹⁰ - 2.5	- 0.6	- 1.8	- 7.6	+ 3.1
Oct	+ 0.7	+ 0.8	+ 0.8	- 1.4	+ 1.2	+ 1.4	+ 0.8		- 0.4	- 0.1	- 0.1	- 0.6	+ 5.0	+ 6.9
Nov	+ 0.7	+ 1.5	+ 1.0	- 2.6	+ 1.0	+ 1.4	+ 0.8	+ 2.1	+ 0.1	+ 3.3	+ 0.3	+ 0.3	+ 6.5	+ 17.0
Dec	+ 1.7	+ 2.4	+ 1.2	+ 2.4	+ 1.6	+ 1.6	+ 1.7		+ 1.0	+ 5.4	+ 1.1	+ 3.5	+ 37.5	+ 27.5
2017 Jan	+ 1.9	+ 2.8	+ 1.0	+ 5.9	+ 1.1	+ 1.6	+ 1.9		+ 2.4	+ 7.5	+ 1.8	+ 6.0	+ 68.8	+ 31.4
Feb	+ 2.2	+ 3.8	+ 1.1	+ 7.2	+ 1.3	+ 1.6	+ 2.2	+ 2.7	+ 3.1	+ 9.6	+ 2.5	+ 7.4	+ 72.2	+ 34.2
Mar	+ 1.5	+ 2.2	+ 1.6	+ 5.2	+ 0.5	+ 1.6	+ 1.6		+ 3.1	+ 10.3	+ 2.3	+ 6.1	+ 37.9	+ 24.4
Apr	+ 2.0	+ 1.8	+ 1.2	+ 5.0	+ 1.8	+ 1.7	+ 2.0		+ 3.4	+ 13.2	+ 2.6	+ 6.1	+ 33.7	+ 15.3
May	+ 1.4	+ 2.2	+ 1.3	+ 2.0	+ 1.0	+ 1.8	+ 1.5	+ 3.1	+ 2.8	+ 14.1	+ 2.2	+ 4.1	+ 12.7	+ 7.2
June	+ 1.5	+ 2.6	+ 1.3	- 0.1	+ 1.6	+ 1.8	+ 1.6		+ 2.4	+ 13.9	+ 1.8	+ 2.5	- 2.5	+ 1.5
July	+ 1.5	+ 2.5	+ 1.4	+ 0.8	+ 1.6	+ 1.8	+ 1.7		+ 2.3	+ 9.3	+ 1.5	+ 1.9	+ 2.5	+ 2.7
Aug	+ 1.8	+ 2.9	+ 1.5	+ 2.1	+ 1.5	+ 1.7	+ 1.8	+ 3.3	+ 2.6	+ 13.5	+ 1.5	+ 2.1	+ 7.4	+ 4.8
Sep	+ 1.8	+ 2.9	+ 1.4	+ 2.7	+ 1.4	+ 1.7	+ 1.8		+ 3.1	+ 10.9	+ 1.7	+ 3.0	+ 14.8	+ 6.0
Oct	+ 1.5	+ 3.6	+ 1.2	+ 1.2	+ 1.0	+ 1.6	+ 1.6		+ 2.7	+ 5.2	+ 1.5	+ 2.6	+ 5.6	+ 2.9
Nov	+ 1.8	+ 2.7	+ 1.2	+ 3.7	+ 1.5	+ 1.7	+ 1.8	...	...	...	...	...	+ 15.6	- 4.3

Sources: Eurostat; Federal Statistical Office and Bundesbank calculation based on data from the Federal Statistical Office; for the Index of World Market Prices of Raw Materials: HWWI. **1** Differences from the official figures are due to rounding. **2** Including alcoholic beverages and tobacco. **3** Electricity, gas and other fuels as well as

transport fuels and lubricants. **4** Net rents. **5** Excluding value-added tax. **6** For the euro area, in euro. **7** Coal, crude oil (Brent) and natural gas. **8** Food, beverages and tobacco as well as industrial raw materials. **9** From January 2012, increase in tobacco tax. **10** From September 2016 onwards, provisional figures.

XI Economic conditions in Germany

8 Households' income *

Period	Gross wages and salaries ¹		Net wages and salaries ²		Monetary social benefits received ³		Mass income ⁴		Disposable income ⁵		Saving ⁶		Saving ratio ⁷
	€ 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
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	1,167.4	3.0	778.3	2.8	388.1	0.1	1,166.4	1.9	1,717.2	1.3	153.7	- 2.5	8.9
2014	1,212.7	3.9	806.9	3.7	398.4	2.6	1,205.2	3.3	1,759.8	2.5	166.6	8.4	9.5
2015	1,260.8	4.0	836.6	3.7	417.0	4.7	1,253.7	4.0	1,804.0	2.5	173.5	4.2	9.6
2016	1,311.5	4.0	869.1	3.9	430.1	3.1	1,299.2	3.6	1,854.1	2.8	179.7	3.5	9.7
2016 Q2	319.5	3.6	207.6	3.7	106.0	3.1	313.6	3.5	462.9	3.4	43.6	5.3	9.4
Q3	323.3	3.9	218.6	3.6	108.8	4.2	327.4	3.8	461.8	2.2	37.7	2.0	8.2
Q4	363.1	4.1	240.4	3.8	106.9	3.0	347.4	3.6	472.4	2.9	39.9	4.4	8.5
2017 Q1	319.3	4.5	211.7	4.6	112.9	4.2	324.6	4.4	477.7	4.5	62.5	6.9	13.1
Q2	333.9	4.5	216.0	4.0	109.9	3.7	325.9	3.9	480.2	3.7	44.8	2.8	9.3
Q3	338.2	4.6	228.4	4.4	111.7	2.6	340.0	3.8	480.7	4.1	40.1	6.5	8.3

Source: Federal Statistical Office; figures computed in November 2017. * 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 ¹								Memo item: Wages and salaries per employee ³	
	On an hourly basis		On a monthly basis							
			Total		Total excluding one-off payments		Basic pay rates ²			
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	
2009	98.4	2.0	98.3	2.0	98.4	2.3	98.2	2.5	97.6	- 0.1
2010	100.0	1.6	100.0	1.7	100.0	1.7	100.0	1.8	100.0	2.5
2011	101.7	1.7	101.7	1.7	101.8	1.8	101.8	1.8	103.4	3.4
2012	104.4	2.7	104.4	2.6	104.7	2.9	104.7	2.9	106.2	2.7
2013	107.0	2.5	107.0	2.5	107.3	2.5	107.3	2.5	108.4	2.1
2014	110.1	2.9	109.9	2.8	110.1	2.7	110.1	2.7	111.4	2.8
2015	112.6	2.2	112.4	2.2	112.6	2.2	112.7	2.3	114.5	2.8
2016	115.0	2.1	114.7	2.1	115.0	2.1	115.2	2.2	117.3	2.4
2016 Q2	107.8	2.1	107.6	2.1	107.7	1.8	114.9	2.1	114.6	2.0
Q3	117.4	2.1	117.2	2.2	117.5	2.2	115.8	2.2	115.4	2.4
Q4	128.3	2.2	128.1	2.2	128.4	2.2	116.1	2.3	128.4	2.5
2017 Q1	109.0	2.5	108.7	2.5	109.0	2.4	116.8	2.5	113.7	2.8
Q2	110.1	2.1	109.8	2.0	110.1	2.3	117.6	2.4	117.8	2.7
Q3	119.8	2.0	119.5	2.0	119.8	2.0	118.2	2.1	118.6	2.8
2017 Apr	110.2	2.5	110.0	2.5	110.3	2.5	117.4	2.6	.	.
May	110.1	2.1	109.8	2.0	110.2	2.1	117.6	2.3	.	.
June	109.9	1.7	109.6	1.6	109.9	2.3	117.7	2.2	.	.
July	138.6	2.0	138.2	1.9	138.6	1.9	118.0	2.0	.	.
Aug	110.3	2.1	110.1	2.0	110.4	2.0	118.3	2.1	.	.
Sep	110.5	2.1	110.2	2.0	110.5	2.0	118.4	2.1	.	.
Oct	110.9	2.1	110.6	2.0	111.0	2.0	118.5	2.0	.	.

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 (13th monthly salary payment)

and retirement provisions). **3** Source: Federal Statistical Office; figures computed in November 2017.

XI Economic conditions in Germany

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

End-of-year/end-of-half-year 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 1		Total	Long-term		Short-term		
												Total	of which Financial debt	Total	of which	
								Financial debt	Trade payables							
Total (€ billion)																
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	379.8	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	207.2	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	222.7	180.3
2016	2,371.4	1,479.8	493.0	595.4	289.7	891.6	227.0	218.1	152.1	676.0	1,695.5	889.0	482.0	806.5	249.0	192.9
2015 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	222.7	180.3
2016 H1	2,256.6	1,381.0	462.4	549.8	272.0	875.6	226.7	195.2	140.5	607.4	1,649.2	895.4	464.6	753.8	243.9	174.9
H2	2,371.4	1,479.8	493.0	595.4	289.7	891.6	227.0	218.1	152.1	676.0	1,695.5	889.0	482.0	806.5	249.0	192.9
2017 H1 P	2,387.4	1,472.0	501.7	582.8	289.4	915.4	238.2	220.7	151.8	705.0	1,682.4	886.8	497.2	795.6	246.2	194.9
as a percentage of total assets																
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	20.0	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	10.0	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	10.0	8.1
2016	100.0	62.4	20.8	25.1	12.2	37.6	9.6	9.2	6.4	28.5	71.5	37.5	20.3	34.0	10.5	8.1
2015 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	10.0	8.1
2016 H1	100.0	61.2	20.5	24.4	12.1	38.8	10.1	8.7	6.2	26.9	73.1	39.7	20.6	33.4	10.8	7.8
H2	100.0	62.4	20.8	25.1	12.2	37.6	9.6	9.2	6.4	28.5	71.5	37.5	20.3	34.0	10.5	8.1
2017 H1 P	100.0	61.7	21.0	24.4	12.1	38.3	10.0	9.2	6.4	29.5	70.5	37.2	20.8	33.3	10.3	8.2
Groups with a focus on the production sector (€ billion) 2																
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	282.8	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	185.6	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	198.3	127.6
2016	1,909.6	1,146.4	322.1	473.4	270.8	763.3	209.8	170.1	115.6	514.5	1,395.1	715.3	369.4	679.8	223.1	141.0
2015 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	198.3	127.6
2016 H1	1,818.4	1,059.3	296.6	432.5	254.2	759.1	210.1	150.0	112.3	466.0	1,352.3	717.9	351.0	634.4	219.2	130.0
H2	1,909.6	1,146.4	322.1	473.4	270.8	763.3	209.8	170.1	115.6	514.5	1,395.1	715.3	369.4	679.8	223.1	141.0
2017 H1 P	1,921.2	1,136.9	324.7	463.5	273.1	784.3	224.2	171.9	125.3	550.0	1,371.2	708.2	378.1	663.0	224.3	153.1
as a percentage of total assets																
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	18.6	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	11.2	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	11.1	7.2
2016	100.0	60.0	16.9	24.8	14.2	40.0	11.0	8.9	6.1	26.9	73.1	37.5	19.3	35.6	11.7	7.4
2015 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	11.1	7.2
2016 H1	100.0	58.3	16.3	23.8	14.0	41.8	11.6	8.3	6.2	25.6	74.4	39.5	19.3	34.9	12.1	7.2
H2	100.0	60.0	16.9	24.8	14.2	40.0	11.0	8.9	6.1	26.9	73.1	37.5	19.3	35.6	11.7	7.4
2017 H1 P	100.0	59.2	16.9	24.1	14.2	40.8	11.7	9.0	6.5	28.6	71.4	36.9	19.7	34.5	11.7	8.0
Groups with a focus on the services sector (€ billion)																
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
2016	461.8	333.5	170.9	122.0	18.9	128.3	17.1	48.1	36.5	161.4	300.4	173.7	112.6	126.6	26.0	51.9
2015 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
H2	461.8	333.5	170.9	122.0	18.9	128.3	17.1	48.1	36.5	161.4	300.4	173.7	112.6	126.6	26.0	51.9
2017 H1 P	466.2	335.1	177.0	119.3	16.3	131.1	14.0	48.8	26.6	155.1	311.1	178.6	119.2	132.6	21.9	41.8
as a percentage of total assets																
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
2016	100.0	72.2	37.0	26.4	4.1	27.8	3.7	10.4	7.9	35.0	65.0	37.6	24.4	27.4	5.6	11.2
2015 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
H2	100.0	72.2	37.0	26.4	4.1	27.8	3.7	10.4	7.9	35.0	65.0	37.6	24.4	27.4	5.6	11.2
2017 H1 P	100.0	71.9	38.0	25.6	3.5	28.1	3.0	10.5	5.7	33.3	66.7	38.3	25.6	28.4	4.7	9.0

* 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.

In some cases revised. Excluding groups engaged in real estate activities. 1 Including cash equivalents. 2 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)		Operating income before depreciation and amortisation (EBITDA 1) as a percentage of revenues					Operating income (EBIT)		Operating income (EBIT) as a percentage of revenues				
	€ billion 3	Annual change in % 4	€ billion 3	Annual change in % 4	Weighted average	Distribution 2			Operating income (EBIT)	€ billion 3	Annual change in % 4	Weighted average	Distribution 2			
						First quartile	Median	Third quartile					First quartile	Median	Third quartile	
	%	Annual change in percentage points 4	%	%	%	%	%	%	%	Annual change in percentage points 4	%	%	%			
Total																
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	196.4	-1.0	12.0	-1.0	6.1	10.6	17.6	91.6	-16.3	5.6	-1.5	1.7	6.5	11.3
2016	1,626.1	-0.4	214.9	8.0	13.2	1.0	6.6	11.4	17.9	112.0	9.2	6.9	0.5	2.3	6.6	12.0
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
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
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	5.7	12.6	-0.4	4.8	10.1	17.6	59.1	1.4	7.3	-0.5	1.1	5.9	10.9
H2	831.7	5.2	93.8	-7.5	11.3	-1.5	6.3	11.5	18.1	32.7	-36.7	3.9	-2.6	2.3	7.1	11.7
2016 H1	782.3	-2.0	111.8	6.3	14.3	1.1	6.1	10.5	17.6	65.6	2.7	8.4	0.4	1.5	6.4	11.3
H2	843.8	1.1	103.1	9.9	12.2	1.0	6.7	11.9	19.0	46.4	21.1	5.5	0.8	2.9	7.5	12.5
2017 H1 P	844.9	7.2	126.0	14.4	14.9	0.9	5.7	10.1	17.2	78.6	29.3	9.3	1.6	1.8	5.8	11.6
Groups with a focus on the production sector 5																
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	-20.2	5.1	-1.8	1.8	6.5	10.0
2016	1,267.1	-1.1	156.5	6.0	12.4	0.8	6.5	10.6	15.9	80.5	4.3	6.4	0.3	2.5	6.2	10.4
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
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
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	4.9	7.7	-0.3	2.1	6.1	10.0
H2	647.1	5.3	63.9	-13.3	9.9	-2.1	5.3	10.9	15.5	16.4	-52.5	2.5	-3.3	1.7	6.8	10.3
2016 H1	610.8	-2.7	83.9	1.2	13.7	0.5	6.7	10.6	15.6	50.6	-6.7	8.3	-0.3	1.7	6.4	9.9
H2	656.4	0.5	72.6	11.9	11.1	1.1	6.2	11.3	16.4	29.9	35.0	4.6	0.9	2.4	6.3	10.4
2017 H1 P	678.6	7.5	98.4	18.4	14.5	1.3	5.9	9.9	16.0	63.9	37.0	9.4	2.0	2.2	5.8	10.5
Groups with a focus on the services sector																
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	52.4	4.8	14.9	-0.2	6.1	11.4	22.1	26.4	-1.6	7.5	-0.6	1.4	6.7	14.1
2016	358.9	2.4	58.3	14.6	16.3	1.8	6.8	13.5	25.1	31.5	24.7	8.8	1.5	2.3	8.2	15.3
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
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
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
H2	184.7	4.6	29.9	10.8	16.2	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	1.2	27.8	27.7	16.2	3.5	5.1	10.3	23.8	15.0	62.1	8.7	3.3	1.0	6.4	14.9
H2	187.5	3.6	30.5	4.6	16.3	0.2	7.4	13.5	24.3	16.5	2.7	8.8	-0.1	4.0	8.9	17.1
2017 H1 P	166.3	5.8	27.6	0.3	16.6	-0.8	5.4	11.0	21.3	14.7	-0.1	8.8	-0.5	1.4	5.8	14.7

* 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. In some cases revised. 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 Annual figures do not always match the

sum of the two half-year figures. See Quality report on consolidated financial statement statistics, p 3. 4 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. 5 Including groups in agriculture and forestry.

XII External sector

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

€ million

Item	2014	2015	2016	2017					
				Q1	Q2	Q3 P	July	Aug	Sep P
A Current account	+ 245,761	+ 335,017	+ 360,160	+ 63,963	+ 62,916	+ 108,707	+ 36,143	+ 30,751	+ 41,813
1 Goods									
Exports	1,966,061	2,138,897	2,131,811	559,110	564,880	553,913	184,111	176,262	193,540
Imports	1,724,958	1,780,137	1,754,134	488,680	476,700	466,099	154,064	152,614	159,421
Balance	+ 241,104	+ 358,760	+ 377,680	+ 70,429	+ 88,180	+ 87,813	+ 30,046	+ 23,648	+ 34,119
2 Services									
Receipts	706,388	769,235	786,143	191,169	208,336	220,455	74,964	71,906	73,585
Expenditure	628,051	707,420	748,186	179,618	188,726	193,056	65,741	64,676	62,639
Balance	+ 78,338	+ 61,817	+ 37,957	+ 11,551	+ 19,612	+ 27,398	+ 9,222	+ 7,230	+ 10,946
3 Primary income									
Receipts	638,693	666,059	652,312	155,040	173,323	155,252	51,815	51,318	52,119
Expenditure	570,131	614,175	569,963	132,726	181,696	126,284	42,007	40,906	43,371
Balance	+ 68,565	+ 51,882	+ 82,349	+ 22,314	- 8,373	+ 28,969	+ 9,807	+ 10,413	+ 8,749
4 Secondary income									
Receipts	96,442	109,468	110,779	25,922	29,308	24,332	7,977	7,751	8,604
Expenditure	238,688	246,910	248,601	66,253	65,811	59,808	20,911	18,292	20,605
Balance	- 142,246	- 137,442	- 137,826	- 40,331	- 36,504	- 35,474	- 12,933	- 10,540	- 12,001
B Capital account	+ 13,711	- 12,466	- 817	- 10,318	- 10,229	+ 1,201	+ 941	+ 426	- 166
C Financial account (Increase: +)	+ 264,839	+ 283,782	+ 305,390	+ 62,420	+ 48,667	+ 161,467	+ 43,079	+ 37,903	+ 80,485
1 Direct investment	+ 71,932	+ 241,686	+ 216,554	- 12,722	- 19,525	+ 11,177	+ 9,640	- 8,007	+ 9,544
By resident units abroad	+ 216,544	+ 976,478	+ 391,596	+ 187,055	+ 51,039	- 153,812	- 176,324	+ 10,923	+ 11,589
By non-resident units in the euro area	+ 144,612	+ 734,796	+ 175,042	+ 199,777	+ 70,565	- 164,988	- 185,963	+ 18,930	+ 2,045
2 Portfolio investment	+ 26,370	+ 96,384	+ 431,428	+ 106,579	+ 63,959	+ 155,619	+ 13,814	+ 93,448	+ 48,357
By resident units abroad	+ 459,905	+ 392,290	+ 391,770	+ 172,294	+ 174,542	+ 175,053	+ 65,835	+ 68,631	+ 40,587
Equity and investment fund shares	+ 142,536	+ 10,920	+ 22,074	+ 28,448	+ 58,269	+ 49,668	+ 23,338	+ 21,802	+ 4,528
Long-term debt securities	+ 224,271	+ 368,619	+ 366,873	+ 96,794	+ 128,660	+ 113,245	+ 59,027	+ 38,963	+ 15,255
Short-term debt securities	+ 93,094	+ 12,750	+ 2,823	+ 47,053	- 12,386	+ 12,140	- 16,530	+ 7,866	+ 20,804
By non-resident units in the euro area	+ 433,535	+ 295,905	- 39,659	+ 65,716	+ 110,583	+ 19,435	+ 52,021	- 24,816	- 7,770
Equity and investment fund shares	+ 303,756	+ 238,775	+ 83,934	+ 83,988	+ 118,244	+ 100,675	+ 61,914	+ 18,451	+ 20,310
Long-term debt securities	+ 141,184	+ 91,835	- 174,544	- 64,675	- 10,170	- 87,755	- 6,170	- 39,474	- 42,111
Short-term debt securities	- 11,406	- 34,707	+ 50,953	+ 46,402	+ 2,508	+ 6,514	- 3,724	- 3,793	+ 14,031
3 Financial derivatives and employee stock options	+ 49,274	+ 87,196	+ 18,504	+ 21,825	- 1,275	- 19,689	- 3,919	- 7,939	- 7,831
4 Other investment	+ 112,902	- 152,049	- 376,552	- 50,772	+ 7,213	+ 13,765	+ 28,712	- 38,937	+ 23,990
Eurosysteem	+ 31,506	- 25,391	- 151,296	- 29,782	- 8,922	- 9,632	+ 36,096	- 15,846	- 29,882
General government	+ 12,224	+ 19,293	+ 1,811	+ 2,011	- 4,570	- 1,320	+ 339	+ 3,339	- 4,998
MFIs (excluding the Eurosysteem)	+ 99,280	- 120,298	- 151,015	- 18,966	+ 18,602	+ 13,267	- 84	- 13,751	+ 27,102
Enterprises and households	- 30,106	- 25,656	- 76,046	- 4,037	+ 2,104	+ 11,451	- 7,639	- 12,678	+ 31,768
5 Reserve assets	+ 4,360	+ 10,565	+ 15,457	- 2,487	- 1,705	+ 595	- 5,168	- 662	+ 6,425
D Net errors and omissions	+ 5,369	- 38,765	- 53,955	+ 8,776	- 4,018	+ 51,559	+ 5,995	+ 6,726	+ 38,838

* 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 3	Primary income	Secondary income	Balance of capital account 4	Total	of which Reserve assets	Errors and omissions 5
		Total									of which Supplementary trade items 2
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	+ 165,078	+ 163,426	- 8,900	- 31,574	+ 68,235	- 35,010	+ 419	+ 120,857	+ 2,836	- 44,639
2012	+ 193,590	+ 200,401	- 10,518	- 32,775	+ 64,858	- 38,894	- 413	+ 151,417	+ 1,297	- 41,759
2013	+ 189,616	+ 212,662	- 3,663	- 41,376	+ 61,969	- 43,639	- 563	+ 225,360	+ 838	+ 36,307
2014	+ 218,026	+ 228,361	- 5,873	- 25,323	+ 56,177	- 41,188	+ 2,355	+ 238,630	- 2,564	+ 18,248
2015	+ 259,963	+ 261,182	- 2,668	- 18,602	+ 57,370	- 39,987	- 635	+ 234,603	- 2,213	- 24,725
2016	+ 259,286	+ 268,369	- 1,434	- 21,218	+ 52,136	- 40,001	+ 1,112	+ 243,586	+ 1,686	- 16,811
2014 Q4	+ 66,413	+ 60,143	- 2,536	- 3,609	+ 21,123	- 11,244	- 216	+ 68,678	- 1,722	+ 2,481
2015 Q1	+ 59,401	+ 60,330	- 1,426	- 2,104	+ 17,030	- 15,855	+ 298	+ 29,421	- 21	- 30,277
Q2	+ 59,356	+ 68,659	- 1,737	- 2,871	+ 611	- 7,043	+ 505	+ 72,121	- 465	+ 12,260
Q3	+ 67,057	+ 67,516	+ 978	- 10,628	+ 16,866	- 6,697	+ 701	+ 67,337	- 1,455	- 421
Q4	+ 74,149	+ 64,676	- 483	- 2,999	+ 22,864	- 10,391	- 2,138	+ 65,723	- 272	- 6,287
2016 Q1	+ 63,623	+ 63,412	+ 621	- 3,363	+ 16,933	- 13,359	- 269	+ 36,937	+ 1,228	- 26,417
Q2	+ 69,291	+ 77,109	+ 242	- 4,009	+ 584	- 4,393	+ 1,092	+ 62,620	+ 761	- 7,762
Q3	+ 58,213	+ 67,022	- 126	- 11,696	+ 13,516	- 10,630	+ 228	+ 61,531	- 261	+ 3,090
Q4	+ 68,160	+ 60,827	- 2,171	- 2,150	+ 21,103	- 11,620	+ 61	+ 82,498	- 43	+ 14,278
2017 Q1	+ 65,370	+ 66,741	+ 2,419	- 3,315	+ 15,902	- 13,958	+ 457	+ 74,476	- 360	+ 8,648
Q2 r	+ 55,218	+ 67,377	- 170	- 4,015	+ 4,662	- 12,805	+ 7	+ 73,956	+ 385	+ 18,731
Q3	+ 62,825	+ 68,266	- 172	- 11,066	+ 16,579	- 10,953	+ 856	+ 53,953	+ 152	- 9,729
2015 May	+ 11,465	+ 20,915	- 690	- 1,177	- 6,268	- 2,005	+ 483	+ 16,041	- 78	+ 4,093
June	+ 26,136	+ 25,478	+ 38	- 1,180	+ 3,980	- 2,143	- 355	+ 25,400	- 318	- 382
July	+ 25,776	+ 25,151	- 896	- 3,062	+ 6,027	- 2,339	+ 448	+ 20,865	- 1,170	- 5,359
Aug	+ 14,760	+ 16,897	+ 661	- 4,616	+ 5,265	- 2,785	+ 44	+ 21,976	- 180	+ 7,171
Sep	+ 26,521	+ 25,469	+ 1,213	- 2,950	+ 5,575	- 1,573	+ 209	+ 24,497	- 105	- 2,233
Oct	+ 22,205	+ 23,927	+ 147	- 4,630	+ 6,013	- 3,105	- 85	+ 20,171	+ 154	- 1,949
Nov	+ 25,362	+ 22,542	+ 4	- 685	+ 6,368	- 2,863	+ 183	+ 24,896	- 548	- 649
Dec	+ 26,582	+ 18,207	- 634	+ 2,315	+ 10,483	- 4,423	- 2,236	+ 20,656	+ 123	- 3,689
2016 Jan	+ 14,891	+ 14,140	- 3	- 1,527	+ 4,518	- 2,241	- 37	- 2,007	- 186	- 16,860
Feb	+ 19,889	+ 22,040	+ 724	- 226	+ 5,600	- 7,525	+ 520	+ 18,706	+ 1,478	- 1,703
Mar	+ 28,843	+ 27,232	- 99	- 1,610	+ 6,815	- 3,594	- 752	+ 20,238	- 64	- 7,853
Apr	+ 27,951	+ 27,812	- 116	- 858	+ 2,726	- 1,730	+ 1,287	+ 25,738	+ 696	- 3,500
May	+ 17,694	+ 23,149	+ 511	- 880	- 4,001	- 574	+ 268	+ 14,378	+ 776	- 3,583
June	+ 23,646	+ 26,147	- 153	- 2,271	+ 1,859	- 2,089	- 463	+ 22,504	- 711	- 679
July	+ 18,065	+ 20,523	+ 520	- 3,503	+ 4,494	- 3,449	- 139	+ 18,115	+ 342	+ 188
Aug	+ 16,667	+ 21,044	- 367	- 4,965	+ 5,092	- 4,504	- 126	+ 18,180	+ 93	+ 1,639
Sep	+ 23,481	+ 25,455	- 279	- 3,227	+ 3,930	- 2,677	+ 493	+ 25,236	- 695	+ 1,262
Oct	+ 18,411	+ 20,456	+ 163	- 3,551	+ 5,076	- 3,570	- 182	+ 30,423	- 145	+ 12,194
Nov	+ 24,860	+ 23,551	- 385	- 339	+ 5,677	- 4,029	- 90	+ 25,794	+ 140	+ 1,024
Dec	+ 24,889	+ 16,820	- 1,949	+ 1,740	+ 10,349	- 4,021	+ 332	+ 26,281	- 38	+ 1,060
2017 Jan	+ 13,840	+ 15,862	+ 278	- 1,271	+ 6,080	- 6,830	- 262	+ 19,471	- 124	+ 5,892
Feb	+ 20,556	+ 22,960	+ 993	- 777	+ 3,008	- 4,635	+ 271	+ 7,355	- 216	- 13,473
Mar	+ 30,973	+ 27,919	+ 1,148	- 1,268	+ 6,814	- 2,492	+ 448	+ 47,650	- 21	+ 16,228
Apr r	+ 14,565	+ 19,380	- 43	- 769	+ 4,234	- 8,281	- 311	+ 21,979	- 2	+ 7,725
May r	+ 15,842	+ 23,185	- 1,020	- 1,801	- 4,624	- 918	+ 66	+ 10,040	- 47	- 5,867
June r	+ 24,812	+ 24,811	+ 893	- 1,445	+ 5,052	- 3,606	+ 251	+ 41,937	+ 434	+ 16,874
July	+ 19,061	+ 21,041	+ 654	- 3,793	+ 6,191	- 4,378	+ 553	+ 14,839	+ 463	- 4,776
Aug	+ 17,962	+ 21,571	- 788	- 4,819	+ 4,646	- 3,437	+ 146	+ 8,723	- 912	- 9,386
Sep	+ 25,802	+ 25,653	- 39	- 2,455	+ 5,742	- 3,138	+ 156	+ 30,391	+ 602	+ 4,433
Oct P	+ 18,079	+ 20,377	- 278	- 3,559	+ 5,468	- 4,207	- 229	+ 16,370	+ 1,176	- 1,480

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

Group of countries/country		2014	2015	2016	2017					
					Jan. / Sep.	Jun	Jul	Aug	Sep	Oct P
All countries ¹	Exports	1,123,746	1,193,555	1,203,833	954,202	107,220	103,136	103,022	110,394	107,950
	Imports	910,145	949,245	954,917	769,933	85,073	84,379	82,943	86,292	89,061
	Balance	+ 213,601	+ 244,310	+ 248,916	+ 184,269	+ 22,147	+ 18,757	+ 20,079	+ 24,103	+ 18,889
I European countries	Exports	761,914	803,425	818,644	651,697	74,430	69,459	68,802	75,546	...
	Imports	642,738	653,782	657,753	526,164	58,254	57,679	55,170	59,206	...
	Balance	+ 119,176	+ 149,643	+ 160,891	+ 125,533	+ 16,176	+ 11,780	+ 13,632	+ 16,340	...
1 EU member states (28)	Exports	648,446	692,493	705,548	559,471	63,877	59,722	58,587	64,942	...
	Imports	527,117	543,334	551,344	439,027	48,934	48,620	46,221	49,925	...
	Balance	+ 121,329	+ 149,159	+ 154,204	+ 120,444	+ 14,942	+ 11,103	+ 12,366	+ 15,017	...
Euro area (19)	Exports	413,753	434,075	441,092	351,272	39,966	37,887	36,047	40,839	...
	Imports	350,550	356,643	358,848	283,774	31,864	31,742	29,542	31,762	...
	Balance	+ 63,203	+ 77,432	+ 82,244	+ 67,498	+ 8,101	+ 6,145	+ 6,506	+ 9,077	...
of which										
Austria	Exports	55,807	58,217	59,778	46,645	5,188	5,091	4,965	5,547	...
	Imports	36,218	37,250	38,543	30,787	3,358	3,439	3,285	3,693	...
	Balance	+ 19,590	+ 20,967	+ 21,235	+ 15,858	+ 1,830	+ 1,652	+ 1,680	+ 1,854	...
Belgium and Luxembourg	Exports	47,345	46,196	46,931	37,608	4,343	3,816	3,997	4,162	...
	Imports	42,548	40,116	40,960	33,235	3,699	3,763	3,449	3,598	...
	Balance	+ 4,797	+ 6,079	+ 5,971	+ 4,373	+ 644	+ 53	+ 548	+ 564	...
France	Exports	100,580	102,762	101,106	78,716	8,988	8,395	7,813	9,056	...
	Imports	66,714	66,819	65,651	47,574	5,474	5,268	4,788	5,206	...
	Balance	+ 33,866	+ 35,943	+ 35,454	+ 31,142	+ 3,514	+ 3,127	+ 3,025	+ 3,850	...
Italy	Exports	54,240	57,987	61,265	48,776	5,706	5,561	4,284	5,851	...
	Imports	48,522	49,038	51,737	41,192	4,895	4,871	4,011	4,574	...
	Balance	+ 5,718	+ 8,949	+ 9,528	+ 7,584	+ 811	+ 690	+ 273	+ 1,277	...
Netherlands	Exports	72,736	79,191	78,433	63,470	6,993	6,961	7,041	7,230	...
	Imports	87,796	87,889	83,142	67,611	7,145	7,470	7,192	7,450	...
	Balance	- 15,060	- 8,697	- 4,709	- 4,141	- 152	- 509	- 151	- 220	...
Spain	Exports	34,820	38,715	40,497	32,268	3,817	3,446	3,023	3,746	...
	Imports	24,804	26,442	27,870	23,607	2,878	2,742	2,073	2,683	...
	Balance	+ 10,016	+ 12,273	+ 12,627	+ 8,661	+ 939	+ 705	+ 950	+ 1,064	...
Other EU member states	Exports	234,693	258,417	264,456	208,199	23,911	21,835	22,539	24,103	...
	Imports	176,567	186,691	192,496	155,253	17,070	16,878	16,679	18,164	...
	Balance	+ 58,126	+ 71,727	+ 71,960	+ 52,946	+ 6,841	+ 4,958	+ 5,861	+ 5,940	...
of which										
United Kingdom	Exports	79,163	89,018	85,939	64,034	7,215	6,972	6,478	7,295	...
	Imports	38,545	38,414	35,654	27,814	2,921	3,246	2,883	3,108	...
	Balance	+ 40,618	+ 50,604	+ 50,285	+ 36,220	+ 4,294	+ 3,727	+ 3,596	+ 4,187	...
2 Other European countries	Exports	113,468	110,932	113,096	92,225	10,553	9,736	10,215	10,604	...
	Imports	115,621	110,448	106,409	87,137	9,320	9,059	8,949	9,281	...
	Balance	- 2,153	+ 484	+ 6,687	+ 5,088	+ 1,233	+ 677	+ 1,266	+ 1,323	...
of which										
Switzerland	Exports	46,202	49,070	50,161	40,746	4,681	4,183	4,328	4,528	...
	Imports	39,392	42,089	43,896	34,559	3,695	3,738	3,377	3,656	...
	Balance	+ 6,810	+ 6,981	+ 6,265	+ 6,187	+ 986	+ 445	+ 951	+ 872	...
II Non-European countries	Exports	358,337	387,398	382,486	300,594	32,517	33,878	33,948	34,579	...
	Imports	267,407	295,461	297,164	243,718	26,819	26,650	27,773	27,085	...
	Balance	+ 90,930	+ 91,936	+ 85,322	+ 56,876	+ 5,697	+ 7,228	+ 6,175	+ 7,494	...
1 Africa	Exports	22,505	23,897	24,434	19,714	2,052	1,923	2,033	1,931	...
	Imports	20,242	18,307	16,675	15,119	1,659	1,598	1,825	1,647	...
	Balance	+ 2,263	+ 5,590	+ 7,759	+ 4,595	+ 394	+ 325	+ 209	+ 284	...
2 America	Exports	135,293	156,982	147,542	115,109	12,429	13,052	12,642	12,846	...
	Imports	74,191	85,582	83,499	66,656	7,607	7,073	7,122	7,091	...
	Balance	+ 61,103	+ 71,400	+ 64,043	+ 48,454	+ 4,822	+ 5,979	+ 5,519	+ 5,755	...
of which										
United States	Exports	95,928	113,733	106,822	83,047	8,807	9,173	8,992	9,199	...
	Imports	49,207	60,217	57,968	45,714	5,211	4,651	4,975	4,896	...
	Balance	+ 46,721	+ 53,516	+ 48,855	+ 37,333	+ 3,596	+ 4,522	+ 4,018	+ 4,303	...
3 Asia	Exports	190,973	196,297	200,158	157,464	17,078	17,976	18,318	18,796	...
	Imports	170,050	188,621	193,979	158,836	17,254	17,622	18,582	18,047	...
	Balance	+ 20,923	+ 7,676	+ 6,179	- 1,372	- 176	+ 353	- 263	+ 749	...
of which										
Middle East	Exports	35,462	39,518	36,659	25,171	2,340	3,052	2,781	3,258	...
	Imports	7,865	7,330	6,581	5,232	607	670	577	610	...
	Balance	+ 27,598	+ 32,188	+ 30,079	+ 19,939	+ 1,733	+ 2,382	+ 2,204	+ 2,648	...
Japan	Exports	16,910	16,968	18,307	14,726	1,532	1,819	1,642	1,765	...
	Imports	19,007	20,180	21,922	17,325	1,794	1,793	1,910	1,957	...
	Balance	- 2,097	- 3,213	- 3,615	- 2,598	- 263	+ 26	- 268	- 193	...
People's Republic of China ²	Exports	74,369	71,284	76,046	63,370	7,088	7,345	7,698	7,194	...
	Imports	79,828	91,930	94,172	73,851	7,955	8,275	8,727	8,525	...
	Balance	- 5,459	- 20,646	- 18,126	- 10,481	- 867	- 930	- 1,029	- 1,331	...
New industrial countries and emerging markets of Asia ³	Exports	48,476	51,510	51,921	39,930	4,391	4,345	4,506	5,152	...
	Imports	38,782	42,478	42,966	38,494	4,338	4,299	4,566	4,235	...
	Balance	+ 9,695	+ 9,032	+ 8,955	+ 1,435	+ 53	+ 46	+ 60	+ 917	...
4 Oceania and polar regions	Exports	9,566	10,221	10,352	8,307	958	927	954	1,006	...
	Imports	2,924	2,951	3,011	3,108	299	356	244	300	...
	Balance	+ 6,641	+ 7,271	+ 7,341	+ 5,199	+ 659	+ 572	+ 710	+ 706	...

* 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. ¹ Including fuel and other supplies for ships and aircraft and

other data not classifiable by region. ² Excluding Hong Kong. ³ 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 1								Primary income		
	Total	of which							Compensation of employees	Investment income	Other primary income 4
		Transport	Travel 2	Financial services	Charges for the use of intellectual property	Tele-communications, computer and information services	Other business services	Government goods and services 3			
2012	- 32,775	- 10,189	- 35,422	+ 8,793	+ 3,030	+ 1,442	- 9,459	+ 3,103	+ 2,187	+ 61,666	+ 1,005
2013	- 41,376	- 9,881	- 37,713	+ 8,056	+ 3,656	- 870	- 5,518	+ 3,073	+ 541	+ 60,205	+ 1,223
2014	- 25,323	- 7,301	- 37,653	+ 7,008	+ 3,639	+ 2,785	- 1,418	+ 3,024	+ 451	+ 54,849	+ 877
2015	- 18,602	- 5,476	- 36,595	+ 9,331	+ 4,942	+ 4,037	- 3,116	+ 3,106	+ 783	+ 56,948	- 361
2016	- 21,218	- 5,962	- 38,266	+ 9,189	+ 6,450	+ 3,312	- 3,276	+ 3,119	+ 652	+ 53,196	- 1,712
2016 Q1	- 3,363	- 1,660	- 6,286	+ 2,095	+ 1,215	+ 219	- 819	+ 852	+ 756	+ 16,817	- 640
Q2	- 4,009	- 1,080	- 8,654	+ 2,174	+ 1,190	+ 1,238	- 687	+ 831	- 107	+ 3,501	- 2,810
Q3	- 11,696	- 1,414	- 15,956	+ 1,892	+ 1,629	+ 483	- 173	+ 833	- 384	+ 15,089	- 1,190
Q4	- 2,150	- 1,808	- 7,371	+ 3,029	+ 2,416	+ 1,372	- 1,597	+ 604	+ 386	+ 17,788	+ 2,928
2017 Q1	- 3,315	- 1,260	- 5,956	+ 2,016	+ 1,223	+ 426	- 1,464	+ 723	+ 740	+ 16,280	- 1,118
Q2	- 4,015	- 438	- 9,179	+ 2,305	+ 1,600	+ 908	- 948	+ 785	- 91	+ 6,584	- 1,832
Q3	- 11,066	- 1,224	- 16,110	+ 2,389	+ 1,609	+ 459	+ 228	+ 704	- 482	+ 18,171	- 1,110
2016 Dec	+ 1,740	- 555	- 529	+ 1,068	+ 609	+ 1,357	- 702	+ 197	+ 60	+ 6,366	+ 3,923
2017 Jan	- 1,271	- 470	- 1,575	+ 831	+ 289	- 317	- 660	+ 201	+ 271	+ 6,219	- 410
Feb	- 777	- 298	- 1,459	+ 478	+ 484	+ 62	- 498	+ 277	+ 272	+ 3,072	- 335
Mar	- 1,268	- 492	- 2,921	+ 707	+ 450	+ 681	- 307	+ 244	+ 197	+ 6,989	- 373
Apr	- 769	- 109	- 1,760	+ 881	+ 688	- 392	- 532	+ 262	- 42	+ 4,720	- 444
May	- 1,801	- 165	- 3,049	+ 806	+ 293	+ 212	- 554	+ 255	- 18	- 3,162	- 1,444
June	- 1,445	- 164	- 4,371	+ 618	+ 619	+ 1,088	+ 138	+ 268	- 31	+ 5,026	+ 56
July	- 3,793	- 211	- 4,879	+ 693	+ 817	- 167	- 485	+ 182	- 190	+ 6,750	- 369
Aug	- 4,819	- 500	- 6,429	+ 1,110	+ 460	+ 75	- 130	+ 259	- 146	+ 5,167	- 374
Sep	- 2,455	- 512	- 4,801	+ 586	+ 332	+ 551	+ 843	+ 262	- 146	+ 6,255	- 366
Oct P	- 3,559	- 494	- 5,365	+ 714	+ 1,287	- 23	- 262	+ 255	+ 97	+ 5,897	- 526

1 Including freight and insurance costs of foreign trade. 2 Since 2001, the sample results of a household survey have been used on the expenditure side. 3 Domestic public authorities' receipts from and expenditure on services, not included elsewhere;

including the receipts from foreign military bases. 4 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 2			
	Total	Total	of which		Total	of which		
			Current international cooperation 1	Current taxes on income, wealth etc.		Personal transfers between resident and nonresident households 3	of which Workers' remittances	
2012	- 38,894	- 25,446	- 5,167	+ 5,206	- 13,448	- 2,952	- 2,952	
2013	- 43,639	- 28,923	- 4,733	+ 6,174	- 14,715	- 3,250	- 3,229	
2014	- 41,188	- 28,106	- 5,972	+ 8,101	- 13,082	- 3,476	- 3,451	
2015	- 39,987	- 24,925	- 6,648	+ 9,830	- 15,062	- 3,540	- 3,523	
2016	- 40,001	- 26,227	- 8,376	+ 9,934	- 13,774	- 4,214	- 4,196	
2016 Q1	- 13,359	- 10,088	- 2,840	+ 1,307	- 3,271	- 1,052	- 1,049	
Q2	- 4,393	- 836	- 1,567	+ 5,561	- 3,556	- 1,053	- 1,049	
Q3	- 10,630	- 6,866	- 1,702	+ 1,772	- 3,763	- 1,053	- 1,049	
Q4	- 11,620	- 8,437	- 2,267	+ 1,294	- 3,183	- 1,055	- 1,049	
2017 Q1	- 13,958	- 7,816	- 2,668	+ 1,774	- 6,141	- 1,157	- 1,153	
Q2	- 12,805	- 2,861	- 1,394	+ 5,170	- 9,944	- 1,158	- 1,153	
Q3	- 10,953	- 5,549	- 1,779	+ 1,726	- 5,405	- 1,157	- 1,153	
2016 Dec	- 4,021	- 2,696	- 1,157	+ 937	- 1,325	- 351	- 350	
2017 Jan	- 6,830	- 3,731	- 1,622	+ 189	- 3,099	- 386	- 384	
Feb	- 4,635	- 2,699	- 699	+ 714	- 1,936	- 385	- 384	
Mar	- 2,492	- 1,386	- 347	+ 871	- 1,106	- 386	- 384	
Apr	- 8,281	- 1,856	- 398	+ 811	- 6,425	- 385	- 384	
May	- 918	+ 829	- 198	+ 3,216	- 1,748	- 387	- 384	
June	- 3,606	- 1,835	- 798	+ 1,143	- 1,771	- 386	- 384	
July	- 4,378	- 2,624	- 906	+ 482	- 1,755	- 385	- 384	
Aug	- 3,437	- 1,463	- 696	+ 455	- 1,974	- 386	- 384	
Sep	- 3,138	- 1,462	- 177	+ 789	- 1,676	- 386	- 384	
Oct P	- 4,207	- 2,977	- 966	+ 94	- 1,230	- 386	- 384	

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

(excluding life insurance policies). 3 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
2013	- 563	+ 1,105	- 1,668
2014	+ 2,355	+ 2,898	- 542
2015	- 635	+ 2,377	- 3,012
2016	+ 1,112	+ 3,324	- 2,212
2016 Q1	- 269	- 521	+ 253
Q2	+ 1,092	+ 2,219	- 1,127
Q3	+ 228	+ 887	- 659
Q4	+ 61	+ 739	- 679
2017 Q1	+ 457	+ 643	- 186
Q2	+ 7	+ 445	- 438
Q3	+ 856	+ 1,596	- 740
2016 Dec	+ 332	+ 507	- 175
2017 Jan	- 262	- 85	- 178
Feb	+ 271	+ 8	+ 263
Mar	+ 448	+ 719	- 271
Apr	- 311	- 37	- 274
May	+ 66	+ 215	- 149
June	+ 251	+ 267	- 16
July	+ 553	+ 757	- 203
Aug	+ 146	+ 341	- 194
Sep	+ 156	+ 499	- 342
Oct P	- 229	+ 0	- 230

XII External sector

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

€ million

Item	2014	2015	2016	2017					
				Q1	Q2	Q3	Aug	Sep	Oct P
I Net domestic investment abroad (Increase: +)	+ 301,030	+ 249,102	+ 380,469	+ 235,373	+ 45,266	+ 59,457	- 6,940	+ 72,346	- 26,650
1 Direct investment	+ 83,960	+ 101,357	+ 69,323	+ 48,982	+ 22,668	+ 21,526	+ 5,806	+ 13,345	+ 10,017
Equity of which	+ 56,733	+ 67,801	+ 61,655	+ 16,835	+ 14,149	+ 17,977	+ 8,058	+ 5,812	+ 6,090
Reinvestment of earnings ¹	+ 18,535	+ 9,711	+ 13,224	+ 6,206	+ 7,891	+ 9,172	+ 3,999	+ 3,972	+ 4,681
Debt instruments	+ 27,227	+ 33,556	+ 7,668	+ 32,147	+ 8,520	+ 3,549	- 2,252	+ 7,533	+ 3,927
2 Portfolio investment	+ 146,979	+ 122,005	+ 96,602	+ 30,952	+ 20,473	+ 30,813	+ 5,477	+ 10,420	+ 6,641
Shares ²	+ 8,935	+ 19,561	+ 17,288	+ 5,528	- 2,404	+ 5,150	+ 1,129	+ 2,978	+ 1,419
Investment fund shares ³	+ 42,057	+ 34,626	+ 36,586	+ 16,923	+ 4,382	+ 10,575	+ 3,206	+ 3,029	+ 7,153
Long-term debt securities ⁴	+ 95,025	+ 73,519	+ 48,826	+ 5,347	+ 19,465	+ 16,462	+ 829	+ 6,666	- 321
Short-term debt securities ⁵	+ 963	- 5,700	- 6,098	+ 3,155	- 970	- 1,374	+ 313	- 2,253	- 1,610
3. Financial derivatives and employee stock options ⁶	+ 31,896	+ 26,202	+ 32,792	+ 0	+ 2,351	+ 1,370	+ 872	+ 1,132	+ 1,315
4. Other investment ⁷	+ 40,759	+ 1,750	+ 180,067	+ 155,799	- 612	+ 5,596	- 18,183	+ 46,847	- 45,799
Monetary financial institutions ⁸	+ 76,296	- 90,287	+ 18,747	+ 72,179	- 26,659	- 16,026	- 11,501	+ 12,735	- 14,804
Long-term	+ 21,139	- 2,803	+ 45,099	+ 12,896	+ 2,596	- 1,397	- 3,061	- 67	+ 715
Short-term	+ 55,156	- 87,484	- 26,353	+ 59,283	- 29,255	- 14,629	- 8,440	+ 12,802	- 15,519
Enterprises and households ⁹	- 2,952	- 19,122	- 10,373	+ 7,423	- 2,807	+ 5,161	- 3,307	+ 9,967	+ 1,299
Long-term	+ 6,364	+ 12,513	+ 1,254	- 162	- 723	- 683	- 994	- 172	+ 229
Short-term	- 9,316	- 31,635	- 11,627	+ 7,585	- 2,084	+ 5,844	- 2,313	+ 10,139	+ 1,069
General government	+ 17,295	- 12,205	+ 1,202	- 567	- 2,565	- 2,668	+ 681	- 2,600	- 624
Long-term	- 405	- 7,557	- 5,331	- 1,253	- 1,240	- 403	+ 49	- 272	- 20
Short-term	+ 17,700	- 4,648	+ 6,533	+ 686	- 1,325	- 2,265	+ 632	- 2,328	- 604
Bundesbank	- 49,880	+ 123,364	+ 170,491	+ 76,764	+ 31,420	+ 19,129	- 4,056	+ 26,745	- 31,669
5. Reserve assets	- 2,564	- 2,213	+ 1,686	- 360	+ 385	+ 152	- 912	+ 602	+ 1,176
II Net foreign investment in the reporting country (Increase: +)	+ 62,400	+ 14,499	+ 136,883	+ 160,898	- 28,690	+ 5,504	- 15,663	+ 41,954	- 43,020
1 Direct investment	+ 11,930	+ 47,284	+ 46,695	+ 28,686	+ 5,896	+ 21,007	+ 6,793	+ 10,461	+ 1,608
Equity of which	+ 23,558	+ 20,935	+ 12,126	+ 5,627	- 887	+ 5,656	+ 1,960	+ 1,562	+ 1,972
Reinvestment of earnings ¹	+ 3,325	+ 4,375	+ 5,905	+ 3,565	+ 1,533	+ 4,115	+ 1,280	+ 1,290	+ 1,775
Debt instruments	- 11,628	+ 26,349	+ 34,569	+ 23,059	+ 6,783	+ 15,351	+ 4,833	+ 8,900	- 364
2 Portfolio investment	+ 13,483	- 74,941	- 111,309	- 20,789	- 4,557	- 28,041	+ 3,826	- 14,056	- 23,509
Shares ²	+ 6,314	+ 9,725	- 985	+ 1,460	- 2,181	- 2,286	- 2,519	+ 1,405	+ 2,798
Investment fund shares ³	- 3,790	+ 7,345	- 6,928	+ 136	- 1,338	+ 641	- 22	- 224	+ 971
Long-term debt securities ⁴	+ 14,131	- 101,208	- 95,730	- 12,459	+ 781	- 20,992	+ 9,884	- 15,336	- 23,278
Short-term debt securities ⁵	- 3,171	+ 9,197	- 7,666	- 9,926	- 1,819	- 5,405	- 3,517	+ 98	- 4,000
3. Other investment ⁷	+ 36,987	+ 42,156	+ 201,497	+ 153,000	- 30,029	+ 12,538	- 26,282	+ 45,548	- 21,119
Monetary financial institutions ⁸	+ 32,480	- 41,166	+ 86,802	+ 107,204	- 18,932	- 3,551	- 38,559	+ 35,631	- 3,384
Long-term	- 14,558	- 19,536	+ 5,834	+ 2,847	+ 347	- 1,325	- 860	+ 295	+ 1,092
Short-term	+ 47,039	- 21,630	+ 80,968	+ 104,357	- 19,279	- 2,226	- 37,699	+ 35,336	- 4,476
Enterprises and households ⁹	+ 16,355	+ 10,459	+ 1,988	+ 13,837	- 16,249	+ 8,815	+ 1,171	+ 8,090	+ 1,011
Long-term	+ 2,960	+ 15,960	+ 6,716	+ 3,042	+ 667	+ 4,489	+ 2,551	+ 285	+ 3,598
Short-term	+ 13,395	- 5,501	- 4,728	+ 10,795	- 16,916	+ 4,327	- 1,379	+ 7,805	- 2,587
General government	- 5,575	- 11,521	+ 1,796	+ 1,161	- 548	+ 5,846	+ 1,457	+ 1,448	- 1,364
Long-term	- 931	- 3,942	- 2,847	- 2,850	- 842	+ 281	- 72	+ 366	+ 121
Short-term	- 4,645	- 7,579	+ 4,642	+ 4,012	+ 294	+ 5,565	+ 1,529	+ 1,082	- 1,485
Bundesbank	- 6,273	+ 84,383	+ 110,911	+ 30,797	+ 5,700	+ 1,428	+ 9,649	+ 380	- 17,382
III Net financial account (Net lending: + / net borrowing: -)	+ 238,630	+ 234,603	+ 243,586	+ 74,476	+ 73,956	+ 53,953	+ 8,723	+ 30,391	+ 16,370

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 °

€ million

End of reporting period	External assets									External-liabilities 3,4	Net external position (col 1 minus col 10)
	Total	Reserve assets					Other investment				
		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	66,278	37,670
2003	95,394	76,680	36,533	1,540	6,069	32,538	18,259	4,474	454	83,329	12,065
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	396,314	282,490
2015	800,709	159,532	105,792	15,185	5,132	33,423	596,638	584,210	44,539	481,801	318,907
2016	990,450	175,765	119,253	14,938	6,581	34,993	767,128	754,263	47,557	592,799	397,651
2015 Mar	767,856	176,922	119,988	15,311	5,944	35,679	544,130	531,701	46,804	434,696	333,160
Apr	762,437	171,758	116,812	14,967	5,796	34,184	544,620	532,192	46,058	436,061	326,376
May	758,500	173,842	118,141	15,124	5,744	34,833	538,619	526,191	46,039	436,637	321,863
June	756,263	168,299	113,838	15,000	5,617	33,844	543,502	531,074	44,461	439,905	316,357
July	763,247	163,071	108,872	15,172	4,919	34,107	555,013	542,585	45,162	444,709	318,537
Aug	781,286	162,917	110,012	14,934	5,164	32,807	573,712	561,284	44,657	440,954	340,331
Sep	774,428	161,922	108,959	14,941	5,191	32,831	567,602	555,174	44,903	462,529	311,899
Oct	786,694	166,664	112,836	15,126	5,199	33,503	575,246	562,818	44,784	468,522	318,172
Nov	813,320	163,816	108,820	15,475	5,217	34,303	604,946	592,518	44,558	482,779	330,541
Dec	800,709	159,532	105,792	15,185	5,132	33,423	596,638	584,210	44,539	481,801	318,907
2016 Jan	807,971	164,656	111,126	15,055	5,197	33,278	599,427	587,000	43,888	473,127	334,844
Feb	839,336	177,917	122,535	15,109	6,899	33,374	617,434	605,006	43,985	489,497	349,839
Mar	837,375	171,266	117,844	14,730	6,730	31,962	621,617	609,190	44,491	492,161	345,214
Apr	856,266	175,738	121,562	14,793	6,759	32,623	638,201	625,774	42,327	495,599	360,667
May	884,887	173,927	118,133	14,970	6,839	33,984	667,972	655,544	42,988	501,617	383,270
June	922,232	184,628	128,963	14,746	6,780	34,139	693,498	681,070	44,106	518,466	403,766
July	904,044	186,300	130,417	14,698	6,736	34,449	672,748	660,320	44,996	518,921	385,124
Aug	918,692	183,951	128,171	14,685	6,642	34,452	689,906	677,479	44,834	525,322	393,370
Sep	957,860	183,796	128,795	14,657	6,605	33,738	728,554	715,378	45,510	549,884	407,976
Oct	947,718	181,623	126,245	14,708	6,631	34,039	720,795	708,029	45,300	543,007	404,711
Nov	991,108	177,348	121,032	14,917	6,572	34,826	766,905	754,057	46,855	552,602	438,506
Dec	990,450	175,765	119,253	14,938	6,581	34,993	767,128	754,263	47,557	592,799	397,651
2017 Jan	1,034,804	177,256	121,656	14,806	6,523	34,270	809,862	795,621	47,687	577,997	456,807
Feb	1,060,894	184,666	128,507	14,976	6,248	34,935	828,264	814,375	47,964	609,242	451,652
Mar	1,075,039	181,898	126,158	14,886	6,183	34,671	843,892	829,751	49,249	623,526	451,513
Apr	1,089,144	180,726	126,011	14,697	6,055	33,963	858,281	843,439	50,137	603,035	486,108
May	1,098,879	175,958	122,486	14,459	5,907	33,107	871,724	857,272	51,197	604,178	494,701
June	1,098,880	171,295	118,235	14,349	5,695	33,016	875,312	860,764	52,273	628,540	470,340
July	1,092,769	169,735	117,330	14,124	5,531	32,750	871,752	856,510	51,282	619,671	473,099
Aug	1,089,883	171,044	119,770	14,071	5,530	31,673	867,696	852,511	51,143	629,245	460,638
Sep	1,115,200	169,937	118,208	14,089	5,471	32,169	894,441	878,888	50,821	629,642	485,557
Oct	1,085,916	172,047	118,569	14,208	5,446	33,824	862,772	848,443	51,097	612,351	473,564
Nov	1,091,805	169,513	117,208	14,069	5,168	33,067	869,988	855,548	52,305	589,275	502,531

° 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			
					Credit terms granted	Advance payments effected					Total	Credit terms used	Advance payments received	
All countries														
2013	787,308	282,026	505,282	325,614	179,668	164,454	15,214	939,252	144,884	794,368	632,110	162,258	95,302	66,957
2014	833,644	279,559	554,085	365,230	188,856	174,058	14,798	959,833	154,566	805,267	636,328	168,939	102,126	66,813
2015	866,912	265,170	601,743	409,858	191,885	177,397	14,488	1,003,050	150,054	852,996	672,312	180,684	109,062	71,622
2016	855,814	241,683	614,131	412,871	201,260	187,086	14,174	1,025,815	128,831	896,984	708,734	188,250	115,808	72,443
2017 May	862,375	215,937	646,438	436,547	209,892	195,247	14,645	1,044,280	119,183	925,096	734,160	190,936	115,520	75,416
June	873,636	216,911	656,726	441,631	209,253	201,253	13,841	1,051,719	119,559	932,160	740,409	191,751	118,820	72,931
July	866,338	215,822	650,516	440,689	209,826	196,355	13,471	1,051,322	116,987	934,335	745,799	188,536	115,024	73,512
Aug	859,633	213,414	646,219	440,278	205,941	192,378	13,564	1,054,736	117,557	937,179	749,860	187,319	113,159	74,160
Sep	878,076	218,625	659,451	442,168	217,283	203,538	13,746	1,052,248	122,376	929,872	733,677	196,195	123,424	72,770
Oct	884,370	219,740	664,630	447,513	217,117	203,037	14,080	1,054,487	120,990	933,497	736,815	196,682	122,630	74,052
Industrial countries ¹														
2013	697,475	278,723	418,753	296,675	122,077	108,620	13,458	852,420	143,577	708,843	594,623	114,220	79,543	34,676
2014	733,191	274,660	458,531	330,034	128,497	115,398	13,099	869,392	153,412	715,980	595,396	120,583	85,122	35,461
2015	761,648	261,267	500,381	368,033	132,348	119,309	13,038	906,968	145,136	761,832	635,205	126,627	90,716	35,911
2016	748,340	237,789	510,551	371,663	138,888	126,211	12,677	931,963	124,504	807,460	674,402	133,058	95,933	37,125
2017 May	745,902	211,998	533,904	391,173	142,730	129,749	12,981	948,825	115,512	833,313	700,437	132,875	94,797	38,078
June	756,604	212,904	543,701	396,298	147,402	135,227	12,176	956,798	115,708	841,090	707,159	133,931	97,108	36,823
July	750,965	211,939	539,026	397,315	141,711	129,870	11,840	954,229	111,507	842,722	712,597	130,124	93,446	36,679
Aug	746,289	209,552	536,737	398,012	138,724	126,825	11,899	960,329	112,945	847,384	717,235	130,148	93,097	37,051
Sep	762,901	214,616	548,285	400,613	147,672	135,554	12,118	950,851	112,989	837,862	701,135	136,726	100,527	36,199
Oct	768,434	215,634	552,800	405,515	147,285	134,770	12,515	952,361	111,747	840,614	703,877	136,737	99,948	36,790
EU member states ¹														
2013	589,286	264,271	325,014	237,949	87,066	76,539	10,527	713,044	129,044	583,999	504,337	79,663	53,340	26,323
2014	617,489	259,516	357,973	266,777	91,196	80,585	10,611	724,674	138,894	585,780	502,054	83,726	56,580	27,147
2015	626,482	243,139	383,344	289,190	94,153	83,665	10,488	743,011	134,564	608,448	524,316	84,132	58,384	25,748
2016	605,613	219,938	385,675	288,730	96,945	86,930	10,016	757,649	114,258	643,390	555,414	87,976	61,160	26,817
2017 May	590,986	193,047	397,938	297,142	100,796	90,502	10,294	778,585	105,601	672,985	582,110	90,874	63,385	27,490
June	597,934	194,237	403,696	300,021	103,675	94,123	9,553	786,173	105,077	681,096	589,821	91,274	64,949	26,326
July	593,228	192,791	400,437	300,403	100,034	90,467	9,567	784,598	100,389	684,209	594,647	89,562	63,447	26,115
Aug	590,108	190,337	399,771	301,487	98,283	88,730	9,554	788,546	100,783	687,763	597,936	89,827	63,581	26,246
Sep	603,874	194,645	409,229	305,203	104,026	94,222	9,804	777,661	101,038	676,623	581,892	94,731	68,693	26,039
Oct	606,421	194,954	411,466	307,122	104,345	94,187	10,158	778,547	99,867	678,679	583,873	94,806	68,518	26,288
of which: Euro-area ²														
2013	428,179	197,430	230,749	174,605	56,143	49,968	6,175	603,366	101,722	501,645	448,142	53,502	36,671	16,832
2014	456,469	204,043	252,426	194,207	58,219	51,999	6,220	606,525	107,694	498,831	444,401	54,430	37,498	16,932
2015	465,919	195,751	270,168	208,862	61,305	54,730	6,575	598,884	93,947	504,937	452,298	52,639	37,994	14,644
2016	445,368	167,575	277,794	213,498	64,295	57,575	6,721	609,399	75,639	533,760	477,891	55,869	41,068	14,801
2017 May	435,699	150,097	285,602	219,346	66,256	59,140	7,116	627,775	67,035	560,740	501,801	58,940	43,574	15,366
June	438,331	148,448	289,883	221,502	68,381	61,226	7,155	636,945	69,711	567,234	507,451	59,783	44,573	15,210
July	433,899	146,251	287,648	221,209	66,439	59,229	7,209	636,189	66,063	570,126	510,427	59,699	44,398	15,301
Aug	432,126	144,124	288,001	222,827	65,174	57,979	7,195	639,953	64,913	575,040	514,960	60,080	44,729	15,351
Sep	441,962	147,862	294,100	225,777	68,323	60,949	7,374	625,362	63,972	561,390	499,409	61,981	46,863	15,118
Oct	446,456	150,417	296,039	227,180	68,859	61,256	7,603	630,494	65,529	564,965	502,147	62,818	47,431	15,386
Emerging economies and developing countries ³														
2013	89,826	3,303	86,523	28,937	57,586	55,829	1,757	86,829	1,307	85,522	37,487	48,035	15,755	32,280
2014	100,400	4,849	95,551	35,193	60,358	58,659	1,699	90,439	1,153	89,285	40,931	48,354	17,003	31,352
2015	104,276	3,094	101,182	41,825	59,358	57,908	1,450	91,912	947	90,964	36,908	54,057	18,346	35,711
2016	106,063	2,647	103,416	41,192	62,224	60,727	1,497	90,708	1,401	89,307	34,132	55,175	19,875	35,300
2017 May	115,005	2,665	112,340	45,339	67,001	65,337	1,664	92,803	1,273	91,530	33,522	58,007	20,687	37,321
June	115,552	2,742	112,810	45,299	67,511	65,846	1,665	92,055	1,240	90,815	33,049	57,765	21,674	36,091
July	113,881	2,607	111,273	43,331	67,942	66,311	1,631	92,488	1,195	91,293	33,001	58,292	21,541	36,751
Aug	111,844	2,585	109,259	42,222	67,037	65,372	1,664	90,634	1,161	89,473	32,425	57,048	20,022	37,026
Sep	113,639	2,699	110,940	41,511	69,428	67,801	1,628	92,871	1,181	91,689	32,342	59,347	22,859	36,488
Oct	114,297	2,695	111,603	41,955	69,648	68,083	1,565	93,720	1,136	92,584	32,738	59,846	22,644	37,201

* 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 fi-

gures shown in Table XI.7. **1** From July 2013 including Croatia. **2** From January 2014 including Latvia; from January 2015 including Lithuania. **3** All countries that are not regarded as industrial countries. 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 Dec	1.4356	1.4070	7.2983	7.4362	122.39	9.0252	9.7095	1.0750	0.84441	1.0543
2017 Jan	1.4252	1.4032	7.3189	7.4355	122.14	8.9990	9.5110	1.0714	0.86100	1.0614
Feb	1.3886	1.3942	7.3143	7.4348	120.17	8.8603	9.4762	1.0660	0.85273	1.0643
Mar	1.4018	1.4306	7.3692	7.4356	120.68	9.0919	9.5279	1.0706	0.86560	1.0685
Apr	1.4241	1.4408	7.3892	7.4376	118.29	9.1993	9.5941	1.0727	0.84824	1.0723
May	1.4878	1.5041	7.6130	7.4400	124.09	9.4001	9.7097	1.0904	0.85554	1.1058
June	1.4861	1.4941	7.6459	7.4376	124.58	9.4992	9.7538	1.0874	0.87724	1.1229
July	1.4772	1.4641	7.7965	7.4366	129.48	9.3988	9.5892	1.1059	0.88617	1.1511
Aug	1.4919	1.4889	7.8760	7.4379	129.70	9.3201	9.5485	1.1398	0.91121	1.1807
Sep	1.4946	1.4639	7.8257	7.4401	131.92	9.3275	9.5334	1.1470	0.89470	1.1915
Oct	1.5099	1.4801	7.7890	7.4429	132.76	9.3976	9.6138	1.1546	0.89071	1.1756
Nov	1.5395	1.4978	7.7723	7.4420	132.39	9.6082	9.8479	1.1640	0.88795	1.1738

* 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 countries 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 ¹			EER-38 ²			Based on the deflators of total sales ³				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 ³	In real terms based on unit labour costs of national economy ³	Nominal	In real terms based on consumer price indices ⁴	26 selected industrial countries ⁵			37 countries ⁶	26 selected industrial countries ⁵	37 countries ⁶	56 countries ⁷	
							Total	Euro area countries	Non-euro area countries					
1999	96.3	96.1	96.1	96.0	96.5	95.8	97.9	99.5	95.8	97.6	98.2	98.0	97.7	
2000	87.2	86.7	86.1	85.3	88.1	85.9	91.8	97.3	85.2	90.8	93.0	92.0	90.9	
2001	87.8	87.1	86.5	86.1	90.6	86.9	91.6	96.4	86.0	90.1	93.0	91.4	90.8	
2002	90.1	90.2	89.5	89.4	95.1	90.5	92.2	95.4	88.4	90.6	93.5	91.9	91.7	
2003	100.7	101.2	100.3	100.5	107.1	101.4	95.5	94.5	97.4	94.7	97.0	96.5	96.7	
2004	104.6	104.9	103.2	103.9	111.7	105.0	95.8	93.2	99.8	94.9	98.4	98.0	98.3	
2005	102.9	103.4	100.9	101.9	109.7	102.4	94.6	91.9	98.9	92.8	98.4	96.9	96.5	
2006	102.8	103.3	100.1	100.6	109.6	101.7	93.3	90.3	98.2	91.0	98.5	96.4	95.8	
2007	106.1	106.0	101.9	102.7	113.0	103.6	94.2	89.5	102.0	91.2	100.7	97.8	96.9	
2008	109.3	108.1	103.2	105.9	117.2	105.5	94.3	88.0	105.1	90.3	102.1	97.7	97.0	
2009	110.7	108.8	104.2	110.7	120.2	106.6	94.6	88.8	104.3	90.8	101.7	97.9	97.4	
2010	103.6	101.1	95.8	102.7	111.7	97.6	92.1	88.5	98.0	87.0	98.7	93.6	91.9	
2011	103.3	100.1	93.6	101.2	112.4	97.0	91.7	88.3	97.3	86.1	98.1	92.7	91.3	
2012	97.7	94.8	88.2	95.1	107.3	92.2	89.8	88.2	92.3	83.5	95.8	89.7	88.2	
2013	101.0	97.7	90.9	97.7	111.8	95.1	92.1	88.7	97.6	85.4	98.1	91.4	90.1	
2014	101.4	97.2	91.0	98.6	114.3	95.4	92.8	89.6	97.9	86.1	98.2	91.6	90.7	
2015	91.7	87.6	82.8	88.2	105.7	P 87.0	90.0	90.5	89.2	82.5	94.1	86.4	P 85.8	
2016	94.4	89.5	85.0	P 89.3	109.7	P 89.3	90.9	91.0	90.7	83.9	94.7	87.5	P 87.0	
2014 Dec	98.4	94.0			112.3	93.0					97.1	89.9	89.2	
2015 Jan	94.6	90.3			108.1	89.3					95.1	87.8	87.0	
Feb	92.8	88.7	83.3	89.9	106.2	87.8	90.0	90.3	89.6	82.5	94.8	87.2	86.4	
Mar	90.0	86.1			103.0	85.1					93.6	85.6	84.6	
Apr	89.1	85.3			101.7	84.0					93.4	85.2	84.0	
May	91.0	87.1	81.5	87.0	104.1	85.8	89.6	90.4	88.3	81.9	94.0	86.2	85.1	
June	91.7	87.7			105.2	86.8					94.1	86.4	85.6	
July	90.7	86.6			104.3	85.8					93.7	85.8	85.0	
Aug	92.4	88.1	83.1	88.2	107.2	88.0	90.2	90.5	89.5	82.8	94.3	86.7	86.4	
Sep	93.2	88.9			108.7	89.3					94.5	87.1	87.1	
Oct	93.0	88.8			108.2	88.7					94.5	87.1	86.9	
Nov	90.5	86.3	83.1	87.9	105.1	P 86.0	90.2	90.8	89.4	82.8	93.5	85.8	P 85.3	
Dec	91.9	87.5			107.1	P 87.5					93.7	86.2	P 85.9	
2016 Jan	93.0	88.4			108.9	P 88.7					93.9	86.7	P 86.7	
Feb	94.2	89.2	84.7	P 89.1	110.3	P 89.9	90.8	91.1	90.3	83.7	94.4	87.2	P 87.1	
Mar	93.6	88.8			109.1	P 89.0					94.5	87.0	P 86.7	
Apr	94.4	89.5			109.8	P 89.4					94.9	87.6	P 87.1	
May	94.6	89.9	85.1	P 89.5	110.3	P 89.9	90.9	91.1	90.7	84.1	94.8	87.7	P 87.4	
June	94.4	89.7			109.9	P 89.6					94.6	87.6	P 87.2	
July	94.6	89.8			109.6	P 89.2					94.8	87.6	P 86.9	
Aug	94.9	90.0	85.3	P 89.5	110.1	P 89.5	91.1	91.1	91.1	84.1	95.0	87.7	P 87.1	
Sep	95.1	90.1			110.3	P 89.7					95.1	87.8	P 87.2	
Oct	95.1	90.3			110.0	P 89.4					95.4	87.9	P 87.1	
Nov	94.6	89.6	84.7	P 89.1	109.7	P 89.0	90.9	90.9	90.7	83.7	94.7	87.4	P 86.7	
Dec	93.7	88.9			108.6	P 88.2					94.6	87.3	P 86.6	
2017 Jan	93.9	89.1			109.1	P 88.4					94.4	87.1	P 86.4	
Feb	93.4	88.8	83.4	P 88.3	108.2	P 87.9	90.5	90.8	90.0	83.2	94.4	87.0	P 86.1	
Mar	94.0	89.2			108.6	P 88.0					94.6	87.1	P 86.1	
Apr	93.7	89.0			108.3	P 87.7					94.4	87.0	P 86.0	
May	95.6	90.5	84.7	P 89.2	110.5	P 89.3	91.6	91.4	91.9	84.2	95.4	88.1	P 87.1	
June	96.3	91.3			111.5	P 90.1					95.9	88.5	P 87.6	
July	97.6	92.4			113.4	P 91.5					96.6	89.2	P 88.5	
Aug	99.0	93.6	...	...	115.1	P 92.9	P 93.2	P 91.5	P 95.8	P 85.8	97.2	89.8	P 89.2
Sep	99.0	93.6			115.1	P 92.8					97.4	89.9	P 89.4	
Oct	98.6	P 93.1			114.9	P 92.4					P 97.1	P 89.5	P 89.0	
Nov	98.5	P 93.1			115.1	P 92.6					P 97.2	P 89.4	P 89.0	

* 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 2017, pp 41-43). 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. ¹ 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, Czechia, 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. ² 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. ³ Annual and quarterly averages. ⁴ 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. ⁵ 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. ⁶ Euro area countries (see footnote 5) and countries belonging to the EER-19 group. ⁷ 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

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

February 2017

- The current economic situation in Germany

March 2017

- German balance of payments in 2016
- Federal states' cyclical adjustment in the context of the debt brake

April 2017

- The role of banks, non-banks and the central bank in the money creation process
- Demographic change, immigration and the potential output of the German economy

May 2017

- The current economic situation in Germany

June 2017

- Outlook for the German economy – macro-economic projections for 2017 and 2018 and an outlook for 2019
- Design and implementation of the European fiscal rules

July 2017

- The market for corporate bonds in the low-interest-rate environment
- The development of government interest expenditure in Germany and other euro area countries
- Return on private financial assets taking into account inflation and taxes
- The danger posed to the global economy by protectionist tendencies
- Changes to the MFI interest rate statistics

August 2017

- The current economic situation in Germany

September 2017

- Monetary policy indicators at the lower bound based on term structure models
- Distributed ledger technologies in payments and securities settlement: potential and risks
- The performance of German credit institutions in 2016
- Changes to the investment funds statistics: scope enhancements, results and outlook

October 2017

- Global liquidity, foreign exchange reserves and exchange rates of emerging market economies
- The natural rate of interest
- The supervisory review and evaluation process for smaller institutions and proportionality considerations
- The Eurosystem's new money market statistical reporting – initial results for Germany
- The new ESCB insurance statistics – integrated reporting flow and initial results

November 2017

- The current economic situation in Germany

December 2017

- Outlook for the German economy – macro-economic projections for 2018 and 2019 and an outlook for 2020
- German enterprises' profitability and financing in 2016
- Mark-ups of firms in selected European countries
- The Eurosystem's financial market infrastructure – origin and future set-up

Statistical Supplements to the Monthly Report

- 1 Banking statistics^{1, 2}
- 2 Capital market statistics^{1, 2}
- 3 Balance of payments statistics^{1, 2}
- 4 Seasonally adjusted business statistics^{1, 2}
- 5 Exchange rate statistics²

Special Publications

Makro-ökonomisches Mehr-Länder-Modell, November 1996³

Europäische Organisationen und Gremien im Bereich von Währung und Wirtschaft, May 1997³

Die Zahlungsbilanz der ehemaligen DDR 1975 bis 1989, August 1999³

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 2013³

Die Europäische Union: Grundlagen und Politikbereiche außerhalb der Wirtschafts- und Währungsunion, April 2005³

Die Deutsche Bundesbank – Aufgabenfelder, rechtlicher Rahmen, Geschichte, April 2006³

European economic and monetary union, April 2008

■ Special Statistical Publications

- 1 Banking statistics guidelines, July 2017^{2, 4}
- 2 Banking statistics customer classification, July 2017²
- 3 Aufbau der bankstatistischen Tabellen, July 2013^{2, 3}
- 4 Financial accounts for Germany 2011 to 2016, May 2017²
- 5 Extrapolated results from financial statements of German enterprises 1997 to 2015, December 2016²
- 6 Verhältniszahlen aus Jahresabschlüssen deutscher Unternehmen von 2013 bis 2014, May 2017^{2, 3}
- 7 Notes on the coding list for the balance of payments statistics, September 2013²
- 8 The balance of payments statistics of the Federal Republic of Germany, 2nd edition, February 1991^o
- 9 Securities deposits, August 2005
- 10 Foreign direct investment stock statistics, April 2017^{1, 2}
- 11 Balance of payments by region, July 2013
- 12 Technologische Dienstleistungen in der Zahlungsbilanz, June 2011³

■ Discussion Papers*

- 26/2017
An integrated shortfall measure for Basel III
- 27/2017
Do all new brooms sweep clean? Evidence for outside bank appointments
- 28/2017
Should unconventional monetary policies become conventional?
- 29/2017
Disagreement and monetary policy
- 30/2017
(Un)expected monetary policy shocks and term premia
- 31/2017
Bargaining power and outside options in the interbank lending market
- 32/2017
Vulnerable asset management? The case of mutual funds
- 33/2017
Moral suasion in regional government bond markets
- 34/2017
A severity function approach to scenario selection
- 35/2017
Why do banks bear interest rate risk?
- 36/2017
Liquidity provision as a monetary policy tool: the ECB's non-standard measures after the financial crisis

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 2014²

2a Solvency Regulation, December 2006²
Liquidity Regulation, December 2006²

- 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.